

**Clinician and child interactions in
ADOS-2 informed online autism
assessments from the perspective of
Conversation Analysis**

Leanne Danielle Chrisostomou

*The thesis is submitted in partial fulfilment of the
requirements for the award of the degree of Doctor of
Philosophy of the University of Portsmouth.*

December 2023

Abstract

Autism cannot be identified through concrete physiological or biological determinants. Clinicians must therefore evaluate a person's communicative functioning, observable behaviours, and developmental level through observations. To receive a diagnosis of autism, the DSM-5-TR stipulates a person must display difficulties in social-emotional reciprocity, including, reduced displayed emotions and affect, a failure of normal back-and-forth conversation, and a failure to initiate or respond to social interactions. Standardised assessments such as the ADOS-2 are therefore used to structure interactions to elicit behaviours revealing autism symptomatology. Yet, the way the behaviours are elicited, i.e., the protocol used, and the facilitating examiner are not taken into consideration when determining the outcome of the interaction within the autism assessment. This PhD project therefore examined interactional tasks and corresponding coding items of the ADOS-2 that are designed to specifically elicit the diagnostic criteria of the DSM-5-TR: the 'Emotions' task, the 'Loneliness' task, the 'Social Differences and Annoyance' task and examiner 'cliffhangers'. To determine the effectiveness of these interactional tasks in eliciting capabilities in social-emotional reciprocity, I utilised Conversation Analysis to sequentially analyse each individual turn at talk to understand how the examiner and examinee make sense of one another within each interaction. Participating within this project were 14 children under assessment for autism, 8 females and 6 males, with an average age of 13.9 ($M = 13.9$, $SD = 2.9$) and 20 assessing clinicians (18 females and 2 males). I in turn compared these interactions with the diagnostic reports written by the examiners about the children being assessed to explore how observations of the children's social-emotional reciprocity were documented in relation to the tasks and the rating criteria within the corresponding coding items of the ADOS-2.

I found that examiners in the data modified assessment protocol to improve opportunities for the child to demonstrate social-emotional reciprocity. Most notable was the examiners attempts to provide contextual information prior to the start of the task, by reformulating the ADOS-2 questions, or after failed answers or instances of difficulty within the interaction. Due to adherence to standardisation, the restrictions placed on the examiner to elicit certain behaviours utilising the design of the ADOS-2 questions often made the interaction unclear. This had implications for both the examinees understanding of what response would satisfy the examiners' reason for asking, and the examiners' subsequent turns at talk. When examiners however digressed from institutional progressivity and modified their questions and comments to contain contextual information, the children were able to provide answers that satisfied the examiners reason for asking. Additionally, I found that when the examiners utilised the ADOS-2 flexibly by using natural conversation in response to the child's answers, this generated enhanced opportunities for the children to display social-emotional reciprocity. This responsive and dynamic way of implementing the assessment changed it from a deficit approach (to elicit behaviours associated with autism to conclude a diagnosis) to a strengths-based approach. Moreover, the children demonstrated capabilities in social-emotional reciprocity which were comparable to non-autistic people within everyday interaction. Due to the requirement however to match the behaviours elicited from the children to a rating corresponding to the coding items of the ADOS-2, the documented observations in the diagnostic reports often omitted the children's social-emotional capabilities or were written in a way that supported observations of behaviours associated with autism symptomatology.

Therefore, I show how the examiners communicative actions implicate the observed capabilities displayed by the examinee. By utilising the ADOS-2 flexibly in response to the

Clinician-child interactions in ADOS-2 assessments – a CA perspective

communication of the examinee, the examiners created multiple opportunities for the examinee to demonstrate capabilities in social-emotional reciprocity. Due to the limitations of the coding items, documented observations however remain limited to the medical model deficit framework that do not capture the examinees interactional capabilities. Thus, the observations contained in the diagnostic reports can inappropriately document a person's capabilities and can have negative consequences for a person's self-representation.

Key words (minimum of 4-5 keywords, listed after the abstract).

Autism, ADOS-2, Social-emotional Reciprocity, Interaction, Assessment, Conversation Analysis

Declaration

Whilst registered as a candidate for the above degree, I have not been registered for any other research award. The results and conclusions embodied in this thesis are the work of Leanne Chrisostomou and have not been submitted for any other academic award.

Studentship grant awarded by the South Coast Doctoral Partnership (SCDTP) and the Economic and Social Research Council (ESRC).

Acknowledgements

I would like to begin with thanking my supervisors Dr Iris Nomikou, Dr Alessandra Fasulo and Dr Beatriz Lopez, it has been a long and windy road with many life changing pitstops. I am grateful you came with me on my journey.

I would like to offer my gratitude to the ESRC South Coast Doctoral Training Partnership (SCDTP) for funding my studies and research and making my dreams and aspirations a reality.

I wish to thank the families and children and the members of staff at CAMHS who participated in this project.

I am very grateful to the academics that very kindly provided me with their precious time and advice. Thank you, Dr Michelle O Reilly, Dr Mark Haydon-Laurelut, Dr Douglas Maynard, and Dr Steven Kapp.

I want to congratulate my peers on achieving their PhD and offer my appreciation to them for creating a supportive experience, Dr Emily Haddy, Dr Jasmine Rollings, Dr Louise Loyant and Dr Kate Lewis.

I want to thank my partner Simon Thackwell for supporting my endless endeavours as a student and fathering our incredible boy Zachary right in the middle of this PhD.

Finally, I would like to offer my endless gratitude to my in-laws, Beryl and David Thackwell who provided endless support and childcare.

Finishing this journey would not have been possible without you all.

Table of Contents

Dissemination	10
List of Tables	10
List of Figures	11
List of Appendices	11
1. Introduction to Autism and Diagnosis	12
2. Literature Review	14
2.1. Autism	14
2.2. Theoretical Models Underpinning Diagnosis	19
2.3. How Autism is Diagnosed in Practice	27
2.4. The Autism Diagnostic Observation Schedule [ADOS]	29
2.5. An Interactional Approach: Conversation Analysis	36
2.6. Aims and Objectives	40
3. Methodology	45
3.1. Participants	45
3.2. Recruitment	46
3.3. The Data	47
3.4. Procedure and Materials for Data Collection	49
3.5. Procedure for Analysis and Interpretation	51
3.6. Diagnostic reports	55
3.6. Ethical approval and considerations	56
4. Comments on Own Thoughts, Feelings, and Experiences	64
4.1. ‘Emotions’ Task and Coding Item ‘Communication of Own Affect’	64
4.2. Emotion and Autism	67
4.3. Situated Emotion	69
4.4. Emotion in Interaction	75
4.5. The Aims	76
4.6. Data Analysis	77
4.6.1. Omitting Communicative Contextual Information	77
4.6.2. Third Turn Evaluations	98
4.6.3. Examiners Orient to Sociocultural Factors	111
4.6.4. Absorption Into the Emotion Eliciting Event and Display Rules	120
4.6.5. Examiners Assisting Practices	128
4.6.6. Summary	142
5. Comments on Others’ Thoughts, Feelings, and Experiences	144

Clinician-child interactions in ADOS-2 assessments – a CA perspective

5.1. ‘Loneliness’ and ‘Social Difficulties and Annoyance’ task and Coding Item ‘Communication of Own Affect’ and ‘Comments on Others’ Emotions/Empathy’	144
5.2. Empathy and Autism	147
5.3. Situated Empathy	151
5.4. Empathy in Interaction	154
5.5. The Aims	156
5.6. Data Analysis	156
5.6.1. Adhering to Institutional Progressivity and not Acknowledging Elicited Emotion	157
5.6.2. Closed Polar Interview Questions	162
5.6.3. Examiners Modify ADOS-2 Protocol to Elicit Third-Person Cognitive Empathy	171
5.6.4. Examiner Modifications - First-Person Perspective	189
5.6.5. Empathy and Emotional Reactivity in the Immediate Interactional Context	197
5.6.6. Summary	203
6. Comments on Examiner’s Thoughts, Feelings, and Experiences	204
6.1. ‘Cliffhangers’ task and Coding Item ‘Asks for Information’ (ADOS-2: Lord et al, 2012)	204
6.2. Cognitive Theories and Social Communication in Autism	206
6.3. Interactional Social Coordination and Autism	209
6.4. Preliminaries (cliffhangers) in Interaction	211
6.5. The Aims	212
6.6. Data Analysis	212
6.6.1. Embedding a ‘Cliffhanger’	213
6.6.2. Responding to a ‘Cliffhanger’	221
6.6.3. The ‘cliffhanger’ as a communicative violation	240
6.6.4. Misunderstanding the ‘cliffhanger’	256
6.6.5. Repeating the same ‘cliffhanger’	261
6.6.6. Summary	267
7. Discussion	269
7.1. Chapter 4: What kinds of opportunities do the interactions within the ‘Emotions’ tasks provide for the examinees to ‘communicate their own affect’?	270
7.2. Chapter 5: What kinds of opportunities do the interactions within the ‘Loneliness’ and the ‘Social Difficulties and Annoyance’ tasks provide the examinees to ‘comment on others’ emotions and display empathy’?	276
7.3. Chapter 6: What kinds of opportunities do the interactions within the ‘cliffhangers’ provide for the examinees to demonstrate social motivation and ‘ask the examiner for information’?	282

Clinician-child interactions in ADOS-2 assessments – a CA perspective

7.4. Reflexivity	287
7.5. Limitations of thesis	290
7.6. Implications for Practice	291
7.7. Recommendations for ADOS-2 and Practitioners	295
7.8. Future directions	299
7.9. Concluding Summary	302
8. References	304
9. Appendices	378

Thesis Word count: 77432 words

Dissemination

Conferences

Chrisostomou, L, D., Nomikou, I., Fasulo, A., Lopez. B. (2022) Behaviour elicitation during online autism assessments and its impact on false positive diagnosis. *South Coast Doctoral Training Partnership Final Year Conference*. Online Conference.

Nomikou. I., Fasulo, A., & Chrisostomou, & Nye, J, T. (2022) "Shall we have a race?" Proposal trajectories in caregiver-child play. *Atypical Interaction Conference*. Newcastle, Newcastle upon Tyne, Tyne and Wear.

Chrisostomou, L, D., Nomikou, I., Fasulo, A., & Lopez. B. (2021) Exploring how autism assessing clinicians elicit responses from children utilising ‘cliffhangers’ during online autism assessments. *Ethnomethodology and Conversation Analysis Doctoral Network Conference*. Loughborough, Leicestershire,

List of Tables

Table 1. Details of Online ADOS-2 Informed Assessment

Table 2. Interview Questions for ‘Emotions’ Task

Table 3. Ratings for Observed Behaviours for Coding Item ‘Communication of Own Affect’

Table 4. Interview Questions for ‘Loneliness’ Task

Table 5. Interview questions for ‘Social Difficulties and Annoyance’ Task

Table 6. Ratings for Observed Behaviours for Coding Item ‘Comments on Others’ Emotions/Empathy’

Table 7. Social Press-Cliff Hanger

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Table 8. Ratings for Observed Behaviours for Coding Item ‘Asks for Information’

List of Figures

Figure 1. Example of online telehealth autism assessment

List of Appendices

Appendix 1. HRA and Health Care Research Wales (HCRW) Approval Letter

Appendix 2. UPR16 Form

Appendix 3. Participant Information Sheet (PIS) for Clinicians

Appendix 4. Participant Information Sheet for Parents/Care-Providers

Appendix 5. Participant Information Sheet for Children

Appendix 6. Participant Information Sheet for Young People

Appendix 7. Consent Form for Clinicians

Appendix 8. Consent Form for Parents/Care-Providers (Autism Assessment)

Appendix 9. Consent Form for Young People (Autism Assessment)

Appendix 10. Consent Form for Children (Autism Assessment)

Appendix 11. Anonymised ADOS-2 Informed Diagnostic Report

Appendix 12. Conversational Analysis Jeffersonian Transcription Symbols

Appendix 13. Mondada Multimodal Transcription (2022)

1. Introduction to Autism and Diagnosis

"If you've met one person with autism, you've met one person with autism"

Dr Stephen Shore

"The lack of social insight seen to be manifested in the actions of autistic people is both biologically and socially derived, and yet is also historically and culturally situated in discourse"

Dr Damian Milton

To receive a diagnosis of autism, a person must display differences or difficulties in social communication, and repetitive behaviours as outlined by the Diagnostic and Statistical Manual of Mental Disorders revised fifth version ([DSM-5-TR], American Psychiatric Association [APA], 2022). Therefore, diagnostic assessments are designed to identify these behaviours with standardised measurements. The diagnostic process involves a developmental history, questionnaires of current behaviours, and an assessment of observation typically conducted with the 'gold standard' Autism Diagnostic Observation Schedule ([ADOS-2, Lord et al., 2012]). The ADOS-2 is a standardised semi structured interaction-based assessment in which the examiner attempts to elicit behaviours associated with autism within semi-structured tasks. The aim of the ADOS-2 is to facilitate an interaction that appears natural so that the institutional objective remains invisible to the examinee (Lord et al., 1989). Post assessment, the ADOS-2 provides categories to rate elicited behaviours which are totalled to provide a diagnostic classification of autism, autism spectrum, or non-autism. Finally, to document the diagnostic outcome, a report is produced outlining all collated information, including a subsection which

Clinician-child interactions in ADOS-2 assessments – a CA perspective

describes the behaviours associated with autism symptomatology elicited within the interactionally based ADOS-2.

The medicalised approach to diagnosis is observable in the design of the ADOS-2, such as, the terminology (e.g., deficit, disability) and view that the presentation of the condition exists within the person only (e.g., no acknowledgement of how the examiner and the environment might influence the examinee's behaviour). Yet research utilising Conversation Analysis [CA] has found that it is not possible to standardise interaction-based assessments as each will differ due to the vast variation found within every co-constructed assessment of social communication. Therefore, variation in institutional interaction is inevitable (Marlaire & Maynard, 1990; Antaki et al., 2002; Maynard & Schaeffer, 2002). Theoretical models which acknowledge how autism is both biological and socially situated, however are not incorporated into the process of autism diagnosis. Due to the medical model focus which aims to observe only how the person's behaviours deviate from the norm, there is often a failure to incorporate a balanced strengths-based approach to diagnosis. Rather than viewing autism as a disability which is solely situated in the person, taking an interaction-based approach to assessment enables a neutral diagnostic process which can identify strengths, difficulties, adaptations, as well as behaviours that are indicative of autism symptomatology.

2. Literature Review

2.1. Autism

The Diagnostic and Statistical Manual of Mental Disorders revised fifth version ([DSM-5-TR], American Psychiatric Association [APA], 2022) describes autism as a neurodevelopmental disorder characterised by deficits in social communication social interaction, social-emotional reciprocity (such as, reduced sharing of interests, emotions, or affect, the use of facial expressions, body postures, gestures and the lack of shared enjoyment), and restricted, repetitive patterns of behaviour, interests, or activities. Currently, around one in 57 (1.76%) people in the United Kingdom are diagnosed with autism (Roman-Urrestarazu et al., 2021). Between 1998 and 2018, there was a 787%, exponential increase in autism diagnoses in the United Kingdom (Russell et al., 2022). Rather than an increase in incidence rates within the population, the significant increase in autism diagnosis is argued to be due to greater recognition of autism (Lord et al., 2020) as a spectrum condition with greater heterogeneity. Autism can be reliably diagnosed before three years of age (Stone et al., 1999) yet due to heterogeneity often people do not receive a diagnosis until later childhood or even adulthood. Autistic people without obvious early developmental delays, and those who perform higher on standardised intellectual ability tests, are often diagnosed at an older age (Mazurek et al., 2014).

Current estimates suggest that boys are at least 5 times more likely to be diagnosed with autism than girls (Loomes et al., 2007). The gender disparities in autism diagnosis are argued to be due to failures in recognition of autistic girls and women. Often females present autism symptomatology different to males (Kaat et al., 2021; Ratto, 2021; Werling & Geschwind, 2013), they may present typical behaviours, and in general, are more socially motivated (Sedgewick et al, 2016). There are also race and cultural disparities in autism diagnosis

Clinician-child interactions in ADOS-2 assessments – a CA perspective

(Mandell et al., 2009). Non-White children and those of lower socio-economic status (Daniels, & Mandell, 2014; Maenner et al., 2020) continue to remain under-represented in autism diagnostic rates (Mazurek et al., 2014; Mandell et al., 2010; Parikh et al., 2018). Prevalence rates of autism also vary across countries and across different ethnic groups within the same country (Norbury & Sparks, 2013). Disparities could in part be explained by differing cultural expectations as each context in which autism is observed is unique and distinctive (Mandy et al., 2014). Due to the white, westernised, middle class, male dominance of the autistic population utilised within clinical research and diagnostic investigations (Ratto, 2021; Soto et al., 2015), the validation of the autism diagnostic process is being called into question (Ratto, 2021).

The differing prevalence rates have also changed over the years due to changes in conceptualisations of autism as determined by the diagnosable criteria stipulated in diagnostic manuals. For example, when autism was first described as a clinical condition, Leo Kanner (1943) emphasised the importance of autism as a separate developmental condition with characteristics of childhood schizophrenia. This in turn, influenced societal understanding of autism as a medical disorder. Kanner (1943) narrowly defined the construct of autism as being severely disconnected from the social world, with an innate inability to form the usual, biologically provided affective contact with people (pp 250). Due to Kanner's narrow conceptualisation of autism, autism was rarely diagnosed, as only 5% of children presented with full symptomatology (Fasulo, 2022). Autism was first introduced as a clinical condition in the second edition of the DSM-II (APA, 1968) as a form of childhood schizophrenia.

In the 1970s, several lines of research (Bartak & Rutter 1973; Rutter, 1972, 1978) began to demonstrate that autism was a distinct condition (Schopler et al., 1979) which led to the

Clinician-child interactions in ADOS-2 assessments – a CA perspective

inclusion of autism as a separate diagnosable construct coined ‘infantile autism’ in the DSM-III (APA, 1980). The identification of ‘infantile autism’ included early onset of delayed and deviant social and language capabilities, restricted and repetitive interests and behaviour, and likely hypo- and hyper-sensitivities (Rutter, 1978). In this version of the DSM (APA, 1980), infantile autism was included within an entirely new category of conditions coined ‘Pervasive Developmental Disorders’ (PDDs). ‘Atypical Pervasive Developmental Disorder’ captured people that did not meet the diagnostic threshold for the existing conceptualisation of ‘infantile autism’.

It soon became apparent that ‘infantile autism’ was limited within its scope to identify all ages and developmental levels (Siegel et al., 1988; Waterhouse et al., 1993). The next revision of the DSM-III-R (APA, 1987) therefore changed the diagnostic label of autism from ‘infantile autism’ to ‘autistic disorder’ which reflected Lorna Wing’s recommendations for a broader view of the diagnostic concept (Wing 1993). In DSM-III-R, a new set of 16 detailed criteria was provided to diagnose autism and organised into what had evolved to the ‘triad of impairment’. The ‘triad of impairment’ was defined by 1) impairments in reciprocal social interaction, 2) impairments in communication, and 3) restricted and repetitive behaviours and interests. In the DSM-III-R, to receive a diagnosis of autistic disorder, at least eight positive criteria were required to meet threshold, including a minimum of two from the social domain, one from the communication domain, and one from the restricted and repetitive behaviours and interests domain. The DSM-III-R intended to account for developmental change, developmental level and provide greater clinical flexibility (Volkmar et al., 1992). PDD was renamed ‘Pervasive Developmental Disorder - Not Otherwise Specified’ [PDD-NOS], again to capture those whose symptomatology were ‘subthreshold’ (Towbin, 1997).

Clinician-child interactions in ADOS-2 assessments – a CA perspective

At the same period as Kanner's work, Hans Asperger documented boys who had marked social difficulties, but good verbal skills and unusual circumscribed interests (Asperger, 1944). Asperger's conceptualisation of autism as a spectrum resulted in a much broader understanding of autistic children's linguistic abilities and social behaviours, this also included the potential presence of strengths, which could be exceptional (Fasulo, 2022). Asperger's work however was discovered decades later by Lorna Wing. Convinced of the heterogeneity of autism based on Asperger's conceptualisation of autism as a spectrum, her clinical work as a psychologist, and her own experience as a mother of an autistic child, Wing considered that parents might be accepting of a different diagnostic label for children with less evident manifestations and coined 'Asperger Syndrome' as a separate condition (Wing, 1981). Asperger syndrome was initially incorporated into the World Health Organization's International Classification of Diseases, 10th edition ([ICD-10] World Health Organization 1992), including recognising other conditions such as, Rett's disorder and childhood disintegrative disorder (Volkmar et al., 2014). Major revisions were then in turn made to the fourth edition of DSM ([DSM-IV & DSM-IV-TR] APA, 1994) in which 1. Autistic Disorder, 2. Asperger's Disorder, 3. Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS), 4. Rett's Disorder, and 5. Childhood Disintegrative Disorder (CDD) were included as separate conditions within the Pervasive Developmental Disorders category (Rosen et al., 2021).

In the next revision of the DSM ([DSM-5] APA, 2013), Autistic Disorder, Asperger's Disorder, and PDD-NOS were collapsed into a single diagnosis of Autism Spectrum Disorder [ASD]. The shift from the DSM-IV subcategories to a single spectrum was reported to improve diagnostic specificity and diagnostic sensitivity as over 90% of children with PDDs met the criteria for DSM-5 Autism Spectrum Disorder (Huerta et al., 2012; Mandy et al., 2012). Moreover, as research at the time began to show that communication is unavoidably social and

Clinician-child interactions in ADOS-2 assessments – a CA perspective

impossible to categorise given the significant overlap, social communication and social interaction were combined into a single social–communication domain (Gotham et al., 2007; Robertson et al., 1999). The ‘triad of impairment’ was therefore restructured into a two-domain model: social–communication (criterion A) and restricted, repetitive patterns of behaviour, interests, or activities (criterion B). The move from a triad to a dyad of symptom measurement was also due to the many unsuccessful attempts to categorise the heterogeneity of autism into empirically defined subcategories (Charman et al., 2011; Georgiades et al., 2013; Ingram et al., 2008), and the lack of diagnostic specificity of any defined language difficulties (Bishop & Norbury, 2002; Baird et al., 2008).

Many diagnostic instruments, such as the ADOS-2 however continue to categorise ‘Language and Communication’ (category A) and ‘Reciprocal Social Interaction’ (category B) as separate non-overlapping behaviours. The ADOS-2 utilises the DSM-IV’s diagnostic criteria for three separate diagnosable constructs: ‘Language and Communication’, ‘Reciprocal Social Interaction’, and ‘Stereotyped Behaviours and Restricted Interests’. Therefore, although research underpinning the diagnosable construct of autism now acknowledges that it is not possible to disentangle communication from reciprocal social interaction, as both are inherently social, this has not been adopted by some diagnostic instruments. The process of separating these interwoven social communication capabilities will likely influence how diagnosticians conceptualise difficulties in social communication as located in the individual as opposed to considering how all communication is unavoidably social and constructed and given meaning between people.

Although for the first time revisions of the DSM-5 (APA, 2013) included contributions from autistic people (Kapp, 2020), the changes within autism diagnosis created controversy and

Clinician-child interactions in ADOS-2 assessments – a CA perspective

criticism. There were concerns regarding the loss of services if a person no longer meets diagnostic criteria. There was also criticism around the impact on any person's identity and community by removing their previously provided diagnosis, specifically regarding the community of 'aspies', a person with a diagnosis of Asperger's Disorder (Rosen et al., 2021). For many, the label of Asperger's or autism had provided an identity and a community (Fasulo, 2022). Therefore, since Kanner's original construct of autism, medical and societal views on autism have changed significantly. Changes in the conceptualisation of autism is largely influenced by the narrative surrounding any cultural knowledge, which is informed and modified by media and the dominant theoretical models.

2.2. Theoretical Models Underpinning Diagnosis

2.2.1. Medical Model

There are various theoretical models that shape an individual's or a culture's understanding and perception of mental health, disability, and neurodevelopmental conditions. Theoretical models shape individual professions as they are interwoven into the design and structure of professional training. For example, medicine and psychiatry utilise a medical model of diagnosis. Although other diagnosing professions such as, psychology have other theoretical models (e.g., the biopsychosocial framework) that guide the profession, typically all disciplines utilise the same diagnostic instruments (e.g., ADOS-2) that are underpinned by the medical model. The medical model considers deviation from typical functioning as existing within the individual as innate and the product of a physiological cause. It views behaviours as objectively definable and in need of remediation (Duchan, 2012; Eagle, 2014; Ferguson, 2009) with a focus on diagnosis, treatment, prevention to cure and to normalise the person (Glynne-Owen, 2010; Evans, 2013). The deficit focus of the medical model is observable in the language utilised to describe symptomatology, such as 'disorder', 'deficit', 'severity' (APA, 2022). The medical

Clinician-child interactions in ADOS-2 assessments – a CA perspective

model has generated a shared language amongst professionals to describe any person's presentation by simply utilising any diagnostic label.

This approach limits conceptualisations of any mental health, disability, neurodiversity or condition to the narrowly defined behaviours as specified by the diagnostic construct. The medical model takes a positivist approach and believes that reality can be discovered, that knowledge about the world is derived from facts, and that humans can be objectively measured. Principles are drawn from the natural sciences in which scientific logic and mathematical equations are deemed to generate the most valid knowledge (O'Reilly & Parker, 2014). Yet, people are unique and complex, and cannot be understood without observation. This model views mental health, disability, and neurodevelopmental conditions as located in the individual only and does not consider how environmental and contextual factors influence a person's presentation (Ratto et al., 2023).

2.2.2. Biopsychosocial Model

The biopsychosocial model (Engel, 1977) includes aspects of the medical model but also considers how a person's sociocultural context (such as, experience of health, wellness, and quality of life) interacts with predisposed biological factors, historical factors, and individual beliefs and attitudes. This approach also considers the ongoing and dynamic interactions that constantly evolve amongst these multiple dimensions. Biopsychosocial model research has focused on how biological responses to the environment, such as, the sensorial system (Markram & Markram, 2010) and neurological characteristics (Muratori & Maestro, 2007; Trevarthen & Delafield-Butt, 2013) influence displays of social behaviours (Markram & Markram, 2010). The biopsychosocial model does not assume that the condition and its associated symptoms are an exhaustive explanation of behaviours but instead focuses on how

Clinician-child interactions in ADOS-2 assessments – a CA perspective

environmental variables function as barriers to participation and impact quality of life (Yu & Sterponi, 2023). This has led to considerations that social and communicative differences in autism (including mental health, disability, and neurodevelopmental conditions) may be a consequence of other factors implicating the social experience (Markram & Markram, 2010), rather than a reduced motivation for social contact and relations (Fasulo, 2022).

Autism assessment researchers are often situated in psychology (Fitzgerald, 2013) and psychology as a discipline is situated in the biopsychosocial model. Measurements for autism diagnosis (such as the ADOS-2) and most clinical practice seeks to apply evidence-based research which emerges from the medical model (Waddell & Godderis, 2005). Standardised evidence-based is valued as it is considered to provide successful practice (O'Reilly & Parker, 2014) which informs commissioning decisions to differentiate the cost effectiveness and values of various therapeutic modalities and strategies (Hoagwood et al., 2001; Rycroft-Malone et al., 2004). As previously noted, standardised evidence-based practice is often situated in the medical model which views mental health, disability, and neurodevelopmental conditions solely through impairment that is located within the individual, rather than considering how environmental and contextual factors influence a person's presentation (Ratto et al., 2023). Therefore, although the biopsychosocial model framework considers how environmental and contextual factors influence a person's presentation over time, when using diagnostic measurements such as the ADOS-2, differences observed in behaviours are only considered to be a byproduct of the condition. This deficit focus to diagnosis therefore neglects the influence of the other, whilst also neglecting other behaviours, including how some capabilities may be utilised to compensate for areas of difficulty (Lam et al., 2020; Russell et al., 2019).

2.2.3. Social Model

Clinician-child interactions in ADOS-2 assessments – a CA perspective

The social model of disability instead conceptualises mental health, disability, and neurodevelopmental conditions as contextually situated. The orientation of the social model is that individuals may have differences in minds and biology, but these are not disabling unless society imposes barriers to perform an action due to external limitations (den Houting, 2019; Kapp, 2020; Kapp et al., 2013). Proponents of the social model intend to inform and change environmental, institutional, and societal barriers and perceptions, which are observed to implicate the participation, autonomy and quality of life of those with neurodiversity and disability (Baglieri & Lalvani, 2019; Tregaskis, 2004; Ware, 2004). The social model is socio-political as it argues for a reformation of society to provide accommodation, increase accessibility, and decrease stigma and discrimination. Efforts are focussed on increasing participatory access (Yu & Sterponi, 2023) and for community and autistic-led research to inform policy development (Kapp, 2020; Milton et al., 2020). The social model assumes that knowledge does not pre-exist as a fact which can be discovered, but rather is co-created in a social historical and political context, in which meaning is co-created through language and interaction (O'Reilly & Parker, 2014). From this perspective, conditions such as autism are not simply located in the individual but also the result of its direct interaction with others' response to those perceived deviations (Oliver & Barnes, 2012), whereby challenges are typically associated with the autistic person (Kapp, 2013).

A clinical assessment with the social model would explore how contextual and sociocultural factors influence a person's presentation in different environments (such as, school, home, work, and social life) with the aim to lessen any negative consequences for the person's functioning, wellbeing, and behaviours. A clinical assessment utilising the social model is a dynamic process which is constructed by people rather than objective (O'Reilly & Parker, 2014). This process will not search for an objective truth and consider the biological or

Clinician-child interactions in ADOS-2 assessments – a CA perspective

cognitive factors contained in any diagnosable construct but will aim to explore meaning and experience (Burr, 2015). Clinical research situated in the social model can go beyond the generalised application of evidence-based research to help stimulate new ideas and build theories to improve services within mental health disability, and neurodevelopmental conditions. Within this model qualitatively rich data can be utilised to explore current terminology which describes diagnostic constructs and replace them with person led meaningful language (O'Reilly & Parker, 2014), which in turn, can be incorporated into clinical practice (Peters, 2010).

As the social model views impairment as separate from disability and the biological as separate from the social (Brownlow & O'Dell, 2013) with a focus on how the social world responds and generates a reality for the individual person with a diagnosis, it does not forefront how the person also co-creates their reality within each unfolding interaction. The social model and the medical model of disability both generate a disabled focus, in that people are either disabled by their brains or an oppressive society. Both models (alongside the biopsychosocial model which adopts a medicalised model approach to diagnosis) in turn, deny the agency of people and their engagement in social interaction (Ortega, 2013).

2.2.4. Predicament Model

Other models have been proposed to conceptualise autism. For example, the predicament model is presented to offer an approach that establishes a positive identity and general representation for the autism community by addressing the experience of the heterogeneity of autism (Anastasiou & Kauffman, 2013). The predicament model disregards the 'spectrum' metaphor, which typically situates any autistic person within the spectrum category on a 'low-to-high' functioning scale (Thomas & Boellstorff, 2017) and accepts that diversity of autism is

Clinician-child interactions in ADOS-2 assessments – a CA perspective

impossible to categorise. Although this approach aims to acknowledge the variability of the autistic individual and the diversity of autistic experience, it refuses to compare autism to a standard of normal (Anastasiou & Kauffman, 2013). To understand the autistic experience however, there must be knowledge of any given cultural norm to determine how people, autistic or not, make sense of one another.

2.2.5. Strengths Based Approach to Autism Assessment

The medical model and its representation of a condition and its deviations from the norm generates unpredictable social effects around those who are provided a labelled diagnosis (Beck, 2018). Only acknowledging behaviours that are associated with DSM-5-TR diagnostic criteria can inadvertently perpetuate stigma around autism and in turn, limit people's self-worth and flourishing (Dinishak, 2016; Waltz, 2008). The autistic person can experience internal conflict when expected to embrace a disability status to access services and support but do not experience their interaction with the world as consistently disabling. This state of incongruence may cause internal conflict in which they want to reject part of their diagnosis perceived as undesirable by others while simultaneously preserving the parts of their diagnosis that make them unique (Jones et al., 2015). A diagnostic process which captures the person's strengths, difficulties, and autism symptomatology will help lessen this internal and societal conflict. Therefore, there is an ethical obligation for researchers and mental health professionals to not simply describe the symptomatology of those diagnosed with autism in terminology that can be circulated with ease.

Every individual has areas of strength and difficulty, and some cognitive profiles are adaptive in some environments yet manifest as disability in others. A modernised framework of diagnosis that does not pathologize and focus disproportionately on difficulties and instead

Clinician-child interactions in ADOS-2 assessments – a CA perspective

takes a more balanced view, with equal attention to what the person can do is therefore needed (Baron-Cohen, 2017). Yet, the exclusive focus on impairment and functional deficits in autism diagnosing services is generally observed internationally (Kapp et al., 2012). Therefore, strengths, abilities and interests such as, honesty, loyalty, creative talents (de Schipper et al., 2016), attention to detail (Baron-Cohen et al., 2009; de Schipper et al., 2016), isolated skills, perceptual peaks (Meilleur, Jelenic & Mottron, 2015), system processing, and sensory sensitivity (Baron-Cohen et al., 2009) often go undocumented or undervalued. By adopting a strengths-based approach to autism assessment that also focuses on identifying a person's strengths, abilities and interests could improve self-esteem, confidence, social engagement, relationships (Diener et al., 2015; Diener et al., 2016) and work-related life skills (Lee et al., 2019).

The strength-based approach however has been criticised for placing people 'in danger' by focusing efforts on strengths-oriented interventions to promote wellbeing and by discouraging standardised diagnostic assessments (Taylor, 2006) and in turn, evidence-based practice (Kratochwill & Shernoff, 2004; Taylor, 2006). Due to the infancy of a strengths-based focus, more strengths-based innovative research must be conducted and substantiated with scientific evidence before the mainstream diagnostic processes will broadly implement this approach into practice (Kratochwill & Shernoff, 2004). Some countries have already incorporated a strengths-based framework to diagnosis into public policy. Australia's new 'National Guideline for the Assessment and Diagnosis of Autism Spectrum Disorders' (Whitehouse et al., 2018) recommends that the process of assessing and diagnosing autism should adopt a strengths-focused approach which aims to identify strengths, skills, interests, support systems, environmental facilitators, as well as barriers (Whitehouse et al., 2018).

Clinician-child interactions in ADOS-2 assessments – a CA perspective

2.2.6. Interaction Framework to Autism Assessment

When it comes to tackling some of the most important questions surrounding autism however, the distinctions identified by these models of disability are not overly useful. The most influential research refuses to situate its origins firmly in one model or another, but instead orients to the strategic applications of the models and their influence on research and practice. Framing an approach to autism as either a neurological difference to be celebrated or as a condition of social impairment can paralyse both clinical, academic, and public discourse which in turn, will be of little benefit to autistic people (Silverman, 2008). Irrespective of the guiding principles of the theoretical model or diagnostic approach, the perspective of the autism researchers and clinicians will be from a neurotypical standpoint. For example, I, the author of this thesis, as both an autism researcher and an autism diagnosing clinician operate from a neurotypical standpoint, and therefore power relations (insider status: of researcher/clinician vs outsider status: not autistic) are therefore likely to influence both the diagnostic process as well as research that informs diagnosis (O'Reilly & Parker, 2014).

Taking an interaction framework to diagnosis will reduce the likelihood of a biased approach which is not motivated by confirming a diagnosis, identifying power relations, or motivated to find strengths. An interaction framework takes the focus away from the diagnostic symptomatology to instead, focus on how an individual interacts (Antaki, 2014). This approach can capture communicative competencies that would potentially go unidentified with typical administration of standardised measurements (Schegloff, 2003). Instead, an interaction framework will remove any preconceived ideas of what any person may do in a clinical interaction and instead focus solely on how people make sense of one another. By analysing only how people within an assessment understand each other's turns at talk, this approach to diagnosis will capture displayed deviations that align with the construct of autism

Clinician-child interactions in ADOS-2 assessments – a CA perspective

symptomatology (medical model), how the environment might shape autistic behaviour (biopsychosocial model), how the established clinical culture within diagnostic practice represents the autistic person (social model), the predicament of assessing the heterogeneity of autism (predicament model), and finally, help identify observable strengths and difficulties in interaction that are unique to the individual under assessment.

2.3. How Autism is Diagnosed in Practice

As autism cannot be identified through concrete physiological or biological determinants, due to its highly genetic and neurobiological heterogeneity (De Rubeis et al., 2014; Toal et al., 2010; Lenroot & Yeung, 2013; Chapman, 2020), when determining if an individual is autistic, clinicians must evaluate the person's communicative functioning, observable behaviours, and developmental level (Kamp-Becker et al., 2018). Clinicians therefore typically utilise standardised measurements (such as, questionnaires, semi-structured interviews, and semi-structured observations) in which autism symptomatology is categorised and integrated into the design of these screening instruments to provide a quantifiable, replicable, and objective attribution process to autism diagnosis. This is considered to be the 'gold standard' approach to autism diagnosis (Falkmer et al., 2013). For screening purposes, two versions of the Autism Spectrum Screening Questionnaire ([ASSQ] Ehlers et al., 1999) may be administered, one to care-providers, and the other to school staff. Dependent on age and gender, the (Girls) Questionnaire for Autism Spectrum Condition ([GQ-ASC] or [Q-ASC] Attwood et al., 2011) and the Autism-Spectrum Quotient Test ([AQ] Baron-Cohen et al., 2001) may be administered.

All these instruments provide descriptions with a corresponding code to match observed behaviours. Typically, the quantified observable behaviours are collated to generate scores which suggest the likelihood of autism. Questionnaires can often present mixed results in that

Clinician-child interactions in ADOS-2 assessments – a CA perspective

the person may meet the clinical threshold for autism in some screening measures but not in others (Maynard & Turowetz, 2022). In these instances, the assessing clinicians may discharge the person from the relevant service or explore to determine if further evaluation of autism is required. In the event of further evaluation, a semi structured interview with parents or care providers is conducted to obtain an historical assessment of the person's developmental history (Falkmer et al., 2013; Zwaigenbaum & Penner, 2018) with tools such as, the Diagnostic Interview for Social and Communication Disorders ([DISCO] Wing et al., 2002) or the Autism Diagnostic Interview-Revised [(ADI-R) Rutter et al., 2003]. These instruments also provide descriptions with a corresponding code with ratings to match observed behaviours.

Utilising scores for diagnosis however can be problematic (Coughlan et al., 2021) as every person presents a unique presentation and history. Scores may be inflated due to other conditions with similar presentations and co-occurring conditions, especially when assessment tools are utilised in isolation (Risi et al., 2006). The process of attributing behaviours to a category, such as, autism or non-autism (Turowetz & Maynard, 2016) to fit diagnostic measures can also result in not diagnosing autism when the person is autistic (Risi et al., 2006). Most diagnostic gold standard measurements are based on a narrow conceptualisation of autism due to an overrepresentation of white, westernised middle-class males (Norbury & Sparks, 2013). Autistic people who present autism differently or mask behaviours (Lai et al., 2017; Loomes et al., 2017; Pearson & Rose, 2021) to navigate neurotypical social expectations (Hull et al., 2017) often fall below criterion to receive a diagnosis of autism. These factors often contribute to an autism diagnosis being missed or delayed (Ratto et al., 2023). Instances of not receiving a diagnosis when autistic can decrease when criterion is relaxed (Risi et al., 2006). Misdiagnosis can also occur due to diagnostic classification uncertainty (Taylor et al., 2016). Coding complexities are observed as the clinicians jointly narrate their observations to

Clinician-child interactions in ADOS-2 assessments – a CA perspective

conclude on a score that represents the observed behaviour (Turowetz & Maynard, 2016). Therefore, clinicians must work as interface managers to balance the interaction of symptomatology and scores (Rosenberg 2002), which involves considerable experience working with autism (Lord et al., 1989), knowledge of other relevant conditions, and knowledge of typical development.

There are few guidelines however to advise diagnosing clinicians on how to deliver the most appropriate autism assessment. Hayes (2019) analysed twenty-one documents of clinical guidelines for autism diagnosis in the UK and found that they all varied in the recommendations for use of diagnostic tools and assessment procedures which made the process complex and confusing. Moreover, there was little information or recommendations for how interactional and contextual factors impacted on the process of assessment, diagnosis and day-to-day practice. Typically, clinical guidelines recommend the use of standardised assessment tools as these are considered to be gold standard with greater reliability. Examiners therefore must follow the protocol of standardised tools that dictate what specific questions to ask, the content and the construction of the questions, the order in which they are asked, what behaviours must be recorded, and the reduction of the behaviours to a corresponding rating.

2.4. The Autism Diagnostic Observation Schedule [ADOS]

Typically, the final assessment tool in the diagnostic process of autism is conducted with the Autism Diagnostic Observation Schedule ([ADOS], Lord et al., 1989). The ADOS has long been considered the gold standard method of standardising direct observations of the person's current functioning and social behaviours in those suspected of being autistic (Fombonne 2009; Lord et al., 2000; Norbury & Sparks, 2013). The ADOS is typically conducted by clinicians who are experienced in evaluating individuals with autism (Lord et al., 1989; Zwaigenbaum &

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Penner, 2018). The first version of the ADOS (Lord et al., 1989) was initially designed for research use in 1989, alongside the original ADI (Le Couteur et al., 1989). The ADOS was initially developed to facilitate observation of current behaviour to discriminate autistic children from 6 years to young adulthood with normal to mild lower Intelligence Quotient (IQ) from other conditions and typical development. The development of the ADOS schedule involved utilising clinical guidelines for the diagnosis of autism from the third revised edition of the DSM ([DSM–III-R] APA, 1987) and the ninth edition of the ICD ([ICD-9] WHO, 1987), clinical experience (Rutter, 1985), and current research at the time in autism and child development (Rutter & Schopler, 1987). The schedule was designed to include contexts in which behaviours associated with autism symptomatology would appear. The tasks within the schedule were predetermined to provide standardised situations in the type of materials, in variations of cognitive demands, and in the behaviours of the examiner (Lord et al., 1989). Descriptions of the behaviours that were to occur in response to these standardised contexts and corresponding coding items were also defined. These ratings were supported by research generalising natural social situations (Pettit et al., 1987), and laboratory equivalence (Lord et al., 1999), and because of interest in identifying situations that were most likely to facilitate the observation of autistic-type social behaviour and communication (Lord et al., 1989; Rutter et al., 1988). Rating of the coding sections was done at the end of the schedule on the basis of the examinees behaviour throughout the assessment on a 3-point ordinal scale (0 = within normal limits, 1 = infrequent or possible abnormality, 2 = definite abnormality, and 7 or 8 for abnormal behaviour not encompassed by other ratings). The ratings were designed to allow uncertainty on the part of the examiners (Lord et al., 1989).

Although the ADOS acknowledged unusual movements, repetitive behaviours, and sensory interests associated with autism symptomatology, the ADOS was designed primarily as an

Clinician-child interactions in ADOS-2 assessments – a CA perspective

assessment of social and communicative behaviours (Lord et al., 1989). The ADOS was intended to be quick and generally required 20-30 minutes to administer eight tasks that prompt the child or adult to gesture, describe an event, demonstrate reciprocal communication, ask for help, give help, turn take, and discuss socioemotional topics. As social communication involves more than one person (Lord et al., 1989), the aim of the ADOS was to standardise the behaviours of the examiner, in order to create occasions in which the child's social and communicative behaviours could be objectively evaluated (Lord et al., 1989). Standardisation of the ADOS relied on the hierarchy of the behaviours employed by the examiner (Lord et al., 1999). The examiner is viewed as a "observer or a confederate in a social experiment" who follows a scheduled protocol that provides planned contextual social "presses" (Lord et al., 1989, p. 187). 'Presses' are purposely delivered in different social situations or tasks to prompt a range of interchanges with the aim to elicit specific behaviours, therefore directly implicating the examinees response (Lord et al., 1989). Some tasks were constructed for the examiner to provide a social communicative situation to determine how the examinee responds to a specific social demand. Whereas other tasks were designed to provide an informal and unstructured social setting in which the examinee must make social overtures and initiate interaction (Lord et al., 1999). Without overtly structuring the social aspects of the task, a critical factor for the examiner is to facilitate an interaction that appears natural so that the institutional objective remains invisible to the examinee (Lord et al., 1989). Therefore, the ADOS-2 describes how the activities and materials are sufficiently intriguing so that the examinee will want to participate in social communication (Lord et al., 2002).

Two factors led to modifications in the original ADOS (Lord et al., 1989) and the ADI (Le Couteur et al., 1989). First, there was an interest in using the instrument in clinical settings (Lord et al., 2000). Second, there was a need to extend the age and verbal limits of the ADOS

Clinician-child interactions in ADOS-2 assessments – a CA perspective

and the ADI to address the concerns of parents of the assessments failure to meet the capabilities of children functioning at infant and toddler levels (Lord et al., 2000). Consequentially, the ADI was revised ([ADI-R] Lord et al., 1994) and the Pre-Linguistic Autism Diagnostic Observation Schedule ([PL-ADOS], DiLavore et al., 1995) was created to capture children four years of age and younger who had too little language to participate in the regular ADOS administration. The ADOS however tended to be underinclusive for autistic children who had some expressive language. Moreover, the ADOS consisted primarily of activities intended for school-age children. Additional or alternative tasks were needed to appropriately assess adolescents and adults. The authors experience with the ADOS and PL-ADOS also indicated several ways in which the assessments could be more efficient in addressing the needs of the children who fell between the PL-ADOS and ADOS in language capabilities and age-appropriate tasks (Lord et al., 2000). In response to these factors, the ADOS-G was designed.

The ADOS-G differed from the preceding instruments by providing standardised contexts for the observation of behaviour for a broader developmental age through four modules aimed at different developmental and language levels, ranging from no expressive use of words to fluent, complex language in an adult (Lord et al., 2000). Module 1 was based on the PL-ADOS and was intended for examinees who did not consistently use spontaneous phrase speech. Module 2 was intended for young children who were verbally fluent or older children who exhibited some spontaneous phrase speech but who were not verbally fluent. Module 3 was based on the 1989 version of the ADOS and intended for children and younger adolescents for whom playing with toys was age appropriate and who displayed fluent spontaneous speech (defined as the expressive language skills of a typical 4-year old child that can produce a range of sentence and grammatical constructions, can produce some logical connections within

Clinician-child interactions in ADOS-2 assessments – a CA perspective

sentences with some possible grammatical errors, and use language to convey events that are not within the current context). Module 4 was based on the 1989 version of the ADOS and intended for verbally fluent adolescents and adults for whom playing with toys was age inappropriate. Module 4 included additional age-appropriate interview questions ‘current work or school’, ‘daily living’, and ‘plans and hopes’ (Lord et al., 1999). Modules 3 and 4 had three specific goals a) to observe the examinees spontaneous social-communicative behaviour, given the situation that provides a press to communicative or interact, b) to assess the examinees ability to behave appropriately given the demands of the situation, and c) to provide a standard context for the collection of language (Lord et al., 1999). Only one module, lasting about 30 minutes, was administered to any individual at a given point in time (Lord et al., 2000).

All concepts, principles, and general strategies from the 1989 version of the ADOS were retained, in that activities followed standard guidelines and allowed for codes made from the observation to be converted to scores in a diagnostic algorithm. Items which operationalised the criteria of the DSM-IV (APA, 1994) and ICD-10 (WHO, 1993) were generated and chosen based on the greatest level of discrimination (Lord et al, 2000). Some tasks and items were modified or removed, for example, ‘Communication of Own Affect’ had very poor reliability and is not included in the coding of Module 3, nor does it contribute to the total algorithm of Module 4. The associated ‘Emotions’ task however remains in both Modules 3 and 4 as a non-optional task. The non-algorithm items were retained for several reasons. First, the standardisation and reliability statistics were based on scoring all items, and that scoring of some items impacted the scoring of others because of the emphasis on not scoring the same behaviour twice. Second, some of the non-algorithm items were intentionally retained to allow comparability across items within modules and to further capture measurement of change, even when a behaviour was not diagnostically significant. The algorithms indicated a cut-off for the

Clinician-child interactions in ADOS-2 assessments – a CA perspective

broader autism spectrum diagnosis (including pervasive developmental disorder and atypical autism) as well as cut-offs that correspond to a narrower conceptualisation of autism (Lord et al., 1999) as defined in the DSM-IV (APA, 1994). Thresholds were established for the current three separate diagnostic domains ('Social Interaction', 'Communication', and 'Restricted, Repetitive Behaviours'). Specific items for coding imaginative play and restricted or repetitive behaviours or interests appeared on the algorithm form of the ADOS Protocol Booklet but did not contribute toward the total score corresponding to diagnosis (Lord et al., 2000; Lord et al., 2012). The ADOS validation sample for this version indicated effective differentiation of individuals with autism and non-spectrum, achieving at least 93% across the four modules with a strong predictive value. Differentiation however of individuals with milder autism and non-spectrum however produced lower specificity and sometimes sensitivity (Lord et al., 1999).

In 2012, the current version of the ADOS-2 was revised. In this version, a fifth module, the Toddler Module and associated algorithms that was specifically designed for children with limited expressive language, who are aged 12 to 30 months, and are walking independently was included. This version included revised algorithms for Modules 1 through 3 due to concerns about the effect of age and language levels on domain totals. Studies found an association between Reciprocal Social Interaction domain totals and level of cognitive impairment in preschool children (Joseph et al., 2002), an overidentification of children with specific language impairments (Bishop & Norbury, 2002), limited validity in adequately identifying young children with mild intellectual disabilities (de Bildt et al., 2004), and an inadequate identification of nonverbal autistic individuals because of a range restriction on the Module 1 algorithm (Gotham et al., 2007). The ADOS algorithms were, therefore, revised to reduce limitations on raw score distributions for children with no spoken language and to minimize associations between raw scores and participant characteristics. A Comparison Score

Clinician-child interactions in ADOS-2 assessments – a CA perspective

was also created to compare autistic children with the same chronological age and language level. The Comparison Score can also be used to interpret an individual's own change in autism spectrum-related symptomatology over time. The goal of revising the ADOS was to improve the accuracy and effectiveness of the diagnostic algorithms (Lord et al., 2012). Although the tasks and the coding items remained separate, the new algorithms for Modules 1 through 3 included two domains (Social Affect [SA] and Restricted and Repetitive Behaviour [RRB]) that are summed to provide an overall Total score which reflected research that indicated a unitary social-communication factor (Constantino et al., 2004; Lord, et al., 1999; Lord, et al., 2000; Robertson et al., 1999). Older adolescents and adults were thought to merit individual study, and available samples were not sufficient for analysis; therefore, Module 4 has not been revised since the previous version. None of the activity items, coding, and scoring procedures of the ADOS-2 modules were changed in this revision. Therefore, Module 4 largely remains in the original pre-publication 1989 version of the ADOS.

Since its publication for research use in 1989, the ADOS remains one of the most widely utilised assessments of autism. The ADOS is used across the world and has been officially published in twenty-three languages (Bulgarian, Croatian, Czech, Danish, Dutch, English, Finnish, French, German, Hebrew, Hungarian, Italian, Japanese, Korean, Mandarin ‘Traditional Characters’ and ‘Simplified Chinese’, Norwegian, Polish, Portuguese, Russian, Romanian, Spanish, Swedish, and Ukrainian) by the Western Psychological Services (WPS, 2023). The ADOS has also been standardised for assessment of autism in individuals with profound, severe, moderate, or mild levels of deafness (Phillips et al., 2022; WPS, 2023). To purchase and utilise the ADOS, the Western Psychological Services requires examiners to have either a master’s degree in psychology or a related field (e.g., occupational therapy, speech-language pathology, special education) with no additional training required in autism.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Alternatively, a bachelor's degree in psychology or a related field is required, plus a licence or certification from an agency or organisation that requires training and experience in assessment (WPS, 2023). Therefore, the profession, qualification, experience of autism, and experience of comparison groups (e.g., typically developing and other communicative conditions) of the ADOS-2 examiners varies considerably.

2.5. An Interactional Approach: Conversation Analysis

Throughout the process of assessment and diagnosis, examiners and those being assessed cooperate in a finely patterned, socially organised, and coherent practice of talking to share professionalised knowledge (Peräkylä & Vehviläinen, 2003). 'The interaction order of the clinic' (Maynard & Turowetz, 2022) is not explicitly stated or acknowledged throughout the course of everyday work, yet it has remained consistent over decades (Maynard & Turowetz, 2019). Similarly, in everyday interaction speakers constantly edit, elaborate, shorten, and amend each utterance both with and without awareness (Sacks, 1992). These patterns do not constrain actions, but they are utilised flexibly to construct communicative order to achieve understanding and progressivity. Interaction is not simply a verbal process but simultaneously embodied with other modes of communication (such as, body movement, body orientation, proximity, gesture, facial expressions, eye gaze) without any priori hierarchy (Mondada, 2014b). Conversation Analysis [CA] is an interdisciplinary methodology which sequentially analyses physical conduct, the environment, and all talk (Hepburn & Bolden, 2017), including lexical properties of language (Ball et al., 2008), intonation, prosody, volume, pitch, silence, and fluctuations in speech patterns. Sequential analysis allows the researcher to focus in fine grained detail on how speakers coordinate their conduct in interaction. Conversation analysis has shown that how a speaker communicates, such as the wording of questions, both presents and constrains the communicative options that the recipient can use to coherently respond. For

Clinician-child interactions in ADOS-2 assessments – a CA perspective

example, in clinical interactions, when doctors ask ‘Is there something else’ or ‘Is there anything else?’, the patient is more likely to elaborate concerns when asked the positively polarised ‘something’ in comparison to the negatively polarised ‘anything’ (Heritage et al., 2007). Clinicians also indirectly generate opportunities for people to share or withhold information. In telephone calls to a psychiatric hospital, counsellors implicitly request the caller’s name by introducing themselves. CA research has shown how although this action expects a response containing a greeting and self-identification, the callers who may want to remain anonymous can avoid self-identifying without explicitly refusing (Sacks, 1992).

Moreover, when utilising standardised assessments, clinicians do not stick to the scripted instructions that are provided but instead, they modify assessments to achieve a ‘yes’ response or an outcome considered beneficial for the person under assessment. For example, CA research has shown how health visitors when visiting new mothers transform the item ‘pregnancy normal/abnormal, specify’ on a standardised checklist into the positively polarised question “and you had a normal pregnancy” which is designed to receive a ‘yes’ response (Heritage, 2002). The ‘Quality of Life’ diagnostic instrument has instructions for ‘reading the items’ and paying ‘close attention to the exact wording’, but as treatment and provision are tied to questionnaire scores, clinicians often reformulate questions that contain three options into questions that are designed to seek a simple ‘yes’ answer (Antaki & Rapley, 1996). Clinicians also vary their communicative approach and modify standardised assessments, such as the Addenbrooke's Cognitive Examination [ACE-111] to assist the examinee in their comprehension and response to the task (Jones et al., 2020).

Variation is also found within autism assessments. Clinicians must deal with many unpredictable situations, changes in implementation of assessment materials, differing

Clinician-child interactions in ADOS-2 assessments – a CA perspective

behaviours and potential mistakes, communicative and otherwise. Depending on the examinees response, clinicians may have to modify the assessment or disregard aspects to progress through test items (Maynard & Turowetz, 2022). Moreover, examiners vary in how they provide feedback after an examinees response to an assessment item (Maynard, 2005). In these instances, the person under examination can make inferences to deduce the correctness of their answer, resulting in ‘learning within the task’, which, in turn, affects performance and diagnosis. Although the goal of standardisation is to eliminate external sources of variation that might confound the behaviours being measured, including discounting the examiner as a contributor, the clinical presentation of the examinee could differ between assessments dependent on the examiner’s communication (Maynard & Marlaire, 1992; Maynard & Turowetz, 2022).

CA research has shown that variation in institutional interaction is inevitable as each assessment is a unique co-constructed interaction, which questions the assumption of standardisation as variability in assessment is inevitable (Marlaire & Maynard, 1990; Antaki et al., 2002; Maynard & Schaeffer, 2002). Yet the research underpinning the assumptions of the ADOS-2 posits that autism can be identified and quantified validly and reliably, as its psychometric properties enable sensitivity and specificity, which, in turn, leads to standardisation of diagnosis (Timimi et al., 2019). Examiners therefore work to achieve standardisation by attempting to adhere to instructions for how questions and comments should be delivered whilst also discouraging all other interaction. Attempting to limit what occurs naturally in interaction however has consequences for the ease of communication and the building of affiliative social relationships (Lavin & Maynard, 2001). The focus of protocol implementation can also prevent examiners naturally displaying and attending to nuances that occur throughout interaction (Maynard, 2019; Maynard & Turowetz, 2020). These nuances in

Clinician-child interactions in ADOS-2 assessments – a CA perspective

interaction impact co-interactants understanding of what is being communicated and how they should construct their responses (Maynard, 2005). This is highly problematic when assessing social communication as it implicates any conclusion that can be drawn from an observation.

Research utilising CA therefore has shown how the communicative competence of one person is significantly influenced by the coparticipant's contributions to the interaction (Schegloff, 1982). CA has contributed to a movement which considers how observable abilities in communication in atypical development may differ when analysed in its sequential position in natural interaction. For example, research utilising a CA framework has revealed that what appeared to be repetitive randomised sounds and physical movements in a non-verbal boy with autism, were in fact a unique strategy adapted to communicate (Damico & Nelson, 2005). Further research utilising CA has found that repetitive stereotyped behaviours of a child with autism were uniquely developed communicative resources that functioned as a form of compensatory adaptation (Damico & Nelson, 2005) rather than simply a characteristic of autism (Fasulo, 2015). CA research has also demonstrated how when autistic children were recipients of topics that were complex and difficult to understand, they nevertheless remained engaged and utilised proximally relevant utterances connected to the unfolding conversation (Ochs & Solomon, 2010). Observable is how the autistic children's contributions were not always acknowledged as relevant by their interactants (Fasulo & Fiore, 2007; Ochs & Solomon, 2010).

Applied CA enables researchers to take the focus away from the diagnostic label and the organic symptoms of the condition and instead, analyse how an individual interacts with the world (Antaki, 2014). Applied CA enables researchers to further analyse if atypical interaction styles (Antaki, 2014) are in fact adaptations of communicative difficulties (Fasulo, 2015).

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Therefore, CA can capture communicative competencies in autism that would potentially go unidentified with standardised measurements (Schegloff, 2003) and the medical model of diagnosis (Fasulo, 2015). CA research and its attention to what autistic children do in interaction has challenged stereotypical conceptualisations of autistic communication (Sterponi et al., 2015). As autism is diagnosed based on difficulties in social and emotional reciprocity, such as, a reduction in back-and-forth conversation, sharing of interests and emotions, and an atypical social style (Lord et al., 2018), research is needed that moves away from the neurobiological, psychological, and cognitive (Fitzgerald, 2013) to a focus on the interaction within diagnostic assessments. To fully understand the social significance of any ‘conduct in interaction’ (Schegloff, 2003), autistic or otherwise, it is essential to situate it in the context of its production and study the activity of that specific social world (Maynard & Turowetz, 2022; Schegloff, 2003). Therefore, when assessments of social and emotional reciprocity are utilised to create a diagnostic profile, research that focuses on social communication must be considered when analysing the behaviours of interactants within the situated context (Yu & Sterponi, 2023).

2.6. Aims and Objectives

The diagnosis and identification of any stable clinical population always includes brief behaviour observations (Brown, 1990; Singh, 2015). As autism cannot be identified through concrete physiological or biological determinants, clinicians must evaluate the person’s social-emotional reciprocity, communicative functioning, and developmental level (Kamp-Becker et al., 2018) through observations which are typically guided by standardised assessments such as the ADOS-2. The medical model dominates the process of assessment and diagnosis and situates any observed difference within the person without consideration of how external factors influence their presentation. Yet the social and the biopsychosocial models show how

Clinician-child interactions in ADOS-2 assessments – a CA perspective

a person's presentation may differ dependent on external influences, including how other people can influence the behaviours of the person under assessment. Therefore, research is needed to understand the interactions within diagnostic assessments to determine how the interactants make sense of one another. No research to date has utilised conversation analysis to explore how specific tasks within the ADOS-2, the most widely utilised measure of observation for autism assessment, elicits behaviours that demonstrate social-emotional reciprocity. Further, no prior research has used CA to compare how these interactions are understood by examiners and concluded in diagnostic reports.

Due to the importance of observing behaviours that reflect the person, including both strengths and differences in a diagnostic assessment, I aim with this PhD to analyse the child being assessed for autism in relation to the communicative behaviours of the examiner. Therefore, my aim with this PhD is to analyse interactional tasks and corresponding coding items of the ADOS-2 that are specifically designed to elicit difficulties in social-emotional reciprocity (including, reduced displayed emotions and affect, a failure of normal back-and-forth conversation, and a failure to initiate or respond to social interactions). I have chosen to utilise CA to sequentially analyse how interactants make sense of each turn at talk to determine the effectiveness of these interactional tasks of eliciting capabilities in social-emotional reciprocity. Specifically, I aimed to sequentially analyse the ADOS-2 question designs and any examiner modifications to the assessment items, how these are responded to by the children, and finally, how these responses are followed up by the examiners. I also utilised the corresponding diagnostic reports to determine how the documented observations were guided by the coding items of the ADOS-2 and how these observations reflected the interactions analysed within the assessment.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Over the last two decades, policy directives have pushed to provide earlier recognition and diagnosis of autism (Fennell et al., 2013; Landa, 2008; Teitelbaum et al., 1998) as earlier autism diagnosis leads to improved outcome (Landa, 2008). Thus, as autism is primarily diagnosed in childhood (84.83%) typically before the age of 19 (Russell et al., 2022), I will focus on the assessment of children rather than adults. I therefore aim to enhance assessment processes that claim to assess autism symptomatology and communicative capabilities within the age window when most observational assessments occur.

Therefore, the following main research questions were formulated and answered in chapters 4 through 7:

1. What kinds of opportunities do the interactions within the ‘Emotions’ tasks provide for the examinees to ‘communicate their own affect’?
2. What kinds of opportunities do the interactions within the ‘Loneliness’ and the ‘Social Difficulties and Annoyance’ tasks provide the examinees to ‘comment on others’ emotions and display empathy’?
3. What kinds of opportunities do the interactions within the ‘cliff hangers’ provide for the examinees to demonstrate social motivation and ‘ask the examiner for information’?

In chapter 3 I provide the method, participant information and procedure for analysis and interpretation for this PhD project.

In chapter 4, I analysed the interactions within the ‘Emotions’ task which aim to provide the examinees a context and an opportunity to talk about their emotions, how they feel, and personal experiences. I explored what kinds of opportunities the interactions within the ‘Emotions’ tasks provide for the examinees to ‘communicate their own affect’. I in turn

Clinician-child interactions in ADOS-2 assessments – a CA perspective

compared these interactions with the diagnostic reports to determine if the examiners' observations reflected the dyadic interaction and how these interactions were captured by the rating options within the corresponding coding item 'Communication of Own Affect' (ADOS-2 coding item). I found how examiners modify the ADOS-2 protocol to provide contextual information within the design of the questions to assist the children to provide 'good' answers that will satisfy the examiners' reasons for asking.

In chapter 5, I analyse the interactions within the 'Loneliness' and the 'Social Difficulties and Annoyance' tasks which aim to provide opportunities for the examinees to talk about their emotions and demonstrate insight into their social situation and personal social difficulties, to describe others emotional experiences and reactions, and demonstrate empathy. I explored what kinds of opportunities the interactions within these tasks provide the examinees to 'comment on others' emotions and display empathy. I in turn compared these interactions with the diagnostic reports to determine if the examiners' observations reflected the dyadic interaction and how these interactions were captured by the rating options within the corresponding coding item 'Comments on Others' Emotions/Empathy' (ADOS-2 coding item). I have shown how the examiners utilise the ADOS-2 flexibly and dynamically by intuitively modifying their communication in response to the child's answers. Therefore, the examiners utilise natural conversation and their own communicative capabilities as members of a specific culture to guide the assessment. This approach to assessment changes the focus from a deficit approach (to elicit behaviours associated with autism to conclude a diagnosis) to a strengths-based approach to assessment.

In chapter 6, I analysed the interactions in which the examiner delivered 'cliffhangers' that aim to provide an opportunity for the examinees to 'ask the examiner for information' to

Clinician-child interactions in ADOS-2 assessments – a CA perspective

demonstrate social motivation and an interest in the examiner's thoughts, feelings, and experiences. I in turn compared these interactions with the diagnostic reports to determine if the examiners' observations reflected the dyadic interaction and how these interactions were captured by the rating options within the corresponding coding item 'Asks for Information' (ADOS-2 coding item). The ADOS-2 requires the examiners to match the examinees elicited behaviours to a rating within a corresponding coding item. I found how though the children utilise devices found in everyday conversations, due to the limitations of the descriptions of the rating options, rather than document observed capabilities in social-emotional reciprocity, the observations in the child's diagnostic reports are typically written to align with the individual rating descriptions.

In chapter 7, I draw together the findings and discuss how the research has answered the project questions. Finally, there is a consideration of reflexivity, project limitations, clinical implications, and future research.

3. Methodology

3.1. Participants

14 children who were under assessment for autism at Child and Adolescent Mental Health Service [CAMHS], took part in the study. As this qualitative project was concerned with measuring depth rather than breadth, this project was conducted with fewer participants (O'Reilly & Parker, 2014). In total, there were 8 Caucasian females and 6 Caucasian males, with an average age of 13.9 ($M = 13.9$, $SD = 2.9$).

As the ADOS-2 is administered by one examiner and typically has one or more observers, 20 multidisciplinary CAMHS clinicians (including 17 Caucasian females, 1 Black British female, and 2 Caucasian males with an age range of 23-50) who were trained to administer the ADOS-2 (Lord et al., 2012) partook in this study. In most assessments, the examiners were from a variety of health care professions, including, six Clinical Psychologists, six Assistant Psychologists, 4 Psychiatrists, one Speech and Language Therapist, one Clinical Nurse, one Child Wellbeing Practitioner Supervisor and Manager, and one Psychotherapist in Doctoral Training).

3.1.1. Examiner inclusion criteria:

The criteria for inclusion included: 1) Being employed by CAMHS, Surrey and Borders Partnership [SABP], 2) being trained to administer the ADOS-2 (Lord et al., 2012), and 3) actively delivering online autism assessments. There were no criteria for gender, age, ethnicity, or socio-economic grouping.

3.1.2. Children's inclusion criteria:

The criteria for inclusion included: 1) being offered an assessment for autism by CAMHS, SABP via online telehealth, being both male and female, and aged between 7-17 years old. The requirement of the specific age range was two-fold: 1) as the ADOS-2 is an assessment of social communication, I was predominantly interested in the interactional tasks of Module 3 (which is administered for verbally fluent children and younger adolescents under 16 years of age) and Module 4 (which is administered for verbally fluent adolescents and adults); and 2) I was specifically interested in the interaction between the examiner and the child and therefore aimed to rule out any differences that might occur due to young childhood (as assessed by the Paediatrics Mental Health Team) and due to learning difficulties (as assessed by the Learning Difficulties Mental Health Team). There were no criteria for ethnicity or socio-economic grouping.

3.2. Recruitment

At the time of data collection, I, the PhD author, was employed at CAMHS, SABP as an autism diagnosing examiner; therefore, examiner recruitment happened internally by introducing the project within a CAMHS team meeting and a follow up email containing the relevant Participant Information Sheets and Consent Forms (see appendices). Moreover, as an autism diagnosing examiner and employee, I had access to the children parent's contact details. After the online telehealth autism assessment appointments were booked, I would telephone the family and introduce the project. Where parents displayed an interest in participation, I would obtain consent to send an email from my University of Portsmouth email address containing the relevant Participant Information Sheets and Consent Forms (see appendices). This project was observational and thus no part of the online telehealth autism assessment was modified.

3.3. The Data

The online telehealth ADOS-2 informed autism assessments produced video data that were collected between February 2021 and February 2022. There were 14 online ADOS-2 informed assessments in total analysed for this PhD. Each assessment ranged from 37 minutes-84 minutes ($M = 63.93$, $SD = 13.85$) and consisted of one examiner administering the ADOS-2 and one to three examiners observing. For the majority of the assessment, the observing examiners had their cameras turned off and their microphones muted. Finally, the diagnostic report subsections documenting the ADOS-2 informed assessments were compared with the data and the scoring criteria of the ADOS-2.

3.3. Table 1

Details of Online ADOS-2 Informed Assessments

Child (examinee)	Examiner1 - administrator Examiner2 – observer Examiner3 - observer	Length of online ADOS-2 informed assessment
Child 1 age 14y 6m gender - male	Examiner1 (E9 - Psychiatrist) Examiner2 (E2 - Psychologist) Examiner3 (E16 - Assistant Psychologist)	71
Child 2 age 9y 10m gender - female	Examiner1 (E3 - Assistant Psychologist) Examiner2 (E6 - Psychologist) Examiner3 (E17 - Psychiatrist)	52
Child 3 age 14y 8m gender - female	Examiner1 (E8 - Psychiatrist) Examiner2 (E12 - Clinical Nurse) Examiner3 (E5 - Assistant Psychologist)	70

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Child 4 age 9y 0m gender - female	Examiner1 (Clinical Psychologist) Examiner2 (CAMHS Clinical Practitioner) Examiner3 (E16 - Assistant Psychologist) Examiner4 (E18 - Psychotherapist in Doctoral Training)	48
Child 5 age 13y 07m gender - male	Examiner1 (E4 - Psychiatrist) Examiner2 (E16 - Assistant Psychologist) Examiner3 (E1 - Assistant Psychologist)	37
Child 6 age 16y 17m gender - male	Examiner1 (E10 - Child Wellbeing Practitioner Supervisor & Manager) Examiner2 (E11 - Psychologist) Examiner3 (E5 - Assistant Psychologist)	78
Child 7 age 15y 7m gender - female	Examiner1 (E13 - Speech And Language Therapist) Examiner2 (E16 - Assistant Psychologist)	68
Child 8 age 17y 9m gender - female	Examiner1 (E11 - Clinical Psychologist) Examiner2 (E11 - Child Wellbeing Practitioner Supervisor & Manager) Examiner3 (E5 - Assistant Psychologist)	53
Child 9 age 15y 2m gender - female	Examiner1 (E14 - Clinical Psychologist) Examiner2 (E16 - Assistant Psychologist)	48
Child 10 age 9y 11m gender - male	Examiner1 (E10 Child Wellbeing Practitioner Supervisor & Manager) Examiner2 (E15 - Psychologist)	66

Clinician-child interactions in ADOS-2 assessments – a CA perspective

	Examiner3 (E5 - Assistant Psychologist)	
Child 11 age 15y 0m gender - male	Examiner1 (E13 - Speech And Language Therapist) Examiner2 (E15 - Psychologist) Examiner3 (E16 - Assistant Psychologist)	70
Child 12 age 12y 0m gender - male	Examiner1 (E15 - Clinical Psychologist) Examiner2 (E16 - Assistant Psychologist) Examiner3 (E19 - Assistant Psychologist)	73
Child 13 age 11y 9m gender - female	Examiner1 (E15 - Clinical Psychologist) Examiner2 (E16 - Assistant Psychologist) Examiner3 (E19 - Assistant Psychologist)	77
Child 14 (age 17y 11m – gender = female)	Examiner (E15 -Clinical Psychologist) Examiner2 (E16 - Assistant Psychologist) Examiner3 (E20 - Assistant Psychologist)	84

3.4. Procedure and Materials for Data Collection

Parents or care-providers were sent an email containing the date and time of their CAMHS autism assessment, the names of the assessing team, log in instructions, and the link to the Microsoft Teams meeting before the autism assessment commenced. Each assessment consisted of a dyadic interaction between one examiner and the child which lasted roughly one hour (see figure 1 for a snapshot of an assessment). Verbal consent to record the meeting was obtained before commencing the recording of the meeting with Microsoft Teams.

The structure of each assessment was informed by the ADOS-2 (Lord et al., 2012), in which each assessment aims to elicit social behaviours from the children through semi-structured

Clinician-child interactions in ADOS-2 assessments – a CA perspective

interaction. Due to the age of the children, examiners would choose between Module 3 (recommended for child/adolescent with fluent speech) or Module 4 (recommended for adolescent/adult with fluent speech). Both modules have identical assessment components which intend to elicit assessable social behaviours. The identical assessment components were the: ‘Demonstration Task’ (in which the child was asked to show and tell the process of how they brush their teeth), ‘Description of a Picture Task’ (in which the child was asked to describe a picture), ‘Telling a Story From a Picture Book Task’ (in which the child was asked to tell a story from a picture book), ‘Cartoon Task’ (in which the child was asked to show and tell a story from cartoon pictures), and ‘Creating a Story Task’ (in which the child was asked to create a story utilising physical objects). In addition, in both modules the examiner will ask semi-structured questions about: ‘Emotions’, ‘Social Difficulties and Annoyance’, ‘Friends, Relationships, and Marriage’, and ‘Loneliness’ to assess the child’s responses in these areas, and their general ‘Conversation and Reporting’. Assessments informed by module 4 had additional semi structured questions on ‘Current Work or School’, ‘Plans and Hopes’ and ‘Daily Living’; whereas assessments informed by module 3 had additional play related tasks (Make-Believe Play and Joint Interactive Play), these tasks however were infrequently administered during the online telehealth ADOS-2 informed assessments.

Once all components of the module (3 or 4) were complete, the additional examiners would visibly and audibly return to the meeting and potentially ask additional questions before the assessment was finalised. Finally, parents or care-providers were invited back onto the camera for a final discussion before the meeting concluded. All assessments were conducted in English. The video (and audio) data were captured on the National Health Service [NHS] Microsoft Teams account and saved on the NHS shared drive utilising an NHS trust computer and finally stored on an encrypted storage device held by I, the author. After the online ADOS-

Clinician-child interactions in ADOS-2 assessments – a CA perspective

2 informed assessment was concluded, diagnostic reports were finalised containing a subsection with observations from each individual online ADOS-2 informed assessment. These diagnostic reports were collected to compare with the interactions and the scoring criteria of the ADOS-2.

3.4.1 Figure 1. Snapshot of online assessment



3.5. Procedure for Analysis and Interpretation

3.5.1. Building Collections

When determining what tasks of interaction were important to explore within the data, I drew on the conflict I experienced as an academic researcher working as an autism diagnosing examiner. Due to my developing knowledge of everyday interaction, that recognizes how the sequential patterns in both verbal and non-verbal interactions are not considered in the scoring and diagnosis. These experiences prior to, during, and after data collection provided valuable information that became relevant for the analysis of situated interaction (Lindholm, 2015). For the typical conversation analyst, this approach to motivated looking guided by subjective experience is incorrect. It could also be argued that occupying both the role of researcher and participant, I may have unconsciously approached data gathering and analysis to satisfy inevitable conclusions that cannot be disentangled from the transcription process (Ochs, 1979). Assumptions, however, generate the foundation which warrants the analysis (Bucholtz, 2000) and in the context of this project, it seemed fundamental to approach the data in this manner. Furthermore, conversation analytic research focuses on interactional practices in the data that are observable through the participants' own conduct, rather than the researcher's interpretations. CA documents every aspect of interaction which, in turn, produces visual data that forms evidence to prove or disprove all preconceived assumptions. A key resource in CA is next turn proof procedure (Sacks et al., 1974), where the interactional meaning of a previous turn is only discernible through the action produced in the next turn, making visible how the recipient has heard and understood the action produced in the previous turn.

Due to core diagnostic criteria of social emotional reciprocity, I analysed the tasks and corresponding coding items of the ADOS-2 that specifically utilised social interaction to elicit behaviours that conveyed these communicative capabilities. The 'Emotions', Loneliness', and

Clinician-child interactions in ADOS-2 assessments – a CA perspective

the ‘Social Difficulties and Annoyance’ task are interview questions that are typically asked sequentially in the order presented by the ADOS-2. Therefore, for each of the 14 examinees, 14 extracts containing the interaction within the entire task were compiled for each of the ‘Emotions’, Loneliness’, and the ‘Social Difficulties and Annoyance’ tasks for data analysis. In the ‘Conversation and Reporting’ section of the ADOS-2, the examiners are instructed to provide ‘Conversational Openings’ (coined cliffhangers) which prompt the child to ask the examiner for information about themselves. In total, there were 50 cliffhangers delivered randomly throughout the assessments. All 50 cliffhangers were collected and analysed including the turns at talk both before and after completion of the cliffhanger. A category of successful responses (when the child utters an explicit ‘go-ahead’ response, e.g., “What happened?” followed by progression to the next institutional question) was created. Several unsuccessful subcategories were created that contained various responses to the ADOS-2 questions and comments that were typically shaped by difficulties in talk and additional prompts and questioning. Final collections presented in this PhD were created from sequentially analysing these broader collections on a turn-by-turn basis.

3.5.2. Conversation Analysis

Utilising CA, my aim with this project is an analysis of the examinees orientation to the examiners’ questions and comments by analysing both speakers’ conduct within their interaction. The video recordings of these interactions are seen not only as resources for producing data but the instances in which they occur are also analytical topics (Modada, 2012). By recording the interactions that occurred within the assessments both preserves the fluidity and temporality of the events within the institutional interaction to make available the details of conduct (in the form of gaze, body positions, demonstrable orientations in talk, etc.) produced and interpreted by both examiner and examinee (Modada, 2012). To understand the

Clinician-child interactions in ADOS-2 assessments – a CA perspective

interactional environment in which the examinees make sense of the examiner's questions and comments, it is necessary to transcribe all features of interaction. Therefore, for this PhD project, all the interactions were transcribed with Jeffersonian transcription (Jefferson, 2004) to capture all aspects of talk (such as changes in intonation, pauses, relative speed of talk) to ascertain the experienced interactional intent of a given utterance (Sidnell & Enfield, 2012). The systematic process of Jeffersonian transcription 'slows down' the interaction to enable a fine-grained analysis on a microsecond-by-microsecond basis in a detailed transcript available for scrutiny by all. As coparticipants within an interaction orient to the relevance of all forms of multimodal resources (Stivers & Rossano, 2010), analysing multimodal aspects of interaction with Lorenza Mondada's (2018, 2022) conventions for transcribing the multimodal embodied conduct of the coparticipants was essential. Multimodal actions include gaze direction, body orientation, facial expressions, hand gestures, manual activities, and the use of objects, including their location and shape (Goodwin, 2000, 2007). Mondada's transcription enables the analyst to situate the precise timing of complex multimodal embodied interaction in relation to the simultaneously unfolding talk. This process also enables the analyst to situate all non-verbal actions within silences to demonstrate the temporal fragments of embodied conduct that correspond with the progression of the interaction (Mondada, 2018).

The data were consistently discussed and analysed with other conversation analysts, such as, with project supervisors and during interdisciplinary data sessions, including Discourse and Rhetoric Group [DARG], Ethnomethodology and Conversation Analysis [EMCA] Doctoral Events, and Conversation Analysis Data Sessions South [CADSS].

3.6. Diagnostic reports

After the online ADOS-2 informed assessments were completed, examiners subsequently scored the child's responses to the ADOS-2 task utilising the coding criteria for either Module 3 or 4. Examiners jointly narrate their observations to conclude on a score that matches the observed behaviour (Turowetz & Maynard, 2016). As these assessments were delivered online and are therefore in an unstandardised form, the delivery of the ADOS-2 and the corresponding coding items are utilised qualitatively. For example, the CAMHS diagnostic reports contained this header:

'Due to the Covid-19 pandemic, a direct observation of NAME OF CHILD was carried via video call in Microsoft Teams. The ADOS-informed assessment was conducted by ... This observation was informed by the Autism Diagnostic Observation Schedule (ADOS-2) and used a select number of items that could be delivered virtually. The ADOS-2 is a semi-structured, standardised assessment of communication, social interaction, and play or imaginative use of materials, used with individuals who possess possible social communication difficulties. This assessment provided a 'snapshot' of social communication and therefore it is acknowledged it may not reflect the whole range of a young person's strengths and difficulties. On this occasion, no ratings were allocated due to the ADOS-2 not being administered in its standardised form. The descriptions provided below involve only those behaviours and clinical impressions that provide useful information about NAME OF CHILD's social communication abilities.'

Each diagnostic report therefore contains a subsection with observations from each individual online ADOS-2 informed assessment (see Appendix 11 for an anonymised ADOS-2 informed diagnostic report). The ADOS-2 requires the examiners to match the examinees elicited

Clinician-child interactions in ADOS-2 assessments – a CA perspective

behaviours to a rating associated with the corresponding coding item. I therefore utilised the diagnostic reports to compare with the interactional data to determine how examiners document the child's capabilities in social-emotional reciprocity. I further compared the interactions and compared how the written observations relate to the individual rating descriptions contained in the coding items of the ADOS-2. By comparing the content of the diagnostic reports, I aimed to determine what implications the written content in the diagnostic reports might have on diagnosis and the representation of the child.

3.6. Ethical approval and considerations

Ethical approval was gained for this research project from the Health Research Authority and Health and Care Research Wales [HCRW], NHS on 04th February 2021. This approval was, in turn, shared with the University of Portsmouth's ethics committee who granted university ethical approval.

3.6.1. Data protection and patient confidentiality

I have received training and supervision to ensure I adhered closely to the guidelines in the Data Protection Act (and subsequent GDPR). All members of the research team also adhered to the core principles outlined in the Data Protection Act 1998 (and subsequent General Data Protection Regulation; GDPR), which covers the collection, storage, processing, and disclosure of all personal information and data. Participant's anonymity was strictly maintained. Each enrolled participant was given a participant number and described as 'child'. These were the only identifiers used to label any written documents and video recordings. Personal data files (e.g., names and consent forms) were stored on an encrypted device and were only accessed and accessible by me. Identifiable information will only be accessed if a participant wishes to withdraw their data or when I need to access the contact details of the participants to share the

Clinician-child interactions in ADOS-2 assessments – a CA perspective

dissemination of the research findings. Note, there was an option for the parents of the children to consent to personal information being stored on a secure directory at the University of Portsmouth if they wish to be contacted about future research. The video data were captured on Microsoft teams and saved on the National Health Service (NHS) trust shared drive which was only accessible by myself. I moved the data to an encrypted device that again was only accessible by myself. Participants were made aware of this intention to use their data in this way in the information sheet and the consent forms. I was and remain the 'Data Custodian' and the 'Data Controller' for the project. As this project utilises Conversation Analysis, the analysis is ongoing and continuous and identifies many important and publishable findings, therefore, I will retain the research data (which include raw and analysed research data) and records for a minimum of ten years from publication (in line with University of Portsmouth's guidelines).

3.6.2. Conversation Analysis, Qualitative Research, and Video Data

As this project aimed to specifically explore the process of the observational assessment of autism by analysing how the examiners and the children made sense of each other's turns at talk, each assessment was video recorded. Therefore, the raw video data consists of a clear image and audio of all participants. Participants gave consent to being recorded in video format via Microsoft Teams, verbally in the initial phone call, in written form in the consent forms and again at the start of the assessment on Microsoft Teams as they were told that the recording was due to commence (Liddicoat, 2021). The participants had some control over the data they produced as they were informed on several occasions that they could opt out of having their sessions recorded at any time. They were also informed that they could redact some part of the interaction. These factors of video data pose potential risks to participant confidentiality, privacy, dignity and safety. To minimise risks however I retained all unaltered copies of the original video recordings for purposes of data analysis, but these data were securely stored and

Clinician-child interactions in ADOS-2 assessments – a CA perspective

encrypted on a secure device. Once the videos were transcribed, all identifiable information was removed from all transcripts. In the event of offering training to diagnosticians, I may use anonymised video recordings to exemplify how interactions can be understood. I will manage confidentiality by distorting the video picture and audio output. In the case of this project and conversation analysis research, video (or audio) recordings are essential due to the micro-attention to all aspects of communication (e.g., pauses in talk, intonation, sound stretches). The value of using video data provides access to all verbal and non-verbal behaviour which enables the researcher to obtain qualitatively rich data to represent the individual experiences of participants.

This project also increases the possibility of levels of disclosure that quantitative research is less likely to generate. ‘Acceptability’ is the commitment that involvement in a study will not cause any harm to participants, that the possible burdens involved in participating will be outweighed by the anticipated benefits of the research, and that participant autonomy and right to confidentiality will be respected (Parry et al., 2016). Therefore, in this project, ‘acceptability’ will be considered from the perspective of the research participants. The research was not a direct benefit to the individual participants, but the purpose of this research is to gain knowledge which can be used to inform services and practitioners. Therefore, adhering to the principle of beneficence (O'Reilly & Parker, 2014), this project benefits children and families and clinical practice generally. Importantly, concerns that video recordings may be detrimental and outweigh the benefits to health care services have not been demonstrated in previous research (Parry et al, 2016). An active contribution to clinical research benefits NHS service development by learning from changes to practice (Helps, 2017) to encourage objective decision-making (Sackett et al., 1996), and in turn, to improve ‘evidence-based practice’ (Eddy,

1990). Therefore, participants may feel altruistic in facilitating new knowledge whilst receiving the same standard of service (Helps, 2017).

3.6.3. Children and young people

There are historical and cultural differences in how childhood is conceptualised. In most contemporary societies children are viewed as vulnerable as there are power differences between adults and children (Holt, 2004; Morrow & Richards, 1996; O'Reilly & Parker, 2014). Due to the considered vulnerability, I sought consultation with relevant gatekeepers and obtained consent from both the parents and the children (DuBois, 2008). Moreover, in various institutional contexts, children are often told what to do and how to behave by adults. Therefore, children are likely to be cautious of the professional adult as another adult entering their social world (O'Reilly & Parker, 2014) or want to please and can disclose private aspects of their lives as they establish trust with an adult more readily (Singh & Keenan, 2010). My adult status may mean that I might inadvertently coerce children to agree to participate in my research (O'Reilly & Parker, 2014). Adhering to the principle of non-maleficence, as the researcher, it was my responsibility to ensure the safety of the children and other participants (Behrman & Field, 2004), therefore, I obtained agreement from the parent initially through a telephone call before speaking directly with the child. I also attempted to lessen the unequal power balance by ensuring that all children were respected and listened to and fully informed throughout the process (Flewitt, 2005). Moreover, if the children displayed any indication of anxiety or discomfort during the recorded online assessment, I would have asked the child if they would like to discontinue and in turn, ended the recording and destroyed any documented data.

To minimise differences in epistemics and how the children understand what their participation within the research will include, I designed several participant information sheets and several

Clinician-child interactions in ADOS-2 assessments – a CA perspective

consent forms (see appendices) that were modified for developmental level and style of communication. The documents aimed to increase the likelihood that the child would understand the aim of the research, their involvement, and have the autonomy to choose if they wish to participate. The children were asked directly if they gave consent and informed they had the option to withdraw at any time. In this project, the children and young people were active social agents and not simply passive participants (Woodhead & Faulkner, 2000) in an adults' world. The children by virtue of their age and status as CAMHS patients are in general marginalised to some extent by their exclusion from the process of knowledge production (Gallagher, 2008). I therefore had the responsibility to my participants to empower them throughout the entirety of my project, including dissemination (Etherington, 2001). Therefore, reporting exactly how they respond to the examiner in the online telehealth autism assessment and by sharing any publications with the children and their families increases access to knowledge, epistemics, and reduces power differentials.

To ensure I protected my participants from harm and any research driven exploitation (Morrow & Richards, 1996), I adhered to the process granted by the ethical reviewers. Further, to make sure that the children were safe online, parents/care-providers were asked to access Microsoft Teams and were responsible to make sure the child had 'logged off' the call correctly at the end of the session. This project did not cause any safeguarding harm to participants nor were there any safeguarding concerns. If any safeguarding concerns were observed about a child or their family, or over the clinician's competency as a CAMHS clinician throughout the entirety of data collection and analysis, this would have been dealt with immediately through discussions with the clinical supervisor of this project, Dr Charlotte Wilkinson (Clinical Psychologist). If deemed necessary, the safeguarding concern would have been reported to the Multi Agency Safeguarding Hub (MASH) Surrey County Council.

3.6.4. Autism

There are also ethical considerations around the concern over research with ‘vulnerable’ autistic participants. Individuals with neurodiversity or mental health difficulties are typically understood to be in a less powerful position by nature of the fact that they are living in a neurotypical social world and experience difference in typical functioning. There is also asymmetry between those who are not neurodivergent nor have a mental health condition and those who do (O'Reilly & Parker, 2014). Therefore, there can be powerlessness and stigma associated with neurodiversity and mental health difficulties, including those seeking a diagnosis or accessing services (Kidd & Finlayson, 2006). The language utilised throughout clinical research and most diagnostic processes takes a particular stance, produces identities (Potter, 2020; Potter & Wetherell, 1987), and shapes and perpetuates ideologies (Fairclough, 2013). This language reflects power and dominant narratives and ideologies about social phenomena (Bottema-Beutel et al., 2021). Therefore, autistic people must be able to engage in research that provides opportunities to determine if the medical view of their differences is straightforwardly originating from their autism diagnosis or equally due to the changeable nature of the social world (Pellicano & Stears, 2011). Not including autistic people in research due to the perception of vulnerability is a discriminatory act. In my project I have ensured that I have not contributed to stigma or ableist approaches to autism, specifically by not using the medical model terminology and by enabling autistic children's voices to be heard (O'Reilly & Parker, 2014).

3.6.5. Dual Role

There are unique challenges combining clinical practice with research (Helps, 2017) and one of the most challenging power imbalances was between my role as a researcher and as a

Clinician-child interactions in ADOS-2 assessments – a CA perspective

CAMHS diagnosing clinician. This role duality created a power differential on several levels, including a conflict of interest (O'Reilly & Parker, 2014). My status as a CAMHS diagnosing clinician and researcher was of great ethical consideration when enquiring about participation. The participants may have framed their expectations of me based on my CAMHS clinician role opposed to my role as a researcher. Therefore, my dual roles had the potential to increase risks of unintended coercion and exploitation as the participants may have agreed to participate based on the influence of my clinical role (Kitchener, 1988). Moreover, parents may have felt uninformed regarding the cause, diagnosis and outcome of their child's assessment (Garth & Aroni, 2003), and therefore may have used the direct connection with myself as the researcher as an opportunity to seek answers (O'Reilly & Parker, 2014). As there was a risk of coercion or misunderstanding if expectations were not carefully managed (Kitchener, 1988), when providing information about the project and the research process, I outlined the boundaries of my roles and the research relationship from the beginning (Dickson-Swift et al., 2006). I did this by clearly outlining my expectations as a researcher and how they differ in relation to my role as a CAMHS diagnosing clinician, whilst identifying their expectations as a potential participant.

Participants were informed on several occasions (in the initial phone call, in the participant and information sheet, and in the consent form) that participation in the research was voluntary and would not impact their care within CAMHS. Participants were also informed that the services their child received were not dependent in any way on their agreement to partake in the research. I also did not have an existing therapeutic relationship with any of the participants. There was also a risk of a boundary drift when interacting with the participants between my roles, as when occupying a role as a CAMHS diagnosing clinician, children and parents would typically be encouraged to talk openly, which, in turn, could lead to over-disclosure in research

Clinician-child interactions in ADOS-2 assessments – a CA perspective

(Hart & Crawford-Wright, 1999; O'Reilly & Parker, 2014). This might be necessary for the clinical encounter, but participants may be less comfortable having certain information documented in research (O'Reilly, Parker, & Hutchby, 2011). Therefore, to remain ethical throughout data collection, I remained mindful of the data obtained, and that the goals and objectives of the research project were different to the goals and objectives of clinical practice in healthcare (O'Reilly & Parker, 2014).

4. Comments on Own Thoughts, Feelings, and Experiences

ADOS-2 task: 'Emotions'

Coding item: 'Communication of Own Affect'

Research question: What kinds of opportunities do the interactions within the 'Emotions' tasks provide for the examinees to 'communicate their own affect'?

4.1. 'Emotions' Task and Coding Item 'Communication of Own Affect'

The ADOS-2 manual explains that the purpose of the 'Emotions' task is to provide a context in which the examinees talk about emotions and personal experiences. The examiner is to observe the events or objects that elicit different emotions in the examinee, and particularly whether they are social in nature. The examiner must also observe the content of what the examinee says and how they talk about more abstract topics, particularly those associated with emotions. Further observations include how the examinee describes and utilises creative language and displays facial expressions in the context of describing emotions. The 'Emotions' task consists of questions about four emotions (happiness, fear, anger, sadness) which has two main objectives: first to determine what 'things' makes the examinee feel each emotion and second to determine how that emotion 'feels'. The ADOS-2 directs the examiner to start and end the 'Emotions' task questioning on a positive emotion. There is a fifth emotion 'relaxed/content' which only consists of the 'things' question.

The ADOS-2 describes how the requirement to talk about different emotions is a topic that is challenging for many people, and if the examinee has difficulty in explaining an emotion, the examiner should note this and continue to the next question (Lord et al., 2012). Although noting the difficulty in emotion description, the ADOS-2 does not provide any further information on

Clinician-child interactions in ADOS-2 assessments – a CA perspective

why emotions are difficult to explain and how this factor might affect the assessment of the examinees capability to communicate their own emotion.

While the ‘Emotions’ task is a non-optional task in both Modules 3 (children and younger adolescents who display fluent, spontaneous speech) and 4 (verbally fluent adolescents and adults) of the ADOS-2, the corresponding coding item ‘Communication of Own Affect’ was removed from Module 3 due to its poor reliability. Reliability has not been analysed in Module 4 as at the time of the ADOS-2 publication, no research was conducted on this Module. Further, the coding item ‘Communication of Own Affect’ is not included in the total diagnostic algorithm of Module 4. The authors argue that non-algorithm items were retained for standardisation and reliability reasons as they generate comparability across items within modules, and because removal would impact the function of other items.

4.1.1 Table 2

Interview Questions for ‘Emotions’ Task (ADOS-2: Lord et al., 2012)

Introduction	<p><i>“Now I'd like to ask you a few questions”</i></p> <p><i>Ados-2 instructions direct the examiners to ‘not’ introduce the task as an ‘emotions’ task</i></p>
Happy	<p><i>“What do you like doing that makes you feel happy and cheerful?”</i></p> <p><i>“What kinds of things make you feel this way?”</i></p> <p><i>“How do you feel when you're happy?”</i></p> <p><i>“Can you describe it?”</i></p>
Afraid	<p><i>“What about things that you're afraid of?”</i></p> <p><i>“What makes you feel frightened or anxious?”</i></p> <p><i>“How does it feel?”</i></p>

Clinician-child interactions in ADOS-2 assessments – a CA perspective

	<i>"What do you do?"</i>
Angry	<i>"What about feeling angry?"</i> <i>"What kinds of things make you feel that way?"</i> <i>"How do you feel 'inside' when you're angry?"</i>
Sad	<i>"Most people have times when they feel sad. What kinds of things make you feel that way?"</i> <i>"How do you feel when you're sad?"</i> <i>"What is it like when you're sad? Can you describe that?"</i>
Relaxed/ Content	<i>"How about feeling relaxed or content? What kinds of things make you feel that way?"</i>

4.1.2. Coding

When coding the examinees responses to the 'Emotions' questions, the examiners provide a rating for scoring item 'Communication of Own Affect'. The ADOS-2 protocol directs the examiner to focus on the examinees ability to describe a range of experienced emotions using words, creative use of language, facial expression, tone of voice, vocalisation, and gesture. The ADOS-2 protocol instructs the examiner that the code given for this item should reflect the range of emotions conveyed and the effectiveness of the communication rather than the presence of any one specific emotion. The examiners are instructed that descriptions elicited during socioemotional questions (such as the 'Loneliness' and the 'Social Difficulties and Annoyance' tasks – analysed in chapter 5) may be rated here, as well as spontaneous comments and reports. In addition, the ADOS-2 instructs the examiner to observe how the examinee identifies the events or objects that elicit different emotions in the examinee, particularly whether they are social in nature, and whether they display insight into typical social relationships that may cause some of these emotions.

4.1.3. Table 3

Ratings for Observed Behaviours for Coding Item 'Communication of Own Affect' (ADOS-2: Lord et al., 2012)

0	Effective communication of a range of emotions that he or she is feeling or has felt.
1	Some description of experiencing several emotions, but limited effectiveness of communication, AND/OR effective communication of at least one emotion.
2	Some communication about at least one emotion.
3	Minimal or no communication of his or her own affect.

4.2. Emotion and Autism

Although emotion and autism has attracted extensive empirical research, any posited relationship remains highly contested (Begeer et al., 2008). A key issue is that emotion is a broad and complex phenomenon which cannot be simplified to its many contributing parts. People's emotional states are observed in facial expressions, vocalisations, posture, and gestures (Ekman & Friesen, 1975). Whereas people's perception and understanding of their own experience of emotion are understood through reflections and descriptions of their experiences.

Plentiful research has been conducted to assess many facets of emotion in autism. For example, research has explored non-verbal expression of emotion and found that autistic people convey less non-verbal depictions of affect, such as, expressive gestures (Attwood et al., 1988), and neutral, flat, or idiosyncratic facial expressions (Hobson & Lee, 1998; Kasari et al., 1990; Loveland et al., 1994; Yirmiya et al., 1989). Other research has focused on emotion comprehension and shown that autistic children often claim not to feel specific emotions, due

Clinician-child interactions in ADOS-2 assessments – a CA perspective

to a difficulty in differentiating between emotions within the negative spectrum (Rieffe et al., 2007). Whereas other research has found that autistic adolescents can accurately report their experienced emotional states on self-report measures (compared to autonomic reactivity during rest and arousal) at comparable levels to mental age-matched controls (Keith et al., 2019). Therefore, as research has consistently returned conflicting results, research should focus on how the tools of measurement can implicate capabilities to communicate own affect in autism.

Some research has focused on the context and how it implicates emotional description and found that autistic children understand situational causes of simple emotions. For example, when asked explicit questions about emotions, from around 10 years old, autistic children and mental age-matched controls show a similar understanding of simple emotions in response to prototypical situations, e.g., ‘birthdays’, ‘hurting yourself’, and ‘(not) getting what you want’ (Baron-Cohen, 1991; Fein et al., 1992). Other research has found that autistic children and adolescents with higher intelligence do not differ from mental age-matched controls in their verbal description of emotions (Jaedicke et al., 1994), and their capabilities to report examples of feeling states based on their own experiences (Yirmiya et al., 1992). Yet other research claims that autistic children are less able to describe emotionally charged situations from their own experience (Rieffe et al., 2007). For example, autistic children are less likely to relate emotions to specific interactions and more likely to attribute positive emotions to concrete events, such as going on a trip (Jaedicke et al., 1994). Similarly, some research indicates that autistic adults have difficulties in identifying and describing feelings, distinguishing feelings from the bodily sensations of emotional arousal, and tend to focus on external events (Hill et al., 2004).

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Irrespective of how a person expresses emotion (e.g., non-verbal expression, perception and understanding, and verbal description of emotions), research shows that expressing the internal states of emotion is situational and experienced in response to environmental factors (Snow et al., 1987). Thus, as environmental factors influence how emotions are conveyed by autistic and non-autistic people (Klin et al., 2003; Losh & Capps, 2006), for emotion difficulties to be considered a symptomatology of autism, these difficulties should be apparent within all contextual environments (Ozonoff et al., 1990). Yet most difficulties in emotion expression in autism are found in dominating decontextualised laboratory studies (Begeer et al., 2008), this in turn, contributes to the maintenance of autism as a condition of “*affective contact*” (Kanner, 1943, pp 250). Therefore, research needs to not only focus on how tools of measurement impact an autistic person’s capabilities to communicate their own affect, but also the situational context in which the communication of emotion is measured.

4.3. Situated Emotion

To display capabilities of any kind involves understanding the situational context of the proceeding eliciting action, yet this is rarely considered in experimental laboratory studies that inform the construction and administration of standardised autism assessments. Contextual configuration refers to how people make sense of their circumstances and available resources by orienting to the wider activity (e.g., an autism assessment) and relevant aspects of their current environment (e.g., relevant topic) to understand expectations and accomplish social actions. Recipients of talk display their orientation and understanding of the unfolding interaction through the embodied conduct of their responses (Goodwin, 2000). Therefore, the content and design of the recipient’s response is highly dependent on the design of the speaker’s previous turn at talk and the situated context in which it occurred. Speakers in general, use specific grammatical resources for making a turn of talk recognizable to the recipient as a

Clinician-child interactions in ADOS-2 assessments – a CA perspective

specific type of sequence-initiating action. The grammatical construction of the speakers initiating actions displays the speaker's orientation to the social and contextual configuration that the action mobilises and constructs (Curl, 2006). In general, in everyday context rich interaction, speakers do not produce an explicit contextualisation of the intention of their actions. There are however moments in which contextual specification is required, and this is typically observed in subsidiary repair sequences when a recipient is unable to deduce meaning from the prior talk (Stivers & Sidnell, 2012), such as requesting for clarification of a prior turn at talk. In decontextualised circumstances, such as clinical assessments, which are typically administered in a clinic or online, with a clinical agenda unknown to the examinee, lapses in intersubjectivity are likely to increase as contextual configuration is reduced. This in turn, is likely to result in the reduction of nuances that shape, and guide interaction found in everyday communication.

The ADOS-2 utilises interview questions to elicit an expression of emotion from the examinee during the 'Emotions' task. Decontextualised interaction however will fail to elicit the same responses found in everyday interaction (Begeer et al., 2008) as emotions are contextually situated within social interactions (Saarni, 1999). Emotion responses dynamically change in relation to changes in the social context (Halberstadt et al., 2001) as they form one system which cannot be separated (Butler, 2011; Barrett, 2013). Emotions are socially created and gain meaning within interaction, are co-regulated and reinforced in social interaction, and produce and anchor social relationships (Butler & Randall, 2012; Ekman, 1992; Frijda, 1986; Mesquita & Boiger, 2014; Saarni, 1999). Emotive exchange will differ depending on the social relationship, and how emotions are exchanged can serve to regulate social interactions, which in turn, defines the social relationship (Begeer et al., 2008).

Clinician-child interactions in ADOS-2 assessments – a CA perspective

People will change, mask, or suppress their feelings depending on the hierarchical social relationship. For example, when interacting with a teacher, children learn the appropriateness of conveying negative emotions and mask or suppress their feelings (Underwood et al., 1992). During the first three years of life, children are increasingly able to socially imitate and adopt 'display rules' (Underwood et al., 1992) which are implicitly learned within social interaction (Brody, 2000). By six years of age, children can regulate social relationships by explaining their behaviour, and by suppressing their emotional reactions, such as, responses to an undesirable gift (Kieras et al., 2005). Emotional suppression as a strategy of regulation therefore can be observed as functional or dysfunctional (e.g., cultural contexts that value authenticity) dependent on the sociocultural context (Butler et al., 2007). The ADOS manual states that 'many children will expect a more direct question-and-answer approach from an adult authority figure' (Lord et al., 1999). Therefore, the hierarchical social relationship found in clinical assessments is likely to influence the observable emotional responses of a child under assessment as children may withhold or lessen their response to the adult examiner (Underwood et al., 1992).

Socialisation of emotional expression starts in infancy (Malatesta & Haviland, 1982; Malatesta-Magai et al., 1994). The affect displayed by infants in their embodied expression (Ekman, 1993; Izard, 2007; Panksepp et al., 1998) provides the observable criteria that ground the reciprocal social process in which public emotional meaning is created and shared (Wittgenstein 1980a, 1980b). Learning how to communicate emotion (including facial expressions, vocal intonation, non-verbal communication, and action) initially requires reference to the child's spontaneous emotional experience. Communication of emotional expression develops as others orient to the child's emotional behaviours. Others communicate a cultural expression for the relevant emotion found in everyday social practices back to the

Clinician-child interactions in ADOS-2 assessments – a CA perspective

infant to establish a shared meaning for specific purposes (Bennett & Hacker, 2022; Parkinson, 2012; Ter Hark, 1990; Wittgenstein, 1953). For example, when a child hurts themselves, they cry and orient their attention to the affected area. This public expression evokes a specific response from a care-provider, the child in turn therefore acquires, assimilates, and appropriates communication around the concept of ‘pain’ (Mascolo, 2009) which they continue to select to convey similar emotions and concepts in the future.

Once social higher-order expression of language of emotion is acquired, it often replaces natural emotional reactions (Wittgenstein, 1953) resulting in sociocultural opportunities and constraints (Mesquita & Boiger, 2014; Parkinson, 2012). Moreover, there is cultural variability in how emotions are experienced and conveyed (Kitayama et al., 2006; Mesquita, 2003), in respect to both the emotion lexicon (Russell, 1991) and pathological characteristics (Mesquita & Frijda, 1992). Research suggests a correlation between socio-emotional communication and parent-child conversations about emotion (Beaudoin et al., 2022). Little is known however if parents of autistic children engage in conversations less about emotional experiences (Jordan et al., 2021). Moreover, non-autistic people have been shown to inappropriately interpret and respond less to the communication of autistic people (Edey et al., 2016; Sheppard et al., 2016). Therefore, it is important to consider interactions within the autism assessment to explore how the non-autistic examiner communicates and responds to the communication of the autistic examinee.

The ‘Emotions’ task of the ADOS-2 has a specific aim to get the child to reference the internal physical bodily sensation of emotion (Lord et al., 2000). Yet, irrespective of the culturally defined common language for emotions, when people refer to an internal ‘feeling’ it is impossible to judge if speakers are describing the same experience. A common view of emotion

Clinician-child interactions in ADOS-2 assessments – a CA perspective

is that a person understands their emotional state through internal observation or introspection. Through introspection, terms such as ‘pain’, ‘grief’ or ‘excitement’ gain meaning by identifying the experiences and assigning the relevant terms. Emotion terms however gain their meaning through public discourse, not through private introspection (Wittgenstein, 1953). Sentences such as “I am in pain” are learnt through observation and replace natural emotional reactions. There is no universal meaning found by introspecting on ‘epistemic privacy’ which describes how any emotion is experienced, such as, ‘grief’ (Mascolo, 2009). Each person's experience of emotion and each description of emotion is unique and impossible to compare. Therefore, as the ADOS-2 does not guide the examiner on ‘appropriate’ responses, it is likely that the examiner’s expectation of ‘appropriateness’ of answer will differ between examiners, as will the examinees understanding and experience.

Although explicit demonstrations of emotion are understood by observers, such as, ‘grief’ or ‘sadness’, descriptions of the experience of emotion are rarely discussed and not easily put into words (Colombetti, 2011; Jaedicke et al., 1994; Lord et al., 2012; Mascolo, 2009). Typically, when people describe their ‘felt’ experiences of emotion, they often resort to describing their emotional state in synonyms and metaphors, such as, feeling ‘empty’, ‘drained’, ‘shook up’, ‘going to explode’, ‘flip their lid’ or ‘hit the ceiling’ (Kövecses, 2000). People also describe their ‘felt’ experiences of emotion by providing a description of the event (Davitz, 1969), storytelling (Sarbin, 1989) or by providing a bodily sensation, such as, awareness of a lump in the throat when reporting the death of a loved one (Colombetti, 2011). Therefore, when considering the description of any single emotional experience, there are multiple co-occurring dimensions which complicate its representation. When requiring a person to describe their emotional experience, a person might resort to any of the experienced dimensions or none, due to the scope of the experience. Consequently, if requiring a specific type of answer to an

Clinician-child interactions in ADOS-2 assessments – a CA perspective

individual's experience of emotion, it is likely that the questioner will need to specify the required dimension of emotion experience within the context of their questioning.

Often however, the bodily experience 'disappears' from awareness as the person becomes absorbed by the object or event causing the emotion (Leder, 1990). The phenomenal bodily sensations of emotion are experienced initially (Lambie & Marcel, 2002), but the lived experience is the subject of awareness as absorption within the eliciting event takes place. The person does not stop and orient their attention to their emotive experience, but instead, they remain in the present moment (Zahavi, 2005). For example, if a person is being chased by a dog, attention is directed to the dog and not the bodily sensation of fear. Attention to bodily feelings can move 'back and forth' in awareness or be brought to awareness if consciously intended (Colombetti, 2011). Typically however, consideration of bodily arousal might be done after the event as a reflective activity (Bennett & Hacker, 2022; Zahavi, 2005). As such, conscious consideration of the first-order phenomenal experience of emotion is done later during a separate reflective state of second-order awareness (Lambie & Marcel, 2002; Mascolo, 2004; Mead, 1934). Pre-reflective emotive experiences are direct, immediate and have no theme (Legrand, 2007), whereas the process of reflection is mediated by embedded sociocultural interaction (Mascolo, 2004) which enables thematic processing (Legrand, 2007). The description of an emotive experience is a separate reflective action to the pre-reflective lived emotive experience. Therefore, objectifying and describing one's own bodily experience on a separate occasion is a complex process which will depend on the person's object of focus at the time of the event.

4.4. Emotion in Interaction

Emotion is often communicated within the nuances of everyday interaction and is not necessarily made explicit through only words and grammar. Emotion can be conveyed in interaction through many modalities, such as, laughter, tone of voice, volume, facial expressions, gestures, and bodily orientation. Emotion displays often consist of various separate (either simultaneous or sequential) modalities of interaction which contribute to the interactants interpretation of any action as emotional. The non-lexical modalities can change the meaning of an utterance (Stivers & Sidnell, 2012). For example, ‘Oh’ is typically uttered as a change in state token (Heritage, 1984). Subdued ‘Oh’ uttered in response to a rejection of requests and proposals, however, display disappointment (Couper-Kuhlen, 2009). Yet out of context, the ‘tone of voice’ within these displays of disappointment sound very similar to displays of sympathy (Couper-Kuhlenm 2009). There are no specific tones of voice that match particular displays of emotion independent of context (Couper-Kuhlen, 2009; Local & Walker, 2008). Instead, participants interpret through cultural experience what is communicated in emotion expression in relation to the co-constructed interaction (Wilkinson & Kitzinger, 2006).

In everyday interaction people do not typically vocalise their present emotion state. For example, during the direct experience of sadness, a speaker may fall silent, wet sniff, cry, or reduce their volume of talk (Hepburn & Potter, 2007). Explicit displays of emotion such as sadness is not often discussed in the subsequent turns following depiction (Haakana, 2001; Hepburn & Potter, 2007), rather, other devices might be used. For example, after a speaker shares a delicate problem during a medical consultation, they may laugh to ‘deal’ with the embarrassment (Haakana, 2001) rather than explicitly state “I am embarrassed”. Any communication, when taken out of context can be ambiguous, as there are a range of scenarios in which the same sentence would have a ‘different meaning’. Interactants in everyday

Clinician-child interactions in ADOS-2 assessments – a CA perspective

conversations do not encounter isolated sentences or expressions of emotion, but instead, any communication is embedded in a unique fine-grained contextual situation. The construction of any utterance and its turn composition can only be completely understood within the situational context in which it is produced. In turn, an interactant understands what will be appropriate in their next turn at talk (Schegloff, 1978). Therefore, communication is context-dependent and understandable in specifiable sequential locations. Within decontextualised interactions, such as, clinical assessments, communication without culturally defined situational cues will be considerably more difficult to navigate.

4.5. The Aims

Emotion is a broad concept and there have been many attempts to determine autistic peoples experience of emotion, yet the vast amounts of differing approaches have returned contradictory results. Although the ADOS-2 briefly informs the examiners of the complexity of emotions talk, it does not provide further information on why, how the task can be managed considering this difficulty, or suitable examinee answers. Everyday social interactional research shows how contextual information such as, environmental cues, non-verbal behaviours, and lexical and non-lexical communication shapes how people understand any unfolding interaction, which in turn implicates any response, emotional or otherwise.

Therefore, through an interactional approach, I aim to explore what kinds of opportunities the interactions within the ‘Emotions’ tasks provide for the examinees to ‘communicate their own affect’. The ‘Emotions’ task interactions and the corresponding coding item ‘Communication of Own Affect’ (ADOS-2; Lord et al., 2012) will be compared with the diagnostic reports to explore how the ADOS-2 coding items capture the child’s capabilities in social emotional reciprocity.

4.6. Data Analysis

This analysis will present 12 examples from the interactions between 8 children and 8 examiners during the ‘Emotions’ task of the ADOS-2 and will demonstrate how 1) contextual information is omitted from protocol; 2) examiners deliver third turn evaluations; 3) examiners orient to sociocultural factors; 4) absorption into first order pre-reflective experiences differs from second-order reflective activities, and finally 5) the examiners deviate from protocol to provide assisting practices.

4.6.1. Omitting Communicative Contextual Information

The ADOS-2 protocol instructs the examiners to introduce the ‘Emotions’ task by saying ‘*Now I’d like to ask you a few questions*’ but directs the examiners to ‘*not*’ introduce the task as an ‘*emotions*’ task (Lord et al., 2012). The ADOS-2 does not explain why the task intentionally omits this contextual information. Recipients of talk however deduce meaning from the contextual information provided by the speakers in preceding turns. Moreover, the ‘Emotions task’ primarily consists of a two-part questioning that has two main objectives to determine what ‘things’ makes the examinee feel an emotion, and how each emotion ‘feels’ to the examinee. Both the ‘things’ and the ‘feels’ question are open questions that in turn aim to give the examinees freedom to provide any answer. The open questioning techniques are designed to introduce an area of enquiry without overly shaping or focusing the content of the response (Silverman et al., 2016). The latter part of the two-part ‘feels’ questions however aim to elicit a specific type of answer which is not contained in the content of the question. The inclusion or exclusion of contextual information has consequences for the recipients understanding of how to respond and how an answer can be formulated. This next section will therefore focus on how the examiners adhere to or modify protocol and manage the reduced contextual

Clinician-child interactions in ADOS-2 assessments – a CA perspective

information found within the design of the ‘Emotions’ task. In response to the ‘Emotions’ task questions, if the examinee has difficulty in explaining an emotion, the ADOS-2 protocol directs the examiner to not continue to prompt and ‘insist’ on a ‘good’ response for too long. Instead, the examiner should note difficulty and continue to the next question. The ADOS-2 does not however provide any examples of what it considers to be a ‘good’ response. Therefore, there is considerable variation in when an examiner feels they have achieved a satisfactory response, and examiner prompting behaviours.

4.6.1.1. Adherence to Protocol with Additional Contextual Information

In the initial extract, the examiner flexibly adheres to the ‘Emotions’ task protocol. Rather than follow the protocol exactly and intentionally omit the ‘emotion’ content from the task introduction, the examiner instead shares contextual information to inform the child that the task will involve discussing ‘feelings’ (lines 1-5). Further, after the examiner asks the initial ‘happiness things question’, the examiner again flexibly uses protocol and generates turns at talk that are outside of the institutional agenda. After the child’s initial response to the ‘happiness feels question’, the examiner continues to prompt the child to provide further answers, in this instance however, without providing incremental contextual information. Prompts continue until the child explicitly explains why it is difficult to answer the emotion ‘feels question’.

Extract 1 (30:53): C01DHA-THA (Adherence to protocol with additional contextual information)

1. E: → hhh uhm (.) >I was go I was gonna ask< a little bit
2. exa >>±gaze to paperwork--->±
3. chi >>•gaze to screen--->•

Clinician-child interactions in ADOS-2 assessments – a CA perspective

4. (.) abo::ut (.) uhm how you feel about other things
5. if that's okay?
6. C: (>yeah [okay.<])
7. E: uhm: so just starting out (.) what sort of things
8. make you feel happy or cheerful,
9. *chi screen freezes---*>
10. C: uhm:: well: I guess: (.) >talking to my friends<
11. that makes me kind of cheerful,
12. E: +yeah?+
13. *exa +nods +*
14. *child's internet becomes unstable and both repeat turns*
15. C: um spending time with my ±family. (.) like when
16. *exa ±gaze to paperwork---*>±
17. we're all together.
18. E: +±yep?+
19. *exa +nods +*
20. *exa ±gaze to screen---*>±
21. C: that's quite nice, •uhm: (2.0) uhm: playing outside
22. *chi •away from screen---*>•
23. with my uhm •±sisters and stuff.
24. *chi •gaze to screen---*>•
25. *exa ±gaze to paperwork---*>±
26. E: oka- [what do you do.]
27. C: [(I quite like that.)]
28. E: ±how old are your sistters?
29. *exa ±gaze to screen---*>>±±gaze to paperwork--->±

Clinician-child interactions in ADOS-2 assessments – a CA perspective

30. C: •uhm:: one of them:'s eleven and one of
31. chi •away from screen--->•
32. •them's eig:ht.
33. chi •gaze to screen--->•
34. E: okay=and what what do you do outside with them.
35. C: um:: we:ll as we live right next door to my
36. cousin (.) cause
37. we like *have- we're basically there's only two
38. chi *RH gestures--->*
39. houses* on this property.+
40. chi *RH neutral
41. exa +head nod
42. um: our house and my cousins house yeah,+
43. exa +head nod
44. we normally go outside and play play with her yeah,
45. E: [+yep,+]
46. exa +nods+
47. C: [(to start-)] then we play: (.) I don't know it
48. hide and seek and stuff.
49. E: %• o::h %fantastic.
50. exa %lifts eyebrows%
51. chi •gaze to screen--->•
52. [>so are you the<] oldest then of the of the lot,
53. C: [(umh)]
54. C: •u::hm yeah the oldest out of everyone who err
55. chi •away from screen--->•

Clinician-child interactions in ADOS-2 assessments – a CA perspective

56. oldest when the oldest of •everyone who plays

57. chi •gaze to screen--->•

58. outside yeah.

59. E: +yeah+

60. exa +nods+

61. ↑oh fantastic.

62. oh so that sounds good fun.

63. C: ↓yep.

64. E: #oh †cool.#

65. exa †gaze to paperwork--->†

66. E: and (.) ↑can you descr:i:be †what it feel:s like to

67. exa †gaze to screen--->†

68. be +happy+=>like how would you describe< feeling

69. exa +shrug+

70. happy,

71. C: um:: (2.0) well ju- •um: >I don't know<

72. chi screen freezes-----•gaze away from screen--->•

73. †having a joyful feeling:,

74. exa †gaze to paperwork--->†

75. E: % yep? %

76. exa %eyebrows raise%

77. C: I guess not feel:ing sad or anythink?

78. E: +yep?+

79. exa +nods+

80. C: it's just having fun •iI guess,

81. chi •gaze to screen--->•

Clinician-child interactions in ADOS-2 assessments – a CA perspective

82. E: yep?
83. ±any other ways you would describe the feeling?
84. exa ±gaze to screen--->±
85. C: •um:: (3.0) something ±that makes you laugh
86. chi •away from screen--->•
87. exa ±gaze to paperwork--->±
88. •I guess?--->•
89. chi •gaze to screen
90. E: +yep.+
91. exa +nods+
92. E: any other ways you would describe the feeling?
93. C: •um:: (3.0) something ±that makes you laugh
94. chi •gaze away from screen--->•
95. exa ±gaze to paperwork--->±
96. •I guess?
97. chi •gaze to screen--->•
98. E: +yep.+
99. exa +nods+
100. C: ±an:d: (.) mm. I dunno it's hard- it's hard
101. exa ±gaze to screen--->±
102. chi screen freezes
103. •to <describe> I guess because (.)
104. •gaze away from screen--->•
105. ±you don't really think about in the mome:nt you
106. exa ±gaze to paperwork--->±
107. [just.]

Clinician-child interactions in ADOS-2 assessments – a CA perspective

108. E: [+yep.+]
109. exa +nods+
110. C: it's just (1.0) cause (1.0) when you're having fun
111. I guess it's just that (.) you you you don't lose
112. that >thin that you're having fun< you just forget
113. about it and just that um: (1.0) you just
114. ±concentrated
115. exa ±gaze to screen--->
116. on having fun with your •friends and family
117. chi •gaze to screen--->•
118. or stuff.
119. E: +yep.+
120. exa +nods+

Prior to the 'Emotions' task, after the child describes his experience of being teased by his peers in the 'Social Difficulties and Annoyance' task, the examiner conveys empathy (not shown). Linking the two subsections of the ADOS-2, the examiner signals to the child that they are about to start a new set of questions and explicitly explains that the new task will involve "*(asking) a little bit about how you feel about other things*" (lines 1-4). The examiner places a tag question at the end of the introduction (line 5) which invites confirmation of agreement. After the child's agreement (line 6), the examiner again marks the commencement of a new task "*so just starting out*" before asking the first 'happiness things question' (lines 9-10). Although the child commences his response with a word search (Oelschlaeger & Damico, 2000) and parenthetical hedge "*I guess*" (line 10), he provides several candidate answers without obvious trouble (lines 12-24). Throughout the child's extended turns, the examiner

Clinician-child interactions in ADOS-2 assessments – a CA perspective

passes the floor back to the child with continuers (lines 12-18). On the child's last proffering, he starts to display difficulties in finding new information with word searches and silence (line 21). Although there is a turn transitional place [TRP] at the end of the child's response (line 23) to ask the 'happiness feel question' and adhere to institutional progressivity, due to the lack of specific type of answer required for the 'happiness things question', the examiner instead deviates from the interview question protocol to engage in unscripted conversational interaction (lines 26-61). This continues until the child communicates that no more information will follow with a downward intoned agreeable response "yep" (line 63) bringing the interaction around this topic to a close.

The examiner commences the 'happiness feel question' with a sharp rise in intonation and stress, a stretched emphasis on "*describe*", and a non-verbal gesture for "*happy*" marking his orientation to the questions institutional importance. The examiner also marks his orientation to the construction of the question by initially formulating the 'happiness feel question' as a polar question "*and can you describe what it feels like to be happy*" (lines 66-68) before immediately tagging a reformulation open question "*like how would you describe feeling happy*" (lines 68-70). The child commences his answer with a word search and a two second pause suggesting difficulty, followed by a "*well*"-preface indicating that 'contextual' information is not provided in the questioning (Schiffrin, 1987) that he cuts off with a further "*um*" (line 71). The child continues with a fast uttered "*I don't know*", which rather than a declaration of a cognitive state, as the child continues with his first candidate answer, the positioning of this "*I don't know*" marks his concern about his uncertainty of his next-positioned answer (Beach & Metzger, 1997) in relation to the examiner's question. This contrasts to the ease observed in the proceeding 'happiness things question' in which the child answers without notable difficulties (lines 6-7). The child however continues to provide four

Clinician-child interactions in ADOS-2 assessments – a CA perspective

different candidate answers. First, he provides an alternative word for happiness “*a joyful feeling*” (line 73), second, he explains not experiencing the opposite emotion “*not feeling sad*” (line 77), third, he provides a cause for the feeling of happiness “*having fun*” (lines 80-81), and fourth, he provides a physiological behavioural reaction “*something that makes you laugh*” (lines 85-89).

Although the structure of the ‘feels question’ is an open question, which in turn does not limit response alternatives as examinees are free to formulate any type of answer (Houtkoop-Steenstra, 2000), the examiners in the data deduce from the ‘emotions’ task question “*How do you feel 'inside' when you're angry?*” and pursue responses containing physical sensations associated with an emotion. As the child does not provide a ‘physical sensation’ in his answer, the examiner pursues the institutional agenda initially by continually passing the floor back to the child with six iterations of “*yep*” (lines 75-120) and a prompt without any additional contextual information “*any other way to describe the feeling*” (lines 83-92). The key issue in this regard is that the response that the examiner is pursuing for the ‘happiness feels question’ is highly specific and without providing relevant contextual information within the question, none of the child’s four different responses are close to the pursued type of answer (i.e., physical sensation). Due to the specific response required however, after each of the child’s answers that do not contain a physical sensation, the examiner continues to pass the floor back to the child to increase the likelihood that the child might respond with the target type of answer. After his fourth answer, the child commences a final attempt shaped by difficulty, before commencing his account “*I dunno*” (Drew, 1992) and explaining why it is problematic to answer the ‘feel question’ due to the mental absorption experienced when living through an emotion eliciting event (lines 100-117).

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Therefore, extract 1 demonstrates how the examiners can flexibly modify the protocol of the ‘Emotions’ task to manage omitted contextual information from the task introduction to instead inform the child that the following questions will involve discussing ‘feelings’. Further, as seen in this example and within the child’s diagnostic report, the initial ‘happiness things question’ that requests the child provides the ‘things’ that makes him feel happy is answered without difficulty *“he could effectively communicate what makes him feel happy, scared, angry, sad and relaxed”* (C01 diagnostic report). Conversely, although the examiner flexibly utilises protocol, when pursuing a response to the ‘happiness feel question’, the examiner continues to pass the floor back to prompt the child to provide further answers. He does not however provide any additional contextual information in his prompting questions beyond the contextual information contained in the ‘happiness feel question’. Therefore, the following is written in the child’s diagnostic report *“He however, had difficulty in describing how emotions physically feel”* (C01 diagnostic report).

4.6.1.2 Omitted Introduction and Reversed Delivery of Happiness Questions

The ADOS-2 manual advises the examiner to ask the ‘Emotions’ interview questions in any order (although it recommends starting and ending with positive emotions). The ADOS-2 manual does not however specify that the ‘things question’ should be asked first to provide contextual information for the ‘feels question’. In the next extract, the examiner commences the ‘Emotions’ task without any introduction to the task and initially asks the ‘happiness feels question’ (line 4) rather than the ‘happy things question’. The lack of any contextual information at the beginning of the task that explicitly communicates what the task will contain, and the things that make the child feel a certain emotion, increases ambiguity and uncertainty, which is observed in the child’s epistemic claims. The examiner in turn returns to the ‘happiness things question’ (lines 14-16) and provides context by listing known ‘things’ that

Clinician-child interactions in ADOS-2 assessments – a CA perspective

the child enjoys. Before the examiner completes her turn, the child describes how he feels when he engages in those ‘things’ that make him feel happy.

Extract 2 (38:30) C10DHA-THA (omitted introduction and reversed delivery of happiness questions)

1. E: .hh (1.5) name-of-child. • (1.0)
2. exa >>±gaze at screen--->±
3. chi >>•gaze to screen-----•gaze away from screen--->•
4. E: → ↑what [does it] feel like when you're happy.
5. C: [°yeah.°]
6. er:::: •happy.
7. chi •gaze to screen--->•
8. E: what does it feel like in your body when you're
9. happy.
10. C: er: my body feels happy.
11. E: how do you know that you're happy.
12. C: because er=I (.4) <↑don't know.>
13. (2.5)
14. E: → ±•what sort of things make you± happy.
15. exa ±gaze from screen-----±gaze at screen--->±
16. chi •gaze away from screen--->•
17. C: I:::=er::: iI don't know.
18. E: you ↑don't know.
19. how about when you're playing with your ↑lego (.)
20. does that make you feel happy,

Clinician-child interactions in ADOS-2 assessments – a CA perspective

21. C: ye:ah:?
22. E: °yeah?°+ (1.0) that's good.
23. exa +head beat
24. and (.) what about when you'r:e: watching (.) or
25. reading (.) something (.) to do with [thor.]
26. C: [reading] (.)
27. I am very ±cr:ying and (.6) when I'm watching tv:
28. (.) my mind goes (.) babo:om i'm super
29. •duper duper ruper juker extra %dexter super
30. chi •gaze to screen--->•
31. exa %smiles-->%
32. looper drinker uper lupa trinca zinka willy wonka
33. \$happy.
34. chi \$smiles-->>\$
35. E: ((laughs)) I like that explanation that's a good
36. one.

As the examiner commences the ‘Emotions’ task. The substantial silences that flank the inbreath and pre-positioned address term (lines 1-3) suggest difficulty in task transition. Rather than follow ADOS-2 protocol, the examiner omits the introduction of the ‘Emotions’ task and the initial ‘happiness things question’ and instead, asks the subsequent ‘happiness feels question’ (line 4). After an elongated word search (Oelschlaeger & Damico, 2000), the child in response repeats the emotion “*happy*” (lines 6-8). The examiner takes the next turn to reformulate her ‘happiness feel question’ to provide incremental information to orient the child’s attention to reflect on ‘what it feels like in his body’ (lines 8-9). In response, the child incorporates the new information provided by the examiner and recycles his prior answer “*my*

Clinician-child interactions in ADOS-2 assessments – a CA perspective

body feels happy” (line 10). Suggesting an inadequacy of the child’s response, rather than provide any further contextual information that communicates how the child can provide an answer that will satisfy the examiners reason for asking, the examiner broadens the question “*How do you know that you’re happy?*” (line 11). This approach remains abstract and asks for introspection which assumes that emotions are private states and only accessible to the person that experienced the emotion (Mascolo, 2009; Wittgenstein; 1953; 1980). The child attempts to provide a response as he prefaces the start of an account with “*because*” (line 12) and a word search before claiming a lack of knowledge “*I don’t know*” recruiting the examiner to assist with the situation (Kendrick & Drew, 2014).

After over two seconds of silence (line 13) which just like a continuer, can explicitly request for further talk (Houtkoop-Steenstra, 2000), the examiner returns to the initial ‘happiness things question’ and asks “*what sort of things make you happy*” (lines 14-16). The child again takes the floor and commences another search for an answer (Oelschlaeger & Damico, 2000) before abandoning his search and claiming his K- stance (line 17). Not treating the child’s “*I don’t know*” as a lack of knowledge (Hutchby, 2002), in emphatic agreement (Ferrara, 1994), the examiner echoes the child’s prosody in her partial repetition of the child’s response (line 18). At this point the examiner utilises known information about the child to provide the ‘things’ that he enjoys with a ‘How about’ form (lines 19-20). This action is indicative that the examiner recognises that the child’s difficulties in answering the question might be due to the reduced contextual information typically provided by asking the initial ‘happiness things question’. The child responds with a stretched type-conforming token “*yeah*” (line 21) accepting the content of the question as relevant (Heritage & Raymond, 2012; Raymond, 2003). The examiner quietly echoes the child’s rising intoned “*yeah*” with a head nod (lines 22-23) functioning to pass the floor back to the child (Schegloff, 1982). After a second silence, the examiner takes

Clinician-child interactions in ADOS-2 assessments – a CA perspective

the floor and positively receipts the child's alignment in the third position (lines 22-23) before providing further candidate 'things' that he enjoys (lines 24-25). Before the examiner completes her turn, the child responds with the physiological responses that he experiences when he reads "*I am very crying*" (lines 26-27). The child continues to describe the happiness his mind experiences when he watches television utilising an extended combination of non-lexical word items (line 27-34) before marking the end of his turn at talk with a smile (line 39).

In this example, the examiner digresses from sequential protocol and omits the task introduction and the initial 'happiness things question', resulting in a significant reduction of contextual information. After the child in turn displays difficulty in answering the 'happiness feels questions' and the subsequent 'happiness things question', the examiner in turn provides the known 'things' that makes the child happy. An open- to-closed cone style of questioning is observed in clinical interactions to initially provide the recipient with an open question that generates an option for any response. The answers are then utilised to assist the recipient to provide the required information to satisfy the agenda of the institutional interaction (Silverman et al., 2016). This action is indicative of her recognition that contextual information is needed to answer the 'happiness feels question'. Once the examiner provides all the information needed for the child to understand how he can answer the question, before the examiner completes her turn, the child in overlap creatively provides the physiological response he experiences when feeling happiness. The child could therefore provide his perception of his internal states when engaging in the 'things' that make him happy once he had received enough contextual information. The child's diagnostic report however made no specific reference to the child's responses to the 'Emotions' task (note, the 'Emotions' task is not utilised for coding in Module 3). Therefore, when contextual information is significantly reduced in any interaction, there will be implications for the examinees understanding of what answer to

Clinician-child interactions in ADOS-2 assessments – a CA perspective

provide to satisfy the speakers reason for asking. This in turn can have implications for what social-emotional behaviours are elicited and thus documented in the examinees diagnostic report.

4.6.1.3. Omitted Contextual Information in the Structure of ‘What about’ Questions

For three of the five emotions (‘afraid’, ‘anger’ and ‘relaxed’), the ADOS-2 manual presents the first ‘things question’ in a structurally and grammatically incomplete "How/What about" construction form (for example, "*What about things that you're afraid of?*", "*What about feeling angry?*", & "*How about feeling relaxed or content?*"). ‘What-about’ questions are not stand-alone utterances but are a ‘next-in-a-series’ question that end after naming a referent (Schegloff, 2007). Speakers use ‘What-about’ questions to reintroduce content found in the prior interaction, link a new aspect to the general topic under discussion, and propose something for the recipient to consider with the option for elaboration (Roth & Olsher, 1997). ‘What-about’ questions consist of two (or more) parts and one part usually provides the context and how the recipient is expected to respond (Fasulo et al., 2016). Like tying procedures, ‘What-about’ questions place an expectation on the recipient to repeat the action they had performed previously (Sacks, 1992) and build on the discussed referent within the preceding talk (Fasulo et al., 2016). Therefore, in a single-unit form, in the absence of any other contextual information, the question does not provide the terms for how the recipient can respond.

4.6.1.4. ‘What About’ Questions – Complete Reformulation

The following extract demonstrates the many instances in the data in which the examiners ask the ‘What about’ questions in isolation which, in turn, are often followed by difficulty. The following extract shows how the child initially demonstrates difficulty in answering the

Clinician-child interactions in ADOS-2 assessments – a CA perspective

incomplete context omitted question (lines 16-21), but after the examiner follows with a contextually complete polar question (line 23), the child provides a relevant answer.

Extract 3 (17:00): C02CDHA-THA (incomplete request for information: angry)

1. C: (it lets sort of) a bit of (.) uhm (.) .hh
2. chi >>•gaze away from screen--->•
3. exa >>±gaze to screen--->±
4. brightness +coming through;% (.7)+
5. exa +head nod-----+
6. exa %smiles--->%
7. [•so it's not] completely •dark.
8. chi •gaze to screen-----•gaze away--->•
9. E: [yeah.]
10. %that's a good idea maybe I should try that.
11. exa %stops smiling
12. C: yeah.
13. E: %that would help.±
14. exa %smiles--->%
15. exa ±gaze at paperwork--->±
16. E: → oka:y. (.6) .hh and+ %what ±about +feeling +an:gry.
17. exa +hands to chest+
18. exa %stops smiling%
19. exa ±gaze to screen--->±
20. (.) • (3.0)
21. chi •gaze away from screen--->•
22. C: → er:: (6.5) it's (5.0) °I don't know.°

Clinician-child interactions in ADOS-2 assessments – a CA perspective

23. E: → ↑does anything make you feel an↑gry,

24. C: → when: um: (.9) my siblings annoy me?

25. E: % £yeah,£ %

26. exa %raised eyebrows%

Prior to the ‘What about’ question, the child shares how she reduces her fear of the dark by leaving a light on (lines 1-8). After the examiner aligns with the child’s telling (line 9-14), she marks her transition with an “*okay*” -preface (Beach, 1993) before continuing with the ADOS-2 protocol and asking the initial structurally incomplete ‘angry things question’ “*What about feeling angry?*” (line 16-19) with gestures to the chest to achieve a mutual focus of attention (Mondada, 2014b). In turn, the child attempts to provide an answer by averting her gaze (line 21), producing word searches (Oelschlaeger & Damico, 2000), and long pauses between talk (Jefferson, 1974; Schachter et al., 1991), before quietly claiming her K-minus stance “*I don’t know*” (line 22). Incomplete “*What about/How about*” increase the likelihood of difficulty and ‘I don’t know’ responses in comparison to other complete question formulations in autism assessments (Stickle, 2015). Orienting to “*I don’t know*” as an issue with understanding the question formulation, the examiner assists with the situation (Kendrick & Drew, 2014) by producing a structurally complete alternative question “*Does anything make you feel angry?*” (line 23). The child commences her answer “*when*”, and after a brief hesitation, the child provides an answer with relative ease (line 24).

Incomplete “*What about*” ‘next-in-a-series’ (Schegloff, 2007) questions are reliant on other communication to provide the examinee with the contextual information needed to answer the question. Therefore, when asked, the ADOS-2 is not simply assessing the child’s ability to communicate their own affect but instead, also testing the child’s capacity to apply meaning

Clinician-child interactions in ADOS-2 assessments – a CA perspective

from questions not directly adjacent to the incomplete *"What about"* question. This has implications for what the examiners can conclude from the child's responses to these questions. In this instance, the examiner's modification of the incomplete question turn construction meant the child was able to provide an answer, which in turn was documented in the child's diagnostic report *"demonstrated some insight into her own emotions"* (C02 diagnostic report).

4.6.1.5 'What About' Questions – Modelled Answer

In the next example, after the examiner asks the structurally incomplete *"How about feeling relaxed or content?"* (lines 15-19), the child utilises the preceding protocol question (i.e., "How do you feel when you're sad?") to source the omitted contextual information. The ADOS-2 however requires the examinee to retain the sequential order and deduce meaning from the 'things question' prior to the preceding 'feels question'. Therefore, to provide the answer that would satisfy the examiners reason for asking, the examinee should not base their answers on contextual information found in the immediate and preceding interaction as this would in turn result in providing two adjacent answers for the 'feels question' (lines 24-26). The examiner in turn provides a model answer (lines 32-34). This modelled answer is in turn templated by the child to provide an answer that satisfies the examiners reason for asking (lines 36-37).

Extract 4 (22:00): C11CDHA-THA (incomplete request for information: relaxed)

1. E: so do you still see him,
2. exa >>±gaze to screen--->±
3. chi >>•gaze away from screen--->•
4. C: * (.) nar. *
5. chi *shakes head*
6. E: + no. +

Clinician-child interactions in ADOS-2 assessments – a CA perspective

7. exa + shakes head+
8. C: +I just don't like+ (inaudible) like I completely
9. exa +nods head-----+
10. cut him off.
11. (1.4)
12. E: okay: (1.2) >that sure that would certainly make
13. me sad too,>
14. C: [mmm.]
15. E: → [±>okay<] and what about <feeling (.)
16. exa ±gaze at paperwork--->±
17. ±relaxed and content.>
18. exa ±gaze to screen--->±
19. chi •gaze away from screen--->•
20. (2.5) * (2.0)
21. chi *LH palm to cheek--->*
22. C: I don't know I just feel relaxed.
23. E: ↑no.
24. C: → *>only when I wake up in the morning I still have
25. chi *LH down
26. my ↑feelin.< for like twenty minutes,
27. E: okay (.3) while you're waking up,
28. C: • mmhmm? •
29. chi •gaze to screen•gaze away from screen--->•
30. E: >+sounds+ like a nice feeling.<=
31. exa +nods---+

Clinician-child interactions in ADOS-2 assessments – a CA perspective

32. → =I like uhm (.3) watching tv and eating
 33. chocolate+ (.3) to relax.
 34. exa +smiles--->>+
 35. C: °yeah, °
 36. → when I'm eating my dinner or something (.) when I
 37. watch netflix (.) i feel relaxed then too,
 38. E: #ye:ah.#

After the child shares a distressing personal experience (not shown) that made him feel sadness (lines 1-10), the examiner aligns with the child's shared emotional experience (lines 12-13). Following sequential protocol when arriving at the final emotion 'relaxed', marking the transition (Beach, 1993) the examiner asks the structurally incomplete question "*and what about feeling relaxed or content?*" (lines 15-19). The examiner emphasises "*feeling relaxed and content*" by slowing the speed of her talk and stressing "*relaxed*" (lines 15-17). After a silence of over four seconds, the child downgrades his commitment to his response "*I don't know I just*" to provide an account for the uncertainty of the answer that follows (Drew, 1992; Turowetz, 2017) before recycling the encapsulating emotion term in his answer "*feel relaxed*" (line 22). The examiner's questioning "*no*" (line 23) indicates surprise at the child's K-response with a 'punched up' prosodic contour (Wilkinson & Kitzinger, 2006). Without hesitation and difficulty, the child expands on his response to specify the exact time of day that he 'feels' relaxed (lines 24-26) further indicating that he 'filled in' the missing content from the preceding 'feel question' rather than the 'things question'. After receipting and evaluating the child's response (lines 27-30), the examiner models a 'candidate answer' which is typically offered after a 'failed' answer (Antaki, 2002; Pomerantz, 1988) to the 'relaxed/content feel question' by sharing the 'things' that help her to relax (lines 32-34). After aligning with the

Clinician-child interactions in ADOS-2 assessments – a CA perspective

examiner (line 35), the child in turn, templates in answer as he shares without difficulty the similar ‘things’ that he likes doing to relax (lines 36-41).

Therefore, when omitting contextual information and asking a structurally incomplete question, the child is left to deduce the content and the extent of his answer from other contextual factors in their interactional environment (Fasulo et al., 2016). Specifically in this case, the child utilises the preceding ‘feels question’ as a template to fill the omitted information in the ADOS-2 question, therefore demonstrating an ability to apply the content of previous questions when contextual information is omitted. In response, as the child’s answer did not match the project of the ADOS-2, The examiner in this instance provided a template for the child to understand the type of answer the incomplete question required, therefore resulting in the child providing the ‘correct type’ of response which in turn was reflected in the child’s diagnostic report “*He could recognise some of his life experiences that triggered different emotions*” (C11 diagnostic report). Rather than supply a template based on her own experiences, the examiner however could have instead ended the task, which in turn, could have had implications for how the child’s responses to these questions were perceived by the examiners.

4.6.1.6. Conclusion of section

Both the ‘things questions’ and the ‘feels questions’ are open questions in which their composition do not limit response types and therefore examinees should be free to formulate any type of answer (Houtkoop-Steenstra, 2000). Unlike the ‘things’ question in which no specific types of responses are pursued by the examiners, for the ‘feels’ question, the examiners however pursue responses containing ‘physical sensations’ associated with an emotion (likely deduced from the only ‘emotions’ task question containing the word ‘inside’ “*How do you feel*

Clinician-child interactions in ADOS-2 assessments – a CA perspective

'inside' when you're angry?"). As seen in extract 1, some examiners pass the floor back to the child to communicate that the answer was not sufficient and to implicitly request an alternative answer with continuers. Therefore, the absence of contextual information results in responses that contain greater levels of difficulty over multiple turns. Examiners work to assist the child after the child displays difficulties by reformulating their prior turn designs to contain the contextual information required to answer (extracts 2 & 3), and by producing model ‘candidate answers’ (extract 4) which are typically offered after a ‘failed’ answer (Antaki, 2002; Pomerantz, 1988). Asking questions that omit the required information has implications for what the ADOS-2 can conclude from the child’s responses to these questions.

4.6.2. Third Turn Evaluations

As seen in the previous section, the examiners utilise different devices to manage difficulties in communication. The ADOS-2 guides that ‘throughout the assessment the examiner should give appropriate encouragement and praise’ (Lord et al., 1999) which typically takes the form of a positive evaluation of the child’s talk in the third turn. Similarly, the ‘Initiation-Response-Evaluation’ ([IRE], Mehan, 1979) approach typically involves an interactional sequence in which the speaker obtains information from the recipient by asking a question, the recipient provides an answer, and the speaker evaluates the recipient’s response before progressing to the next question. Evaluating responses however has consequences for ‘learning within the task’ as the recipient perceives the ‘correctness’ of their answer (Maynard, 2005). Dependent on the positivity or negativity of the ‘evaluation’, the recipient is likely to model or modify subsequent answers which can implicate the examinees performance across any questions that are perceived to be in the same category as the initial ‘third turn evaluation’. Utilising a ‘learned’ model answer that is incorrect for the assessment will result in a presentation of the examinee that might not reflect how they would have responded if the evaluation had not

Clinician-child interactions in ADOS-2 assessments – a CA perspective

occurred in the preceding turn. Therefore, recipients are responsive to the inclusion of additional contextual information, evaluative or otherwise.

In the following extract, after the examiner provides a third turn positive evaluation of the child's response to the prior task, the examiner follows the ADOS-2 'Emotions' task protocol which instructs the examiners to '*not*' introduce the task as an '*emotions*' task (Lord et al., 2012). The reduction of contextual information (i.e., the task will contain questions based on experiences of emotion) in the task transition can have implications for understanding appropriate next turn responses. This can be observed in the child's displayed difficulty (lines 11-18). The examiner continues her positive third turn evaluative approach of the child's candidate answers (line 35 & 63). In these instances however, the child's answers to the 'Emotions' questions would be considered to have limited effectiveness. The child in turn 'learns within the task' and models subsequent answers on her previously positively evaluated answer.

Extract 5 (25.00): C04DHA-THA (Initiation-Response-Evaluation' [IRE] approach)

1. E: excellent. (.7) •well: don:e::
2. exa >>±gaze to paperwork--->±
3. chi >>•gaze away from screen•gaze to screen--->•
4. E: [↑you have got] a ↑brilliant memory:.
5. C: [(°inaudible°)]
6. (°inaudible°)
7. E: okay (.) so I'm gonna ask you some questions now:?
8. what ±kind of things make you feel happy and
9. exa ±gaze to screen--->±

Clinician-child interactions in ADOS-2 assessments – a CA perspective

10. cheerful.
11. C: •±hm*mm (2.0) •
12. chi •gaze away from screen•gaze to screen--->•
13. exa ±gaze to paperwork--->±
14. chi *LH to chin--->*
15. (4.0) •mmm (1.8) hmm:ah
16. chi •gaze away--->•
17. (6.0) *tt hmmm (1.3) hmmm (1.)
18. chi *LH down
19. •±my dogs.
20. chi •gaze to screen--->•
21. exa ±gaze to screen--->±
22. E: ±•oh yeah I thought you were gonna say that_
23. exa ±gaze to paperwork--->±
24. chi •gaze away from screen--->•
25. E: and (.) when you ±feel ±happy can you describe
26. exa ±hands to chest--->±
27. exa ±gaze to screen--->±
28. what it ±feels like.
29. exa ±hands down
30. exa ±gaze to paperwork --->±
31. C: I don't know,
32. E: can you give it a go..
33. C: ±hmm (4.0) mm (.) I just ±feel happy?
34. exa ±gaze to screen--->± ±gaze to paperwork--->±
35. E: → •yeah: good description.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

36. chi •gaze away from screen--->•
37. okay, (.) and ↑what kind of things are you afraid
38. *of.
39. chi *RH palm hits ball on table
40. C: spi:ders:.
41. E: ye:ah: me too:.
42. an:d: (.) •tt ↑how †does it feel when you're
43. chi •gaze away from screen--->•
44. exa †gaze to screen--->†
45. afraid: or †kind of
46. exa †RH gestures to chest--->†
47. frightened:..†•
48. exa †RH down
49. exa †gaze to paperwork--->†
50. chi •gaze away from screen--->•
51. C: †uhm (.) •I feel scared:† (.) so I take a picture
52. exa †gaze to screen-----†gaze to paperwork--->†
53. chi •gaze to screen--->•
54. of the thing and run downstairs <as fast as
55. lightning.>
56. E: wo:w. •
57. chi •gaze away from screen--->
58. C: so I go <slowly>• when there's a big >massive
59. chi •gaze to screen--->•
60. spider in my room.<
61. >so I take a picture of it< (.) for the proof.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

62. and then: (.) I run downstairs as fast as sonic.

63. E: excellent.

Before the examiner commences the ‘Emotions’ task, she concludes the child’s completion of the previous ‘Cartoons’ task with a positive evaluation (lines 1-4). The child takes a turn at talk in overlap (line 5) and then again in the next turn at talk (line 6), but this is not oriented to by the examiner. The examiner instead marks the start of a new task with an “*okay so*” (line 7) prefaced turn marking the transition (Beach, 1993) to a new task that is not linked to the prior (Bolden, 2009). Following ADOS-2 sequential protocol, the examiner explicitly introduces the change in activity “*I’m gonna ask you some questions now*” (line 7) without providing any contextual information surrounding the questions that will follow. The examiner takes the next turn at talk and asks the initial ‘happiness things question’ “*What kind of things make you feel happy and cheerful*” (lines 8-10). The child displays a difficulty searching for an answer (lines 11-18) with fillers and pauses (Jefferson, 1974; Schachter et al., 1991), gaze shift up and away from the screen (Rossano, 2012) and by placing her hand on her chin (Abbasi et al., 2008). The child’s fixed gaze on the screen for four seconds (line 12-15) suggests a turn-yielding cue to recruit the examiner to take the floor (Kendon, 1967; Duncan & Niederehe, 1974; Duncan & Fiske, 2015) to assist by providing further contextual information. After the examiner does not provide any further information, the child hesitates further before providing a candidate answer (lines 19-20) which receives an aligning response from the examiner in the third turn (lines 22-24).

Following ADOS-2 sequential protocol, the examiner asks the broad subsequent ‘happiness feel question’ along with hand gestures orienting the child to the body “*And when you feel happy can you describe what it feels like*” (lines 25-30). In response, without attempting to

Clinician-child interactions in ADOS-2 assessments – a CA perspective

provide an answer, the child claims *“I don’t know”* (line 31) to recruit the examiner to assist with the situation (Kendrick & Drew, 2014). The ADOS-2 does not guide if the examiners can provide specific contextual information to clarify the fixed questions. Not treating the child’s claim as a cognitive state (Hutchby, 2002) the examiner prompts the child *“Can you give it a go”* (line 32). The child displays difficulty searching for an answer with fillers and long pauses (Jefferson, 1974; Schachter et al., 1991) before downgrading her commitment (Turowetz, 2017) *“I just feel happy”* (line 33). Although this answer would be considered an ineffective response, in the following turn, the examiner provides a third turn positive evaluation of the child’s response *“yeah good description”* (line 35).

The examiner transitions to the next two-part emotion question *“What kind of things are you afraid of”* (lines 37-38). Before the examiner completes her turn, the child hits the ball on the table with the palm of her hand (line 39) and without hesitation, provides her candidate answer *“spiders”* (line 40). The empathic gesture that is executed before the examiner completes her turn and the sound stretch of the child’s candidate answer marks her certainty (Stokoe & Edwards, 2008) and demonstrates an understanding of what type of response is now required to the ‘emotions things questions’. After aligning with the child’s answer in the third turn (line 41), linking the preceding and subsequent question with an ‘and’ prefaced turn (Heritage & Sorjonen, 1994), the examiner progresses the agenda by asking the subsequent ‘fear feel question’ *“and how does it feel when you’re afraid or kind of frightened”* (lines 42-49) with a gesture to the chest to achieve a mutual focus of attention (Mondada, 2014b) to ‘inside the body’. Using the same template that received a positive evaluation to the previous emotion answer (i.e., *“I just feel happy”*), the child reformulates her answer to contain the new emotion fear *“I feel scared”* (line 51). On the second iteration, the child drops the K- “just” (Turowetz, 2017) suggesting confidence in applying the same model to the previously positively evaluated

Clinician-child interactions in ADOS-2 assessments – a CA perspective

answer. The child continues by providing a story of what she does in the event of encountering the referent, ‘a spider’ (lines 51-62). Emotional experiences are often shared with others by putting the experience in narrative form (Habermas, 2018; Sarbin, 1989). The examiner initially affiliates as a recipient of the child’s story with a prototypical “*wow*” (line 56) before again providing a positive third turn evaluation of the child’s candidate response with “*excellent*” (line 63). Here after the initial “*wow*” (line 56), the examiner does not provide any further responses to a story as would be usually observed with a ‘real’ rather than ‘assessment’ question (Heritage, 2013). Instead, the positive evaluation is linked to the ‘appropriateness’ of the child’s answer (Maynard, 2005) in relation to the institutional agenda.

In this interaction, the examiner provides positive third turn evaluations which in turn communicate that the child’s previous answer was correct or sufficient. The child templates her subsequent answer on her previously ‘successful’ answer, which in turn, results in another answer which does not satisfy the examiners reason for asking. Therefore, the examiner’s interaction has consequences for how the child’s answers are perceived to demonstrate abilities to describe emotion. As the coding item ‘Communication of Own Affect’ was removed from Module 3, there is no documentation of the child’s responses to the ‘Emotions’ task questions within the child’s diagnostic report.

Similarly, in the following example, the examiner also positively evaluates the child’s answers in the third turn (line 27). In this extract however, rather than adhere to institutional progressivity and sequentially ask the next protocol question, the examiner passes the floor back to the child to prompt the child to provide further answers. After further attempts to provide an answer, the child displays difficulty with a six second silence indicating that no more answers will follow (line 26). The examiner in turn abandons her pursuit of attempting

Clinician-child interactions in ADOS-2 assessments – a CA perspective

to get the child to provide a particular answer (a physical sensation associated with a particular emotion), and at this point positively evaluates the child's answers.

Extract 6 (14:20): C02DHA-THA (praise in the third turn)

1. E: ±.hh uhm (1.5) how ±>how does it<
2. chi >>•gaze away from screen--->•
3. exa ±gaze to paperwork ±gaze up--->±
4. ±+ fee:1 (1.2) when you're happy.
5. exa ±gaze to screen--->±
6. exa +hands clasp in front of chest--->+
7. C: <it feels very good> (.7) cause+ (.4) you're
8. exa +nods--->+
9. doing+ something that you love and you- it's very
10. nice.
11. E: ye↑ah?
12. how does it feel+ insi:de. + (.) do you know
13. exa +hands to chest+hands together--->+
14. how it makes your + body + feel.
15. exa +clench fists+hands together--->+
16. C: <m:akes my body feel (1.3) uhm (2.7) comforta↑ble?>
17. E: +↑yeah?
18. exa +nods--->+
19. C: and ca:lm?
20. E: •↑yeah.
21. chi •gaze to screen--->•

Clinician-child interactions in ADOS-2 assessments – a CA perspective

22. (.7) +• (.8)
23. exa +stops nodding
24. chi •gaze away from screen--->•
25. C: uhm,
26. (6.0)
27. E: → ±+•well done.
28. exa ±gaze to paperwork--->±
29. exa +hands down
30. chi •gaze to screen--->•
31. >so it makes you •feel comfortable and
32. chi •gaze away from screen--->•
33. ±calm. * < (.4) *
34. exa ±gaze to screen--->±
35. chi * nods *
36. E: ±yea:h.
37. exa ±gaze to paperwork--->±
38. and (.) what about is there anything that you're
39. afra:id of.
40. C: •↑spiders.
41. chi •gaze to screen--->•
42. E: +spiders•* (.)+ ↓yeah* spiders are scary aren't
43. exa +eyebrows up+eyebrows down
44. chi •gaze away from screen--->•
45. chi * nods *
46. they.
47. C: mmm:..

Clinician-child interactions in ADOS-2 assessments – a CA perspective

48. E: what happens when you see a spider.
49. C: I scream and say +↑mommy can you get it out of
50. exa +smiles--->+
51. the bath:room.*• ((laughs))
52. chi *smiles--->*
53. chi •gaze to screen--->•
54. E: £yeah£ ((laughs)) does mommy come and help.
55. C: •yeah: and then she gets a cup and then chucks it
56. chi •gaze away from screen--->•
57. °out the window.°
58. E: % ahh: % yeah (.) *+that's a good way of getting
59. exa %head beat%
60. chi *stops smiling
61. exa +stops smiling
62. rid of spiders isn't it.
63. C: *y:eah.*
64. chi * nods *
65. E: and SO IF YOU SEE a spider (.) how does it make you
66. fee:l (.) how's it [make your body feel.]
67. C: [terrified] (.9)
68. s::cared.
69. E: y:eah?
70. and how does that feel in your body.
71. C: makes me feel like I want to hi:de cause it's
72. s:cary.
73. E: +yeah: it is+ scary isn't it.

74. exa +eyebrows up+eyebrows down

After the child's candidate answers to the 'happiness things question' which are receipted by the examiner with an affiliative insert question (not shown), the examiner continues with institutional protocol and multimodally asks the 'happiness feels question' (lines 1-6). The child in turn explains how happiness 'feels good when you're doing something that you love' (lines 7-10). Because the child has not provided a specific physical sensation, rather than progress onto the second subsequent emotion, the examiner instead provides incremental information to orient the child to 'inside' and how happiness makes her 'body feel' with gestures to the chest (lines 11-15) to achieve a mutual focus of attention (Mondada, 2014b) to 'inside the body'. The child slowly recycles the examiners incremental contextual information "*makes my body feel*", before displaying difficulty in searching for her answer (Jefferson, 1974; Schachter et al., 1991). The child provides another attempt to describe the felt experience as "*comfortable and calm*" (lines 16-19). Due to the lack of physical sensation specificity, the examiner again acknowledges the child's candidate answers with a high intoned "*yeah*" and 'head nod' (lines 17-20) to pass the floor back to prompt the child to provide another answer. The child in turn utters an "*uhm*" (line 25) again attempting to search for an answer (Jefferson, 1974; Schachter et al., 1991). After a six second silence (line 26) which just like a continuer, can be an explicit request for another alternative answer (Houtkoop-Steenstra, 2000), the examiner positively evaluates the child's prior answers "*well done*" as she returns her gaze to the paperwork (lines 27-30). The examiner 'so' pre-faces a repetition of the child's final candidate answer (lines 31-37) which receives, receipts, and accepts the answer as complete, before launching a new question (Christensen & Fiechtner, 2010).

Clinician-child interactions in ADOS-2 assessments – a CA perspective

The examiner returns to protocol and asks the next ‘afraid things question’ (lines 38-39). After the child’s candidate answer “*spiders*” (line 40-41), rather than progress immediately to the next ‘afraid feels question’, the examiner initially aligns with the child’s fear of spiders (lines 42-46), before prompting the child to provide a situation of what happens in the event of seeing a spider (line 48). The child in turn provides a description of the event (Davitz, 1969) in the form of storytelling in which she incorporates a first-person narrative voice (lines 49-53). The child’s laughter, smile and gaze (lines 52-53) invites the examiner to receipt her telling as humorous. The examiner in turn produces laughter and prompts the child for further information (line 54) before continuing to align (lines 58-62) with the child’s conclusion of her story (lines 55- 57). In the following turn, the examiner incorporates the child’s fear of ‘spiders’ into the ‘afraid feels question’ with an increase in volume to orient attention to the referent (lines 65-66). In this instance, the examiner initially asks how it makes the child feel before repeating the question to incrementally provide specific information to guide the child’s response to answer how it makes her ‘body’ feel. In overlap, the child answers “*terrified*” (line 67) and after a second silence in which neither party speaks, the child continues “*scared*” (line 68). This approach to providing terms that typically encapsulate an overall ‘felt’ experience was positively evaluated by the examiner in response to the child’s previous answer “*comfortable and calm*”. The examiner prompts for a specific physical sensation by asking the child how it feels ‘inside her body’ (line 70). The child again uses a template from a previous response that received positive aligning responses (such as, agreeable responses and laughter) from the examiner in the form of storytelling (Sarbin, 1989) and description of the event (Davitz, 1969) “*makes me feel like I want to hide cause it's scary*” (lines 71-72). This answer in turn, received another aligning response from the examiner (lines 73-74). Although this examiner differs from the previous example in prompting behaviours (in the form of providing

Clinician-child interactions in ADOS-2 assessments – a CA perspective

incremental information), the child models previous responses that were received positively suggesting ‘learning within the task’.

As seen in the previous example, Module 3 was also administered due to the child’s age. Although in this instance, this child’s diagnostic report contained reference to the child’s ‘Communication of Own Affect’ (ADOS-2; Lord et al., 2012). For example, within the child’s diagnostic report it was documented how she was able to comment on the ‘things’ that made her feel happiness “*She demonstrated some insight into her own emotions. For example, she said that horse riding makes her happy and it feels good because she is “doing something [she] really loves”*” (C02 diagnostic report). After answering the ‘things’ questions, the examiner utilised a more flexible approach to pass the floor back to the child to prompt the child to provide further answers, signifying that the previous response did not satisfy the reason for asking. After the child indicated that no more information will follow, the examiner positively evaluated the child’s insufficient answers which in turn resulted in ‘learning within the task’ as the child modelled a subsequent answer. Recycling previously positively evaluated answers therefore can have negative consequences as observed in the child’s diagnostic report “*She found it difficult to describe physical sensations associated with various emotional states”*” (C02 diagnostic report).

4.6.2.1. Conclusion of section

In both examples, the children ‘learn within the task’ and perceive ‘correctness of their response’ (Maynard, 2005) and model subsequent answers based on the examiners third turn positive evaluations. In extract 5, after the child’s initial answer, the examiner does not pursue any further responses, and after positively evaluating the child’s response, adheres with institutional progressivity and asks the next protocol question which communicates a

Clinician-child interactions in ADOS-2 assessments – a CA perspective

successful answer (Antaki, 2002). Conversely, in extract 6 after the child provides an insufficient answer, only after six seconds of silence in which it becomes clear no further information will follow, does the examiner positively evaluate the child's prior answer. Therefore, adopting a third turn evaluative feedback approach can implicate the children's answers as they 'learn within the task'. Moreover, both children provide answers to the emotion questions with storytelling (Sarbin, 1989) and a description of the event (Davitz, 1969) which are responses that are observed in everyday interactions. Therefore, the children in the above extracts demonstrate strengths in social-emotional reciprocity that are not documented in their diagnostic report.

4.6.3. Examiners Orient to Sociocultural Factors

Children acquire sociocultural communication through each experience of public manifestation of emotion (Bennett & Hacker, 2004; Parkinson, 2012; Ter Hark, 1990; Wittgenstein, 1953). Children learn and observe how emotions are co-regulated between people (Saarni, 1999) and how the experience and meaning of emotions can differ depending on cultural norms between any particular culture (Brody, 2000; Underwood et al., 1992). Children are also aware of the social consequences of displayed emotions, such as, expectations (Stein et al., 1993), control and nonacceptance (Frijda et al., 1989) and the implications for social relationships (Beeman, 1976). Children may in turn conceal emotions due to a sociocultural understanding that emotion displays such as sadness can receive negative reactions and evaluations from other people (Siegel & Alloy, 1990). People conceal emotions that display weakness or are deemed culturally unattractive to self-protect (Novin et al., 2009). Moreover, there are sociocultural gender differences in emotional expressiveness which are heavily influenced by cultural values and attitudes concerning gender roles (Brody, 2000). For example, 'fear' can be viewed as 'unmanly' (Siegel & Alloy, 1990) and can be regarded as 'powerless'. Associations with

Clinician-child interactions in ADOS-2 assessments – a CA perspective

powerfulness can influence males and females understanding of specific emotion labels (Fischer, 1993).

The ADOS-2 manual states that the requirement to talk about different emotions is challenging for many people (Lord et al., 2012) as describing the felt state of emotion is rarely discussed (Jaedicke et al., 1994). The ADOS-2 protocol potentially demonstrates a recognition of the sociocultural meaning of specific emotions. Yet, no further information is provided as to why these factors are included in the design of the comments and questions and how these factors might implicate task interactions. Therefore, without explicitly documenting how people might respond differently to emotion questions based on their sociocultural experiences, each examiner will differ in how much they modify their questioning. The following section will show how the examiners orient to the potential differing social cultural meaning of emotional words and manage sociocultural factors in the following turns.

4.6.3.1. ADOS-2 interchangeable emotions

The ADOS-2 utilises interchangeable emotions in the ‘Emotions’ task questioning to assess how an examinee conveys ‘fear’ (afraid, frightened, and anxious). The ADOS-2 does not however inform the examiner of the potential implications of sociocultural charged emotions, nor does it advise the examiner to use the various ‘fear’ emotions interchangeably to prompt a response. For example, to ‘be afraid’ is considered a state of being ‘, whereas, a ‘fright’ or ‘get scared’ is an initial reaction caused by triggering event (Nichols et al., 2004) and has connotations for choice and volition (Rickman & Rudanko, 2018). In the next example after the examiner asked the ‘fear’ things question (lines 1-7), the child claims that he has never experienced a state of being ‘afraid of anything’. Rather than adhere to institutional progressivity, only after the examiner pursues the agenda further by changing the fear label

Clinician-child interactions in ADOS-2 assessments – a CA perspective

from ‘afraid’ (lines 20-21) to ‘frightened’ does the child accept how he has been ‘frightened’ as an “*jump scare*” reaction, but not in response to a person (“*no person scares me*”).

Extract 7 (17:24): C11DHA-THA: (interchangeable ‘fear’ emotions)

1. E: → ±>okay< what about± being +afra:id are you
2. chi >>•gaze away from screen--->•
3. exa ±gaze to paperwork±gaze at screen--->±
4. exa +LH to chin--->+
5. afraid +of anything.%
6. exa +LH down
7. exa %smiles--->%
8. C: → no.
9. (3.5)
10. E: +nothing at %all.+(.3)%
11. exa +shakes head-----+
12. exa %wide eyes%
13. C: no. (.7) I [may a:ct it.]
14. E: [(well-)]
15. C: I don't really care about anything,
16. E: %o↑kay,
17. exa %stops smiling
18. C: nothing [fazes_]
19. E: [uhm.]
20. E: → >what about being frightened.< (.7) you m- are you
21. frightened [of any]%thing?

Clinician-child interactions in ADOS-2 assessments – a CA perspective

22. C: [yeah,]
23. exa %smiles--->%
24. ↑someone tries to like (.5) jump scare me or
25. whatever .hh %but obviously (.) like (.) I'll get
26. exa %stops smiling
27. scared (.) like I might [jump or] something.
28. E: [(°yeah°)]
29. C: but other than that (.) like (1.0) horror movies
30. scare me yeah (.4) bu[t (.6) >I] know that they're
31. E: [+(°yep°)]
32. exa +head nod--->+
33. C: not real+ (.5) so like< no person scares me> (.4)
34. exa +stops head nod
35. or anything (.5) but like (.4) yeah: (.5) so I'm
36. scared of +horror movies+ I guess (.) and spiders
37. exa +nods-----+
38. (.) >that's about it.<
39. E: yeah? (.) I was gonna say I'm a bit frightened of
40. spiders,

Following sequential ADOS-2 protocol, the examiner asks the structurally incomplete initial 'afraid things question' "*What about being afraid?*" before immediately reformulating into a polar question "*Are you afraid of anything?*" (lines 1-7). Aligning with the format of the polar question, the child responds with a disaffiliative "*no*" (line 8). After a three second silence (line 9) in which the examiner waits for an account, the examiner marks her surprise with a clarifying question (line 10), head shake (line 11) and wide eyed (line 12) facial expression

Clinician-child interactions in ADOS-2 assessments – a CA perspective

(Ekman & Friesen, 1978). The child in turn provides an account that he “*may act it*” (line 13) but emphasizes that he does not really “*care about anything*” by marking ‘care’ with emphasis (line 15). The examiner stops smiling (line 17) as she receipts the child’s response with highly an intoned “*okay*” (line 16), before the child completes his answer with a claim that “*nothing fazes (him)*” (line 18). Rather than adhere to institutional progressivity and ask the next interview question, the examiner repeats the ‘fear things question’ but replaces the word ‘afraid’ with ‘frightened’ (lines 20-21) before again smiling at the end of her question (line 23). Before the examiner completes her polar question, the child provides an affiliative response (line 22) followed by a description of how he might be “*scared*” in response to a “*jump scare*” (lines 24-27), “*horror movies*” (lines 29-33), and “*spiders*” (lines 33-38). The child however sandwiches his original claim from the initial answer to the ‘fear question’ by slowing down the pace of his utterance and emphasising how “*no person scares (him)*” (line 33).

Therefore, this example demonstrates how a child can change his answer from disaffiliative to affiliative in response to a single term change (‘afraid’ to ‘frightened’). The child’s differing orientation to ‘fear’ words that are utilised interchangeably by the ADOS-2 suggests that responses can differ depending on the sociocultural meaning of the emotion. Applying culturally responsive methods throughout interaction-based assessments can provide an accurate characterization of a child’s communication (Washington et al., 2023). Although the ADOS-2 provides several different interchangeable emotional terms for ‘fear’, it does not provide a reason in the manual for this action. Without explicitly informing the examiners that people may have different sociocultural experiences of emotion terms, examiners are likely to differ in how much they try another emotional term if one fails to achieve a type of response.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

In this example, rather than abandon pursuit to adhere to institutional progressivity, the examiner's action of repeating the same question with a different term provides the child the opportunity to show social-emotional capabilities "*He also described how he is scared of horror movies and spiders*" (C11 diagnostic report). Other examiners however may consider the child's initial rejection as a difficulty in providing a response.

4.6.3.2. ADOS-2 inclusive emotion

For the final negative emotion 'sadness', the ADOS-2 directs the examiner to provide a pre-expansion "*Most people have times when they feel sad*" before asking the 'sadness things question'. This addition to the 'Emotions' task protocol is indicative that when constructing the assessment, the authors were sensitive to the difficulties that people have in discussing 'sadness'. This action indicates recognition of sociocultural differences in emotion, such as, concerns that expressing sadness is undesirable and can impact likeability (Shields, 2000; Zeman & Garber, 1996). In turn, the preamble is intended to normalise sadness by making the examinee feel in the majority. The ADOS-2 does not provide a reason for this isolated pre-expansion, or again inform the examiner of any sociocultural implications of expressing negative emotions. Therefore, it is likely that each examiner will differ in the delivery of this culturally sensitive pre-expansion, which will in turn lead to differing receipts from the child. For example, in the following extract, the examiner observably orients to the instructions as she reads the pre-expansion "*Most people have times when they feel sad*" before inserting "*I'm just wondering*" (lines 16-23) as a device to facilitate potentially difficult 'feelings talk' (Hutchby et al., 2020). The examiner's orientation to the isolated introduction to 'sadness' and her utilisation of a feelings talk device suggests an awareness of the potential difficulty in discussing the emotion sadness.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Extract 8 (44:30): C03DHA-THA: (inclusive sadness)

1. E: anything else make •you feel angry?
2. exa >>±gaze to paperwork--->±
3. chi >>•gaze to screen---•away from screen--->•
4. C: I don't think so.
5. E: no: (.) [okay.]
6. C: [no.]
7. E: so nothing at school: ±or (.)
8. exa ±gaze to screen--->±
9. *with your (.) •friends °or° (.)
10. chi *shakes head--->
11. chi •gaze to screen--->•
12. no± (.) [okay.]
13. exa ±gaze to paperwork--->±
14. C: [•I don't] (°think so.°)
15. chi •gaze away from screen--->•
16. E: → okay (.) and then it °said-° >the question
17. here says< MOST people have •times then they feel
18. chi •gaze to screen--->•
19. sad ±so I'm just wondering what (.)
20. exa ±gaze to screen--->±
21. ±kind of things <make you feel feel
22. exa ±gaze to paperwork--->±
23. •sad.>
24. chi •gaze away from screen--->•
25. (1.3)

Clinician-child interactions in ADOS-2 assessments – a CA perspective

26. C: .hh (2.0) •er (.) I (.) don't (.) know?
27. chi •gaze to screen--->•
28. E: ±↑hmm.
29. exa ±gaze to screen--->±
30. +have you [not been sad+ for a]
31. exa +shakes head-----+
32. C: [((laughs))]
33. E: •long time?]
34. chi •gaze away from screen--->•
35. C: £no I've *been sad* I just don't
36. chi *nods----*
37. +analyse why I'm sad.£+
38. exa +smiles-----+
39. E: +•right okay+ (.) when was the last time you were
40. exa +nods head+
41. chi •gaze to screen--->•
42. sad (.) •can you remember.
43. chi •gaze away from screen--->•

After the examiner asks the ‘angry things question’, the child shares her frustration with her mother, which opens an extended discussion (not shown). In the polar question format, the examiner asks if there is “*anything else*” that causes the child anger (lines 1-3), before providing the child with specific referents “*school*” (line 7) or “*friends*” (line 9). After the child’s several iterations of ‘no’ (lines 5-14), the examiner abandons her pursuit (line 12) and returns her eye gaze to her paperwork (line 20). Rather than simply vocalise the ‘sadness’ pre-sequence introduction from the ADOS-2 manual, the examiner explicitly orients the child to

Clinician-child interactions in ADOS-2 assessments – a CA perspective

the fact the words are contained in the manual “*okay and then it said the question here says most people have times when they feel sad*” (lines 16-19). The specific inclusion of this preface within the ADOS-2 manual is indicative that the assessment item aims to normalise sadness with an inclusive and a majority approach. It is therefore suggestive of a sociocultural understanding of sadness as undesirable (Shields, 2000; Zeman & Garber, 1996). The examiner shifts her eye gaze to the screen (line 20) as she inserts “*I’m just wondering*” (line 19) as a device to facilitate ‘feelings talk’ (Hutchby et al., 2020). The placement of this device before asking the ‘sadness things question’ (lines 19-23) indicates a recognition from the examiner of the sociocultural sensitivity people navigate when generating discussion around certain emotions.

The child displays difficulty in providing an answer with silences, an inbreath, fillers, pauses, and a claim a lack of knowledge “*I don’t know*” (lines 25-27) to account for not providing an answer (Beach & Metzger, 1997; Hutchby, 2002). As typically autistic and non-autistic people offer ‘things’ and situations that cause an emotion with relative ease (Baron-Cohen, 1991; Fein et al, 1992) the examiner displays surprise with a non-lexical surprise token marked by a sharply ‘punched up’ prosodic contour “*hmm*” (Wilkinson & Kitzinger, 2006) and gaze shift (lines 28-29) before following with a head shake and clarifying question “*have you not been sad for a long time*” (lines 30-33). The child aligns with the examiner’s surprise with laughter (line 32) before continuing her alignment through a modified form of agreement (Ford, 2001) in the shape of negation followed by elaboration (line 35) and head nod (line 36) before accounting for her absent response “*I just don’t really analyse why I’m sad*” (lines 35-37).

It is likely in this instance that the child’s response indicates an orientation to sociocultural experiences of sadness. The child however could be perceived as having difficulties in

Clinician-child interactions in ADOS-2 assessments – a CA perspective

discussing emotion which in turn might explain why the observations written in her diagnostic report quantify ‘some description’ rather than ‘effective description of emotion’ “*she was able to offer some description of her experience of different emotions*” (C03 diagnostic report).

4.6.3.3. Conclusion of section

Both children demonstrated how language is not neutral and will differ depending on their sociocultural experience. As observed in extract 7, the emotion terms included in the design of the ‘fear’ questions implicate the child’s response (i.e., his acceptance or rejection of his experience of the ‘fear’ emotion). Rather than adhere to institutional progressivity, the examiner’s decision to repeat the question with a change in ‘fear’ term enabled the child to demonstrate social-emotional capabilities. In extract 8, the examiner demonstrates a sociocultural sensitivity to the emotion ‘sadness’ as she proceeds with ‘feelings talk’ (Hutchby et al., 2020), a resource found in mental health practice to manage difficult discussions around emotions. Each examiner will differ in how much they consider sociocultural differences in how they administer the assessment, how they modify the assessment in response to the child, and how they perceive the child’s answers in relation to diagnosis. Yet research has found that applying culturally responsive methods throughout interaction-based assessments can provide an accurate characterization of a child’s communication (Washington et al., 2023).

4.6.4. Absorption Into the Emotion Eliciting Event and Display Rules

As seen in the previous example, when experiencing emotion, people do not necessarily analyse why they feel a certain way. Emotions are in general experienced in the present moment as a first-order pre-reflective activity (Gallagher, 2005; Thompson, 2010; Zahavi, 2005) and bodily awareness can ‘disappear’ into the background as absorption into the eliciting event (Colombetti, 2011) and the emotive foreground takes focus (Leder, 1990). The bodily

Clinician-child interactions in ADOS-2 assessments – a CA perspective

experiences surrounding the emotive event can dissipate without making lasting consciousness (Leder, 1990). Therefore, when asked to describe an emotive experience, reflections on the emotional experiences are a separate, second-order reflective activity (Colombetti, 2011; Gallagher, 2005; Thompson, 2010; Zahavi, 2005). Moreover, people may shape their response dependent on the social environment (Underwood et al., 1992) to save face and sustain a positive social value (Goffman, 1967). Children are also sensitive to ‘display rules’ (Underwood et al., 1992) and prosocial inhibitory behaviours (Diener & Lucas, 2004) governing the expression of emotions. For example, children minimise the expression of certain negative emotions such as anger when in the presence of authority figures (Underwood et al., 1992) and modify behaviours typically associated with autism (Solomon, 2008).

In the following example, the child shares how there are many ‘things’ that anger him. When asked how he ‘feels’ when experiencing anger, the child describes the absorption that he experiences in response to the eliciting event. The child also shares how he attempts to ‘hide’ his anger as he does not want to explicitly display anger, and how in turn, his anger turns into sadness (lines 37-58). Therefore, the child communicates an understanding of both the mental absorption when feeling a strong emotion and how he conforms to display rules.

Extract 9 (37:09): C01DHA-THA (absorption in eliciting event and display rules)

1. E: .hh uhm: (.5) tt so: (.) >also what about<
2. exa >>±gaze to screen--->±
3. chi >>•gaze to screen--->•
4. chi >>intermittent screen freeze--->•
5. ±an:gry what what sort of things make you feel
6. exa ±gaze to paperwork--->±

Clinician-child interactions in ADOS-2 assessments – a CA perspective

7. angry.
8. C: •±uhm: (.4) ↓angry (.3) uhm: (.) ↓mm tt well (.8)
9. chi •gaze away from screen--->•
10. exa ±gaze to screen--->±
11. uhm (.) there are ±quite a few things that get me
12. exa ±gaze to paperwork--->±
13. angry.
14. (.6) ±+ (.4) +
15. exa ±gaze to screen--->±
16. exa + nods +
17. I guess (.4) uhm: (.5) people trying to purposely
18. purposely like annoy me ±yeah,
19. exa ±gaze to paperwork--->±
20. E: +yep,+
21. exa +nods+
22. C: and (.) people being mean or something?
23. (.9) ± (.2)
24. exa ±gaze to screen--->±
25. but also stress can get me quite angry?
26. E: +yep,+
27. exa +nods+
28. C: and also sadness can (.3) get me quite angry
29. sometimes,
30. E: +okay-+
31. exa +nods +
32. •and what does it feel like when you are feeling

Clinician-child interactions in ADOS-2 assessments – a CA perspective

33. chi •gaze to screen--->•
34. ang•ry:?
35. chi •gaze away from screen--->•
36. how would you desc[ribe it.]
37. C: → [uhm:?] (.5) tt (.8) that I
38. it's hard to explain really tha (.) uhm: that I
39. just that I just forget every other
40. ±feeling I just feel an- anger I guess?
41. exa ±gaze to paperwork--->
42. E: yep?
43. C: •>that I'm just like really angry?< (.4) I think-
44. chi •gaze to screen--->•
45. (.4) I can't really explain it± really?
46. exa ±gaze at screen--->±
47. E: tt and any other like (.) feelings or sensations
48. inside: like +> your body <+ or: >that
49. exa +head & shoulders shake+
50. that< you notice when you're angry,
51. C: well: (.) when I'm angry=yeah I don't really want
52. to show it (.3) I'm trying to hide my anger back
53. it (.) it turns kind of into sadness?
54. E: [±okay?]
55. exa ±gaze to paperwork--->±
56. C: [because] I'm like- coz I want to reject my anger
57. out in some way? (0.5) but then I'm trying to keep
58. it in so I think I just reject into sadness.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

59. E: yep. + (1.1) ±°↑okay°
60. exa +nods+
61. exa ±gaze at screen--->>±
62. .hh
63. C: so yeah_

As seen in the previous examples, following ADOS-2 protocol, the examiner asks the initial structurally incomplete ‘What about’ question, but in this instance, he immediately reformulates the ‘anger things question’ into an open question (lines 1-7). The child demonstrates hesitancy with a “*well*”-preface (lines 8-11) indicating the ‘non-straightforwardness’ of his subsequent response (Schegloff & Lerner, 2009) as he states that “*there are quite a few things that get me angry*” (lines 11-13). After a silence, the child commences the list of ‘things that annoy him’ without difficulty (lines 17-29) which are receipted by the examiner’s multimodal continuers (Schegloff, 1982).

After the examiner asks the ‘anger feel question’ (lines 32-36), the child again commences his response with instances of “*uhm*”, pauses, and a click (Ogden, 2020) indicating a difficulty in formulating his answer (line 37) before providing an account for his trouble “*it’s hard to explain*” (line 38). The child in turn elaborates with an explanation of ‘absorption’ (Colombetti, 2011) and how ‘during the direct experience of emotion, one does not think or feel about the emotion’ “*I just forget every other feeling I just feel anger*” (lines 38-40). The downgrade of epistemic primacy “*I guess*” (Rhys, 2016), recruits the examiner to assist with the situation (Kendrick & Drew, 2014), but the examiner’s gaze remains fixed on his paperwork as he utters a continuer (lines 41-42). The child in turn, takes the floor again and explicitly claims “*I can’t really explain it*” (lines 43-45) which successfully recruits the examiner to assist with the

Clinician-child interactions in ADOS-2 assessments – a CA perspective

situation (Kendrick & Drew, 2014). The examiner in turn, prompts the child to provide a specific answer by asking another question containing incremental information “*sensations inside...your body... that you notice*” (lines 47-50) with a head a shoulder gesture to achieve a mutual focus of attention (Mondada, 2014b). The examiner also utilises non-verbal communication to orient the child’s focus on ‘the body’ (line 49). The child in turn explains how ‘he does not want to show his anger and how he tries to “*hide*” and “*reject*” it, which, in turn, turns into sadness’ (lines 51-58). The child therefore demonstrates the drive he feels to change, mask, or suppress his feelings which is likely to be a learned behaviour in response to sociocultural ‘display rules’ (Parker et al., 2001; Underwood et al., 1992).

In the following example, the child describes the absorption that he experiences in response to the eliciting event and his orientation to display rules as he describes how he attempts to ‘hide’ and not explicitly display anger, and how in turn, his anger turns into sadness. Therefore, the child effectively communicated an understanding of his personal experience when feeling a specific emotion. As the child did not however provide a physical sensation as pursued by the examiner (lines 47-50), the examiners observations within the child’s diagnostic report however states that “*He shared some descriptions of experiencing several emotions, but was limited in the effectiveness of his communication*” (C01 diagnostic report).

4.6.4.1. Absorption in Eliciting Event, First Order Pre-Reflective Activity and Second Order Reflective Action

As seen in the previous examples, many children in the data vocalise their absorption in an emotion eliciting event. In the following extract, after the child attempts multiple varying different approaches to describe the ‘happiness feels question’, in which the examiner continues to prompt the child for further answers (see extract 1 for complete extract), the child

Clinician-child interactions in ADOS-2 assessments – a CA perspective

provides an explicit account of why it is difficult to describe emotions. The child's account again explains how during the emotion eliciting event, the experience can dissipate without making lasting consciousness (Leder, 1990) as the eliciting event takes focus (lines 11-29).

Extract 10 (33:00): C01DHA-THA: (absorption in first order pre-reflective activity)

1. E: any other ways you would describe the feeling?
2. exa >>±gaze to screen--->±
3. chi >>•gaze to screen--->•
4. C: •um:: (3.0) something ±that makes you laugh
5. chi •gaze away from screen--->•
6. exa ±gaze to paperwork--->±
7. •I guess?
8. chi •gaze to screen--->•
9. E: +yep.+
10. exa +nods+
11. C: → ±an:d: (.) mm. I dunno it's hard- it's hard
12. exa ±gaze to screen--->±
13. chi screen freezes
14. •to <describe> I guess because (.)
15. •gaze away from screen--->•
16. ±you don't really think about in the mome:nt you
17. exa ±gaze to paperwork--->±
18. [just.]
19. E: [+yep.+]
20. exa +nods+
21. C: it's just (1.0) cause (1.0) when you're having fun

Clinician-child interactions in ADOS-2 assessments – a CA perspective

22. I guess it's just that (.) you you you don't lose
23. that >thin that you're having fun< you just
24. forget about it and just that um: (1.0) you just
25. ±concentrated
26. exa ±gaze to screen--->
27. on having fun with your •friends and family
28. chi •gaze to screen--->•
29. or stuff.
30. E: +yep.+
31. exa +nods+

Treating the child's previous several candidate answers (see extract 1 for complete extract) as not providing answers that will satisfy the examiner's reason for asking, the examiner requests that the child finds another way to describe the feeling (line 3). After a filler and a long pause that suggest difficulty, the child provides a physiological behavioural response before producing an epistemic downgrade (Rhys, 2016) thus reducing commitment to his response (lines 4-8). Not treating the child's response as complete, the examiner passes the floor back (lines 9-10), and the child initially attempts an additional candidate answer with an "and"-prefaced turn before providing an account for the uncertainty of his answer that follows (Drew, 1992) in which he explicitly states why the felt experience of emotion is difficult to describe (lines 11-15).

The child states why the 'feels' questions are problematic to answer in his account that during the immediate and direct experience of emotion, a person is immersed and focused on the unfolding experience (line 11-29) rather than thinking about the internal experience of the

Clinician-child interactions in ADOS-2 assessments – a CA perspective

emotion. As seen in the previous examples, the child in this extract explained the problem of describing emotion when experiencing absorption in an emotion eliciting event. Yet, the child's report however stated that "*He however, had difficulty in describing how emotions physically feel*" (C01 diagnostic report).

4.6.4.2. Conclusion of section

The children in the data display an orientation to culturally defined norms and are sensitive to hierarchical social relationships (extract 9) which in turn influence how they communicate emotions (Underwood et al., 1992). The children (extract 8, 9 and 10) also effectively communicated how the experience of emotion can dissipate without making lasting consciousness (Leder, 1990) as the eliciting event takes focus; as well as reflecting on how the emotional experiences are a separate, second-order reflective activity to the original first order pre-reflective experience (Colombetti, 2011; Gallagher, 2005; Thompson, 2010; Zahavi, 2005). Due to the standardisation underpinning the restricted categories of the coding item 'Communicates Own Affect', the examiners are restricted to pursue responses that describe emotions. When the children demonstrate strengths that show reflections around the challenges of emotion descriptions, there is no option to categorise these reflections. Thus, without direct instruction on how to navigate these issues, the examiners will differ in how they respond to children who raise them. Therefore, there are implications for any conclusions drawn from the 'Emotions' task to inform diagnosis.

4.6.5. Examiners Assisting Practices

As seen in the previous extracts, there are several practices utilised by some examiners to encourage the production of specific target responses from the children. These practices range from minimally passing the floor back to the child with continuers, to frontloading assisting

Clinician-child interactions in ADOS-2 assessments – a CA perspective

practices containing specific contextual information at the beginning of the task. As seen in extract 4 and 11, and in other types of institutional interactions (Antaki, 2002), after receiving a response that did not efficiently answer the institutional objective, rather than immediately revise the question, interviewers first redesign and reformulate a personalised basis for the question, informed by and displaying a knowledge of the recipient's circumstances. Conversationally, within insertion sequences, these follow up questions are highly projective of the recipient's alignment and are designed to provide the recipient with contextual information to aid understanding of the project of the intended question (Antaki, 2002).

4.6.5.1. Providing 'Candidate Answers' Containing 'Physical Sensations'

In offering a 'model candidate answer', a speaker provides a model that can guide the recipient to know what response to provide to satisfy the reason-for-asking. This is particularly useful when the speaker wants the recipient to respond with specific information. Providing 'model candidate answers' can also be useful when a recipient either displays or is anticipated to have difficulty in providing the sourced specific type of answer. Therefore, incorporating 'model candidate answers' can be utilised to assist recipients as well as to direct and restrain response types (Pomerantz, 1988). In the following extract, after the child demonstrates difficulty in providing an answer to the initial 'happiness feels question' the examiner provides a 'physical sensation' in the form of a 'model candidate answer' (lines 8-12). The child rejects the examiner's initial 'model candidate answer' as a relatable experience. After the child demonstrates further difficulty, the examiner provides a different 'model candidate answer' (lines 22-25). Yet while the child claims to not "*keep track of that stuff*", after the examiner asks the next 'feel question', the child incorporates the examiner's previous model response containing a 'physical sensation' into his subsequent answer. In the next turn at talk, the examiner again provides a further 'physical sensation' that other people experience (lines 57-

Clinician-child interactions in ADOS-2 assessments – a CA perspective

60). This ‘model candidate answer’ is again modified and incorporated into the child’s later answer. Therefore, the child in turn ‘learns within the task’ (Maynard, 2005) by applying the examiner’s ‘candidate answers’ to formulate his own answers to the ‘Emotions’ task questioning.

Extract 11 (43:18): C06DHA-THA (Providing ‘candidate answers’ answers containing ‘physical sensations’)

1. E: >and that- what does it ↑FEel like< in your body (.)
2. exa >>±gaze to paperwork --->±
3. chi >>•gaze away from screen--->•
4. ±when you're happy.
5. exa ±gaze to screen--->±
6. C: +.hh ↓mm↑mm↓mm_+
7. exa + shrugs +
8. E: → ±some people might describe a sort of
9. exa ±gaze away from screen--->±
10. +fizzing:: feeling.±±
11. exa +shakes head-----+
12. exa ±gaze to screen--->±
13. (1.5)
14. C: na::h:.
15. (.7) * (3.5) • (1.0) *
16. chi * shrugs *
17. chi •gaze to screen--->•
18. E: [±•when I-]

Clinician-child interactions in ADOS-2 assessments – a CA perspective

19. C: [(inaudible)]
20. exa ±gaze away from screen--->±
21. chi •gaze to screen--->•
22. E: → >when when I am happy< I might get err my
23. ±↑heartbeat might go a bit fas+ter.
24. exa ±gaze to screen--->±
25. exa +smiles--->+
26. C: yeah (.5) >I don't really like< (.8) keep track of
27. that stuff? *
28. chi *smiles--->*
29. E: +okay.+
30. exa +nods +
31. *lines omitted - 'things' AP for afraid*
32. E: ±>and what does it< feel like (.) for you (.) to
33. exa ±gaze at paperwork--->±
34. feel- >when you're frightened< or anxious what does
35. •it feel like in your body,±
36. chi •gaze away from screen--->•
37. exa ±gaze to screen--->±
38. C: → uhm: (2.3) •sometimes (.) >will make my like
39. chi •gaze to screen--->•
40. heartbeat go a bit fast+ter< as well,+
41. exa ±gaze at paperwork--->±
42. exa + nods +
43. E: •#yeah.#
44. chi •gaze away from screen--->•

Clinician-child interactions in ADOS-2 assessments – a CA perspective

45. C: uhm:± (2.5) *dunno *•+ (.9) I just don't really
46. exa ±gaze to screen--->±
47. chi *shrugs*
48. chi •gaze to screen--->•
49. exa +nods--->+
50. •like+ (.5) (go clearly like) (.) go out in the
51. chi •gaze away from screen--->•
52. exa +stops nodding
53. dark so,
54. E: +mm[hm.+]
55. exa + nods +
56. C: [(don-)]
57. E: → ±some people might describe breaking out into
58. exa ±gaze away from screen--->±
59. ±a cold ↑sweat.
60. exa ±gaze to screen--->>±
61. C: yeah?
62. (2.0)
63. E: do you ever ↑feel like that?
64. C: yeah.
65. E: + yeah, (1.0) +
66. exa + nods +
67. *lines omitted - 'things' AP for angry*
68. E: → >↑what does it feel like< insi:de when you're
69. exa >>±gaze to screen--->±

Clinician-child interactions in ADOS-2 assessments – a CA perspective

70. chi >>•gaze away from screen--->•
71. ±angry (.) you always- already told me that
72. exa ±gaze away from screen--->±
73. ±you: (.5) might + shout and you might +
74. exa ±gaze at screen--->±
75. exa +fists move forward and back+
76. punch things ±(.) or slap doors but uhm, (.)
77. exa ±gaze at paperwork--->±
78. C: (get [hot.])
79. E: [±>what] does it< feel ±like in your body.
80. exa ±gaze at screen-----±gaze at paperwork--->±
81. C: •get like hot,
82. chi •gaze to screen--->•
83. E: you get •ho:t.
84. chi •gaze away from screen--->•
85. C: yeah,
86. E: (°yeah°) (.7) ± ye[ah:.]
87. exa ±gaze at screen--->>±
88. C: [and] I shout so my my my
89. throat can hurt ±sometimes after (.5) as well,
90. exa ±gaze at paperwork--->±
91. E: +okay+
92. exa +nods+

In this example, following protocol, the examiner asks the ‘happiness feel question’, in which she adds emphasis by marking the words “*what*” and “*feel*” and adds incremental information

Clinician-child interactions in ADOS-2 assessments – a CA perspective

to orient the child to “*in your body*” (lines 1-5). In response to the reduced contextual information contained in the protocol structure, the child vocalises a non-verbal epistemic position with a shrug (line 7) and a simultaneous closed mouthed non-lexical vocalisation that mirrors the prosody and length of ‘I don’t know’ (line 6) communicating a K-minus stance. In the next turn, after the child displays difficulty, the examiner deviates from protocol and models a ‘candidate answer’ (Antaki, 2002; Pomerantz, 1988) containing a ‘physical sensation’ in the form of a metaphor “*fizzing feeling*” (lines 8-2). The examiner shakes her head to represent ‘fizzing’ (line 11) as she utters the metaphor to achieve a mutual focus of attention (Mondada, 2014b). In this example, the examiner defers receipt and progression to the next assessment item by showing what answer would count in general by providing a ‘candidate model answer’. After a silence (line 13), the child provides a disaffiliative response (line 14) followed by an elongated shrug lasting over four seconds (lines 15-16) indicating personal disengagement (Debras, 2017) and disconnect from the examiner’s proffering. Both speakers take the next turn at talk (lines 18-19), but the examiner wins the floor to proffer the child with an alternative ‘candidate model answer’ this time in the form of a physiological reaction “*heartbeat might go a bit faster*” (lines 22-25). As seen in the previous section in which the children vocalise their absorption in the emotion eliciting event, the child in turn claims that he does not “*really like keep track of that stuff*” (lines 26-27) before returning the examiner’s smile at the end of his talk (line 28) to serve to maintain affiliation and to promote progressivity of talk (Sert & Jacknick, 2015).

In the sequence that follows, after the child answers the ‘afraid things question’ (not shown), the examiner returns to protocol with the ‘afraid feel question’ again orienting the child to “*in your body*” (lines 32-37). After an initial difficulty in searching for an answer, although the child previously reflected that he does not “*really like keep track of that stuff*” (lines 26-27),

Clinician-child interactions in ADOS-2 assessments – a CA perspective

he incorporates the examiner's previous 'candidate model answer' into his own response "*sometimes will make my like heartbeat go a bit faster as well*" (lines 38-42). The tail end of the child's contribution "*as well*" is backwards looking and links his answer to the examiner's (line 22-25) 'candidate model answer'. The examiner receipts the child's utterance with a croaky "*yeah*" (line 43) which in turn passes the floor back indicating she would like further information from the child. The child utters "*dunno*" marking uncertainty about his next-positioned (Beach & Metzger, 1997) account as he explains that he avoids the 'things' that cause him to feel fear "*don't really like go out in the dark*" (lines 45-53). Again, the examiner wins the next turn overlap in talk (lines 54-56) and in response to the child's difficulty, the examiner provides another 'candidate model answer' (Antaki, 2002; Pomerantz, 1988) containing a 'physical sensation' "*breaking into a cold sweat*" (line 57-60). On this occasion, rather than reject, the examiner's offering of a candidate experience, the child receipts the 'candidate model answer' with a questioning rising intonation (line 61) and agrees (line 64) with the examiner's question "*do you ever feel like that*" (line 63).

In the sequence that follows, after the child answers the 'anger things question' (not shown), the examiner again follows protocol and asks the 'anger feels question' with the additional incremental information "*inside*" (lines 68-72). As seen in the previous extract, the examiner utilises the information provided by the child about his behaviours when angry ("*punching things*") with corresponding punching gestures, to provide contextual information (lines 71-77) within the design of her question (Antaki, 2002). This insert sequence, in which the examiner incorporates information known about the child after a 'failed' question, not only personalises the question (Antaki, 2002) but also provides context for the child to answer the institutional question (Antaki, 2002; Edwards & Mercer, 1989). Before the examiner completes her turn, the child modifies part of the examiner's previous 'candidate model answer'.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

“breaking into a cold sweat” (lines 57-60) to provide a physiological based answer on bodily temperature *“get hot”* (line 78) which he repeats again to ensure his answer is heard *“get like hot”* (line 81) after an overlap in talk (lines 79-80). After confirming (line 85) the examiner’s clarification (line 83), the child takes the floor and describes the physiological discomfort he can feel after experiencing anger *“I shout so my throat can hurt sometimes after”* (lines 88-90).

In this extract, the child ‘learns within the task’ and utilises the examiner’s ‘candidate model answers’ to template his subsequent answers. The child does not simply repeat but transforms the proffered answer to formulate his own answer to the subsequent question. For example, it was noted in the child’s diagnostic report how with the examiner’s modelling, the child’s answers aligned with the examiners reasons for asking the questions *“However, he needed support to explain his experience of his emotions. With the support of the assessor he was able to share that his heart beats faster when he is afraid and that he feels hot when angry”* (diagnostic report C06). Therefore, by offering ‘model candidate answers’, the child ‘learns within the task’ (Maynard, 2005) how he can utilise the examiner’s ‘candidate answers’ to formulate his own answers to the ‘Emotions’ task questioning.

4.6.5.2. Personalising and Including an Explicit Request for a ‘Physical Sensation’ in the Initial ‘Happiness Feels Question’

In the previous example, the examiner incorporates known information about the child into a personalised question towards the end of the task. The examiner also provides ‘model candidate answers’ to assist the examinee in responding with a ‘physical sensation’ after the child displays difficulty (Antaki, 2002; Pomerantz, 1988). Whereas, in the same turn at talk in the following example, the examiner incorporates known information about the child as the task

Clinician-child interactions in ADOS-2 assessments – a CA perspective

commences to personalise the initial ‘happiness feel question’ whilst also explicitly requesting for a ‘physical sensation’ (lines 14-31). Therefore, rather than wait until the child displays difficulty, the examiner frontloads contextual information within the design of the first ‘happiness feels question’. These contextual providing practices result in the child providing answers that contain a ‘physical sensation’ without any signs of difficulty.

Extract 12 (29:00): C14DHA-THA (Personalising and including an explicit request for a ‘physical sensation’ in the initial ‘happiness feels question’)

1. E: + anything else *that makes •you* feel +
2. exa >>±gaze to screen--->±
3. chi >>•gaze away from screen-----•gaze to screen--->•
4. exa +hands move side to side in front of chest+
5. chi *nods-----*
6. ±really happy?
7. exa ±gaze to paperwork--->±
8. C: •u:h:m: (2.0) ± (1.5) m:ain•*ly dancing.
9. chi •gaze away from screen•gaze to screen--->•
10. exa ±gaze to screen--->±
11. chi *nods-----*
12. E: °mainly dancing°=±yeah? (.) okay.
13. exa ±gaze to paperwork--->±
14. E: → .hh (.) and so when you ±are feeling happy.
15. exa ±gaze away from screen--->±
16. ±+>so when you’re- so when you< +
17. exa ±gaze to screen--->±

Clinician-child interactions in ADOS-2 assessments – a CA perspective

18. exa +hands rotate in front of chest+
19. +are dancing± .hh uhm what does it feel like
20. exa +palms up in front of chest--->+
21. exa ±gaze away from screen--->±
22. +inside your % body• % when you're happy
23. exa +fingers to chest--->+
24. exa ±gaze to screen--->±
25. exa %eyebrows raise%eyebrows neutral
26. chi •gaze away from screen--->•
27. did you get any sort of + physical +
28. exa +hands in front of chest+
29. +sensations * inside? * (1.0) *+
30. exa +hands rotate in front of chest+
31. chi *head lift*nods---*
32. C: → •I (.) I normally *feel it in my head.
33. chi •gaze to screen--->•
34. chi *RH to head--->*
35. E: [(+°okay°+)]
36. exa +nods +
37. [•*the (.5)] only ±way I can describe it is like
38. chi •gaze away from screen--->•
39. chi *RH scratches head--->*
40. exa ±gaze to paperwork--->±
41. •*feeling high? *
42. chi •gaze to screen--->•
43. chi *RH flaps by chin*

Clinician-child interactions in ADOS-2 assessments – a CA perspective

44. E: [okay.]
45. C: [or it's-] it's •like uhm: (1.1) not quite light
46. chi •gaze away from screen--->•
47. headedness (.) •but (1.0) ± (.8)
48. chi •gaze to screen--->•
49. exa ±gaze to screen--->±
50. I [don't know:] (.) it's (.) a weird feeling?
51. E: [+±hmm. +]
52. exa +nods +
53. exa ±gaze to paperwork--->±
54. E: ±yeah no I sort of get that (.) + that + (.)
55. exa ±gaze to screen--->>±
56. exa +gestures+
57. it's a good description
58. +it's hard to des±*cribe. •+* (.3) *
59. exa +gestures-----+
60. exa ±gaze from screen--->±
61. chi *nods-----*
62. chi •gaze away from screen--->•
63. uhm* but that makes sense great (.) okay,

In this example, after deviating from protocol and engaging in conversation about the ‘thing’ that makes her feel happy ‘dance’ (not shown), the examiner asks the child if there is ‘anything else’ that makes her feel happy (lines 1-7). After an “*uhm*”, long silence and gaze shift suggesting difficulty in searching for an answer, the child responds that it is mainly dancing that makes her happy (lines 8-11). After receiving the child’s answer (lines 12-13), the

Clinician-child interactions in ADOS-2 assessments – a CA perspective

examiner launches the ‘feel’ question protocol with an “*and so*” preface turn (Christensen & Fiechtner, 2010), but abandons this turn construction (lines 14-15). The examiner instead deviates from protocol and incorporates the child’s previous answer (i.e., that dancing makes her happy) into the ‘happiness feel question’. Reusing known information about the recipient is an interviewing device to prompt alignment in mental health (Hutchby et al., 2021) and care settings (Antaki, 2002). This device provides contextual information to inform the recipient on what information to include in their response to satisfy the examiner’s reason for asking (Antaki, 2002). The examiner also gesticulates throughout and incrementally adds “*inside your body*” and “*physical sensations*” (lines 16-31). Here the examiner specifically changes the generalised question in which there are many ways the examinee can answer to contain the target referent and thus the specific contextual information to help the examinee to deduce what type of answer to provide (Pomerantz, 1988).

Before the examiner completes her turn, the child nods her head (line 31) to signal she has understood (Burdelski, 2019; Petukhova & Bunt, 2009) the examiner’s intended project. The child initially multimodally communicates how she ‘feels happiness in her head’ as she touches her temple (line 15) to communicate the location of the ‘physical sensation’ to achieve a mutual focus of attention (Mondada, 2014b). The child continues to gesticulate as she describes her unique feeling of happiness as “*feeling high*” (lines 37-43). Rather than end her turn at talk, the child continues by clarifying how her experience is “*not quite light-headedness*” (lines 45-49) before marking her uncertainty about her next-positioned answer “*I don’t know*” (Beach & Metzger, 1997) “*it’s a weird feeling*”. (lines 50-53). Orienting to the child’s K- stance, the examiner initially aligns and positively evaluates the child’s answer (lines 54-57) before acknowledging the difficulty of the task “*it’s hard to describe*” (line 58-60) which is receipted in agreement by the child with a head nod (line 61).

Therefore, by modifying the initial ‘happiness feels question’ to contain both personal and contextual relevant information as well as an explicit request for a ‘physical sensation’, the child provides a multimodal description of a physical sensation without obvious signs of difficulty. The child’s diagnostic report therefore reflects the ease of the interaction “*She effectively communicated a range of emotions that she was feeling or had felt. The examiner attempted to elicit affective communication by asking about her experience of various emotions (happiness, sadness, angry, anxiety, contentment)... For example, she described how dancing makes her feel happy and how her happiness is felt internally “I feel high - not quite light headedness”. She also described how she does not feel she is “scared of anything” but that she can “get nervous and anxious” which “feels like I cannot breathe - like a tightness in my chest”* (C14 diagnostic report). Therefore, the examiner provided the contextual information this child needed to immediately understand what type of answer would satisfy the examiner’s reason for asking.

4.6.5.3. Conclusion of section

As seen throughout the data, the examiners differ in how much they manage the difficulties in communication that may arise from reduced contextual information. In this section, examiners provide ‘candidate model answers’ to guide and assist a recipient in providing a specific type of answer (Pomerantz, 1988) containing a ‘physical sensation’ (extract 11). Moreover, as seen in extract 4 and 12, and in other types of institutional interactions such as, therapy (Gale & Newfield, 1992) and care settings (Antaki, 2002), speakers can redesign and reformulate a personalised question to provide contextual information informed by and displaying knowledge of the recipient’s circumstances (Antaki, 2002). Rather than in response to the child’s difficulty, if at the beginning of the task the examiners frontload the design of their

Clinician-child interactions in ADOS-2 assessments – a CA perspective

turns at talk to provide a question containing a ‘physical sensation’, the children can quickly ‘learn’ early in the task how to provide ‘good’ answers (Edwards & Mercer, 1989) and what types of answers to apply to the remaining task questions. In that, instead of rigidly utilising the ADOS-2 and adhering to institutional progressivity to elicit behaviours associated with autism to conclude a diagnosis, the examiners modify the ADOS-2 to elicit behaviours that show social-emotional reciprocity when not restricted by ambiguity. Examiners that adopt a flexible approach to assessment that is responsive to the child, sensitive to communicative norms found in everyday talk, and that work to achieve ‘good’ answers from the children that satisfy the institutional objective demonstrate a strength-based approach that aims to understand the children holistically. Instead, when using the ADOS-2 deficit focused approach, examiners may abandon pursuit after signs of difficulty in ‘communicating own affect’ as this may confirm observations of difficulties associated with autism.

4.6.6. Summary

I have shown how all children were able to effectively communicate their own affect with answers that are typical of everyday interaction, such as, a description of the event (Davitz, 1969), storytelling (Sarbin, 1989) and synonyms and metaphors (Kövecses, 2000). Some children learned within the task and modelled subsequent answers on previously positively evaluated answers. Others demonstrated how language is not neutral and will differ dependent of their sociocultural experience. Finally, some children explicitly vocalised the issue of describing past emotional events as bodily awareness can ‘disappear’ into the background as absorption into the eliciting event (Colombetti, 2011) and the emotive foreground takes focus (Leder, 1990). Yet when comparing the interactions with the children’s corresponding diagnostic reports, as the children do not typically utilise physical sensations to describe the felt experience of emotion, I show how most often the children’s diagnostic reports describe

Clinician-child interactions in ADOS-2 assessments – a CA perspective

the children as providing some description of experiencing several emotions, but with limited effectiveness of communication. Therefore, this description does not reflect the social emotional capabilities demonstrated by the children who were able to utilise a variety of approaches to communicate emotions.

5. Comments on Others' Thoughts, Feelings, and Experiences

ADOS-2 task: 'Loneliness' and 'Social Difficulties and Annoyance'

Coding item: 'Comments on Others' Emotions/Empathy'

Research question: What kinds of opportunities do the interactions within the 'Loneliness' and the 'Social Difficulties and Annoyance' tasks provide the examinees to 'comment on others' emotions and display empathy'?

5.1. 'Loneliness' and 'Social Difficulties and Annoyance' task and Coding Item

'Communication of Own Affect' and 'Comments on Others' Emotions/Empathy'

The 'Loneliness' and 'Social Difficulties and Annoyance' tasks are non-optional interview questions within Module 3 and Module 4. The interview questions for the 'Loneliness' task are identical for both modules. For the 'Social Difficulties and Annoyance' task some questions vary slightly between modules, such as, *"Have you ever had problems getting along with people at school?" (Module 3) "Have you ever had problems getting along with people at school or at work?" (Module 4)*. The ADOS-2 manual instructs the examiners to ask the questions in the order listed for coding. The purpose of the 'Loneliness' task is to assess the examinees ability to describe their emotional reaction to 'Loneliness' and their insight into their social situation. The focus of observation in the 'Loneliness' task is to evaluate whether the examinee understands the concept of loneliness and how they feel it relates to them and to other people. The purpose of the 'Social Difficulties and Annoyance' task is to assess the examinees insight into personal social difficulties and sense of responsibility for their own actions. The focus of observation is to observe the examinees understanding of the appropriateness and implications of their feelings and behaviours. The examiners are instructed

Clinician-child interactions in ADOS-2 assessments – a CA perspective

to evaluate the examinees view of social difficulties, their insight into the nature of these problems, and if they have tried to modify their own behaviour to fit in with others. The examinees responses to the ‘Loneliness’ and ‘Social Difficulties and Annoyance’ task questions, are rated for both coding items ‘*Communication of Own Affect*’ and ‘*Comments on Others’ Emotions/Empathy*’ (ADOS-2: Lord et al., 2012).

5.1.1. Table 4

Interview Questions for ‘Loneliness’ Task (ADOS-2: Lord et al., 2012)

<i>"Do you ever feel lonely?"</i>
<i>"Do you think other kids/people your age ever feel lonely?"</i>
<i>"Are there things that you do to help yourself feel better?"</i>
<i>"What about things other people do to help themselves feel better when they're lonely?"</i>

5.1.2. Table 5

Interview questions for ‘Social Difficulties and Annoyance’ Task (ADOS-2: Lord et al, 2012)

<i>"Have you ever had problems getting along with people at school?" (Module 3)</i>
<i>"Have you ever had problems getting along with people at school or at work?" (Module 4)</i>
<i>"How about at home with your family?" (Module 3)</i>
<i>"How about at home?" (Module 4)</i>
<i>"Do you ever get in trouble?"</i>
<i>"Why?"</i>
<i>"What for?"</i>
<i>"Are there things that other people do that irritate or annoy you?"</i>
<i>"What are they?"</i>
<i>"What about things you do that annoy others?"</i>

<p><i>If no response, ask:</i></p> <p><i>“What about your brother(s) or sister(s) or parents?” (Module 3)</i></p> <p><i>“What about your family members?” (Module 4)</i></p>
<p><i>“Have you ever been teased or bullied?”</i></p> <p><i>“Why, do you think?”</i></p> <p><i>“Have you ever tried to change these things?”</i></p> <p><i>“Have you ever done anything so that others wouldn't tease you?”</i></p> <p><i>“How has it worked?”</i></p>
<p><i>“Are there other kids/people you know who get teased or bullied?” (Module 3)</i></p> <p><i>“Are there other people you know who get teased or bullied?” (Module 4)</i></p>

5.1.3. Coding

The focus of this item is on the examinees communication of their recognition, understanding, and response to the feelings of other people or characters (portrayed by pictures) in stories or other tasks (ADOS-2: Lord et al., 2012).

5.1.4. Table 6

Ratings for Observed Behaviours for Coding Item ‘Comments on Others’ Emotions/Empathy’
(ADOS-2: Lord et al., 2012)

0	<p>Spontaneously communicates clear understanding or labelling of and/or appropriate response to several different emotions in other people/characters. Labelling several emotions in others is sufficient but not necessary if there are other clear indications of understanding and/or appropriate response.</p>
---	---

1	Communicates some understanding, labelling, or response to an emotion in others (e.g., spontaneously and correctly identifies at least one emotion in another person/character).
2	No or minimal identification/communication of understanding of emotion in others.

5.2. Empathy and Autism

When autism was first described as a distinct clinical syndrome, Leo Kanner (1943) wrote that “these children have come into the world with innate inability to form the usual, biologically provided affective contact with other people, just as other children come into the world with innate physical or intellectual handicaps” (p. 250). Since, how autistic people respond to the emotional states of others has received extensive interest. For example, research has found that autistic people convey reduced positive affect in communication (Capps et al., 1993; Kasari et al., 1990), recognise facial expressions less (Tantam et al., 1989), and show reduced capabilities to explain how complex emotions arise from other people’s mental states (Buitelaar & van der Wees, 1997; Dennis et al., 2000). Although related, studies that measure different socioemotional capabilities often conclude a deficit in some form of empathetic processing without considering confounding factors. Moreover, a significant amount of research exploring ‘empathy’ in autism have resulted in contradictory findings (Begeer et al., 2007). For example, research has found that socioemotional capabilities related to empathy differ dependent on IQ (Capps et al., 1992; Davies et al., 1994), age (Baron-Cohen et al., 1997; Happe’, 1995), gender (Bacon et al., 1998), and individual differences (Sigman et al., 1992). In addition, differences in socioemotional capabilities can also differ dependent on contextual factors, such as, the specificity of the task (Langdell, 1981; Hobson et al., 1988; Loveland & Tunali, 1991; Ozonoff et al., 1990), a real life versus laboratory interaction (Ponnet et al., 2005; Ponnet et al., 2004),

Clinician-child interactions in ADOS-2 assessments – a CA perspective

and if responding to the emotions conveyed by humans or cartoon characters (Rosset et al., 2008). Therefore, research that combines different socioemotional capabilities without consideration of the confounding factors which directly influence displays of empathetic related behaviours, contribute to the maintenance of autism as a condition of “*affective contact*” (Kanner, 1943, pp 250), which in turn implicates diagnostic constructs and societal conceptualisation of autism.

The ‘lack of empathy’ argument in autism research is also maintained by the significant variation in how empathy is conceptually defined. For example, Bollen (2023) found that in 111 articles, 31 unique definitions of empathy were used in autism research. Diverging meanings of empathy are impacting the progress of autism research and implicate the construction of any measurement which aims to assess and draw conclusions of an individual’s experience of empathy (Fletcher-Watson & Bird, 2020). The inconsistent conceptualisation of empathy in research has consequences for links between autism and extremism behaviours that are also described as displaying a lack of empathy. For example, although autistic individuals are capable of moral judgement and deliberation (Aaltola, 2014), some research connects ‘cognitive empathy’ to ‘moral judgement’ (Zalla et al., 2011) and in turn, conclude a risk of terrorism and deviance in autism (Palermo, 2013). This can have significant negative consequences for societal perception of autism (Fletcher-Watson & Bird, 2020). Some conceptualise empathy as a defining characteristic of being human (Decety & Cowell, 2014) and therefore, a population who are deemed to lack empathy and ‘feelings’ are dehumanised (Yergeau, 2013). As the empathy deficit in autism is ingrained in research and clinical practice, when an autistic person demonstrates or reports experience of empathy, this contradicts the conceptualisation of most professionals, which in turn, complicates diagnosis (Fletcher-Watson & Bird, 2020).

Contributing to the narrative of a ‘lack of empathy’ in autism are the instruments that are utilised to assess ‘empathy’. For example, the Empathising Quotient ([EQ] Baron-Cohen & Wheelwright, 2004), a 60-item (or abbreviated 40-item) self-report measure is utilised extensively in research due to the quick and inexpensive ease of use. The EQ contains sub-scales that measure three different capabilities associated with empathy (cognitive empathy, emotional reactivity, and social skills). The EQ does not however differentiate between its differing sub-scales (Lawrence et al., 2004; Muncer & Ling, 2006), instead, total scale scores are most frequently reported (Fletcher-Watson & Bird, 2020). Moreover, self-reporting on EQ is a process of reflection that is detached from any emotion-eliciting event. Whereas, empathy is experienced in the moment, as an emotional reaction in response to another person or persons. The conceptualisation of empathy is therefore a complex endeavour and can only be fully understood by breaking it down into components. For example, like the sub-scales contained in the EQ, Fletcher-Watson and Bird (2020) propose that first, a person must notice and orient to another’s observable experience of emotion (social skills), after noticing the person will need to interpret the others experience of emotion (cognitive empathy), and finally, somehow have affinity for, resonate with or mirror the feelings displayed by that person (emotional reactivity). This ability to ‘emotionally react’ with empathy by resonating or mirroring the feelings conveyed by another person is the only component not shared by another socio-cognitive process (Baron-Cohen & Wheelwright, 2004; Fletcher-Watson & Bird, 2020).

The cognitive ability to infer and form cognitive representations of a full range of mental states such as, beliefs, desires, intentions, imagination, and emotions, that cause behaviours in others is referred to as Theory of Mind ([ToM] Baron-Cohen et al., 1985). ToM is one of the most prominent long-standing theories in mainstream autism research and has been extensively

Clinician-child interactions in ADOS-2 assessments – a CA perspective

studied in both typical and atypical development (Baron-Cohen, 1995; Baron-Cohen et al., 1985; Perner, 1991; Perner et al., 1989). Due to the overlap of conceptualisations of ToM with ‘cognitive empathy’ (Baron-Cohen & Wheelwright, 2004), research underpinning a delayed or a reduced ToM in autism has perpetuated the lack of empathy theory of autism. In this view, the identification of causes of different emotional states should be impaired due to the relatively complex representational ability required (Jaedicke, Storoschuk, & Lord, 1994). As many autistic individuals however pass standard ToM tests (Baron-Cohen et al., 1997; Shamay-Tsoory et al., 2002), it is argued that autistic people utilise interests in normative rules to distinguish between moral and conventional violations as a resource to detect emotions in others (James & Blair, 1996; De Vignemont & Frith, 2008). Theories such as the empathising-systemising (E-S) theory claim that autistic people manage weaknesses in empathy by identifying underlying rules and system constructions (Baron-Cohen, 2008) to predict other people’s behaviours based on known regularities of inputs, operations, and outputs (De Vignemont & Frith, 2008).

Alternatively, other theorists suggest that autistic individuals demonstrate a reduced ability to attribute mental states and respond empathetically to others because they are “egocentric in the extreme” (Asperger, 1944) combined with a highly abstract allocentric stance (Frith & De Vignemont, 2005; Gillberg & Gillberg, 1989). When considering the emotional states of other’s, a person’s process of mentalizing can be understood depending on if they were using an egocentric (“you”) or an allocentric (“he/she/they”) stance. Under this theory, it is claimed that autistic people with an extreme egocentric stance represent the other person and their emotions in relation to themselves. Thus, when using their allocentric stance, autistic people have difficulties in representing another’s emotional experience as independent from their own experience (De Vignemont & Frith, 2008). Both the use of the egocentric (“you”) or an

Clinician-child interactions in ADOS-2 assessments – a CA perspective

allocentric (“he/she/they”) stance and how they influence empathetic expression could be better understood by separating both third-person ‘cognitive empathy’ and second-person ‘emotional reactivity’. Research has found that when both cognitive and emotional reactivity components of empathetic behaviours are assessed separately, autistic people do not display weaknesses in either. Instead, difficulties occur in integrating the separate cognitive and affective components to deduce the other person’s emotional state (Shamay-Tsoory et al., 2002). This in turn can implicate representation of the third-person’s mental state as independent from the first-person experience. Therefore, when researching empathy in autism, it is important to distinguish between third-person ‘cognitive empathy’ and second-person ‘emotional reactivity’ to improve understanding and diagnostic documentation of an individual’s empathetic response.

5.3. Situated Empathy

Varying paradigms that claim to test ToM and empathy which allows people to recognise others as subjective people like themselves (Reddy, 2003) mainly assess a representational account of a third-person (‘he/she/they’) that requires participants to observe, think or reflect on the mental states of others (Frith & Frith, 2006; 2010). The experience of understanding another’s actions and how another is ‘thinking, feeling, and experiencing’ is a jointly accomplished (you and I) process (Henderson, 2019), rather than an individualised accomplishment of a separate, detached theorising brain (Reddy, 2003). Displays of empathy when observing or reflecting on the experience of a third-person is a separate experience that is detached from the emotion eliciting event. This is fundamentally different to when a person emotionally reacts to the second-person (Reddy 2003; 2008; Rietveld 2008; Schilbach et al., 2013). Third-person perspectives can be perceived by anyone, whereas the second-person ‘you’ exists only in relation to the ‘I’ and can only be perceived by the ‘I’ (Reddy, 1996). An empathetic response to a second-person (‘you’) is based on the information experienced within

Clinician-child interactions in ADOS-2 assessments – a CA perspective

mutual engagement, which provides an emotional, nonrepresentational, link between self and other (Reddy, 2003). Interacting with the second-person ‘you’ forces recognition of similarities and connections and makes intentionality which is not available for third-person reflection, visible (Reddy, 1996). A second-person self-and-other awareness can form an embodied bridge that connects the alleged gap between first-person experience and third-person observation (Reddy, 2003). Therefore, although direct first-person ‘emotional reactivity’ to a second-person emotional experience is different to a third-person reflection and experience of ‘cognitive empathy’, this is not factored into the design and/or conclusion of most assessments that measure empathy in autism.

The second or third-person identification of intentionality and emotion in others requires interpretation of the constantly changing embodied expressions within the evolving situation in which they occur, which depends on the sociocultural experiences and unique exchanges with others (Mascolo, 2009; Wittgenstein, 1953). Societal conceptualisations and expectations of public displays of empathy are shaped by sociocultural norms and non-autistic expectations (Fletcher-Watson & Bird, 2020; Wittgenstein, 1953). As the minority, people with autism may not follow the same sociocultural response-script as a neurotypical person (Fletcher-Watson & Bird, 2020). Difficulties in interaction between an autistic person and non-autistic person are usually attributed to the autistic person and are presented as being a by-product of a socio-cognitive deficit (Heasman & Gillespie, 2018; Henderson, 2019). Milton (2012) refers to the interactional challenges that operate in both directions as the ‘double empathy problem’. Milton (2012) describes how the behaviours of the autistic person are perceived as a violation in the ‘natural attitude’ and a breach in natural ‘social reality’ for people who are non-autistic. As the majority, non-autistic people experience the autistic person as unusual, whereas, for autistic people, the disparity experienced is their everyday norm (Milton, 2011). For example, during

Clinician-child interactions in ADOS-2 assessments – a CA perspective

conversation, the contributions of the autistic person may drift from the previous utterance of the non-autistic person (Ochs & Solomon, 2010) which alters the flow of actions as confined by the non-autistic sociocultural normative structure. The ‘double empathy problem’ refers to the disconnect in intersubjectivity, reciprocity and mutuality between people of different dispositional stances and conceptual understandings in the formation of a social experience (Milton, 2012). Autistic researchers have argued that interacting with non-autistic people within non-autistic sociocultural norms can impose a way of behaving upon an autistic person. The autistic person may modify their behaviour to suit normative purposes rather than their own resulting in the subsequent internalisation of this world perception which in turn can become a type of internalised oppression (Milton, 2012). When people with autism are analysed within the non-autistic social reality, rather than the social reality of the autistic person, the experience is often felt as invasive and imposing by the autistic person (Milton, 2012).

The ‘double empathy problem’ has been demonstrated in how non-autistic people find it difficult to judge the emotional expressions of autistic people (Edey et al., 2016; Sheppard et al., 2016). Non-autistic adults rate autistic adults and children less favourably than non-autistic adults and children on a wide variety of evaluative dimensions, as well as indicating reduced intentions to engage with them (Sasson et al., 2017). Both autistic and non-autistic people self-report having more difficulty in interacting in cross-neurotype interactions (Gernsbacher et al., 2017). Cross-neurotype interaction studies demonstrate how autistic individuals have greater levels of rapport with other autistic, and in some interactions, greater than those between non-autistic interactants, therefore suggesting a distinct mode of social interaction style rather than demonstrating social skills difficulties (Crompton et al., 2020). In addition, when examining the interactions between two autistic people, there is a greater level of rapport both as rated by

Clinician-child interactions in ADOS-2 assessments – a CA perspective

people in the interaction, and by blind observers, than rated between an autistic and non-autistic dyadic interaction (Crompton et al., 2019). In conversations involving two autistic interactants, flow and intersubjectivity are greatly increased and, in some instances, observers documented improvements in perceived communicative abilities (Williams et al., 2021). Moreover, when comparing non-autistic, cross-neurotype, and autistic interactions, another study found that rapport for non-autistic pairs was established with mutual gaze and continuers, whereas higher ratings of rapport for autistic pairs was established with less mutual gaze and use of continuers. This suggests that visible markers of rapport can differ dependent on neurotype pairing (Rifai et al., 2021). Therefore, autistic, and non-autistic people may establish rapport and social affiliation differently which in turn, has communicative consequences. For example, autistic adults report disclosing more about themselves to other autistic interactants compared to non-autistic partners (Morrison et al., 2020). The improved rapport and transfer of information in autistic-to-autistic interaction challenges the diagnostic criterion that autistic people have social communication deficits (Crompton et al., 2020). Therefore, studies of autistic, cross-neurotype and non-autistic interactions support reframing social interaction difficulties in autism as a relational rather than an individual impairment (Morrison et al., 2020). As autism assessments are typically cross-neurotype interactions, in which if rapport is reduced, the autistic person may withdraw from communication, these studies have implications for psychological theories of autism and clinical practice.

5.4. Empathy in Interaction

A non-cognitivist social interaction framework analyses how people display knowledge and empathy of another by focusing on how people accomplish social actions in the present (Antaki, 2004; Edwards & Potter, 1992). This approach does not ‘mindread’ or deduce the private mind which is considered prior to the separate observable public bodily behaviour,

Clinician-child interactions in ADOS-2 assessments – a CA perspective

instead it argues mentalized constructs, such as knowledge and empathy, are understood in the immediate social conduct of the person (Henderson, 2019). Situated within a sequential interactional position, internal states are observable as speakers provide meaning and relevance for their public actions in their turns at talk. People rarely explicitly state, ‘these are my thoughts, feelings, and beliefs’, people instead, deduce meaning through recognisable social interactional practices that build intersubjectivity and progressivity (Edwards & Potter, 1992; Schegloff, 1992). Social interaction involves managing others ‘thoughts, feelings and beliefs’ (Grice, 1957), and coordinating others’ intentionality with one’s own (Clark, 1996).

Empathy can be observed in turns at talk based on their temporal sequencing in the interaction (Kupetz, 2014) through explicit verbal acknowledgments and expressions of understanding (Ford et al., 2019; Hepburn & Potter, 2007; Kupetz, 2014; Weatherall, 2021), naming other’s feelings, formulations, co-completions (Muntigl et al., 2014), follow-up questions (Kupetz, 2014), response cries (Heritage, 2011), prosody (Weiste & Peräkylä, 2014), and a soft and quiet volume (Kupetz, 2019). Sequential analysis also demonstrates how non-verbal resources such as, smiling (Muntigl et al., 2014), head nods (Kupetz, 2014; Muntigl et al., 2014), brow furrows (Kupetz, 2014) and tactile touching (Cekaite, 2020; Kupetz, 2019; Weatherall, 2021) are also displays of empathy. Displays of empathy can also vary dependent on social roles defined by sociocultural norms (Kupetz, 2020). Therefore, to manage sociocultural norms, a person must be able to understand (Leudar & Costall, 2009) a speaker’s intentionality within their action (Colombino, 2006; Henderson, 2019). ToM and empathy are therefore interactional accomplishments (Button, 1991; Edwards & Potter, 2005) and require the ability to understand and co-ordinate the social actions of another (Antaki, 2004; Bottema-Beutel, 2017). Therefore, people who have reduced capabilities representing others’ intentionality or ToM, should have great difficulties in navigating the fundamentals of interaction (McCabe et al., 2004) and in

Clinician-child interactions in ADOS-2 assessments – a CA perspective

turn, depictions of empathy. Autistic people however routinely demonstrate ToM by socially coordinating complex conversational sequences by following and responding appropriately to the immediate turns at talk (Ochs & Solomon, 2010).

5.5. The Aims

Although the research suggests that many factors will influence how a person displays empathy, such as, the situation in which empathetic reactions are measured, overlapping cognitive processing differences, double empathy and cross-neurotype interactional styles, how emotion recognition and empathy are assessed with the ADOS-2 are grossly oversimplified. As the social interactional approach has demonstrated how autistic people coordinate complex conversational sequences and display ToM, it is likely that the social interactional approach may also show how autistic people can ‘Comment on Others’ Emotions/ (and display) Empathy’. Therefore, through an interactional approach, I aim to explore what kinds of opportunities the interactions within the ‘Loneliness’ and the ‘Social Difficulties and Annoyance’ tasks provide the examinees to ‘comment on others’ emotions and display empathy’. The ‘Loneliness’ and the ‘Social Difficulties and Annoyance’ tasks interactions and the corresponding coding item ‘Comment on Others’ Emotions/Empathy’ (ADOS-2; Lord et al., 2012) will be compared with the diagnostic reports to explore how the ADOS-2 coding items capture the child’s capabilities in social emotional reciprocity.

5.6. Data Analysis

This analysis will present examples of interactions between 7 children and 7 examiners during the ‘Loneliness’ and the ‘Social Difficulties and Annoyance’ tasks of the ADOS-2 and will demonstrate 1) how examiners adhere to institutional progressivity and in turn not acknowledge elicited emotion, 2) the function of standardised closed polar questions, 3) how

Clinician-child interactions in ADOS-2 assessments – a CA perspective

examiners modify ADOS-2 protocol to elicit third-person ‘cognitive empathy’, 4) how third-person perspective are different from second-person and first-person experiences of emotion and empathy, and finally 5) how examiner elicits empathy and emotional reactivity in the immediate interactional context

5.6.1. Adhering to Institutional Progressivity and not Acknowledging Elicited Emotion

The ADOS-2 manual describes that the purpose of the ‘Loneliness’ task is to assess the examinees understanding of loneliness and their insight into their social situation, their ability to describe their emotional reaction to loneliness, and how they feel it relates to themselves and to other people. The first two interview questions of the ‘Loneliness’ task prompt the examinee to comment on their and others’ experience of loneliness. The ADOS-2 manual however instructs the examiners to ask the tasks interview questions in the order provided. Due to the content of these questions, the child is prompted to reflect on difficult experiences. In the instance in which the examinees response contains a negative personal experience of loneliness, but the examiner adheres to institutional protocol and asks the next sequential ‘Loneliness’ task question, the examinees elicited expression of emotion may not be explicitly acknowledged, affiliated, or empathised with. In everyday conversations however, when negative emotional experiences are shared, recipients typically display an explicit verbal acknowledgment of the difficulty of the situation (Weiste & Peräkylä, 2014) and empathy in some form in their following turn at talk (Ford et al., 2019; Hepburn & Potter, 2007; Heritage, 2011; Kupetz, 2014; Weatherall, 2021). An absent empathetic response is oriented to in everyday communication in the next turn at talk. For example, interactants may pursue a response through various communicative resources, such as, gaze and interrogative prosody (Stivers & Rossano, 2010). Alternatively, when shared information is not receipted with affiliation or empathy, interactants can attempt to retract or revise their previous turn as an

Clinician-child interactions in ADOS-2 assessments – a CA perspective

overstatement or an exaggeration (Antaki & Wetherell, 1999; Couper-Kuhlen & Thompson, 2005; Voutilainen & Koivisto, 2022).

In the first example, after the examiner asks the first ‘Loneliness’ task interview question and the child shares that she has experienced loneliness, rather than provide an affiliative or empathetic response, the examiner (lines 11-13) adheres to institutional progressivity and asks the second question in the ‘Loneliness’ task interview questions (*"Do you think other kids/people your age ever feel lonely?"*). In clinical practice, an absent empathetic response from a clinician can have implications, as the person may convey less emotions over subsequent turns and instead display rational thinking (Freud, 1937). Recipients in clinical interactions may also distance themselves from the emotion that the clinician did not engage with (Voutilainen & Koivisto, 2022). In the following example, after the examiner adheres to institutional progressivity (lines 11-13) and moves directly on to the second question without providing an empathetic response, the child ‘yawns’ and provides a minimal answer to the next sequential ‘others loneliness’ question. Changes in answers in response to the examiners’ absent empathy can have significant consequences, especially if the interaction produces a conclusion that the examinee does not communicate own or others’ emotional experiences effectively.

Extract 13 (38:45): C04DHA-THA (Examiner does not provide an empathetic response)

1. E: ↑okay (.) .hh ±we're NEARLY done with
2. exa >>±gaze to paperwork±gaze to screen--->±
3. chi >>•gaze away from screen--->•
4. ±•my questions then we got one last activity okay?
5. exa ±gaze to paperwork--->±

Clinician-child interactions in ADOS-2 assessments – a CA perspective

6. chi •gaze to screen--->•
7. C: hmm mm.
8. E: so (.) ↑do ±you ever feel lonely:.
9. exa ±gaze to paperwork--->±
10. C: → UHM: (.) .hh yeah when no one wants to talk to me.
11. E: → ye:ah:* (1.4) and: >do you think other people
12. chi *RH manipulates toy--->*
13. sometimes feel lonely other people your age.>
14. C: ((yawns)) ±er:: ((yawn continues)) yeah:
15. exa ±gaze to screen--->±
16. sometimes.
17. E: and: ↑what kind of things can you do to make
18. yourself feel better if you're feeling a bit
19. lonely.
20. C: *uhm: (.) I don't know: (.)* (1.3) [mm* if I-]
21. chi *RH to cheek-----*RH to cheek*RH neutral
22. E: [any ideas?]

Due to the sequential placement of the ‘Loneliness’ questions being situated at the end of the ADOS-2 protocol delivery, the examiner prefaces the ‘Loneliness’ task questions by informing the child that the assessment is nearly finished (lines 1-7). The examiner commences the ‘Loneliness’ task with a “so” preface to mark its independence from the previous questions to advance the interactional agenda (Bolden, 2009). The examiner asks the first question in its polar question format “do you ever feel lonely” (line 8). Rather than simply provide a ‘yes’ response to meet the minimum requirements of the question design, the child demonstrates an

Clinician-child interactions in ADOS-2 assessments – a CA perspective

orientation too the examiners question with a sharp increase in volume “*uhm*” before she shares her experience of loneliness “*when no one wants to talk to me*” (line 10) which creates an empathic opportunity for the examiner to provide an empathic response and explicitly acknowledge the emotion (Suchman et al., 1997; Voutilainen & Koivisto, 2022). Without looking up from her paperwork (line 9), the examiner however receipts the child’s utterance with a stretched “*yeah*” and silence to provide an opportunity for the child to take the floor and continue her talk (line 11). Suggesting difficulty (Rossano, 2012), the child starts manipulating a toy (line 12) and does not return her gaze to the screen (line 3). Without looking up from her paperwork (line 9), the examiner allows the child’s sharing of affect to pass without further interaction or an empathetic reaction, which in turn could affect rapport (Suchman et al., 1997) and future interactions. Instead, the examiner utters “*and*” with emphasis marking the continuation of institutional progressivity (Heritage & Sorjonen, 1994) and asks the second polar question of the ‘Loneliness’ task (lines 11-13). After an elongated yawn which can indicate disengagement and boredom (Provine & Hamernik, 1986), the child again demonstrates a recognition that others’ experience loneliness “*yeah sometimes*” (lines 14-16) but in this instance, does not provide any further information. Without prompting the child for elaboration, the examiner again follows institutional protocol and with an “*and*” preface (Heritage & Sorjonen, 1994), asks the next ‘Loneliness’ question (lines 17-19).

In this initial example, as the examiner sequentially follows institutional protocol, she does not demonstrate empathy in response to the child’s shared emotive experience. An absence of empathy may result in a reduction of shared emotional experiences in the following turns at talk (Freud, 1937) as the person who shared an emotive experience attempts to distance themselves from an emotion that the interactant did not engage with (Voutilainen & Koivisto, 2022). Whereas, in instances when an adult responds to a child’s disclosures with empathy, the

Clinician-child interactions in ADOS-2 assessments – a CA perspective

child is more likely to make quicker disclosures in future interactions (Disla et al., 2018; Main et al., 2019). A lack of an empathetic reaction can have consequences, especially when the interaction aims to determine how a person communicates their own and others emotional experiences. Therefore, if the examiner engaged with the child's initial response to the 'Loneliness' question by displaying an empathetic reaction and/or follow up question, the child may have expanded on her subsequent answer to the second 'Loneliness' task question "*Do you think other kids/people your age ever feel lonely?*", this would have provided the child with the opportunity to communicate an understanding of how other people experience loneliness.

In the ADOS-2 informed subsection of this child's diagnostic report, there are no references to the child's responses to the 'Loneliness' task. Instead, corresponding to the 'Comments on Others' Emotions/Empathy' coding item rating description, the examiners documented in the child's diagnostic report that she "*communicates some understanding, labelling and response to an emotion in others. She demonstrated this by spontaneously and correctly identifying at least one emotion in another person or character*" (C04 diagnostic report).

5.6.1.1 of section

As seen in extract 13, examiners may focus on administering sequential protocol in pursuit of institutional progressivity to elicit behaviours associated with autism. The lack of orientation to the content contained in the child's answer can result in a missed third turn empathetic response. This approach however reduces the likelihood of the children producing further communication which either confirms a difficulty to comment on others' feelings or display empathy, provide an answer that might show strengths or adaption techniques despite difficulties, or demonstrate no difficulties in commenting on others' emotions and/or displaying empathy. Therefore, as seen in interaction research, the examiner's empathetic or

Clinician-child interactions in ADOS-2 assessments – a CA perspective

otherwise communication, can influence how the examinee might respond. This has consequences for how an examinee might comment on others' emotions and any inferences the examiners might make about the child's capabilities to comment on others' experience of emotion.

5.6.2. Closed Polar Interview Questions

5.6.2.1. Closed Polar Question – 'Loneliness' Task

As seen in the previous section, the first two of the four 'Loneliness' task interview questions are closed polar questions. The format of closed polar questions invites recipients to either affirm or reject a candidate proposition concerning a particular referent (Pomerantz, 1988). Closed polar questions are unavoidably designed to elicit either a 'yes' or a 'no' answer (Heritage, 2010), and most often they are structured for a preference for an agreeable confirming response (Heritage & Raymond, 2012; Pomerantz, 1984; Sacks, 1987). Whereas a 'no' answer with an account takes more interactional work from the examinee (Houtkoop-Steenstra & Antaki, 1997). The design of closed polar questions lay the terms for how recipient responses can be constructed (Raymond, 2003) and gives the speakers more control over the recipients' responses. This in turn limits the possible information that can be obtained by restricting the answer to a narrow response type, which often results in the recipient providing an answer of one or two words without elaboration (Silverman et al., 2016).

Therefore, as the ADOS-2 instructs the examiner to ask the 'Loneliness' task interview questions in the order listed and it does not provide any follow up questions to prompt the child to expand on their answers, as seen in the next extract, the children may align with the closed polar question format and provide a minimal agreeable 'yes' response. In the following example, the child provides a minimal agreeable response to *"Do you think other kids/people*

Clinician-child interactions in ADOS-2 assessments – a CA perspective

your age ever feel lonely?", which in turn satisfies the positively polarised question design. As there is limited information contained in the minimal agreeable answer in response to the ADOS-2 interview question, the examiner digresses from protocol and asks a follow up question to prompt the child to comment on how she knows that her peers experience loneliness with another polar question "*do any of your friends complain of that sometimes or not*" (lines 8-10). As the design of this closed polar question lays the terms for how the child should respond (Raymond, 2003), although the child elaborates and shares the social norms of her peer group, by limiting the answer to a narrow response type (Silverman et al., 2016), this closed polar question design does not enable the child to comment on how she knows other people experience loneliness.

Extract 14 (57:15): C03DHA-THA (Polar question – ‘Loneliness’ task)

1. C: no. ••*
2. exa >>↑gaze to paperwork--->±
3. chi •gaze towards screen--->•
4. chi *folds arms---*
5. E: do you- ((laughs)) +no (.) no\$ (.) no. +\$
6. exa +head shake-----+
7. chi \$head shake\$
8. → ±do you think ↑other people ever feel (.) your age
9. exa ±gaze to paperwork--->±
10. ever feel lonely,
11. C: → yes \$↓definitely.\$
12. chi \$nods head---\$
13. E: + °yeah° +• okay.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

14. exa +slight head nod+
15. chi •gaze away from screen--->•
16. do any of your friends complain of that sometimes
17. or not.
18. C: \$ no:: \$ you don't really [talk]
19. chi \$head shake\$
20. E: [no]
21. C: +(about those) kind of things [((laughs))]
22. exa +head nod--->+
23. E: [you don't] talk
24. about that +±kind of thing (.) sure (.) okay.
25. exa +stops head nod
26. exa ±gaze to paperwork--->±

After sharing her understanding of her mother's intentionality (not shown – see extract 15), the child multimodally continues to tease her mother (lines 1-7). The examiner in turn, cuts her utterance short to acknowledge and align with the child's teasing with laughter, repetition of the child's disagreeable response "no", and headshake (lines 4-6). Restarting the next sequential ADOS-2 polar loneliness question "*Do you think other kids/people your age ever feel lonely?*", the examiner utilises a sharp rise in pitch to mark "other" to shift the focus of the child's experience of loneliness asked in the previous question to 'other people her age' (lines 8-10). The child aligns with the structure of the polar question and responds with a head nod (lines 12) and sharp drop in pitch to create a strong affirmative "*yes definitely*" (line 11). The examiner receipts the child's answer with a quiet "*yeah*" and "*okay*" (line 13) and slight head nod (line 14) but rather than progress onto the next sequential ADOS-2 question, the

Clinician-child interactions in ADOS-2 assessments – a CA perspective

examiner requests for elaboration from the child “*do any of your friends complain of that sometimes or not*” (lines 16-17). Again, without hesitation, the child shakes her head (line 19) as she answers “*no*” before describing that people do not typically talk about their experience of loneliness “*no, you don’t really talk about those kind of things*” (lines 18-21). At the end of her utterance, the child laughs as she orients to the content of the examiners question and her own disaffiliative answer (Jefferson, 1984). Before the child completes her turn at talk, the examiner aligns with the child’s answer with a head nod (line 22), and partially repeats the child’s explanation (lines 23-26).

Although the design of the second ‘Loneliness’ question asks the child to either affirm or reject the content of the question (Pomerantz, 1988), the closed structure does not explicitly ask the child to expand and provide an account for their answer. Nor does the closed polar question format explicitly elicit demonstrations of empathy. Rather simply, due to the narrow and limited information the question affords, the second ‘Loneliness’ question can only facilitate the examiners in observing the child’s perspective of other people’s experience of loneliness. This child’s diagnostic report summarises what the examiners can conclude about the child’s answer to the ADOS-2 ‘Loneliness’ task interview question “*She also displayed an understanding that others feel lonely at times...*” (C03 diagnostic report). As the ADOS-2 does not formulate this question as an open question, nor does it provide follow up prompts, as seen in this example, the examiner orients to the minimal ‘yes or ‘no’ answer, digresses from protocol and generates her own follow up prompts.

5.6.2.2. Open Ended Question - ‘Social Difficulties and Annoyance’ Task

In general, to prompt someone to share their full perspective on a specific topic, people make use of ‘open-ended questions’, such as, ‘What, When, Where, Why, and How’. Open

Clinician-child interactions in ADOS-2 assessments – a CA perspective

questioning techniques are designed to introduce an area of enquiry without overly shaping or focusing the content of the recipient's response. Open questions still direct the recipient to a specific area but allow more choice in the recipient's answer. In turn, open-ended questions communicate that elaboration is both appropriate and welcome (Silverman et al., 2016). Therefore, 'open-ended questions' are recommended in clinical interactions to encourage extended responses that enable the clinician to better understand the presentation of the individual under assessment (Heritage, & Robinson, 2006; Silverman et al., 2016).

Four of the five questions in the 'Social Difficulties and Annoyance' task are closed 'yes/no' polar questions. The third question of the 'Social Difficulties and Annoyance' task is however an open question '*What about things you do that annoy others*' (ADOS-2: Lord et al., 2012). The form of this question projects that the examinee must do something to annoy others. Unlike the 'Loneliness' task, the 'Social Difficulties and Annoyance' task provides follow up prompts if the child has difficulty in providing a candidate behaviour that they do which may be annoying for others. The ADOS-2 follow up questions however only prompt the examinees to think about specific people (i.e., "*What about your brother(s) or sister(s) or parents?*" "*What about your family members*") to assist the child to provide a 'thing' they might do that annoys others. There are no prompts to request elaboration to assess the child's insight into other's emotions. Nor do the questions explicitly elicit displays of empathy. In the following extract, after the child provides his candidate behaviour without difficulty, which satisfies the content of the ADOS-2 request for information, rather than continue to the next protocol question, the examiner provides an additional prompt in the form of an open question to specifically ask the child to comment on 'how' he knows that his candidate behaviour might annoy others (line 22). The open question format, in turn, enables the child to comment on others' emotions and demonstrate an ability to consider a third persons 'thoughts, feelings, and beliefs'.

Extract 15 (26:38): C01DHA-THA (Open question - ‘Social Difficulties and Annoyance’**task)**

1. E: an:d (.) what about: (.)
2. exa >>±gaze to screen--->±
3. chi >>•screen freezes--->•
4. +do you: (.) •do things that+ (.) annoy: (.)
5. exa +furrows eyebrows-----+
6. chi •gaze to screen--->•
7. +others at all •do you think.
8. exa +sharp head movement
9. chi •gaze away from screen--->•
10. C: uhm:± (1.6) I think I uhm: (.) talked
11. exa ±gaze to paperwork--->±
12. •*a bit, ((laughs))*
13. chi •gaze to screen--->•
14. chi *smiles-----*
15. E: +oh okay?
16. exa +smiles--->+
17. C: I think I talked a bit much to them+ (.) and about
18. exa +stops smile
19. random thins I think that annoyed them a bit,
20. E: right + ↑okay. +
21. exa +head nod+
22. → how=how do you know that.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

23. C: → •uhm::± (.5) cause uhm: (.) they would just get
24. Chi •gaze away from screen--->•
25. exa ±gaze to screen--->±
26. annoyed •with me from talking so much I think,
27. chi •gaze to screen--->•
28. *((laughs))*
29. Chi *smiles-----*
30. E: >oh: okay< so sometimes they + might + get
31. exa +eyebrows raise+
32. annoyed with you.
33. C: yeah.
34. E: okay.

The examiner commences the third question ‘*What about things you do that annoy others*’ (ADOS-2: Lord et al, 2012) which projects that the child must do something that annoys others. The examiner however cuts the ADOS-2 question short and reformulates the question “*Do you do things that annoy others at all do you think*” (lines 1-8). In clinical interactions, clinicians use “do you think” within stance-eliciting questions to invite the recipient to comment on a third-party stance (Rossen et al., 2020). After hesitation and hedging by reusing the examiners ‘think’ (Heritage & Raymond, 2005), the child provides his candidate behaviour with a laughter and smile (lines 10-14) inviting the examiner to receipt his candidate behaviour as humorous (Jefferson, 1979). The examiner returns the child’s smile as he receipts the child’s offered candidate behaviour and displays understanding (Heritage, 1984) in the third position (lines 15-16). The rising intoned ‘okay’ is treated to pass the floor back to the child as the child expands on his initial answer “*I think I talked a bit much to them and about random things I*

Clinician-child interactions in ADOS-2 assessments – a CA perspective

think that annoyed them a bit” (lines 17-19). The child therefore satisfies the ADOS-2 question design and coding by ‘commenting on others’ emotions’. After the examiner multimodally receipts the child’s elaboration “*okay*” (lines 20-21), rather than progress to the next ADOS-2 question, the examiner passes the floor to provide any type of further answer (Roter & Hall, 1987) to formulate a third-person perspective about his ‘thoughts, feelings, and beliefs’ in response to his own behaviours “*how do you know that*” (line 22). This question is structured to request epistemic certainty which is oriented to by the child as he downgrades epistemic claims with ‘parenthetical’ hedges (Heritage & Raymond, 2005; Sidnell, 2012; Turowetz, 2017) within his supporting claim that the children “*would just get annoyed with me from talking so much I think*” (lines 23-29). Although the child’s answer did not differ significantly, the additional open-ended question resulted in a modified response that further supports the child’s recognition and understanding of other people’s reactions to his behaviours through his observations that they would get annoyed ‘when he talked too much’.

Within this child’s diagnostic report however, there is no reference to any of the child’s answers in response to the questions contained in either the ‘Social Difficulties and Annoyance’ task or the ‘Loneliness’ task. Instead, as the ADOS-2 scoring item ‘Comments on Others Emotions/Empathy’ can be coded by the correct labelling of emotions in response to the facial expressions conveyed by cartoon characters, this separate capability to recognise and label facial expressions is documented in the report “*he spontaneously communicated a clear understanding by labelling several different emotions in other people/characters. “For example, after a prompt from the examiner when describing a picture, he explained that he ‘could see a lot of smiles in the picture and that he did not see any frowns anywhere’. Moreover, when retelling a story from the book, he described the characters as being surprised, confused, angry and upset*” (C01 diagnostic report). Therefore, although the child commented on other

Clinician-child interactions in ADOS-2 assessments – a CA perspective

peoples ‘thoughts, feelings, and experiences’ in response to both the ADOS-2 and the examiner’s open-ended question designs, this capability that is different to the recognition of cartoon facial expressions, was not documented as a social emotional capability within his diagnostic report.

5.6.2.3. Conclusion of section

As seen in the previous section, two of the four ‘Loneliness’ task interview questions and four of the ‘Social Difficulties and Annoyance’ task interview questions are closed polar questions that are designed to invite recipients to either affirm or reject, a candidate proposition concerning a particular referent (Heritage, 2010; Heritage & Raymond, 2012; Pomerantz, 1988). Therefore, as observed in extract 14, the design of the ADOS-2 interview closed polar questions are positively polarised and a preferred minimal agreeable ‘yes’ response which provides limited information will satisfy the design of the question. Therefore, the ADOS-2 questions are not neutral in their design. In both examples, the examiners digress from protocol to elicit further talk from the children. In extract 14, the examiner prompts further talk with a closed polar question that lays the terms for how the examinees response can be constructed (Raymond, 2003). Whereas, in extract 15, the examiner asks an open question to prompt the child without overly shaping or focusing the content of the child’s response to communicates that elaboration is both appropriate and welcome (Silverman et al., 2016).

Closed polar standardised questions give the assessment tools more control over examinee responses for the benefits of coding and time constraints. Easily administered closed polar questions enable the examiners to quickly attempt to match the narrowly defined elicited responses to the medical model symptomatology of the condition under assessment. Although this approach of using closed polar questions makes the diagnostic process easier, it contributes

Clinician-child interactions in ADOS-2 assessments – a CA perspective

to an overly narrowly defined field of enquiry and diagnostic reasoning (Silverman et al., 2016). As seen in extract 14, the diagnostic information obtained through a restricted response can lead to answers that are less efficient for the purpose of the information gathering (Silverman et al., 2016). Conversely, as seen in extract 15, open-ended questions can elicit relevant information (Roter & Hall, 1987). Open-ended questions also provide the examiner more time to generate questions in response to the information provided by the examinee in prior talk (Silverman et al., 2016) which in turn has consequences for the interactional relationship and building of rapport (Launer 2002). Open-ended questions also enable the recipient time to order their thoughts and experiences into a more logical framework to make sense of their own stories, and in turn, more understandable, for both interactants (Silverman et al., 2016). Therefore, open-ended questioning is recommended in clinical interactions to encourage extended responses that enable the clinician to better understand the presentation of the individual under assessment (Heritage, & Robinson, 2006; Silverman et al., 2016).

5.6.3. Examiners Modify ADOS-2 Protocol to Elicit Third-Person Cognitive Empathy

As observed in the previous extracts, due to the narrowly defined ADOS-2 ‘Loneliness’ task and the Social Difficulties and Annoyance’ task interview questions, the child may not specifically ‘Comment on Others’ Emotions/Empathy’ (ADOS-2, Lord et al., 2012) and display cognitive empathy. The examiners therefore may digress from protocol to pursue a response with an open ‘Wh’ (What, When, Where, Why, How) question that might demonstrate the child’s recognition and understanding of another individual’s experience of emotion (cognitive empathy).

5.6.3.1. Examiner Modifications – ‘Loneliness’ Task

Clinician-child interactions in ADOS-2 assessments – a CA perspective

In the next extract, the examiner asks the initial ‘Loneliness’ task interview question. Aligning with the polar question construction that projects minimal ‘yes’ responses as a preferred answer (Pomerantz, 1984), the child provides a minimal ‘yes’ response to the polar question. Rather than continue with institutional progressivity and ask the next interview question, the examiner prompts the child to provide further information with a follow up question (lines 41-44) to enable the child to share a greater understanding of their concept of loneliness. The child in turn, provides a specific situation involving her mother’s actions which evokes the feeling of loneliness. Again, rather than return to institutional progressivity, the examiner requests in an open format question (lines 49-53) that the child provides an account for her answer and comments on her mother’s thoughts, feelings, and experiences. By requesting that the child expands on her answers, the child not only provides a more detailed description of her experienced loneliness but also demonstrates a third-person perspective (ToM). Therefore, the structure of the ADOS-2 initial ‘Loneliness’ question can be limited to simply determine if someone will accept or reject their own experience of loneliness.

Extract 16 (55:45): C03DHA-THA (Examiner modifications to ADOS-2 protocol to elicit cognitive empathy – First question of ‘Loneliness’ task)

1. E: +I mean I wondered do you (.) cause you
2. exa >>±gaze to paperwork--->±
3. chi >>•gaze away from screen to object in hands--->•
4. exa +furrowed eyebrows--->+
5. %said you'd want % to live by yourself=
6. exa %both hands gesture%
7. =I just wondered (.) if you (.) you ever feel
8. lonely at all.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

9. C: •uhm: (.) ↑yeah. •
10. chi •gaze up-----•gaze to screen--->•
11. E: [±↑yeah.]
12. exa ±gaze to paperwork--->±
13. exa +raised eyebrows+
14. C: [Syeah• §] (.) [yeah.]
15. chi Shead upS
16. chi •gaze to object in hands--->•
17. E: [okay.] okay.
18. °and° when- when is that. (.8) I mean when that
19. happens (.5) ±+what hap- I mean (.) is there+ any
20. exa ±gaze to screen--->±
21. exa +furrowed eyebrows-----+
22. particular ↑time that happens that you might feel
23. lonely?±
24. exa ±gaze to paperwork--->±
25. C: uh:m (.8) if I had a fight with my mum (.) and (.)
26. I (.) have (.4) yeah (.) yeah (and) (.7) I (.5)
27. don't have my •S phone § (.8) because you know
28. chi •gaze towards mother--->•
29. chi Swide eyesS
30. someone blocks everything +on it (.) % hint hint
31. exa +smiles--->+
32. my •mum+% (.8) uh:m: (.) ((laughs))
33. chi •gaze towards object in hands--->•
34. exa +wide open mouth smile--->+

Clinician-child interactions in ADOS-2 assessments – a CA perspective

35. exa %raised eyebrows--%
36. E: °okay.°
37. C: that felt that might be a (.) triggering (.)
38. +me to be \$ feel lonely? \$
39. exa +mouth closes
40. chi \$raised eyebrow\$
41. E: → ↑right (.) †and why do you feel mum +block
42. exa †gaze to screen--->†
43. exa +smiles--->+
44. everything on your phone do you +think.
45. exa +stops smiling
46. C: •she likes the control. (.) \$ (.) \$
47. chi •gaze towards mother--->•
48. chi \$raised eyebrow\$
49. E: → hmm. • (.) + <anything el:se> + that
50. chi •gaze towards screen--->•
51. exa +lateral slow head movement+
52. •she might be blocking blocking it for?
53. chi •gaze towards object in hands--->•
54. C: %because she's annoying and she likes to purposely
55. exa %raised eyebrows--->%
56. annoy me?
57. E: [or it-]
58. C: → [AND maybe it's] + (.) there might be a small hint
59. exa +turns head to side--->+
60. of %her +trying to protect me from +things (.)

Clinician-child interactions in ADOS-2 assessments – a CA perspective

61. exa %eyebrows neutral
62. exa +head front facing+ +head nod--->+
63. \$ on \$ the internet that I shouldn't
64. chi \$head lift\$
65. •see * BU:T * I don't •think that is the key
66. chi •gaze towards screen---•gaze towards mother--->•
67. chi *gesture*
68. thing,•
69. chi •gaze towards object in hand--->•
70. E: mmm (.) ↓right+ (.) %okay ↑well I'm glad you are
71. exa +stops head nod
72. exa %raised eyebrows--->%
73. able to acknowledge% that (.) + third: +
74. exa %eyebrows neutral
75. exa +head nod +
76. *thing even though you think it's a little thing
77. chi *smiles--->*
78. (.4) uhm finally because I was % just gonna %
79. exa %raised eyebrows%
80. say maybe mum is *doing it cause she cares for you
81. chi *stops smiling
82. and wants to (.) try and keep you
83. *\$safe °isn't it.°*
84. chi *pursed lips-----*
85. chi \$head shake--->\$
86. C: no.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

87. E: mmm.

88. C: no (.) no.\$

89. chi \$head shake--->\$

90. E: *clears throat*

91. C: no. •*

92. chi •gaze towards screen--->•

93. chi *folds arms---*

94. E: do you- ((laughs)) +no (.) no\$ (.) no. +\$

95. exa +head shake-----+

96. chi \$head shake\$

The examiner commences the ‘Loneliness’ subsection, by incorporating the child’s previous answer that she wants to live by herself (not shown) within a pre-sequence to the task (lines 1-8). The examiner utilises “*I just wondered*” twice as a device to encourage the child to engage with the feelings-talk from the standpoint of subjective experience (Hutchby et al., 2020) before asking the initial loneliness question ‘*Do you ever feel lonely*’ (lines 1-8). Aligning with the positively polarised polar question design, the child confirms she has experienced loneliness with an agreeable “*yeah*” (lines 9-10). The examiner multimodally echoes the child’s prosodic ‘yeah’ (lines 11-13) to pass the floor back to the child to expand on her answer. The child does not expand but instead confirms her initial answer with two further iterations of ‘yeah’ (lines 14-16). The examiner receipts the child’s conformation (line 17) and attempts to formulate an explicit request for elaboration (lines 18-21). As the ADOS-2 does not provide any prompts, the examiner displays difficulty before engaging in self repair as she reformulates the request for elaboration (lines 19-24). With an empathetic brow furrow and follow-up question the examiner also multimodally displays empathy (Kupetz, 2014). The child in turn provides a

Clinician-child interactions in ADOS-2 assessments – a CA perspective

specific situation in which she argues with her mother, who places age restrictions on her mobile telephone internet browsing, and how this action causes the feeling of loneliness (lines 25-40). The child's mother is present throughout the assessment but largely (not on camera and) not engaging in the dyadic assessment. Midway through the child's accusation she marks the word 'phone' with emphasis as she looks at the mother with wide eyes (lines 27-29) and utters an explicit vocalisation at the tail end of her accusation "*hint hint my mum*" that both indicate teasing (lines 30-32). The child also includes laughter at the end of her accusation to normatively invite her recipients (examiner and mother) to laugh (Jefferson, 1979) and receipt her response as humorous (line 32). Before the child completes her turn, the examiner conveys an emotional reaction with an open mouth, wide eyes and raised eyebrows indicating surprise (Ekman & Friesen, 1976; Ekman & Friesen, 1978) whilst also smiling suggesting an orientation to the child's teasing (lines 34-35). Although the child commences her next turn with further teasing "*she's annoying and she likes to purposely annoy me*" (lines 54-56), after an overlap in talk, in which the child 'wins' the floor with a loud 'and' prefaced turn (Schegloff, 2000), the child provides the intentionality beyond her mother's actions (i.e., trying to keep her safe) from her mother's perspective (lines 58-69). After sharing her understanding of her mother's intentionality, the child multimodally returns to her accusation and continues to tease her mother with a smile (lines 77-96), pursed lips (line 84), head shake (lines 85-96), folded arms (line 93), and iterations of "*no*" (lines 86-94). The examiner vocalises the child's acknowledgement and reflection on her mother's perspective (lines 70-83).

Therefore, as seen in the previous examples, the format of the first two 'Loneliness' task questions do not prompt the examinee to provide anything other than a minimal 'yes or no' response, nor do they explicitly request or help the examinee to provide answers that demonstrate insight into their social situation, emotional reactions to loneliness, and how

Clinician-child interactions in ADOS-2 assessments – a CA perspective

loneliness relates to them and to other people. The ADOS-2 manual instructs the examiners to ask the questions in the order listed and does not provide prompts or any information on prompting behaviours. Therefore, in instances when the child aligns with the ADOS-2 question design and provides a minimal ‘yes or no’ response, the decision to pursue an expanded answer or adhere to sequential delivery of the protocol is left to the examiner. In this example, as the examiner digresses from protocol and asks the child follow up questions, the child is provided with specific content to shape her answers that will in turn demonstrate an ability to understand another’s thoughts, feelings, and beliefs.

In this child’s diagnostic report, other examples were used to score the coding item ‘Comments on Others’ Emotions/Empathy’ *“She also displayed an understanding that others feel lonely at times and was able to identify strategies that others may use to help with this”* (C03 diagnostic report). Due to the standardised design of the ADOS-2, the diagnostic report therefore contains the examiner’s observations that occurred within specific structured tasks within the protocol. As the examiner’s follow up prompts occurred outside of the design of the ADOS-2, the child’s third-person awareness and comments about her mother’s ‘thoughts, feelings, and beliefs’ are not included in the diagnostic report.

5.6.3.2. Examiner Modifications Reveal Difficulties - ‘Social Difficulties and Annoyance’

Task

The first question in the ‘Social Difficulties and Annoyance’ task asks the child if they ‘have ever had problems getting along with people at school’. For this question the ADOS-2 provides prompts *“Why”* (lines 31-32) and *“What”* (lines 33-36 and lines 54-62) to pursue elaboration. With the unspecified content and complete openness of these questions, there is no guarantee the examinees will comment on their own or other’s emotions or display empathy. The

Clinician-child interactions in ADOS-2 assessments – a CA perspective

examiner in this example expands on her question to make ‘social difficulties’ inclusive and experienced by many children (lines 15-18) and specifically designs her questioning (line 54-62) to request that the child to reflect on a third persons ‘thoughts, feelings, and experiences’ and how this relates to the child’s behaviours.

Extract 17 (11:30): C05DHA-THA (Examiner modifications Reveal Difficulties - ‘Social Difficulties and Annoyance’ task)

1. E: ↑do you +feel that way (.) sometimes (.) or often.
2. exa >>±gaze to screen--->±
3. chi >>•gaze to object in hands--->•
4. chi >>*moving objects in hands--->*
5. exa +shoulders raise--->+
6. C: not a lot:.
7. E: %not a lot% (.) %okay %±good (.4) alright.
8. exa %nod-----%smiles%
9. exa +shoulders fall
10. exa ±gaze to paperwork--->±
11. E: and (.) ↑what about (.)± uhm (.6) + getting on +
12. exa ±gaze away from screen--->±
13. exa +gesticulates+
14. with people at school how is that for you
15. + cause I + (.5) I know you know
16. exa +gesticulates+
17. +lots of [children+ struggle-]
18. exa +gesticulates-----+

Clinician-child interactions in ADOS-2 assessments – a CA perspective

19. C: [(like) (.)]± I do get along
20. exa ±gaze to screen--->±
21. with some people and (.) sometimes >whenever er I
22. like go an< (.4) go to like (.) a new year
23. +.hhh there is just some >people in class
24. exa +nods--->+
25. +they'll look at me< and they instantly just say
26. exa +stops head nod
27. they don't like me.
28. E: +↑do they: (.) gosh I'm really sorry to hear that.
29. exa +furrowed eyebrows--->+
30. oh that sounds really awful.
31. → %why do they say % that. %
32. exa %shakes head-----%shoulders raise%
33. → what % what %do you make of
34. exa %shoulders raise%
35. it.+
36. exa +eyebrows neutral
37. C: I don't know why:: (.) even
38. +though I did nothing to them.+
39. exa +head nod-----+
40. E: ye:a:h.
41. C: like last year: (.) there was a >boy in my class<
42. called carl (.4) [and] when .hh on the first day
43. E: [+mmm+]
44. exa +nod+

Clinician-child interactions in ADOS-2 assessments – a CA perspective

45. C: in (.5) when I was >•just about to work< with
46. chi •gaze to screen--->•
47. someone new (.) +he butted in+
48. exa +head nod-----+
49. •and said he's gonna work with him and .hh and I
50. chi •gaze to object in hands--->•
51. had to work on my ow:n.+ (.5) +
52. exa +head nod+
53. E: ↑gosh I'm really sorry to hear that (.) yeah (.5)
54. → what- could there + BE a rea:son + I mean +
55. exa +shoulders raise+gesticulates+
56. if you think about it (.) could (.)
57. +could something+ have happened or (.4) .hh °e-° do
58. exa +shoulders raise+
59. you think there's +something that maybe you might
60. exa +gesticulates--->+
61. have done that had irritated + him:. +
62. exa +head shake+
63. C: uhm (.) I've never done +↑anything.+
64. exa +head shake+
65. E: +°no::: (.) [yeah. °+]
66. exa +head nod-----+
67. C: [(to annoy people.)]
68. E: +↑does that kind of thing+ happen often to you
69. exa +gesticulates-----+

Clinician-child interactions in ADOS-2 assessments – a CA perspective

70. (.5) [(with-)]
71. C: [(well it)] happens in +every year (.4) .hh
72. exa +head nod--->+
73. E: ri[ght.]
74. C: [every] year >there's (always)
75. * one person in my in my * class< like .hh who
76. chi *straightens index finger*
77. doesn't like me .hh an:d: (.7) +and they just make
78. exa +stops head nod
79. sure (.5) that (.4) I don't I don't get a lot of
80. things completed.

Prior to the ‘Social Difficulties and Annoyance’ task, the child has shared how he feels when he is sad (not shown). The examiner seeks to determine how often the child feels sadness (lines 1-5) before closing the ‘Emotions’ task (lines 7-10). The examiner transitions into the ‘Social Difficulties and Annoyance’ task but rather than ask “*Have you ever had problems getting along with people at school?*” (ADOS-2 manual), the examiner reformulates the question, initially as an incomplete open format “*and what about uhm getting on with people at school*” before tagging an ‘How’ question ‘to rectify the omitted structure “*how is that for you*” (line 14-17). The examiner continues and uses her epistemic stance to make ‘social difficulties’ an inclusive experience of many children by providing an account for asking the question “*cause i know you know lots of children struggle*” (lines 14-18). In overlap with the tail end of the examiner’s turn, the child shares ‘how he gets along with his peers in school but some children instantly dislike him’ (lines 19-27). Rather than sustain institutional progressivity, the examiner provides a multimodal empathetic response (lines 28-34) with furrowed brows (Kupetz, 2014),

Clinician-child interactions in ADOS-2 assessments – a CA perspective

explicit verbal acknowledgments and expressions of understanding (Ford et al., 2019; Hepburn & Potter, 2007; Kupetz, 2014; Weatherall, 2021) and multimodal follow-up questions (Kupetz, 2014).

The two follow-up open questions “*why do they say that*” and “*what what do you make of it*” specifically ask the child to reflect and comment on his peers’ behaviours (lines 31-36) and therefore provide the child with an opportunity to demonstrate a third-person perspective. The child in turn explains that he does not know why these social difficulties occur and provides a specific situation in which a peer dismissed him (lines 37-52). Again, the examiner provides a vocalised empathetic response (line 53) before multimodally prompting the child with an open question format to give a third-person perspective “*could there be reason I mean if you think about it could something have happened or do you think there's something that maybe you might have done that had irritated him*” (lines 54-62). After the child claims that he has ‘never done anything’ (lines 63-64), the examiner again passes the floor back to the child to consider the frequency of his social difficulties with his peers “*does that kind of thing happen often to you*” (lines 68-70). The child explains that his social difficulties occur ‘every year’ and how his peers intentionally distract him from getting things completed (lines 71-80). Therefore, in this example, rather than adhere to institutional protocol and ask the simple ADOS-2 follow-up questions “*Why?*” and “*What for?*” or abandon pursuit to sustain institutional progressivity, the examiner provided multiple questions which specifically directed the child to consider his peers third-person perspective and their ‘thoughts, feelings, and beliefs’.

Specifically, in response to the ADOS-2 protocol questions, the examiners in this instance reference in the child’s diagnostic report how he was able to reflect on his social difficulties that he experiences with his peers in school “*he was able to tell the examiner if he ever had*

Clinician-child interactions in ADOS-2 assessments – a CA perspective

problems getting along with people at school. He replied with “sometimes people don’t like me. I don’t complete things”. When the examiner asked him “how” he replied with “people get me in trouble and then I don’t complete the work” (C05 diagnostic report). Conversely, the examiner’s additional prompts showed how the child demonstrated difficulties in understanding his peers third-person perspective (their ‘thoughts, feelings, and beliefs’), yet as these questions occurred outside of the ADOS-2 interview question protocol, the interactions were not included in the child’s diagnostic report.

5.6.3.3. Examiner Modifications - ‘Social Difficulties and Annoyance’ Task

The penultimate question of the ‘Social Difficulties and Annoyance’ task *“Have you ever been teased or bullied?”* has a few follow up prompts but the final question *“Are there other kids/people you know who get teased or bullied?”* however has none. Therefore, as there are no prompts for this question, the ‘Social Difficulties and Annoyance’ task might be closed after a simple yes or no response. In the next example, after the examiner asks the final polar question, the child provides a ‘yes’ answer and shares how her peers informed her of their teasing. Rather than close the ‘Social Difficulties and Annoyance’ task, the examiner asks a follow up prompt to pass the floor back to the child to consider her own perspective of her peers’ third-person experience (lines 36-39).

Extract 18 (24:37): C08DHA-THA (Examiner modifications - ‘Social Difficulties and Annoyance’ task)

1. E: uhm: (.4) did +you ever sort of try to::
2. exa >>±gaze to paperwork--->±
3. chi >>•screen to screen--->•
4. exa +RH gestures--->+

Clinician-child interactions in ADOS-2 assessments – a CA perspective

5. ± (.5) +to talk a bit more+ or to to change
6. exa ±gaze to screen--->±
7. exa +both hands gesture+
8. + things + <so that wouldn't happen.<
9. exa +eye close+
10. C: I don't: >I don't< *I just don't like* talking to
11. chi *head shake-----*
12. people I don't think I [really] (.) got on
13. E: [+ mmm. +]
14. exa +head nod+
15. C: with most the people in school anyway:
16. +so * I don't know,*+
17. exa +head nod-----+
18. chi *shoulder raise*
19. E: °yeah± (.) +yeah (.) okay.+°
20. exa ±gaze to paperwork--->±
21. exa +head nod-----+
22. you're doing really well today.
23. +.hh *\$uhm: (.8) +*\$do you know anybody el:se
24. exa +smile-----+
25. chi *smile-----*
26. chi \$shoulder raise\$
27. that (.) +that got teased or bullied.
28. exa +sharp head movement
29. C: uhm:* (1.7) yeah I think* I've I have (.) three
30. chi *furrowed eyebrows*

Clinician-child interactions in ADOS-2 assessments – a CA perspective

31. friends I think they're all: (.) sort of (.) I
32. think they were all teased a bit (.) yeah.
33. E: + mmmhmm + (.7) °okay.°
34. exa +head nod+
35. (3.1)
36. → and what sort of things were they (.)
37. ±teased for (.) did you (1.0)
38. exa ±gaze to screen--->±
39. [get the sense of why.]
40. C: → [>I'm not really sure i don't really know<]
41. their+ (.) things+ >i don't really remember (.)
42. exa +head nod---+
43. *super +well<* what they've told me [(inaudible)+]
44. chi *head shake--*
45. exa +head nod-----+
46. E: [mmmhmm.]
47. +mmmhmm. +
48. exa +head nod+

In this extract, after asking the fourth, penultimate question *'Have you ever been teased or bullied'*, the child in turn responds with a specific situation in which she might have been teased (not shown). The examiner in turn multimodally asks a follow up prompt *"Have you ever tried to change these things?"* so that teasing would not happen (lines 1-9). The child in turn downgrades her epistemic answer with 'parenthetical' hedges (Heritage & Raymond, 2005; Sidnell, 2012; Turowetz, 2017) as she comments she does not like talking to people and how

Clinician-child interactions in ADOS-2 assessments – a CA perspective

she may not get along with people in school (lines 10-18) before ending her answer with “*I don’t know*” to seek closure on the examiner’s topic (Beach & Metzger, 1997) with a simultaneous shoulder shrug indicating incapacity and powerlessness (Debras, 2017). The examiner receipts the child’s uncertainty and social difficulties (lines 19-21), before empathetically providing praise “*you’re doing really well today*” (line 22) and smiling at the child (line 24). In response to the examiner’s display of empathy, the child returns the examiner’s smile as she simultaneously raises her shoulders conveying a shyness (lines 25-26).

The examiner reformulates the final question “*do you know anybody else that got teased or bullied?*” (lines 23-28), but retains the polar format. The child however answers that she has three friends that have experienced teasing (lines 29-32). The examiner multimodally receipts the child’s answer with continuers (line 33-34) treating the child’s answer as incomplete (Goodwin, 1986), and waits for the child to take the floor. After three seconds of silence (line 35), rather than end the task, the examiner asks an additional ‘and’ prefaced ‘Wh’ question to explore the child’s third-person perspective “*What sort of things were they teased for? Did you get the sense of why?*” (lines 36-39). The child takes the floor to answer how ‘she does not remember what her peers told her’ (lines 40-44). After receipting the child’s answer (lines 45-48), the task is closed (not shown).

Again, as seen in the previous examples, none of the child’s answers to the ‘Social Difficulties and Annoyance’ and the ‘Loneliness’ task questions are referenced in the diagnostic report. Instead, the examiner utilises the child’s responses from the tasks containing cartoons depicting emotions to conclude their observations in the child’s diagnostic report “*she was also able to spontaneously recognise emotions in others. “For example, she stated that the frogs in the book were ‘upset’ and the cat was ‘disgruntled’ and during the Cartoons task commented that the*

Clinician-child interactions in ADOS-2 assessments – a CA perspective

cat was 'pissed' (C08 diagnostic report). Therefore, the report only contains the child's responses to emotions portrayed by cartoons. The child's representation of other's emotional experiences and reactions to other's emotional experiences and depictions of empathy are not documented.

5.6.3.4. Conclusion of Section

As the ADOS-2 instructs the examiners to ask the 'Loneliness' task questions in the order provided, regardless of the size and content of the child's initial answer, follow up prompts are left to the examiner's digression. For example, in extract 14, rather than adhere to institutional progressivity, the examiner digresses from protocol and asks follow up questions, which in turn, creates more opportunities for the child to 'comment on others emotions and display empathy'. The child not only expands on her previous minimal "yeah" response to share more about her experience of loneliness but also provides a third-person perspective on her mother's thoughts, feelings, and experiences. As seen in extracts 15, 16 and 17, the examiners modify the formats of the ADOS-2 interview questions in the 'Social Difficulties and Annoyance' task or utilise follow up prompts designed to specifically provide the children with an opportunity to demonstrate a third-person perspective and comment on others' thoughts, feelings, and experiences.

As seen in extract 14 and 15, the examiners additional prompts that occurred outside of the ADOS-2 question designs that provided the children with opportunities to demonstrate capabilities to comment on other's thoughts, feelings, and experiences are not documented in the children's diagnostic reports. Therefore, although occurring under clinical observation, the medicalised focus of adhering to standardised procedure during assessment practices is resulting in diagnostic reports that are not holistically capturing the children's differences and

Clinician-child interactions in ADOS-2 assessments – a CA perspective

capabilities. Moreover, as seen in extracts 16 and 17, there are many instances where there are no references to any of the children's answers in response to the questions contained in either the 'Social Difficulties and Annoyance' task or the 'Loneliness' task. Instead, as the corresponding ADOS-2 rating item 'Comments on Others Emotions/Empathy' can be coded by spontaneously correctly labelling the emotions conveyed by facial expressions displayed in the tasks containing cartoons, this is what is documented in the children's diagnostic reports.

5.6.4. Examiner Modifications - First-Person Perspective

The previous section demonstrates how the rating item 'Comments on Others' Emotion/Empathy' can be coded and concluded with either of three separate different socio-emotional capabilities. The examinees empathetic response to another's direct emotional experience (emotional reactivity) however is also not explicitly elicited by any of the tasks. The following extracts will demonstrate how examiners reformulate the 'Loneliness' and the 'Social Difficulties and Annoyance' task questions into a second-person (you) perspective. This approach restricts the child to respond in turn with a first-person (I) perspective, thus commenting on their own behaviours in relation to another's emotional experience.

5.6.4.1. First-Person Perspective - 'Loneliness' Task

In the following extract, the examiner asks the first two questions of the 'Loneliness' task but does not follow up with prompts to request an expansion, nor does she ask the third open question "*Are there things that you do to help yourself feel better?*" (ADOS-2: Lord et al., 2012). The examiner instead, changes the final open question "*What about things other people do to help themselves feel better when they're lonely?*" (ADOS-2: Lord et al., 2012) from a third-person to a second-person perspective format (lines 20-11). This in turn, restricts the child

Clinician-child interactions in ADOS-2 assessments – a CA perspective

to provide an answer in the first-person. This change generates a space for the child to reflect on their hypothetical behaviours in response to another's emotive experience.

Extract 19 (08:17): C09DHA-THA (first-person perspective - 'Loneliness' task)

1. E: +>do you think< other •young people+ feel that way,
2. exa >>±gaze to screen--->±
3. chi >>•gaze to screen--->•
4. exa +-----head nod-----+
5. chi •gaze to object in hands--->•
6. C: •yea:h: (.) •probably,
7. chi •gaze to screen•gaze to object in hands--->•
8. E: +±mmh:m, +
9. exa +head nod+
10. exa ±gaze away from screen--->±
11. C: [it just depends,]
12. E: [what do you think is-±]
13. exa ±gaze to screen--->±
14. (1.2)
15. +y[eah.]
16. exa +head nod--->+
17. C: [on] the person.+
18. exa +stops head nod
19. (2.4)
20. E: → [>what do you think] is a good< thing to do if
21. C: [(°inaudible°)]
22. someone feels lonely.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

23. (2.8)
24. C: I dunno?
25. (5.0) + (.2) ±±
26. exa +head nod+
27. exa ±gaze to paperwork--->±
28. → like (.) speak to them.±
29. exa ±gaze to screen--->±
30. E: +mmmhmm?±
31. exa +head nod--->+
32. exa ±gaze to paperwork--->±
33. C: yeah.
34. E: yeah.+
35. exa +stops head nod

After the child provides a minimal affirmative agreeable response of “*yeah*” to the initial question of the ‘Loneliness’ task “*Do you ever feel lonely?*” (not shown), the examiner immediately progresses to the next question on the protocol “*Do you think other young people feel that way?*” (lines 1-5). The child places emphasis on her initial answer “*yeah*” before downgrading her epistemic commitment with a ‘parenthetical’ hedge “*probably*” as she shifts her gaze to the object in her hand (lines 6-7). After the examiner’s multimodal continuer (lines 8-9), both interactants speak in overlap (lines 11-12), in which the examiner cuts off her request for elaboration (lines 12-13) and the child expands “*it just depends*” (line 11). The examiner multimodally receipts the child’s response (lines 15-18) again in overlap as the child also takes the floor to further expand her answer “*on the person*” (line 17). After nearly a three second silence as both parties wait for the other to take the floor (line 19) both interactants speak again

Clinician-child interactions in ADOS-2 assessments – a CA perspective

in overlap as the examiner reformulates the final question “*What do you think is a good thing to do if someone feels lonely?*” (lines 20-22) to ask the child to position herself in response to another’s emotive experience and account for a possible action. Although the child is now accountable to provide an answer, another long silence occurs (line 23) before the child declares her ‘K-minus’ stance “*I dunno*” (line 24) suggesting difficulty or resistance (Hutchby, 2002). The examiner does not treat the child’s “*I dunno*” as an inability to provide an answer as she waits for the child to answer. After five seconds (line 25), the examiner nods her head and returns her gaze to the paperwork (lines 26-27) before the child provides a candidate answer “*like speak to them*” (line 29) as an action she would perform as the ‘first-person’ in relation to another. Therefore, changing “*What things other people do to help themselves feel better when they’re lonely?*” to “*what do you think is a good thing to do if someone feels lonely*” directly incorporates the child and their potential reactions in relation to another’s emotive experience of loneliness. The change of the subject of the question from ‘other people’ to ‘you’ requires the child to reflect how they might respond to another’s emotive experience of loneliness.

In this child’s diagnostic report, both the examiner’s modification of the protocol question and the child’s response were documented “*she could also reflect on other people experiencing bullying and loneliness and that these experiences would differ dependent on the individual. She also noted how she could reduce these feelings of isolation by talking to those people*” (C09DHA-THA). Therefore, the examiner’s modification to the final question of the ‘Loneliness’ task enabled the child to provide a response that conveyed how she would respond to another person’s emotional distress. Although the report also referenced the child’s responses in relation to the emotions portrayed by the cartoon characters, there were also references to the child’s responses to both the ‘Loneliness’ and the ‘Social Difficulties and

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Annoyance’ task questions. Therefore, in this instance, the examiners’ modification to the ADOS-2 protocol and the child’s responses documented in the diagnostic report provide an holistic presentation of the child’s displayed capabilities.

5.6.4.2. First-Person Perspective - ‘Social Difficulties and Annoyance’ Task

Similarly, as found in the ‘Loneliness’ task, in the following extract, after the examiner has asked the final closed ‘Social Difficulties and Annoyance’ task question, she provides follow up questions formulated in the second-person (lines 15 and 23), which in turn, restrict the child to provide an answer in the first-person. Again, this question generates a space for the child to reflect on their hypothetical behaviours in response to another’s emotive experience.

Extract 20 (43:50): C02DHA-THA (first-person perspective - ‘Social Difficulties and Annoyance’ task)

1. E: so can you: think of anything that you: do that
2. exa >>±gaze to screen--->±
3. chi >>•gaze to screen--->•
4. °annoys your siblings.°
5. C: uhm::? (1.0) ss ss ss (1.2) mmm,
6. E: or you not +as annoying as me.+ ((laughs))
7. exa +shakes head-----+
8. C: well: (.) I don't know.
9. E: ±↑no (.) +that's okay?+
10. exa ±gaze towards paperwork--->±
11. exa +shakes head-+
12. #okay# (.) ↑and have you ever seen anyone at

Clinician-child interactions in ADOS-2 assessments – a CA perspective

13. school being te:as:ed. \
14. exa ±gaze towards screen--->±
15. C: yeah:.
16. E: yeah?
17. → is there anything you can do about that?
18. C: → i:: uhm (.) went over and saw if they are okay?
19. E: yeah
20. C: mmm.
21. [(whispers to mum)]
22. E: [that's really nice] of you.
23. C: yeah cause then (.) someone (.) was wasn't (.)
24. the nicest °someone.°
25. E: → aww but you were there to look ↑after them.
26. C: yeah.
27. E: well done.
28. → ↑is there anything else you can do: if you see
29. someone being teased?
30. C: I tell a teacher?
31. E: #y:e:ah:# (.) that's a good idea.
32. ±very good idea to tell the teacher.
33. exa ±gaze towards paperwork--->±

After the child displays difficulty (lines 5-8) answering “*What about things you do that annoy others?*” (lines 1-4), the examiner omits the fourth question “*Have you ever been teased or bullied?*”, and instead asks the final question of the ‘Social Difficulties and Annoyance’ task

Clinician-child interactions in ADOS-2 assessments – a CA perspective

with an “*okay and*” preface (lines 12-14). The examiner however reformulates the final question in the past tense to ask the child if she has personally ‘*ever seen anyone at school being teased*’ (lines 12-14). Responding to the polar question format, the child provides a simple agreeable response “*yeah*” (line 15). The examiner repeats “*yeah*” with a rising intonation (line 16) to elicit confirmation from the child. Although the examiner has completed the ADOS-2 interview sequence protocol for the ‘Social Difficulties and Annoyance’ task, the examiner asks an open follow up question in the second-person format “*is there anything you can do about that*” (line 17). The construction of this question invites the child to provide a first-person answer to share what they would do in response to that specific emotive situation. Aligning with the previous question which asked for the child to reflect if she has observed teasing happen personally, the child in turn utilises a personal experience to provide an example “*I uhm went over and saw if they are okay*” (line 18). The examiner provides another rising intoned “*yeah*” to elicit confirmation from the child (line 19) and a positive evaluation of the child’s candidate answer (line 22). In the next turn the child provides an account for her behaviour, in that, as a child was not the “*niciest*”, she deduced that the recipient of the unkind behaviour might need reassuring (lines 23-24). The past tense utilised by the child is treated by the examiner as a lived experience rather than hypothetical (line 16) which is confirmed by the child (line 26). After the examiner positively evaluates the child’s response (line 27), she again takes the next turn to ask the child again in the present tense ‘*is there anything else you can do if you see someone being teased*’ (lines 28-29). The child in this instance aligns with the present tense and provides a candidate answer but this time as an action she could do in the event of witnessing another’s experience of ‘teasing’ rather than an action she did previously (line 30).

Therefore, changing “*Are there other kids/people you know who get teased or bullied?*” to “*have you ever seen anyone at school being teased*” specifically asks the child to comment on

Clinician-child interactions in ADOS-2 assessments – a CA perspective

their own personal experience and if they have ever observed another person being teased. Moreover, rather than close the task, the examiner's open follow up question "*is there anything you can do about that*" again requests the child to consider her own behaviours in the first-person in response to another person's emotional experience. Therefore, the change of the subject of the question from 'other people' to 'you' requires the child to reflect how they might respond to another's emotive experience of teasing. Conversely, in this child's diagnostic report, neither the examiner's modification of the protocol question, the additional follow up questions, nor the child's responses were documented. Instead, there were only references to the 'Loneliness' task "*She showed good insight into when other people might feel lonely*" (C02DHA-THA). Therefore, although the child's responses demonstrated how she has both previously responded and how she would hypothetically respond to another person's emotional distress, as these answers occurred to modified questions outside of the protocol, they are less likely to be presented in the diagnostic report.

5.6.4.3. Conclusion of Section

This section demonstrates how although ADOS-2 tasks require the child to comment on others (as well as their own) experience of emotions, the tasks do not however require the children to explicitly comment on how they respond to another's emotional experience. The examiners modification "what do you think is a good thing to do if someone feels lonely" (extract 19) directly requires the child to position themselves and their hypothetical potential response and explain this reaction to another's emotive experience of loneliness. Similarly, as seen in extract 20, the examiner modifies the final question of the 'Social Difficulties and Annoyance' task in the past and present tense to also situate the child in relation to other people's emotive experience of teasing. The child in turn was able to provide a hypothetical action in response to another's experience of teasing. Therefore, by modifying the question to contain 'you' in

Clinician-child interactions in ADOS-2 assessments – a CA perspective

turn makes the child accountable to provide an answer containing the ‘I’ in the first-person. Utilising the questions to intentionally position the child in relation to another person enabled the children to comment not only on other people’s emotions but also describe their actual or hypothetical reactions to other people’s emotional experiences. Therefore, flexibly utilising the standardised questions to position the child in relation to another’s emotional experience provides the child with better opportunities to demonstrate an understanding and empathetic response to others’ thoughts, feeling and experiences.

5.6.5. Empathy and Emotional Reactivity in the Immediate Interactional Context

As the above extracts demonstrate, the questions are designed to get the child to reflect and comment on both the child’s and other’s emotive experiences. Although the rating item ‘Comments on Others’ Emotions/Empathy’ (ADOS-2; Lord et al., 2012) contains ‘empathy’ as in the coding item title, it does not guide the examiners on any potential observations of empathy. The design of the ADOS-2 interview questions however do not typically elicit demonstrations of empathy. The direct and first-hand experience of empathy is typically accomplished between people when a person engages with the second person (‘you’) rather than as a detached process of a third-person reflection (Reddy 2003; 2008; Rietveld, 2008; Schilbach et al., 2013). Specifically, in the direct and first-hand experience of empathy, each person works to ensure that what they understand of how another is thinking, feeling, and experiencing is accomplished jointly as an interactional achievement (Henderson, 2019).

The ADOS-2 protocol also instructs the examiners to provide conversational openings coined ‘cliffhangers’, such as, *‘Oh, I remember where I’ve seen one of these before’* (ADOS-2: Lord et al., 2012) that invite a response from the child. These ‘cliffhangers’ are utilised to prompt the child to ask the examiner questions about their thoughts, feelings and experiences. These

Clinician-child interactions in ADOS-2 assessments – a CA perspective

instances are then utilised to rate the coding item ‘Asks for Information’ (ADOS-2: Lord et al., 2012). Typically, the examiners make brief statements utilising some form of telling which includes an emotional experience (explored fully in the next chapter). In the next extract, although not with the intention of eliciting an empathetic reaction, the examiner incorporates herself as the direct second-person sharing her emotive experience (line 12-19), whose thoughts, feelings, and experiences are made relevant in the immediate interaction. The child in turn, aligns with the examiner’s display of emotion and demonstrates an empathetic response with a smile, laughter, and by sharing a similar experience (Kuroshima & Iwata, 2016).

Extract 21 (01:20): C09DHA-THA (Empathy and emotional reactivity in the immediate interactional context)

1. E: like so (.4) is there anything in particular that
2. exa >>±gaze to screen--->±
3. chi >>•gaze away from screen--->•
4. people +do::: (.) that like+ (.) <%irritates %you
5. exa +RH gestures-----+
6. exa %head shake%
7. or annoys you.>:
8. C: >yeah: (.) i mean there's loads of em like noise.<
9. E: ±+the noise.+
10. exa ±gaze to paperwork--->±
11. exa + head nod +
12. → ±•+i've got %this one ↑noise% *that just (.)
13. exa ±gaze to screen--->±
14. chi •gaze to screen--->•

Clinician-child interactions in ADOS-2 assessments – a CA perspective

15. exa +RH gestures-----+
16. exa %narrows eyes---%
17. chi *smiles--->*
18. + kills: +me i just [can't handle] it.
19. exa +head to left+head neutral
20. C: → [((laughs))]
21. * (.7) • (4.9)
22. chi *stops smiling
23. chi •gaze away from screen--->•
24. C: no i don't have that i just uhm.+
25. exa +head nod+
26. (1.2) • (.7)
27. chi •gaze to screen--->>•
28. E: %just +generally% is it?+
29. exa % head shake %
30. exa +RH gestures-----+
31. C: yea:h:.
32. E: like +lou:d things:+ (.4)
33. exa +head nod-----+
34. *are quite horrible for you.*
35. chi *head nod-----*
36. (.2) ± (2.2)
37. exa ±gaze to paperwork--->±
38. ye:a:h.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

After the examiner asks the “*Have you ever had problems getting along with people at school?*” question and the child provides limited information, the examiner digresses from protocol to prompt for further information (not shown). The examiner moves to the next question in the ADOS-2 protocol, “*Is there anything in particular that people do that like irritates you or annoys you*” (lines 1-7). The child shares that she is annoyed by “*loads*” of things and specifically emphasises “*noise*” (line 8). The examiner receipts the referent with a head nod and by partially repeating “*the noise*” (lines 9-10). Rather than continue with the current task project, the examiner instead changes the subject of focus from the child to the examiner. The examiner does this by presenting the child with a ‘cliffhanger’ “*I’ve got this one noise that just kills I just can’t handle it*” (lines 12-19). In this instance, the examiner is attempting to prompt the child to ask the examiner about her thoughts, feelings, and experiences’ (topic of focus in the next chapter). The disclosure of a problematic experience creates an empathetic moment (Heritage, 2011) where reciprocation of the displayed stance becomes relevant (Stivers, 2008). The examiner marks her emotive ‘cliffhanger’ with an increase in gesticulation (line 15), narrowed eyes (line 16) and sharp increase in pitch to emphasise ‘noise’ (line 12). The child in turn orients to the examiner as she commences her turn initially with gaze (line 14) and as the talk unfolds, aligns with the examiners emotive experience with a smile (lines 17) and laughter (line 20) which in turn, displays empathy (Muntigl et al., 2014). This empathetic response demonstrates how the child aligns to the unfolding narrative and passes the floor back to the examiner. After a long silence in which the examiner does not elaborate (line 21), the child takes the floor and continues to align and convey empathy with the examiner’s experience by sharing how her similar experience differs (line 24) slightly from the examiners (Kuroshima & Iwata, 2016). The examiner in turn empathetically (lines 25-35) responds to the child’s clarification with a continuous head nod and follow-up questions (Kupetz, 2014), head shake, and explicit verbal acknowledgments and

Clinician-child interactions in ADOS-2 assessments – a CA perspective

expressions of understanding (Ford et al., 2019; Hepburn & Potter, 2007; Kupetz, 2014; Weatherall, 2021), and by reformulating and naming the child's difficult experience (Muntigl et al., 2014).

The direct and first-hand experience of empathy is typically accomplished between people when a person, in this instance the child engages with the second person, the examiner (Reddy 2003; 2008; Rietveld, 2008; Schilbach et al., 2013). As observed in the above extract, the child demonstrates empathy or emotional reactivity in response to the direct emotion conveyed by the examiner. The examiner and the child both provide empathetic responses in relation to the other's shared emotional experiences as both work to ensure that they understand how the other is thinking and feeling as an interactional achievement (Henderson, 2019).

The child's responses to some of the 'Social Difficulties and Annoyance' task questions are documented in this child's diagnostic report "*she could also reflect on other people experiencing bullying and loneliness and that these experiences would differ dependent on the individual... She could not reflect on how she might annoy other people... she showed some empathy and sense of connection, but this was reduced for her chronological age and ability*" (C09 Diagnostic report). These sentences in turn correspond to description of a rating within the 'Comments on Others Emotions/Empathy' (ADOS-2; Lord et al., 2012). The child's direct emotional reactivity and display of empathy in response to the examiner were documented in the child's diagnostic report but not to describe capabilities in empathetic emotional reactivity. Instead, this interaction is documented in the child's diagnostic report to conclude the child's response to the examiner's 'cliffhanger' "*she responded appropriately to examiner's comments about her thoughts, feelings, or experiences, but did not spontaneously inquire about them. The examiner generated opportunities for her to enquire about her thoughts, feelings, or*

Clinician-child interactions in ADOS-2 assessments – a CA perspective

experiences by proffering several cliffhangers (where she shared information in a manner which invited further questioning) throughout the assessment. For example, the examiner shared that she ‘has this one noise she cannot handle’ and that she ‘knows what her colleagues would say about how she annoys them. She however did not enquire about either utterance’ (C09 Diagnostic report). This description of the interaction corresponds to the criteria of a specific rating within the coding item ‘Asks for Information’ (ADOS-2; Lord et al., 2012). Therefore, as the child’s direct emotional reactivity and empathetic responses occurred within a task that had a different project (i.e., getting the child to ask for information), these factors are not documented as depictions of empathy.

5.6.5.1. Conclusion of section

Although the corresponding coding item ‘Comments on Others Emotions/Empathy’ (ADOS-2; Lord et al., 2012) contains ‘empathy’ as a scoring option, as all the above extracts demonstrate, none of the interactive tasks attempt to elicit demonstrations of empathy. The fifth section demonstrates how the examiner in extract 21 conveyed an emotional reaction as she shared an emotion eliciting situation, which in turn created a communicative opportunity for the child to provide an empathetic response. The child in response demonstrates an empathetic reaction which is visible in her response to the examiner’s conveyed emotion. Therefore, although not within the instruction of the ADOS-2, this interaction (extract 21) demonstrates how empathic reactivity occurs as a direct and immediate response to another person’s experience of emotion. Within the confines of the standardised assessment and the training of the ADOS-2 however, when administering, observing, and concluding observations, the examiners are unlikely to consider how the child and the examiner co-construct emotional reactivity and empathy together.

5.6.6. Summary

I have shown throughout the data how the children provide a variety of answers to the questions contained in the ‘Loneliness’ and ‘Social Difficulties and Annoyance’ tasks. The examiners for example reformulate questions to ask the child to respond with both a first person and a third person perspective which allowed the child to comment on how they would respond to another person. I have also shown how the children demonstrate empathy with follow-up questions (Kupetz, 2014), response cries (Heritage, 2011), prosody (Weiste & Peräkylä, 2014), and a soft and quite volume (Kupetz, 2019), and non-verbal responses such as, smiling (Muntigl et al., 2014), head nods (Kupetz, 2014; Muntigl et al., 2014), brow furrows (Kupetz, 2014) and tactile touching (Cekaite, 2020; Kupetz, 2019; Weatherall, 2021).

As seen in this section, although the children demonstrated empathy or an understanding of another’s third-person perspective, as this interaction occurred outside of the typical ADOS-2 protocol, this capability was not documented in the diagnostic reports. Moreover, the coding item ‘Comments on Others’ Emotion/Empathy’ contains three different socio-emotional capabilities which involve recognising and commenting on: 1) the facial expressions conveyed by cartoon characters, 2) another individual’s experience of emotion (cognitive empathy), and 3) another’s direct emotional experience (emotional reactivity). Examinees can receive the lowest score by spontaneously and correctly labelling the emotions conveyed within the tasks containing cartoons (ADOS-2; Lord et al., 2012). Therefore, due to the three different socio-emotional capabilities contained in this coding item, I have shown how in some diagnostic reports, none of the children’s answers to the ‘Loneliness’ and ‘Social Difficulties and Annoyance’ tasks are documented. This in turn results in the observations documented in diagnostic reports not holistically capturing the children’s comments, representations, and reaction to others’ emotional experiences and social-emotional capabilities.

6. Comments on Examiner's Thoughts, Feelings, and Experiences

ADOS-2 task: Conversation and Reporting

Coding item: 'Ask for Information'

Research question: What kinds of opportunities do the interactions within the 'cliff hangers' provide for the examinees to demonstrate social motivation and 'ask the examiner for information'?

6.1. 'Cliffhangers' task and Coding Item 'Asks for Information' (ADOS-2: Lord et al, 2012)

In the 'Conversation and Reporting' subsection of the Module 4 manual (adolescent/adult with fluent speech), the ADOS-2 protocol instructs the examiners to emphasise the reciprocal nature of the task of conversation by providing conversational leads in which the examiners should make brief statements about their own interests, activities, and feelings and observe whether the examinee can build on or follow up on their comments. In the Module 3 manual (child/adolescent with fluent speech), the ADOS-2 protocol instructs the examiners to stage specific events by offering conversational openings that invites a response to observe if the child will follow the lead, such as, "*Oh, I remember where I've seen one of these before*" (ADOS-2: Lord et al., 2012). Therefore, throughout the ADOS-2, the examiner constructs unscripted comments, coined 'cliffhangers', which aim to prompt the child to 'Ask questions

Clinician-child interactions in ADOS-2 assessments – a CA perspective

about the examiner’s thoughts, feelings, or experiences on several occasions’ (ADOS-2; Lord et al., 2012), and they can occur at any point within the assessment. ‘Cliffhangers’ are thus conversational openings that are structured to introduce a referent, such as, a reference to people, places, or things in a turn or turns.

‘Cliffhangers’ are conversational openings that do not stand alone ‘in their own right’ but function ‘on behalf of’ and specifically preliminary to, other talk that follows, contingent on the response of the recipient (Schegloff, 1980). The ‘cliffhanger’ therefore aims to communicate that the recipient should orient to the information as incomplete and understand that the full information which is not intended to occur in the same unit of talk, will occur in a subsequent turn (i.e., the ‘cliffhanger’ projects what might come next and thus is in the service of leading up to the fulfilled projected action). Therefore, the ‘cliffhanger’ as a preliminary, aims to secure recognizability to help speakers maintain intersubjectivity and understand what is happening second-by-second to know how to navigate the interaction (Schegloff, 1980). The ‘cliffhanger’ aims to limit and constrain the recipient’s response in the next turn (Schegloff, 1980), to a specific type of ‘go-ahead’ response (Schegloff, 2007) in which the child explicitly ‘Asks questions about the examiners (proffered) thoughts, feelings, or experiences on several occasions’ (ADOS-2; Lord et al., 2012). As demonstrated in the data, to satisfy the institutional agenda, a ‘go-ahead’ turn (Schegloff, 2007) can be formulated by recycling a word contained within the examiner’s ‘cliffhanger’ to construct a ‘Wh’ go-ahead’ question (Terasaki, 2004).

6.1.1. Table 7

Cliffhanger (ADOS-2: Lord et al., 2012)

Module	Example Cliffhanger
Module 3	Oh, I remember where I’ve seen one of these before

6.1.2. Coding

The focus for the examiners is to observe the responses of the children and how they spontaneously express an interest in the examiner's ideas, experiences, or reactions to code item 'Asks for Information'.

6.1.3. Table 8

Ratings for Observed Behaviours for Coding Item 'Asks for Information' (ADOS-2: Lord et al., 2012)

0	Asks the examiner about his or her thoughts, feelings, or experiences on several occasions
1	Occasionally (at least one clear example) asks the examiner about his or her thoughts, feelings, or experiences
2	Responds appropriately to examiner's comments about his or her thoughts, feelings, or experiences, but does not spontaneously inquire about them
3	Rarely or never expresses interest in the examiner's thoughts, feelings, or experiences

6.2. Cognitive Theories and Social Communication in Autism

Social communication difficulties in verbal and nonverbal reciprocal social interaction have been a defining feature of autism (Volkmar et al., 2004) since Kanner (1943) initially described children as 'lacking interest in other people and as having an inability to relate'. Social communication difficulties are argued to distinguish autistics from other neurodivergent populations and non-autistics (Sigman et al., 2004), be universal across ages and ability level, despite heterogeneity of language abilities (Tager-Flusberg et al., 2001), and to implicate social

Clinician-child interactions in ADOS-2 assessments – a CA perspective

relations and daily living (Howlin, 1998). Cognitive theories of autism have been concerned with providing an underlying difficulty that can explain any breakdown in communication integral to autism (Happé, 2001). The Theory of Mind ([ToM] Baron-Cohen et al., 1985) hypothesis argues that breakdowns in communication and social interaction difficulties are due to an autistic person's inability to infer and form cognitive representations of mental states such as, beliefs, desires, intentions, imagination, and emotions. Other cognitive theories focus less on the ability to 'mindread' the social actions of another and instead hypothesise that breakdowns in communication occur due to unique differences in processing communicational input holistically and simultaneously. These theories therefore suggest that an autistic person would have an inability to understand a speaker's intention due to the need to simultaneously switch between individual turns at talk, whilst interpreting each turn within the global context.

For example, the 'Weak Central Coherence' [WCC] theory claims that for autistic people, the social world is fragmented and disjointed due to a strong orientation towards lower-level cohesive pieces rather than as a meaningful central global coherence (Frith & Happé, 1994). Kanner also presented a central feature of autism to be "the inability to experience wholes without full attention to the constituent parts" (p. 38). According to the central coherence theory, autistic people should demonstrate an inability to maintain overall coherence of the social context to interpret the linguistic material contained in an individual turn at talk (Happé, 1997), which in turn, results in 'an incoherent world of fragmented experience' (Frith 1989). For example, in a laboratory based homograph communication task which presents people with sentences in a story format that contain words that have two possible meanings and pronunciations, autistic people made less use of the preceding sentence context to assist in situationally correct pronunciation (Happé, 1997). In everyday interaction however, a person must interpret each turn at talk, and the actions produced with it (such as, a question or a

Clinician-child interactions in ADOS-2 assessments – a CA perspective

request) in reference to the preceding utterances, as they will influence what turns at talk will follow (Sidnell & Stivers, 2012). Therefore, if the WCC theory can explain social communication difficulties in autism, autistic people will be unlikely to understand how to interpret the contextual information contained in the global sequence of talk within the ADOS-2 tasks in order to understand and respond appropriately to the localised action of the ‘cliffhanger’.

Some researchers have reported links between the ‘Executive Dysfunction’ ([ED] Pennington & Ozonoff, 1996) theory and social competence (Pellicano, 2007; Dawson et al., 1998) such as, difficulties in switching between local and global information (Hughes & Russell, 1993) and monitoring other’s actions and responding to these actions (Moses, 2001; Russell, 1997). The ED theory claims difficulties occur due to monitoring the competing elements required which guide attention, the initiation and monitoring of action, impulse control, inhibition, mental flexibility, and set shifting (Hill, 2004; Russo et al., 2007). To successfully engage in any interaction however involves an ability to simultaneously monitor other’s actions and switch between both the action of the local turns at talk and the global social context. Social interaction also involves the ability to sequentially respond with relevant turns at talk whilst inhibiting other responses. Social coordination, maintenance of continuity, awareness and following of certain social conventions, actions and propositions across extended social interaction therefore draws on executive function (Ochs & Solomon, 2010). Therefore, if the ED theory can explain social communication weaknesses in autism, difficulties in monitoring the examiner’s action, managing competing information, and interpreting meaning from the simultaneously occurring contextual information, will be observable in interaction. Moreover, difficulties will also be observable in turn taking, overlap in talk, inhibiting irrelevant

Clinician-child interactions in ADOS-2 assessments – a CA perspective

responses, formulating relevant turn constructions, and anticipating what talk will follow, and understanding and responding to the ‘cliffhanger’.

6.3. Interactional Social Coordination and Autism

The ability to engage in local social coordination of conversational sequences of actions constitute a basic building block of human sociality (Ochs & Solomon, 2010). A person needs to be able to manage simultaneous multifaceted social dimensions, such as, communicative order and cultural classifications and how they are implemented in everyday social practice (Ochs & Solomon, 2004). Interactional research has demonstrated how autistic people effectively engage in social coordination and manage local interactional conversational actions (e.g., question/answer request/response, and comment/assessment) and contingencies with others when participating in extended sequences (Kremer-Sadlik 2004; Ochs & Solomon, 2004). Autistic children also utilise other communicative resources to sustain local sequences of actions (Wootton, 1999). For example, children may use non-verbal actions to pass the floor back to a speaker (Ochs & Solomon, 2010), use delayed echolalia to elicit a specific response from their co-participant (Tarplee & Barrow, 1999), or utilise immediate echolalia in response to questions which are difficult to understand (Local & Wootton, 1995). Sometimes autistic children may drift from the topic of the previous utterance or set of utterances in which their conversational contributions fall into a zone of ‘proximal relevance’ which sits between somewhat irrelevant and completely relevant (Ochs & Solomon, 2010). As multiple localised turns at talk that relate, and projects are inserted across an extended sequence of discourse, contextualisation and Wittgenstein’s language game becomes more demanding (Ochs & Solomon, 2010). As autistic people can coordinate local social actions but may sometimes fall within the zone of ‘proximal relevance’, it has been proposed that perspective taking capabilities must be separated into ‘sociocultural’ and ‘interpersonal’ perspective taking (Ochs

Clinician-child interactions in ADOS-2 assessments – a CA perspective

et al., 2004). ‘Interpersonal’ perspective taking, like ToM, is the situationally bound past and current awareness of another individual person’s experiences, feelings, beliefs, and intentions (Ochs et al., 2004; Ochs & Solomon, 2010). Whereas ‘sociocultural perspective taking’ involves a knowledge of preferences and expectations regarding conversational turn taking and engagement in conversational sequences, as understood by members of a cultural community.

In institutional interactions such as autism assessment, the examiners often fall into the zone of ‘proximal relevance’ in which their conversational contributions situate between irrelevant and completely relevant (Ochs & Solomon, 2010). Under these conditions, autism examiners have their own institutionalised projects in which they limit the fluidity of the conversation to meet the institutional agenda. In such interactions the conversation is often simplified in terms of granularity and the level of expertise or detail discussed (Schegloff, 2000) and are restricted to specific topics (Fasulo & Fiore, 2007). Artificial decontextualised interaction tends to lose everyday idiosyncratic content, such as ellipsis, repetition, irregular syntax, turn fragmentation and partial overlap in favour of formal correctness of expression (Fasulo & Fiore, 2007). The reduced expressiveness in artificial institutional interaction changes the localised turn constructions which in turn, has implications for the recognisability of individual global projects. Due to the limited range of social actions, autistic children’s opportunities to display sociality and experiences of intersubjectivity in psychological testing sessions are reduced (Solomon, 2015). The courses of actions launched by the child are subtly glossed over and dismissed or ignored, which in turn, results in the examiners not recognising the full communicative capabilities of the children’s talk (Fasulo & Fiore, 2007) and other communicative capabilities displayed within interaction (Antaki et al., 2004).

6.4. Preliminaries (cliffhangers) in Interaction

For recipients of talk to understand preferences and expectations in everyday interactions, speakers work to supply context in their interaction to maintain intersubjectivity. For example, people lay the groundwork and provide hints in preliminaries for how their subsequent talk can be received by producing a turn or turns which contains an evaluative referent (Berger, 2017; Dingemans et al., 2017; Jefferson, 1978; Sacks, 1974). Preliminaries are structured to introduce a referent, such as, a reference to people, places, or things to secure recognizability to help speakers maintain intersubjectivity and understand what is happening second-by-second to know how to navigate the interaction (Schegloff, 1980). For example, a speaker may ask “I would like to ask you a favour” which communicates, in part, that the speaker in the next turn will ‘ask a favour’ of the recipient (Schegloff, 1980). Thus, the preliminary first utterance does not stand alone ‘in its own right’ but functions ‘on behalf of’ and specifically preliminary to, the utterance that subsequently follows. Therefore, the preliminary turn provides some information for the recipient to anticipate next actions and guide their response. Recipients of preliminaries understand that an extended unit of talk has commenced and normal turn taking rules are suspended and to refrain from substantive contributions (Jefferson, 1985; Schegloff, 1982; Stivers, 2008) such that the speaker can bring their telling to completion to deliver their projected action (Mandelbaum, 2012; Jefferson, 1978; Sacks, 1974; Schegloff, 1982). Typically, by use of continuers, such as, ‘uh huh’, ‘mm hm’, ‘yeah’ interaction (Schegloff, 1980) and ‘head nods’ (Schegloff, 1982). The recipient also has an opportunity to raise any problems of understanding or recognition that the references in the preliminary pose (Schegloff, 1980). As soon as a preliminary becomes recognisable, it can be encouraged and jointly launched, blocked by the recipient, acknowledged but diverted, or sometimes skilfully diverted and covert (Sidnell, & Stivers, 2012). Abandoned preliminaries are typically

Clinician-child interactions in ADOS-2 assessments – a CA perspective

noticeable to interactants, this includes turn construction, long silences, and incomplete and abandoned turns.

6.5. The Aims

In institutional interactions, children expect to be the recipients of questions (Lord et al., 2012). Children will also orient to the power relations and therefore will likely adhere to the institutional role of answering questions as opposed to an everyday equally balanced back and forth conversation. Children are also likely to minimise certain reactions when in the presence of authority figures (Underwood et al., 1992). Moreover, in everyday communication, recipients of ‘preliminaries can minimally utilise many communicative resources as ‘go-ahead’ prompts to pass the floor back to a speaker without the need for an explicit request for information. Therefore, through an interactional approach, I aim to explore what kinds of opportunities the interactions within the ‘cliffhangers’ provide for the examinees to demonstrate social motivation and ‘ask the examiner for information’. The ‘cliffhanger’ interactions and the corresponding coding item ‘Asks for Information’ (ADOS-2; Lord et al., 2012) will be compared with the diagnostic reports to explore how the ADOS-2 coding items capture the child’s capabilities in social emotional reciprocity.

6.6. Data Analysis

Throughout the data there were 50 ‘cliffhangers’ delivered throughout the assessments. In roughly half of the data, the examiners embedded the ‘preliminary cliffhangers’ as insert sequences following structured task questions (e.g., within the ‘Emotions’ or the ‘Social Difficulties and Annoyance’ task). For example, in the ‘Emotions’ task, the ADOS-2 instructs the examiners to ask ‘What about things that you’re afraid of’ (ADOS-2; Lord et al., 2012),

Clinician-child interactions in ADOS-2 assessments – a CA perspective

this in turn generates a space for the examiners to insert a planned ‘cliffhanger’ (e.g., ‘I am afraid of something too’) after the child’s answer. The remaining ‘cliffhangers’ are in response to a topic raised by the child’s talk that cannot be semi-planned.

This analysis will present examples which demonstrate how 1) the examiners embed a ‘cliffhanger’, 2) the children respond to a ‘cliffhanger’, 3) the children orient to the ‘cliffhanger’ as a communicative violation, 4) the children misunderstand the ‘cliffhanger’, 5) the examiner’s repeat the ‘cliffhanger’.

6.6.1. Embedding a ‘Cliffhanger’

This initial section will demonstrate the strategies utilised by the examiners to ‘embed’ a ‘cliffhanger’ in a way that is communicatively recognisable as a preliminary conversational opening. Throughout the data, to elicit some form of ‘go-ahead’ request for information from the child that asks the examiner for information about their thoughts, feelings and experiences, the examiners utilise two strategies to embed an ‘cliffhanger’. The examiners either embed a ‘cliffhanger’ as a semi-planned insert to an ADOS-2 task question or embed an unplanned ‘cliffhanger’ in response to a topic raised by the child.

6.6.1.1. Embedding a ‘Cliffhanger’ within an ADOS-2 task

The first extract demonstrates how the examiners utilise an ADOS-2 task to insert a ‘cliffhanger’. In this instance, after the child describes her experience of the emotion ‘fear’ in response to the ‘Emotions’ task interview questions, the examiner recycles the topic of fear “*There's one thing that I'm really scared of*” (line 12-16) to prompt the child to ask the examiner information about her experience. This initial example also demonstrates the explicit

Clinician-child interactions in ADOS-2 assessments – a CA perspective

kind of ‘go-ahead’ request for information the ‘cliffhanger’ aims to elicit from the child (i.e., ‘what’ thing makes the examiner feel a certain way).

Extract 22 (16:30): C02DHA-THA (the embedded ‘preliminary cliffhanger’ – ADOS-2 task)

1. E: do you think that's how you feel
2. exa >>±gaze to screen--->±
3. chi >>•gaze away from screen--->•
4. ±when you see a spi↑der,
5. exa ±gaze away from screen--->±
6. C: yeah.
7. E: ±yeah,
8. exa ±gaze to screen--->±
9. (.5) + (.4)
10. exa ±smiles--->±
11. C: mm hmm?
12. E: → +there's ±one ±thing that I'm
13. exa +stops smiling
14. exa ±gaze up±gaze down
15. ±really scared of.
16. exa ±gaze away from screen--->±
17. (1.) ± (.3)
18. exa ±gaze to screen--->±
19. C: → wha•t.
20. chi •gaze to screen--->•

Clinician-child interactions in ADOS-2 assessments – a CA perspective

21. E: +the dark. (.) +
22. exa +leans towards screen+smiles
23. (.9)
24. C: oh •I'm terrified of the dark but I'm getting used
25. chi •gaze away from screen--->•
26. to having the d•ark?
27. chi •gaze to screen--->•

After the child answers the two-part ('things' and 'feels') fears question (see chapter 4), the examiner provides a template model answer (not shown), before asking the child if she has also experienced the examiners proffered 'physical sensation' (lines 1-5). The child in turn agrees with the examiner's polar question (line 6). Rather than progress onto the next sequential protocol question, the examiner echoes a rising intoned "yeah", returns her eye gaze to the screen, and smiles to select the child to take the floor (lines 7-10), therefore not progressing from the 'fear' discussion. After the child again agrees (line 11) with the examiners questioning "yeah" (lines 7-10), again rather than progress onto the next sequential protocol question, the examiner embeds the 'cliffhanger' "*There's one thing that I'm really scared of*" (lines 12-16) to prompt the child to ask the examiner information about her experience of 'fear'. The examiner marks the relevance of the 'cliffhanger' by exaggerating her non-verbal behaviours by abruptly ending her smile (line 13), a gaze shift up to the ceiling to mark "one" (line 14), before shifting her gaze from the screen where it remains after she completes her turn at talk (line 16). Typically, however, speakers tend to look toward the recipient when approaching the end of their turn at talk to signal that they are ready to pass the floor over to the other participant to take their turn to speak (Duncan & Niederehe, 1974; Duncan & Fiske, 2015). After a silence of over a second which indicates that the child anticipates that the examiner will continue

Clinician-child interactions in ADOS-2 assessments – a CA perspective

talking (line 17), the examiner returns her gaze to the screen to non-verbally select the child to take the floor (line 18). The child takes the next turn and requests for more information from the examiner by emphasising the single unit form “*What*” (line 19). The examiner in turn multimodally provides the ‘thing’ that causes her own experience of ‘fear’ “*The dark*” (line 21).

Therefore, as seen in this example, the ‘cliffhanger’ can be interactionally pre-planned by embedding it as an insert sequence after a structured ADOS-2 task question. In this instance, the child passes the floor back to the examiner with an explicit ‘go-ahead’ “*What*” response. Therefore, in line with the coding criteria for ‘Asks for Information’ (ADOS-2; Lord et al., 2012), the child’s diagnostic report contains a subsection identifying the child’s explicit request for information “*She also picked up on the examiner’s cliffhangers and asked some follow up questions*” (C02 diagnostic report).

6.6.1.2. Embedding a ‘Cliffhanger’ Within Unstructured Conversation

The next example demonstrates how examiners find an opportune moment to embed a ‘cliffhanger’ in response to a topic raised by the child. In the following example, the examiner’s ‘cliffhanger’ is delivered as a second story in response to the child’s story. A ‘second’ story is fitted to the prior story by recycling a specific point raised (Sacks, 1992), in which normal turn taking rules are abandoned. In contrast to the previous example, the examiner explicitly appears to disengage (minimal turn design, gaze to paperwork, etc.) from the previous conversation prior to his second story suggesting an orientation to the delivery of his ‘cliffhanger’. Moreover, the examiner also demonstrates difficulties in talk during the delivery of the ‘cliffhanger’ (lines 22-37). The noticeable changes in the examiner’s turn design can have implications for how his interaction is observed, noticed, and understood by the child

Clinician-child interactions in ADOS-2 assessments – a CA perspective

(Schegloff, 2007). The silence upon the examiner's completion of his 'cliffhanger' however marks how the child, as a recipient of a story, waits for the examiner to continue his storytelling.

This second example also demonstrates the kind of 'go-ahead' request for information (e.g., 'What' happened to your ice cream) the 'cliffhanger' aims to elicit from the child.

Extract 23 (16:30): C01DHA-THA (the embedded 'cliffhanger' – unstructured conversation)

1. E: wo::w fantastic (.) and >what what< do you like to
2. exa >>±gaze to screen--->±
3. chi >>•gaze to screen--->•
4. have at the um: (1.) you know with- from the ice
5. cream• van.
6. chi •gaze away from screen--->•
7. C: .hh um:: (.4) tt (.8) um I try and get (.) ll (.)
8. new stuff every sin- (.)
9. ±like every single day (.) and um: (.4) tt (.4)
10. exa ±gaze to paperwork--->±
11. so I bu- I so I basically just have (1.) ll (.5)
12. anything from there because he um ss he does quite
13. a lot of ice cream there.±•
14. exa ±gaze to screen--->±
15. chi •gaze to screen--->•
16. (1.3)
17. E: +yep. +
18. exa +head nod+
19. C: ±so yea:h.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

20. exa ±gaze to paperwork--->±
21. (1.1)
22. E: → a:n:d: um:. (.) ±tt (.7) I remember
23. exa ±gaze away from screen--->±
24. +once: ha:ving an ±ice cream by by
25. exa +RH to chin--->±
26. ±the beach: (.6) fer:f and then ((laughs))
27. exa ±gaze to screen--±gaze away from screen--->±
28. got a bit of surprti:s:e when I looked I
29. exa ±gaze to screen--->±
30. ±+looked away (.) % and then % it got
31. exa ±gaze away from screen--->±
32. exa +RH gestures to right--->±
33. exa %eyebrows up%eyebrows down
34. +a a little surprise (.) um: (.) about what
35. exa +RH to chin--->±
36. happened to my ±ice cream.
37. exa ±gaze to screen--->±
38. (1.8)
39. C: → what happened.
40. (.4) ± (.)
41. exa ±gaze away from screen--->±
42. E: .hh± um: I'lll+ (.4) when I
43. exa ±gaze away from screen--->±
44. *lines omitted - telling continues*

In this example, after the ‘Description of a Picture’ task, the examiner (as guided by the ADOS-2 manual) asks the child if he has ever been to a place like the holiday island resort represented in the picture. This is asked to observe the child’s ability to describe a non-routine event (not shown). After the child shares how his family frequently holiday in the same destination and how he likes having daily ice cream (not shown). The examiner evaluates the child’s experience “*wow fantastic*” (lines 1-3) before taking the next turn to ask the child ‘what ice cream the child likes to have’ (lines 1-6), therefore remaining on the topic of ice cream. During the child’s extended answer (lines 7-15), the examiner’s shifts his gaze from the screen to his paperwork suggesting a shift in attention where it remains until the child has completed his answer (line 6). Although, the child gave an extended answer to the examiners question, rather than ask further questions or close the sequence after evaluating the child’s response, after a silence of over one second (line 16) which typically indicates difficulty, the examiner utters “*yep*” with a corresponding head nod (lines 17-18). This turn design is typically uttered during extended turns to pass the floor back to the speaker. Orienting to the examiner’s minimal multimodal response as a continuer, the child utters a final closing “*so yeah*” (line 19) communicating that he has finalised his utterance and intends to relinquish his turn to prompt the examiner to assume speakership (Local & Walker, 2005; Raymond, 2004). The examiner shifts his gaze back to his paperwork suggesting a full closure and shift in attention (line 6).

The examiner commences his ‘cliffhanger’ with an “*and*” preface (line 22) which is typical of an agenda-based turn initiating another question which invokes and sustains an orientation to a course of action (Heritage & Sorjonen, 1994). Instead, the examiner however commences a storytelling, in which ‘and’ preface do not typically occur in everyday interaction. The examiner explicitly marks the start of a storytelling turn “*I remember once*” (Sacks, 1992)

Clinician-child interactions in ADOS-2 assessments – a CA perspective

communicating a suspension of normal turn-taking rules (Mandelbaum, 2012; Jefferson, 1978; Sacks, 1974; Schegloff, 1982). The examiner demonstrates difficulty in formulating and embedding his ‘cliffhanger’ (lines 22-37) to fit as a local linked turn at talk within the global sequence with instances of dysfluencies such as, ‘uhm’, pauses, sound stretches, and repetition (Schegloff et al., 1977; Schegloff, 1979). The examiner could have paused his ‘cliffhanger’ on the first turn transitional place after his micro pause (line 30) to receive a ‘go-ahead’ response from the child as he returned his gaze to the screen (line 31). Instead, the examiner adds a form of exaggerated incremental information “*when I looked away*” to emphasise the element of surprise alongside repetition of the word “*surprise*” (line 30-37). During the storytelling, the examiner exaggerates his use of gestures and eyebrow raises to orient the child to the significance of the ‘cliffhanger’ to forward the progressivity of the telling sequence (Dressel & Satti, 2021) and the institutional goal. The inclusion of “*what happened*” (lines 34-37) communicates that there is a missing piece to the examiner’s narrative. As the examiner nears completion of his turn, he returns his gaze to the screen to select the child to talk (line 37). The child, as a recipient of a storytelling sequence orients to the examiners multi-unit turn (Sacks, 1974) by fixing his gaze (Rossano, 2012) and bodily orientation to the screen (lines 1-44). After nearly a two second silence (line 38) in which speakers would typically work to resolve the problem as indicated by the silence (Jefferson, 1989), the child orients to the examiner’s ‘cliffhanger’ by repeating “*what happened*” (line 39).

Therefore, as seen in this example, the examiner utilised the child’s referent ‘ice cream’ to generate his second story to embed his ‘cliffhanger’. There were however many changes in the examiner’s communication that would not be anticipated by the child as a recipient of a storytelling. The child’s behaviours however were consistent with everyday responses for what reactions would be expected in response to a storytelling. Moreover, as the child explicitly

Clinician-child interactions in ADOS-2 assessments – a CA perspective

uttered a ‘Wh’ question construction, and therefore asked the examiner to continue his story of his personal experience when at the beach, this specific ‘cliffhanger’ interaction was noted in the child’s diagnostic report “*Occasionally, he spontaneously expressed an interest in the examiner and asked about his thoughts, feelings, or experiences. For example, when the examiner told a story about eating ice cream, he asked ‘what happened’* (C01 diagnostic report).

6.6.1.3. Conclusion of Section

The first section demonstrates that the examiners can either embed a ‘cliffhanger’ as a semi-planned insert to an ADOS-2 task question or in response to a topic raised by the child. Regardless of the approach, both ‘cliffhangers’ in the above examples are followed by a notable silence as the children anticipate that the examiner will continue to talk. In this section, after the examiners do not take the floor to bring their telling to completion, the children work to address the silence of over a second (Jefferson, 1989) by explicitly prompting the examiner to take the floor with a ‘What’ formulation. This in turn satisfies the institutional agenda as the examiners conclude the ‘cliffhangers’.

6.6.2. Responding to a ‘Cliffhanger’

In the first section, the children utilise open class “*What*” requests for information in response to the examiner’s ‘cliffhanger’. The next section demonstrates how children use other types of responses which vary from showing listenership and waiting to addressing a problem in the examiner’s prior turn at talk. As observed in the silences following the ‘cliffhangers’ in the previous section, in everyday interaction, once a speaker has commenced their talk with a ‘preliminary’, there is a suspension of normal turn-taking rules to allow the speaker the right to bring their talk to completion (Mandelbaum, 2012; Jefferson, 1978; Sacks, 1974; Schegloff,

Clinician-child interactions in ADOS-2 assessments – a CA perspective

1982). In general, it is preferred that recipients of a preliminary support the speaker by responding minimally (Labov & Waletzky, 1967; Sacks, 1974; Jefferson, 1978; Stivers, 2008), in which they generally refrain from substantive contributions (Jefferson, 1985; Schegloff, 1982; Stivers, 2008). For example, in everyday conversation recipients exhibit recognition of a preliminary telling as incomplete, and support and prompt the continuation of the speakers extended turns minimally with non-verbal (e.g., head nods) and verbal continuers such as, "mm hm" or "yeah" (Schegloff, 1980; 1982). Other devices can also be employed to align with the speakers talk whilst inviting them to conclude their preliminary. The following section will demonstrate how children in the corpus respond to preliminaries or ‘cliffhangers’ utilising the same minimal communicative resources found in everyday interactions.

6.6.2.1. Go-ahead’ response: ‘laugh’

In the next example, as the examiner smiles at the tail end of her task embedded ‘cliffhanger’ (lines 43-49) indicating the information that will follow can be treated as humorous (Peräkylä & Ruusuvuori, 2012; Stivers & Sidnell, 2012), the child in turn minimally aligns with the examiners telling by immediately responding to the ‘cliffhanger’ with laughter and a smile. As the child does not provide an explicit ‘go-ahead’ response (e.g., ‘what’/‘what do they say’), due to the task objective, the examiner waits for the child to ask a ‘what’ question ‘for eight seconds before abandoning the ‘cliffhanger’ and returning to the next sequential interview question of the ‘Social Difficulties and Annoyance’ task.

Extract 24: (02:10): C09DHA-THA (“Go-ahead’ response ‘laugh’)

1. E: ±tt +>okay- and do you think< that you ever
2. chi >>•gaze to screen--->•
3. exa ±gaze away from screen--->±

Clinician-child interactions in ADOS-2 assessments – a CA perspective

4. do things which annoy other people or irritate
5. exa gaze to screen--->
6. other people?
7. C: •yeah probably (.) +but (1.1) •+everyone
8. chi •gaze away from screen--->•
9. exa +smiles-----+
10. chi •gaze to screen--->•
11. *fdoes.f
12. chi *smiles--->*
13. E: yeah you're ri:ght I think we all do.
14. *what kind of things do you think (.) other people
15. chi *stops smiling
16. might find hard about you.
17. C: •I dunno: (3.) no clue.
18. chi •gaze away from screen•gaze to screen--->•
19. E: if some of your: (.) if your +parents were in
20. exa +head shake--->+
21. here+ or some of (.) like (.) +you know someone
22. exa +stops head shake +head shake--->+
23. you know+ from school was here and I asked them
24. exa +stops head shake
25. .hhh (.) what would you say- (.) what do you
26. think they'd sa:y:.
27. C: [I dunno.]
28. E: [*name-of-child is +always-] (.) +doing this +or
29. chi *smiles--->*

Clinician-child interactions in ADOS-2 assessments – a CA perspective

30. exa +head to right--+head to left+
31. that* or.
32. chi *stops smile
33. •*I dunno *+ (2.5) + (2.) *[I dunno.]*
34. chi •gaze away from screen--->•
35. chi *head shake* *head shake*
36. exa +smiles--+
37. E: ±[tt]
38. exa ±gaze away--->±
39. ±+°yeah° (.) ±hard to know.+
40. exa ±gaze to screen±gaze away from screen--->±
41. exa +head nod-----+
42. (1.3)
43. → .hh +I know ±what my colleagues would say
44. exa +head nod--->+
45. exa ±gaze to screen--->±
46. •about me.+%
47. chi •gaze to screen--->•
48. exa +head nod stops
49. exa %smiles--->>%
50. C: → *•((laughs))*
51. chi *smiles----*
52. chi •gaze away from screen--->•
53. (4.) + (4.)
54. exa +stops smiling
55. E: ±tt well (.) like (.) what about have you ever

Clinician-child interactions in ADOS-2 assessments – a CA perspective

56. exa ±gaze to paperwork--->>±
57. been te:ased or ±bullied by (.) other young
58. exa ±gaze to screen--->>±
59. people.

In this example, the examiner is asking the child the interview questions from the global ‘Social Difficulties and Annoyances’ task. After the examiner asks the child “*Do you think that you ever do things which annoy other people or irritate other people?*” (lines 1-6), as a recipient of the closed polar design, the child multimodally without hesitation provides an affirmative response that “*yeah probably but everyone does*” (lines 7-12). After evaluating the child’s response (line 13), the examiner asks the child to share ‘what things she might do that irritates or annoys people’ (lines 14-16). In contrast to her prior ease in recognition that she likely annoys/irritates other people (lines 7-12) the child removes her gaze from the screen and claims “*I dunno*” and after three seconds of silence in which the examiner waits for the child to continue talking, the child returns her gaze to the screen and claims “*no clue*” (lines 17-18). The examiner in turn personalises the question by incorporating the child’s parents and peers and what they might find annoying about her (lines 19-32). In overlap, the child resists providing an answer with another “*I dunno*” (line 27) with a smile (Hutchby, 2002, 2005). Upon completion of the examiner’s turn, the child again removes her gaze from the screen and repeats “*I dunno*” with a head shake, and after nearly three seconds silence in which the examiner does not take the floor, again repeats “*I dunno*” with a head shake (lines 33-35) to resist providing an answer (Hutchby, 2002, 2005). This final iteration is multimodally aligned with by the examiner “*yeah hard to know*” (lines 39-41).

Clinician-child interactions in ADOS-2 assessments – a CA perspective

As observed in the previous examples, the examiner shifts her gaze from the screen (line 40), and after over a second silence (line 42), takes an inbreath and inserts her ‘cliffhanger’ which in this instance, is pre-faced with a K+ epistemic claim (Heritage, 2013) “*I know what my colleagues would say about me*” (lines 43-46). This falling intoned ‘cliffhanger’ does not contain the typical verbal preface particles as seen in the previous examples that communicate how it can be receipted. Instead, the examiner exaggerates the length of her head nod (lines 44-48) to function as a backchannel request (McClave, 2000) to orient the child to the contextual information contained in the previous turns at talk (i.e., what you do that annoys others). At the tail end of her utterance, she selects the child to talk as she moves her gaze back to the screen (line 47) and replaces her nod with a smile (line 49) marking how the preliminary can be treated (Peräkylä & Ruusuvuori, 2012). In turn, the child returns a smile (line 51) and laughter (line 50) treating the examiner’s unfolding telling as humorous whilst passing the floor back to the examiner to continue her talk (Stivers & Sidnell, 2012). Laughter is typically placed concurrent with or immediately following a “laughable” referent (Glenn, 2003) as a display of understanding, as a resource of affiliation, and as an invitation to elaborate (O’Donnell-Trujillo & Adams, 1983). After an eight second silence (line 53), in which the examiner stops smiling (line 54), the ‘cliffhanger’ is abandoned, and the examiner returns to the next question from the global ‘Social Difficulties and Annoyances’ task (lines 55-59).

Therefore, in this example, although the examiner utilises non-verbal resources to communicate that the localised project of her ‘cliffhanger’ can be receipted as humorous, as indicated by the eight second silence and abandonment of the ‘cliffhanger’, the child’s returned laughter and smile however are not accepted as a floor passing ‘go-ahead’ response. Due to the confines that the coding item ‘Ask for Information’ (ADOS-2; Lord et al., 2012) places on rating observations, the child’s use of non-explicit floor passing devices are documented in the

Clinician-child interactions in ADOS-2 assessments – a CA perspective

child's diagnostic report "*In general, she responded appropriately to examiner's comments about her thoughts, feelings, or experiences, but did not spontaneously inquire about them. The examiner generated opportunities for her to enquire about her thoughts, feelings, or experiences by proffering several cliffhangers (where she shared information in a manner which invited further questioning) throughout the assessment. For example, the examiner shared that she 'has this one noise she cannot handle' and that she 'knows what her colleagues would say about how she annoys them. She however did not enquire about either utterance'*" (C09 diagnostic report). Therefore, although the child's minimal floor passing devices are observed in everyday interaction, as the child does not specifically utilise a 'What' question format to 'Ask (the examiner) for Information', this is scored and documented as indicative of autism symptomatology. Moreover, as there are multiple 'cliffhangers' embedded throughout an autism assessment, extended silences and abandonment of the topic opener is likely to be noticeable (Jefferson, 1989) and may have consequences for communicative withdrawal (Davidson, 1984). These communicative behaviours therefore may impact subsequent responses to 'cliffhangers'.

6.6.2.2. 'Go-ahead' response: 'Yeah'

In the following example, after the examiner's 'preliminary cliffhanger' (lines 21-33), the child utilises a 'go-ahead' continuer "*yeah*", which is a device found in everyday interaction to pass the floor back for the speaker to continue their talk (Schegloff, 1980; 1982). The examiner waits for over three seconds for the child to follow with an explicit 'go-ahead' request for information. In this example however, the examiner concludes the climax of his story (note the child's screen freezes during this example).

Extract 25: (09:00) C01DHA-THA ('Go-ahead' response: 'Yeah')

Clinician-child interactions in ADOS-2 assessments – a CA perspective

1. E: we've ↑had a few days recently where it's been
2. exa >>↑gaze to screen--->↑
3. chi >>•gaze to screen--->•
4. r:eally \$raining (.) heavily. >and then< ↑there's
5. chi \$screen freezes-audio fine>>
6. also all that ↓snow as well.
7. C: yeah.
8. (1.6)
9. E: er: (.4) >are ↓you are you< someone who likes
10. snow.
11. (1.)
12. C: u:m:: (.7) in: like (.) >I I< do like it but not
13. (.) but (.) also I don't because it makes err it
14. makes it >outside (look)< really cold.
15. E: yep.
16. C: but then also it's fun to um: (.) play >outside
17. uhm.<
18. (1.6)
19. E: [yeah,]
20. C: [so yeah.]
21. (.9)
22. E: → ↑as- (.) we: ↓um: (.4) +we actually ma:de: um: (.)
23. exa ↑gaze away from screen--->↑
24. exa +RH holds chin--->+
25. little ↑snowman +that (.6) +um:. (.) >we

Clinician-child interactions in ADOS-2 assessments – a CA perspective

26. exa +RH gestures+RH to chin--->+
27. we< made um ±>put put< outside the house (.)
28. exa ±gaze to screen--->±
29. ±and actually for me it was ±quite
30. exa ±gaze away from screen--->±
31. ±a↑mazing (.) ±er ±what happened.
32. exa ±gaze to screen±gaze away from screen--->±
33. (.6) ± (.4)
34. exa ±gaze to screen--->±
35. C: → y:eah.
36. (3.4)
37. E: → tt ±the um: (.4) >the the:< (.3)
38. exa ±gaze away from screen---->±
39. *lines omitted - telling continues*

In the following example, at the end of the ‘Telling A Story from A Picture Book’ task, the examiners typically ask the children about their understanding of a series of idioms such as ‘raining cats and dogs’ (not shown) to assess understanding of literal language. The examiner in turn produces a conversational opening about the weather linked to the last idiom (lines 1-6). The child demonstrates listenership with a continuer “*yeah*” (line 7), but after nearly a two second silence (line 8), the examiner abandons his telling and asks the child if he ‘likes snow’ (line 9). Rather than respond minimally to the polar question format, the child in turn provides an expanded answer with an account (lines 11-13). The examiner’s “*yep*” (line, 14) is treated by the child as a continuer as the child expands with a contrast structure (lines 15-16) before finishing his turn with an “*uhm*” indicating a difficulty in searching for further information

Clinician-child interactions in ADOS-2 assessments – a CA perspective

(Jefferson, 1974; Schachter et al., 1991). After nearly a two second silence, in overlap the child utters a closing “*so yeah*” (line 19) communicating that he has finalised his utterance and intends to relinquish his turn to prompt the examiner to assume speakership (Local & Walker, 2005; Raymond, 2004). The examiner in overlap however did not orient to the child’s turn yielding cues but instead uttered another rising intoned questioning continuer to pass the floor back to the child (line 18).

The examiner in the following turn at talk commences his ‘cliffhanger’ with an “*as we*” prefaced turn which implies a conditional utterance has commenced (line 21). The examiner however abandons the turn construction and commences a reformulation in the form of a storytelling. The examiner’s ‘cliffhanger’ is marked by dysfluencies such as “*uhm*”, pauses, sound stretches, repetition (Schegloff et al., 1977; Schegloff, 1979) and self-repair suggesting difficulty in formulating the ‘cliffhanger’ as a story (lines 21-33). Moreover, throughout the delivery of the ‘cliffhanger’, the examiner exaggerates his gesticulations, creates stress with sharp rises in pitch and emphasises the experience with an intensifier “*quite amazing*” (lines 21-33) to orient the child’s attention to the ‘cliffhanger’ before returning his gaze to the screen to select the child to take the floor (line 33). After a second silence, the child orients to his position as a recipient of a storytelling sequence and responds with a falling intoned continuer “*yeah*” (line 34) to support the process of telling by passing the floor back to the examiner to complete his story climax (Labov & Waletzky, 1967; Sacks, 1974; Jefferson, 1978; Stivers, 2008). Again, as observed in the other extracts, what follows however is a silence of over three seconds (line 35) in which the examiner waits for the child to explicitly ‘ask the examiner for information’. The child instead, as a recipient of a storytelling sequence remains silent to allow the teller the right to bring the telling to completion (Mandelbaum, 2012; Jefferson, 1978; Sacks, 1974; Schegloff, 1982). After no further talk from the child, the examiner commences

Clinician-child interactions in ADOS-2 assessments – a CA perspective

the climax of his story which continues to be shaped with difficulty in formulation (lines 36-37).

Again, as this child did not explicitly utter a ‘what’ ‘go-ahead’ question in this instance, but did in response to a subsequent ‘cliffhanger’ (see extract 23), in line with the coding item ‘Asks for Information’ (ADOS-2; Lord et al., 2012), this child’s diagnostic report documented “*Occasionally, he spontaneously expressed an interest in the examiner and asked about his thoughts, feelings, or experiences. For example, when the examiner told a story about eating ice cream, he asked ‘what happened?’. His interests in the examiner however were inconsistent*” (C01 diagnostic report). Therefore, although the child’s response to the ‘cliffhanger’ that was embedded within a storytelling sequence is observed throughout everyday interactions, the lack of explicit ‘go-ahead’ response is noted as a lack of interest in the examiner.

6.6.2.3. Go-ahead’ response: Multimodal ‘Right’ and ‘head nod’

In the following example, after the two second silence that follows the examiners ‘cliffhanger’ (lines 27-33), the child provides a multimodal response token “*right*” to mark the speakers turn as in need of completion (Bolden et al., 2023; Gardner, 2007) and that her epistemic dependency is linked to the talk which needs to be progressed further (Gardner, 2007). Again, as seen in the previous examples, as the child does not utter an explicit ‘go-ahead’ ‘what’ question, the examiner waits for four seconds before completing the climax of her story.

Extract 26: (34:45) C08DHA-THA (Multimodal ‘Right’ and ‘head nod’)

1. E: +what sort of things do you like to impulsively
2. exa >>±gaze away from screen--->±

Clinician-child interactions in ADOS-2 assessments – a CA perspective

3. chi >>•gaze away from screen--->•
4. exa +smiles--->+
5. buy.
6. C: I like to- I guess (.) usually it's (.) games but
7. it's sort of like (.) what=*whatever I'll see* in
8. chi *head shake-----*
9. the (.) local shop.+
10. exa +stops smile
11. E: +[yeah.]+
12. exa +head nod-----+
13. C: [(I just like)] (.) walkthrough (.) tiger and pick
14. £things * up,£ *
15. chi *shoulder rise*smiles--->*
16. E: +oh I love+ tiger: it's really good there's always
17. exa +head nod-+
18. ±loads of* (.6) + you know + (.)
19. exa ±gaze to screen--->±
20. chi *stops smile
21. exa +both hands gesture+
22. +little knickknacks+ and stuff in +there:+ (.)
23. exa +head beat-----+ +head nod-+
24. .hh [isn't there.]
25. C: *[mmm.]*
26. chi *head nod-----*
27. E: → ±I was out shopping +the other day+ and
28. exa ±gaze away from screen--->±

Clinician-child interactions in ADOS-2 assessments – a CA perspective

29. exa +eyebrow rise+
30. +something %reall:y % ±embarrassing happened.
31. exa +left palm to face+
32. exa %head nod%
33. exa ±gaze to screen--->±
34. (2.3)
35. C: → *right, * (.7) *
36. chi *eyebrows rise*shoulder rise*
37. (3.) • (.3) * (.3) *
38. chi •gaze to screen--->•
39. chi → *head nod*
40. E: so I ±went +I got a few sh- +uhm::
41. exa ±gaze away from screen--->±
42. exa +left hand gesture+
43. *lines omitted - telling continues*

The examiner in this extract is asking the child questions from the ‘Responsibility’ task (not shown). The child shares that she saves her pocket money so she can go shopping and how she might impulsively buy things (not shown). The examiner in turn asks what the child might impulsively buy (lines 1-5) and the child shares how she likes to browse a particular shop (lines 6-15). Receiving the child’s information with an “*oh*” (Heritage, 1984) prefaced turn, the examiner multimodally affiliates (Stivers, 2008) with the child’s choice of shop (lines 16-22). After a brief pause, in overlap with the child’s multimodal affiliative token (line 25), the examiner takes an inbreath and produces a tag question to validate the child's epistemic authority and pass the floor back to the child (Ekberg et al., 2022).

The examiner in response to the child's raised referent 'shopping', inserts her 'cliffhanger' (lines 27-33) in which she utilises an intensifier "*really*", to describe the intensity of her emotional "*embarrassing*" experience that "*happened*" (line 30). Again, the 'cliffhanger' is marked by exaggerated multimodal behaviours, such as, her elongated gaze shift away from the screen (line 28), eyebrow rise (line 29), and multimodal empathic gestures, such as, a palm to face during her head nod (line 31), before returning her gaze to the screen to select the child to take the floor (line 33). As a recipient of a telling the child remains oriented towards the screen. After over two seconds of silence (line 34), rather than pass the floor back to the examiner and with 'passive reciprocity' with a continuer such as, 'mm hm' (Jefferson, 1984), the child uses a rising intoned "*right*" (line 35) that acknowledges that her epistemic dependency is linked to the prior talk which needs to be progressed further (Gardner, 2007) due to its pragmatic incompleteness (Ford & Thompson, 1996). 'Rights' regularly come during an extended 'telling' sequence of talk in which a speaker is passing on information at a point where the telling is incomplete (Bolden et al., 2023; Gardner, 2007). Also marking the child's orientation to the long silence during the examiner's storytelling is her eyebrow raise signifying surprise (Ekman & Friesen, 1976; Ekman & Friesen, 1978), followed by a shoulder shrug (line 41) marking the momentarily loss of intersubjectivity and her incapacity to progress without the examiner's expansion (Debras, 2017). After a further three second silence (line 37), the child returns her gaze to the screen (line 38) to select the examiner to take the floor and continue her telling (Duncan & Niederehe, 1974; Duncan & Fiske, 2015), before doing a single nod (line 39) communicating to the examiner that she treats the telling as incomplete (Schegloff, 1982).

Recipients infrequently raise problems of understanding or recognition of the preliminary's projected action (Schegloff, 1980). These atypicalities can however impact how much children

Clinician-child interactions in ADOS-2 assessments – a CA perspective

spontaneously contribute to further talk. Therefore, due to the confines of the rating options within the coding item “Ask for Information”, the examiners documented in the child’s diagnostic report how “*She rarely asked for information about the assessor’s thoughts, feelings or experiences and often responded to the assessor’s anecdotes with ‘oh’ or ‘right’ rather than asking for any further information*” (C08 diagnostic report). Yet, the child in this instance, employed several multimodal resources to nonverbally strengthen her single-worded acknowledgment that her epistemic dependency is linked to the unspoken talk. As the ADOS-2 does not incorporate everyday communicative norms into its design and due to the confines of the scoring criteria for “Asks for Information”, communicative behaviours are not being observed in relation to their everyday function and for their interactional meaning.

6.6.2.4. Go-ahead’ response: ‘Oh’

Similarly to the previous example, in the next extract after the examiner’s ‘cliffhanger’ (lines 19-26), the child utters a floor passing “*oh*” treating the ‘cliffhanger’ as an incomplete segment, which in turn, invites further talk to complete the informing (Heritage, 1984). In the following example however, the examiner waits for an explicit ‘go-ahead’ question for eight seconds in which she smiles as she utters a minimal vocalisation before returning her gaze to her paperwork. Rather than complete the climax of ‘cliffhanger’, the examiner abandons her telling and returns to the global ‘Description of a Picture’ task.

Extract 27: (24:17) C12DHA-THA (‘Go-ahead’ response: ‘Oh’)

1. C: •±I managed to do at- (.) in the end because (.) my
2. chi •gaze away from screen--->>•
3. exa ±gaze to paperwork--->>±
4. (.) my grandma: (.) has really good (.) internet

Clinician-child interactions in ADOS-2 assessments – a CA perspective

5. connection but (.) where there's er (.) like the
6. wi-fi connection for ±uhm (.) the caravan °is.°
7. exa ±gaze to screen--->>±
8. E: [+hmm mm hmm mm.+]
9. exa +head nod-----+
10. [*yawns (.5)] (1.1) *
11. chi *right hand to mouth-----*
12. C: really ±uhm (.) bad.+
13. exa ±smiles-----+
14. E: +okay± ±so that's a bit of a a shame >but it
15. exa ±nod-+
16. exa ±gaze to paperwork--->>±
17. sounds like you still had fun< which is good.
18. C: yeah.
19. E: → >I had a summer holiday this ±year too but it
20. exa ±gaze to screen--->>±
21. +•wasn't quite as fun as yours<+ cause something
22. exa +furrowed eyebrows-----+
23. chi •gaze to screen--->>•
24. (.) ±not± so ±great happened.
25. exa ±nod+
26. exa ±gaze to paperwork--->>±
27. C: → oh:.
28. (1.3) • (.4)
29. chi •gaze away from screen--->>•
30. E: ±+hmm. (.4) ±

Clinician-child interactions in ADOS-2 assessments – a CA perspective

31. exa ±gaze to screen±gaze to paperwork--->>±
32. exa +smiles--->+
33. (2.5) + (4.)
34. exa +stops smile
35. .hh okay:: so: (.) >what do ±you think of the
36. exa ±gaze to screen--->>±
37. picture then do you like that picture?<

Typically, after completing the ‘Description of A Picture’ task, the examiners as guided by the ADOS-2, ask the children if they have ever been to a place like the holiday island resort represented in the picture. This is to observe if the child can report a non-routine event in the ‘Conversation and Reporting’ task (not shown). After the child shares how he likes to make YouTube videos, and how it is stressful when he cannot upload the videos to the internet (not shown), he concludes his answer by sharing how he was able to upload the videos at his grandmother’s house (lines 1-12). The examiner receipts the child’s utterance with a head nod (Whitehead, 2011) and an “*okay*” (line 14) marking the transition (Beach, 1993) as she commences a “*so*” prefaced turn to advance the institutional agenda (Bolden, 2009) before evaluating the child’s holiday as an overall positive experience (lines 14-17).

The examiner moves her gaze to her paperwork (line 16), and after the child accepts her evaluation (line 18), the examiner inserts her ‘cliffhanger’ by recycling the planned inserted topic of a holiday experience. Throughout the ‘cliffhanger’, the examiner multimodally marks the contrast (structure) and how her experience was negative in comparison to the child’s “*wasn't quite as fun as yours*” (lines 19-22) with furrowed eyebrows (line 22) and a head nod to emphasise “*not*” (line 25). The examiner could have stopped talking after her initial turn

Clinician-child interactions in ADOS-2 assessments – a CA perspective

construction unit which functioned to generate a contrast structure, instead, she continued to provide an account “*cause something not so great happened*”. The examiner returns her gaze to her paperwork when she uttered “*not so (great happened)*” (line 26), the shift in head direction can perform as a turn-yielding cue (Duncan & Niederehe, 1974; Duncan & Fiske, 2015) and can signal the sharing of difficult information.

The child utters a ‘go-ahead’ “*Oh*” with a with a stretched falling intonation (line 27). ‘Oh’ is typically treated as a change in state of knowledge or information in response to complete chunks of information that are produced at points at which an informing is possibly complete. ‘Oh’ and related utterances (such as ‘yes’, ‘uh huh’, ‘mm hm’) can also function as an undifferentiated collection of ‘back channels’ or ‘signals of continued attention’ (Heritage, 1984) that treat the talk as incomplete and invite further talk. Specifically, in this interaction, ‘Oh’ with a falling intonation is conveying an empathetic reaction in response to the examiners sharing that something negative has happened to her. The child in this instance not only uses the continuer “Oh” to tactfully listen but he also is doing delicacy. After over a second of silence (line 28), the child shifts his gaze away from the screen (line 29) but remains in his postured position indicating that he is aligned to a continuation of talk. The examiner in turn produces a turn acknowledging “*hmm*” with a falling contour (Gardner, 2007) and a smile (lines 30-32). Rather than continue her storytelling, the examiner waits for eight seconds for an explicit ‘Wh’ ‘go ahead’ question before abandoning her telling and returning to the global task by asking about the child’s perception of the picture (lines 35-37).

The child in this example demonstrates a strength in social communication and empathetic delicacy. As the diagnostic reports in general however only typically contain observations that correspond with the individual codes of the ADOS-2 scoring items, once the scoring criteria is

Clinician-child interactions in ADOS-2 assessments – a CA perspective

met (e.g., more than one observation of a certain behaviour), these observations will be documented. Therefore, as this child responded to the other ‘cliffhangers’ with explicit ‘Wh’ ‘go-ahead’ responses, this interaction was not noted in his diagnostic report “*He also asked the examiner about her thoughts, feelings, or experiences at times. The examiner generated opportunities for he to enquire about her thoughts, feelings, or experiences by proffering several cliffhangers (where she shared information in a manner which invited further questioning)*” (C12 diagnostic report).

6.6.2.5. Conclusion of section

As observed in everyday interaction, the children in the second section demonstrate an understanding that once a speaker has commenced their talk with a ‘preliminary’, there is a suspension of normal turn-taking rules to allow the speaker the right to bring their talk to completion (Mandelbaum, 2012; Jefferson, 1978; Sacks, 1974; Schegloff, 1982) and therefore only minimal responses are required (Labov & Waletzky, 1967; Sacks, 1974; Jefferson, 1978; Stivers, 2008). The children exhibit recognition of a preliminary telling as incomplete, and support and prompt the continuation of the examiners talk minimally with non-verbal (e.g., head nods) and verbal continuers such as, "mm hm" or "yeah" (Schegloff, 1980; 1982). The children utilise different types of floor passing devices to show both listenership and waiting. The children also use minimal floor passing devices to orient to problems, such as silences of over a second or to show empathy in response to a potential difficult conversational opening. If continuers are utilised without explicit ‘what’ ‘go-ahead’ requests for information in response to a ‘cliffhanger’, the scoring item ‘Asks for Information’ provides a score of ‘2’ as the child ‘Responds appropriately to examiner's comments about his or her thoughts, feelings, or experiences, but does not spontaneously inquire about them’ (ADOS-2; Lord et al., 2012).

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Therefore, although the children's floor passing responses are observed in everyday interaction, these everyday responses are scored and documented as indicative of autism symptomatology.

6.6.3. The 'cliffhanger' as a communicative violation

Once a preliminary or project becomes recognisable, it can be encouraged by the recipient and jointly launched. A preliminary can also be blocked by the recipient, acknowledged but diverted, or covertly diverted (Sidnell & Stivers, 2012). Like any other communication, the turn design of a preliminary must first be recognised as a preliminary to a subsequent turn. The linguistic practices contained in everyday conversations in any given culture are habits that are largely predictable as they are organised in terms of their sequential positioning (Ford et al., 2002; Fox, 2007; Schegloff, 1996). Any difficulties or changes which do not fit habitual communicative practices are noticeable, including subtle changes in silences (Jefferson, 1989), gaze patterns (Goodwin, 1980; 1981; Rossano et al., 2009), and non-verbal interaction (Mondada, 2019). When changes occur and recipients are puzzled about the prior talk (and are unable to understand 'why that now'), they may take the preliminary as spoken 'in its own right' without reliance on a subsequent turn to provide meaning (Sacks, 1974; Schegloff, 1979; Schegloff, 1980; Schegloff & Sacks, 1973; Terasaki, 2004). Although infrequent, recipients can raise problems of understanding or recognition of the preliminary's projected action (Schegloff, 1980) and might try to resolve the communicative void (Jefferson, 1989). The previous extracts have shown how the turn composition of the examiners 'cliffhangers' are shaped by exaggerated multimodal behaviours and difficulties in delivery or stopped in a place not typical of a turn transitional place. The following section will demonstrate how the children explicitly orient to the abrupt end of the turn construction of the examiner's 'cliffhanger'.

6.6.3.1. Child's orientation: sensitive information

Clinician-child interactions in ADOS-2 assessments – a CA perspective

In the following example, after the child shares how she would be fearful of engaging in an activity displayed in the ‘Description of a Picture’ task, the examiner introduces her own emotional experience as a ‘cliffhanger’ (lines 26-32). To orient the child to the significance of the ‘cliffhanger’, the examiner in overlap exaggerates her multimodal delivery as she raises her volume and increases her pace of talk to win the floor. The exaggerated delivery continues as she slows her pace to stretch out and intensify the referent and mark the end of her talk with stress. As the examiner stops short of the climax of the story, after a two second silence, the child in turn orients to the turn design of the examiner’s ‘cliffhanger’ as noticeably salient due to the intended resources employed to have her emotional experience heard. Similar to the above example, the child in this extract explicitly treats the ‘cliffhanger’ as an incomplete telling that potentially indicates that the topic might be of a sensitive issue.

Extract 28 (14:00): C07DHA-THA (Child’s orientation: sensitive information)

1. C: I’ve never been *fun one£ ((laughs)) +.hh but I’m
2. chi >>•eye gaze away from screen--->•
3. exa >>±eye gaze to screen--->±
4. chi *smiles--->*
5. exa +smiles--->+
6. really scared of heights: so I don't think I would
7. manage to [jump down] or slide down one of them?
8. E: [((laughs))]
9. E: [maybe not.]
10. C: [.hh but] (.) it looks so fun though: like (.) I
11. w::ant to do it (.) I just (.) I’m just too
12. §°scared.°

Clinician-child interactions in ADOS-2 assessments – a CA perspective

13. chi \$left shoulder rise
14. E: [(it's confidence \$isn't it.\$)]
15. chi \$nods-----\$
16. C: [I'm just I'd get stuck] *at the top I'd be
17. chi *stops smile
18. the person stuck at the top like .hh too scared to
19. ask for help but £then just standing there like
20. *please someone get me down.£
21. chi *smiles--->*
22. E: ((laughs))
23. C: •\$↑I'd end up crying. [((laughs)) \$ (inaudible)]
24. chi •gaze to screen--->•
25. chi \$right palm to head-----\$
26. E: → [SO (.)]
27. I WAS >looking at this picture
28. %the other day<% and it reminded me of
29. exa %head nod-----%
30. *something re:ally b:rave I did when I was
31. chi *stops smile
32. eighteen.
33. (2.1)
34. C: → uhm *((laughs)) (.5) £what was i:t£ \$like if you\$
35. chi *smiles--->*
36. chi \$head shake-\$
37. wanna say it \$I don't know\$ (.) °you might not
want

Clinician-child interactions in ADOS-2 assessments – a CA perspective

38. chi §shrugs-----§
39. %to.°%
40. exa %nod%
41. E: ↑yeah no I do: (.) uhm I jumped out of an
42. aero:plane (.) with a parachute:.

In this example, after the examiner asks the child if she has ever been to a place like the holiday island resort represented in the picture (asked to capture the child's ability to describe a non-routine event), the child shares how she would be fearful of getting off a beach slide and asking for help (lines 1-25) which is receipted by the examiner with multimodal alignment (lines 5-22). At the transition relevance place in the child's talk, the examiner inserts her loudly emphasised "so" prefaced 'cliffhanger' as she competes in overlap to take the floor (Schegloff, 2000) to advance the institutional agenda (Bolden, 2009). The examiner's 'cliffhanger' starts loud as she increases her volume to orient the child's attention to her talk (line 27). Again, the examiner exaggerates her 'cliffhanger' by increasing the pace of her talk (lines 27-28) to give her 'cliffhanger' a special status (Stivers & Sidnell, 2012), by creating emphasis with her head nod (Maynard, 1987) before slowing down and stretching out the emotive component "really brave" (lines 28-32).

As a recipient of a multi-unit storytelling (Sacks, 1974), the child's gaze and orientation remain fixed on the screen as she waits for the examiner to conclude her telling (line 24). After a two second silence (line 33), the child commences her turn with her prefaced "uhm", laugh, and a pause in talk (Jefferson, 1974; Schachter et al., 1991) orienting to the examiner's pause in talk as problematic (Jefferson, 1989). The child's laughter concerns the delivery, design, sequential position, and action of the prior talk turn (Ford & Fox, 2010; Holt, 2011). After a brief pause,

Clinician-child interactions in ADOS-2 assessments – a CA perspective

the child utters the explicit ‘go-ahead’ response “*what was it like*” (line 34) marked with a smiley voice continuing to acknowledge the examiner’s prior turn (Jefferson, 2004d) as problematic. Rather than pausing her talk to pass the floor back to the examiner as a prompt to continue, the child orients to the possible delicacy that the examiner’s ‘cliffhanger’ might indicate and how the examiner might be reluctant to share her proffered information (Davidson, 1984). The child delivers her verbal orientation with a preface “*like if you wanna say it*” to delicately give the examiner the option to share and bring her storytelling to completion (lines 34-39) with a simultaneous head shake (line 36) marking the contradiction (Kendon, 2002). The child continues her talk with a “*I don’t know*” marking her uncertainty and concern (Beach & Metzger, 1997) with a simultaneous shoulder shrug (line 38) indicating her epistemic powerlessness (Debras, 2017) before quietly expanding that the examiner “*might not want to (say)*” (lines 37-39).

Therefore, the child in this example oriented to the atypicality of the examiner’s ‘cliffhanger’ as a potential sign of the examiner’s reluctance to share an emotional experience. The child in this example not only demonstrated an understanding of communicative norms but also demonstrated empathy as she delicately managed another person’s shared emotional experience. As seen in the other examples, only the observations corresponding to the tasks and the coding items are documented in the child’s diagnostic report. Therefore, documentation of the observations for the coding item ‘Asks for Information’ is unlikely to include the interaction that occurred around the child’s explicit ‘what go-ahead’. For example, corresponding to the description of the criteria to receive a rating for the coding item ‘Asks for Information’, the child’s diagnostic report documents “*She occasionally asked the examiner about her thoughts, feelings, or experiences. For example, the examiner proffered several cliffhangers throughout the assessment, where shared information in a manner which invited*

Clinician-child interactions in ADOS-2 assessments – a CA perspective

further questioning” (C07 diagnostic report). Therefore, by adhering to the coding structure to guide tasks and observations, this can restrict what is ‘seen’ within the interactions.

6.6.3.2. Child’s orientation: Multimodal request for elaboration

Similar to the previous extract, in the following example, after the examiner inserts a ‘cliffhanger’ (lines 27-29) which projects that she intends to share an emotional experience but does not conclude the telling climax, the child orients to the turn design of the ‘cliffhanger’ as conveying a difficulty in delivering the content (Schegloff, 1980). In the following extract, the child raises problems of recognition of the preliminary’s projected action (Schegloff, 1980) by asking the examiner to repeat the ‘cliffhanger’ (lines 33-35). The examiner repeats the ‘cliffhanger’ near verbatim, communicating that the ‘cliffhanger’ is intentionally absent of a concluding telling climax. The child in turn explicitly orients to the examiner’s ‘cliffhanger’ as incomplete by utilising humour.

Extract 29 (36:00): C07DHA-THA (Multimodal request for elaboration)

1. E: *°okay° was it sometimes •the sickness is cause
2. exa >>±gaze to screen--->±
3. chi >>•gaze away from screen-•gaze to screen--->•
4. chi *constantly manipulating objects with hands--->*
5. you're +anxious + about something: (°and°)
6. exa +head nod+
7. sometimes: it's [cause you're] +ill:. +
8. C: [yeah.]
9. exa +head beat+
10. C: •yeah: (.) but *most of the* time it's

Clinician-child interactions in ADOS-2 assessments – a CA perspective

11. chi •gaze to screen--->•
12. chi *head shake-*
13. *jus- (.) sometimes* (.) the stuff with the
14. *head shake-----*
15. sickness just pops up (.) like
16. *↑hello:: * .hh you're *anxious * no:w: (.)
17. chi *RH gesture* *eyebrows raise*
18. *[deal with it.]*
19. chi *head nod-----*
20. E: [+okay. +]
21. exa +head nod+
22. C: •*[and I don't really.]*
23. chi •gaze away from screen--->•
24. chi *head shake-----*
25. E: [(that's really tricky.)]
26. C: it's [not-]
27. E: → [so there's] +something uhm (.) +little that
28. exa +head and gaze up--+
29. I'm: a little bit afraid of.
30. (1.0) • (1.5)
31. chi •gaze to screen--->•
32. C: pardon.
33. E: → there's something (.) little
34. +that I'm a bit afraid of.+
35. exa +furrowed eyebrows-----+

Clinician-child interactions in ADOS-2 assessments – a CA perspective

36. C: → okay (.5) *+£do you wanna+ (.) elaborate*
37. chi *both hands rotate forward-----*
38. exa +head nod-----+smiles--->+
39. ((laughs)) or not.£
40. E: uhm I'm a bit afraid of spi;ders.

After the child describes her experience of ‘sickness’ in response to the ‘Fear’ questions of the ‘Emotions’ task, the examiner asks the child for clarification about the cause of her sickness (lines 1-7). The child in turn shares how she can feel nauseous in response to both illness and anxiety (lines 8-24). After providing multimodal continuers to support the child’s turns at talk (lines 6-25), the examiner takes the floor in overlap with a “so” prefaced’ turn marking her intention to advance the interactional agenda (Bolden, 2009). The examiner in turn, embeds her ‘cliffhanger’ in relation to the structured task to project that she intends to share something that she is afraid of (lines 27-29). After the child cuts off her speech to relinquish the floor to the examiner (line 26), the examiner moves her head and gaze diagonally to the ceiling demonstrating a bodily display that she is searching for information (Rossano, 2012) as she reformulates her ‘cliffhanger’ to emphasise that there is something “*little*” she fears (lines 27-29).

After a second silence (line 30), the child returns her gaze to the screen (line 31) to select the examiner to continue her story (Duncan & Niederehe, 1974; Duncan & Fiske, 2015), but instead both speakers continue to look at the screen for a further two seconds of silence (line 30). The child takes the next turn to explicitly request that the examiner repeats her turn (line 32) with an open class repair which claims there is a problem with understanding or hearing the examiner’s prior turn construction as it appears removed from the immediately preceding

Clinician-child interactions in ADOS-2 assessments – a CA perspective

topic (Drew, 1997). The examiner near verbatim repeats her ‘pre-cliffhanger’ (lines 33-34) with a brief pause before she utters “*little*”. Pauses in talk can be used purposefully as a strategy to create space for the child to consider an intended referent (Cohrssen et al., 2014). The examiner on this iteration marks the tail end of her utterance with furrowed eyebrows (line 35).

Although infrequent, a recipient of a preliminary can raise problems with the turn design of the preliminary (Schegloff, 1980). Here the child prefaces her response with “*okay*” as a backward-looking device (Schegloff, 2007) which signals issues with the projective qualities of the prior utterances (Beach, 1993; 1995). The child after a brief pause, explicitly orients to the examiner’s incomplete iterations “*do you wanna elaborate or not*” as she adds emphasis with a corresponding rotating hand gesture (line 36-39) to mark the examiner’s telling as incomplete and as a prompt to continue (Schegloff, 1982; Stivers, 2008). As the child commences her turn, the examiner nods and then smiles (line 38) to positively evaluate the child’s orientation to the ‘cliffhanger’ and explicit request for information. The child’s use of a smiley voice and laughter are often employed to manage sensitive displays of interactional conduct (Haakana, 2001) and communicate that her orientation to the examiner’s failed elaboration should not be taken too seriously (Schenkein, 2014).

In this example the examiner produces two near verbatim ‘preliminary cliffhanger’ iterations which in turn communicate that they are intentionally uttered to omit contextual information and that no more information will follow. As the child in turn explicitly orients to the examiner’s intentional withholding of information, she demonstrates an ability to delicately utilise humour to manage a potentially difficult interaction. Although the child’s response explicitly passed the floor back to prompt the examiner to finish her conversational opening, because she did not explicitly utilise a ‘what go-ahead’ question, the examiner’s document in

Clinician-child interactions in ADOS-2 assessments – a CA perspective

the child's diagnostic report how *"She occasionally asked the examiner about her thoughts, feelings, or experiences. For example, the examiner proffered several cliffhangers throughout the assessment, where she shared information in a manner which invited further questioning. For example, the examiner shared that 'there is something that she is afraid off', rather than explicitly ask what that fear is, she uttered a conversational continuer 'okay'. The examiner repeated her initial utterance 'there is something that I'm afraid off' and she firmly asked 'Are you gonna elaborate or not?'. Although her question demonstrates listenership and an interest in the examiner's thoughts and feelings, the abruptness of her utterance does not demonstrate social awareness of the contextual situation or sensitivity in her reciprocal interactions"* (C07 diagnostic report). Due to the medical model underpinning the design of the ADOS-2 assessment, the child's responses are not considered in relation to a dyadic interaction but instead as independent of any social influence. Therefore, due to the confines of adhering to the coding criteria of the ADOS-2 and the ADOS-2 failure to consider communicative norms in its design and instruction, the children's diagnostic reports misrepresent social communication capabilities.

6.6.3.3. Child's orientation: Long silence and awkward stares

As seen in all the previous examples, the long silences which occur directly after the 'cliffhanger' indicate that there is some form of trouble in talk associated with the prior turn (Jefferson, 1989). The 'cliffhanger' in the following example, is the second cliffhanger for this child. After the first 'cliffhanger' (not shown), there was a silence of three seconds before the child took the floor. In the following example, before the examiner completes her second 'cliffhanger' (lines 18-26) of the assessment, the child multimodally re-enacts his experience as a recipient when a speaker suddenly stops talking and an elongated silence occurs.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Extract 30: (56:22) C10DHA-THA (Long silence and awkward stares)

1. E: ±>what about ±%+scared< (.) I'm su-+
2. chi >>gaze to screen--->•
3. chi >>eating--->*
4. exa ±gaze away---±gaze to screen--->±
5. exa %furrowed eyebrows--+
6. exa +head beat
7. ±+ <we all: feel ±+ scared sometimes.>
8. exa ±eyes roll L to R-±
9. exa +head rolls L to R+
10. >what +% kind of+ things<% make you feel scared.
11. exa +head beat+
12. exa %furrowed eyebrows%
13. C: •ab- ((swallows)) absolutely nothing.
14. chi •gaze away from screen--->•
15. E2: %+ ↑nothing. +%
16. exa %eyebrows raise%
17. exa +head beat---+
18. → ah ±>there's something that ±+makes me feel<
19. exa ±gaze away-----±gaze to screen--->±
20. exa +eyebrows raise--->+
21. +re::ally + [re::ally scared and
22. exa +head beat+
23. C: [((screen freezes))
24. E: ±actually + I [saw ±+one earlier today.]
25. exa ±gaze away from screen±gaze to screen--->±

Clinician-child interactions in ADOS-2 assessments – a CA perspective

26. exa +head beat-+
27. C: [((screen unfreezes))(inaudible)]
28. silent. •
29. chi •gaze to screen--->•
30. E2: +what was that?
31. exa +moves closer to screen--->+
32. C: → the only thing that scared me (1.1) ((swallows
33. food)) is a conversation (.9) they usually go
34. silent (.6) tt %for a very long time.
35. exa %furrowed eyebrows--->%
36. E2: why would that sca:re you a conversation that goes
37. silent.
38. C: •>cause like \$.hh yeah yeah
39. chi •gaze away from screen--->•
40. chi \$smiles--->\$
41. yeah<•\$
42. chi •fixes eye gaze - no movement--->•
43. chi \$fixes neutral expression - no movement--->\$
44. (2.9)
45. E2: ah::: so why is •\$↑that scary.
46. chi •gaze to screen--->•
47. chi \$continues chewing food--->\$
48. C: → cause you- cause you're just staring at each other
49. like. •\$
50. chi •fixes eye gaze - no movement--->•
51. chi \$fixes neutral expression - no movement--->\$

Clinician-child interactions in ADOS-2 assessments – a CA perspective

52. E2: <s:taring •\$okay> and >is it .hh (.)
53. chi •gaze away from screen--->•
54. chi \$opens mouth--->\$
55. ±•\$what what ↑happens in that ±situation< do you
56. exa ±gaze away from screen-----±gaze to screen--->±
57. chi •gaze to screen--->•
58. chi \$continues chewing food--->\$
59. then have +<to say> + or do you
60. exa +head beat+
61. wait %to think of something for the other person
62. exa %eyebrow raise--->%
63. to think of something to say.%
64. exa %eyebrow neutral
65. C: •uh:m: I:: (1.1) wait for the• other person.
66. chi •gaze away from screen-----•gaze to screen---->•
67. E2: ±#oka:y:# .hh okay: %and I mean are you
68. exa ±gaze away from screen--->±
69. exa %furrowed eyebrows--->%
70. ±+ able + to think of things to say yourself
71. exa ±gaze to screen--->±
72. exa +head beat+
73. %or is it + ha:rd %+ to think of things to say in
74. exa %eyebrows raise-----%
75. exa +head beat+
76. that situation (.) %cause sometimes
77. exa %furrowed eyebrows--->%

Clinician-child interactions in ADOS-2 assessments – a CA perspective

78. + our mind just go a bit +

79. exa +palms move forward and back either side of head+

80. blank and we don't know what to say: (.6) ↑what's

81. it like for you.

In this example, the examiner asks a question from the ‘Emotions’ task (lines 1-8) "What about things that you're afraid of?" (ADOS-2, Lord et al., 2012). The child in turn responds that there is ‘absolutely nothing’ that scares him (lines 13-14). After a questioning tail end partial repetition (line 15) marked by an eyebrow raise (line 16) and head beat (line 17) suggesting surprise (Ekman & Friesen, 1978), the examiner takes the next turn to utilise the ‘Emotion’ task to embed her ‘cliffhanger’ into a structured task sequence (lines 18-26). The examiner multimodally exaggerates her ‘cliffhanger’ with a gaze shift, eyebrow raise and intensifier “*really really scared*” (lines 18-22). The examiner could end her ‘cliffhanger’ after the intensifier at the turn transitional place (line 21). Instead, as the examiner expands her ‘cliffhanger’, the child’s internet briefly becomes unstable (line 23) and, as the internet stabilises (line 27) in overlap, the child completes his utterance “*silence*” (lines 27-28). Due to the brief unstable internet, the examiner asks the child to repeat his utterance (line 30).

The child in turn claims that ‘the only thing that scares him is how during conversation, the speaker will go silent for a very long time’ (lines 32-34). Multimodally receipting the child’s utterance as confusing (McDaniel et al., 2007) the examiner queries ‘why the child might find a conversation that goes silent fearful (lines 35-37). The child provides his account of his previous experience (Holt, 2000; Sidnell, 2006) multimodally through a re-enactment (Sidnell, 2006) with a smile (line 40), and reported speech (Holt, 2000) “*cause like yeah yeah yeah*” (lines 38-41) before depicting his feared silence with a fixed stare off camera (line 42) and a

Clinician-child interactions in ADOS-2 assessments – a CA perspective

fixed neutral facial expression (line 43), which he holds for over three seconds (lines 44-47). The examiner expresses a ‘change in state’ with an elongated “*Ah*”. The examiner however continues to convey confusion with her furrowed eyebrows (McDaniel et al., 2007) as she asks the child again to clarify ‘why a long silence is scary’ (lines 45). In turn, the child explicitly vocalises his previous experience of an elongated silence “*cause you're just staring at each other like*” (line 48) before repeating his re-enactment (Sidnell, 2006) in which he demonstrates the same fixed stare and neutral facial expression (lines 50-51). After receipting the child’s re-enactment (line 52), the examiner asks ‘what the child does in that situation and if the child speaks first or waits for the coparticipant to speak’ (lines 55-64). After an “*uhm*” and one second silence (Jefferson, 1974; Schachter et al., 1991) and gaze shift towards the ceiling (Rossano, 2012) suggesting a difficulty in searching for an answer, the child responds that he waits for the other person to talk first (line 65).

Therefore, after the child’s experience of a three second silence following the examiner’s initial ‘cliffhanger’ (not shown), after the examiner delivered his second ‘cliffhanger’, the child’s immediate re-enactment suggests ‘learning within the task’ that an elongated silence is likely to follow. The child in turn utilised the referent of the current ‘cliffhanger’ to re-enact the communicative violation that is experienced with elongated silences. Therefore, the child’s awareness, orientation and re-enactment of social communication violations demonstrate an ability to understand that silences of over a second are unusual without interactants typically working to resolve the problem which caused the silence (Jefferson, 1989). Due to the limitations of the ADOS-2 coding structure that guides what the examiners should observe, the child’s vocalisation and re-enactment of the interactional difficulty is unlikely to be considered as an ability. Instead, the examiner’s requests for further information from the child pursue a response to determine if the child’s orientation to the difficulties in conversation are due to

Clinician-child interactions in ADOS-2 assessments – a CA perspective

social communication difficulties associated with autism (e.g., not knowing what to contribute to a social discussion). For example, the examiners note within the child's diagnostic report that *“He did not express interest in the assessor's thoughts, feelings or experiences. When the assessor shared an anecdote or offered a conversational cliff-hanger (e.g. ‘I did something really exciting...’), he would usually ignore this and continue to talk about his own interests or would talk over the assessor and would not ask any follow-up questions”* (C10 diagnostic report).

6.6.3.4. Conclusion of section

The children in this section recognise the turn design of a ‘cliffhanger’ as a preliminary to a subsequent turn, and therefore demonstrate an explicit orientation to the silence which follows the preliminary as unexpected. Moreover, as the children are members of the same communicative culture as the examiners, they are sensitive to the changes in the turn design of a ‘cliffhanger’ that do not fit habitual communicative practices, such as, changes in silences (Jefferson, 1989), gaze patterns (Goodwin, 1980; 1981; Rossano et al., 2009), and non-verbal interaction (Mondada, 2019). When changes occur in habitual communicative practices that are made to be explicit through exaggeration, recipients might be puzzled about the speaker's prior talk and might work to understand ‘why that now’ (Sacks, 1974; Schegloff, 1979; Schegloff, 1980; Schegloff & Sacks, 1973; Terasaki, 2004).

For example, in extract 28, the atypicality of the turn design and the silence that follows the ‘cliffhanger’ is taken to be indicative of the examiner's difficulty in sharing an emotional experience. In extract 29 when the examiner produces two near verbatim ‘cliffhanger’ iterations which in turn communicate that they are intentionally uttered to omit contextual information and that no more information will follow, rather than explicitly raise a problem,

Clinician-child interactions in ADOS-2 assessments – a CA perspective

the child uses humour to manage a potentially difficult interaction. The child in extract 30 also demonstrates an orientation to the communicative violation that is experienced with elongated silences by blocking the examiners ‘cliffhanger’ (Sidnell & Stivers, 2012) with a re-enactment of an elongated silence. The children therefore not only recognise the turn design of a ‘cliffhanger’ but also employ different approaches to manage the atypicality of its sequential delivery. Yet, the failure to include communicative norms and everyday practices into the design of the ADOS-2 results in the children’s responses going undocumented.

6.6.4. Misunderstanding the ‘cliffhanger’

Observable in the former examples is how the children orient to, and variably generate space for the examiners to deliver their ‘cliffhangers’, therefore making themselves available as recipients to establish a common ground (Sacks, 1992). In the following example, after the examiner asks if the child would recommend his favourite game, both speakers take the floor in overlap, and the child in turn, cuts his overlapped answer to the examiner’s question. The examiner ‘wins the floor’ and without displaying an orientation to the child’s unrealised project of his cut off talk (Fasulo & Foire, 2007), embeds her ‘cliffhanger’ (lines 58-63). The child orients to the examiner’s ‘cliffhanger’ by remaining silent, and by sustaining his bodily orientation and gaze. During the ‘cliffhanger’, there are several elongated silences which suggest difficulty. After a further four second silence, the child returns to his previous turn at talk and continues his answer of if he ‘would recommend the videogame’. The mismatched projects of the examiner and child here have implications for assessment.

Extract 31: (27:40): C05DHA-THA (Misunderstanding the ‘cliffhanger’)

1. E: what kin- +do you- (.) do you’ve-+ (.) do you like
2. exa >>±gaze to screen--->±

Clinician-child interactions in ADOS-2 assessments – a CA perspective

3. chi >>•gaze away from screen--->•
4. chi >>*manipulating objects with hands--->>*
5. exa +LH gestures-----+
6. playing video games quite a ↑bit.
7. C: ye yes see >sometimes when my brother asks me< to
8. play •one video game too much. •
9. chi •eye away from screen----•gaze to screen--->•
10. E: +mm hum,+ •which one is that.
11. exa +smiles +
12. chi •gaze away from screen--->•
13. C: <uhm destiny two:> (.) is it- it's like a pla- (.)
14. planet %game where you: go to hh go to >different<
15. exa %furrows eyebrows--->%
16. planets %+an:d (.) +flight in a
17. exa %eyebrows neutral
18. exa +head nod-+
19. war. •
20. chi •gaze to screen--->•
21. E: %+o:h right% (.) +•okay.
22. exa %head nod--%
23. exa +eyebrows raise-+
24. chi •gaze away from screen--->•
25. C: through very different types of aliens.
26. (2.0)
27. E: sounds terrifying.
28. (3.5)

Clinician-child interactions in ADOS-2 assessments – a CA perspective

29. C: .hh (.) •yes but there are many >different kind

30. chi •gaze to screen--->•

31. of< weapons. >so there's<

32. +bo:w:s (.7) shotguns: sword:s+

33. exa +head nod-----+

34. +rifle:s (.7) .hh *scar rifle:s (.)

35. exa +furrows brows--->+

36. chi *furrows brows--->*

37. %trace rif•les (.) .hhh

38. exa %head nod--->>%

39. chi •gaze away from screen--->•

40. E: m[mm

41. C: [*sidearms +hand cannons dragon

42. chi *eyebrows neutral

43. exa +eyebrows neutral

44. launchers% grenade •launchers.

45. exa %stops head nod

46. chi •gaze to screen--->•

47. .hhh >many +different types of weapons<.+

48. exa +head nod-----+

49. E: %mmm.±

50. exa %LH to mouth--->%

51. exa ±gaze away from screen--->±

52. sounds interest↓ing (.4) would you recommend

53. ±it.

54. exa ±gaze to screen--->±

Clinician-child interactions in ADOS-2 assessments – a CA perspective

55. C: mmhmm.± (.) [(and I've-•)]
56. exa ±gaze away from screen--->±
57. chi •gaze to screen--->•
58. E: → [my children] >love to play<
59. uhm:• (1.3) ±<a gam:e> (1.5) •a very unusual
60. chi •gaze away from screen---•gaze to screen--->•
61. exa ±gaze to screen--->±
62. •#game.#
63. chi •gaze away from screen--->•
64. (3.2)
65. C: → •w: well there are: (.) two- (.) three other
66. chi •gaze to screen--->•
67. *lines omitted - telling continues*

In this example, after the child shares that he and his brother play video games (not shown), the examiner asks questions about the child's experience of video gaming (lines 1-10). The child in turn describes the details of the video game that he and his brother play (lines 7-25). A two second silence follows the child's turn at talk (line 26) suggesting some form of problem or disaffiliation (Stivers & Sidnell, 2012) before the examiner provides an assessment that the game "*sounds terrifying*" (line 27). Another long silence follows (line 28) before the child agrees "*yes*" before providing a list of the games weaponry (lines 29-47) as his response shifts to a zone of 'proximal relevance' which sits between somewhat irrelevant and completely relevant (Ochs & Solomon, 2010). The examiner provides an assessment "*sounds interesting*" of the child's description before asking the child if he would recommend the game (lines 52-53) as she returns her gaze to the screen to select the child to take the floor (line 54). In turn,

Clinician-child interactions in ADOS-2 assessments – a CA perspective

the child implies he would recommend the game “*mmhmm*” (Stivers & Sidnell, 2012) and after a micro pause the child continues his turn at talk (lines 55).

The examiner shifts her gaze from the screen (line 56) and in overlap with the child’s talk, commences her ‘cliffhanger’ (line 57). As the child orients to the examiner’s talk, he cuts off his turn (line 55) and shifts his gaze to the screen (line 56). Rather than relinquish the floor to the child to complete his answer to her prior adjacent question, the examiner increases her pace of talk to win the floor (line 58). The examiner displays difficulty in constructing her ‘cliffhanger’ as she utters “*uhm*” and a slowly spoken “*a game*” (line 58-59) which is flanked by long pauses in talk greater than a second (Jefferson, 1974; Schachter et al., 1991). Rather than end her ‘cliffhanger’ after the first turn transitional place “*my children love to play a game*”, the examiner provides an intensifier “*a very unusual game*” as a type of exaggeration (line 58-59). The creaky tail end of the examiner’s ‘cliffhanger’ indicates the turn completion (Local et al., 1985). After over three seconds of silence (line 64), rather than pass the floor back to the examiner to continue her turn at talk, the child commences a “*well*” pre-faced turn (lines 65-66) which functions as a generalised procedural alert that the turn that follows will depict his perspective and interests relative to the actions established in the prior sequence (Heritage, 2015).

Due to the overlap in talk as the examiner delivered her ‘cliffhanger’, it is likely that this child may not have heard or has misunderstood the project of the examiner’s ‘cliffhanger’. Yet as the examiner in this instance does not orient to the overlap in talk (for example with a repetition), the examiners note the lack of floor passing device from the child as indicative of autism symptomatology. For example, the child’s diagnostic report noted that “*The assessor occasionally made ‘cliff-hanger’ statements (disclosing personal information in a way which*

Clinician-child interactions in ADOS-2 assessments – a CA perspective

clearly invites questioning). For example, the examiner started to talk about her own children and how they really love to play this one game. He did not attempt to ask the examiner any questions and directed the conversation back to his own interest. For instance, he started to talk about the games he likes to play” (C05 diagnostic report).

6.6.4.1 Conclusion of section

Until the ‘cliffhanger’, the child acknowledges and answers the examiner’s turns at talk, relinquishes his turn when he speaks in overlap with the examiner, and waits for the examiner to complete her ‘cliffhanger’. Due to the overlap in talk as the examiner commences her ‘cliffhanger’, it is not clear if the child heard “*my children*” and therefore recognised the action of the turn design. Nor do recipients typically raise problems of understanding or recognition of a preliminary’s projected action (Schegloff, 1980). Therefore, as the examiner did not orient to the overlap in talk and determine if the child heard or recognised the turn design, it is impossible to determine if the child would have uttered a form of floor passing device.

6.6.5. Repeating the same ‘cliffhanger’

Similarly, in the following example, the child relinquishes his turn when he and the examiner speak in overlap as she attempts to insert her cliffhanger’ (lines 21-26). Again, as seen in the previous example, the child waits for the examiner to complete her turn but then returns to expand on his previous turn at talk. Therefore, it is not clear if the child heard or understood the examiner’s cliffhanger’. Rather than abandon the cliffhanger’ however, the examiner acknowledges the child’s talk before relaunching the same ‘cliffhanger’ (lines 65-71). On this iteration, the child provided the explicit ‘What-go-ahead’ response which in turn satisfied the institutional agenda. Therefore, it is unlikely that the child heard or understood the examiner’s initial cliffhanger that was uttered in overlap with the child’s talk.

Extract 32: (30:42) C06DHA-THA (Repeating the same ‘cliffhanger’)

1. E: but sometimes you might have to go for
2. exa >>±gaze to screen--->±
3. chi >>•gaze away from screen--->•
4. +↑other reasons+ can you think what other reasons
5. exa +eyebrow raise-+
6. you might have to go [for.]
7. C: [•yeah] if- if like
8. chi •gaze to screen--->•
9. •the property: if the property: (.5) .hh uhm: (.)
10. chi •gaze away from screen--->•
11. •say like they need a plumber or electrician to
12. chi •gaze to screen--->•
13. come fix something (.4) or: +some- something like
14. exa +head nod--->+
15. that (.5) cause if you're landlord you have to
16. take care of that (.) •as well,+
17. chi •gaze away from screen--->•
18. exa +stops head nod
19. (1.5)
20. [uhm:.]
21. E: → ±[↑I had] an +<absolute +disa:ster>+
22. exa ±gaze up to ceiling--->±
23. exa +eyebrow raise+head nod-+
24. ±•in my house (.) couple of months ago.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

25. exa ±gaze to screen--->±
26. chi •gaze to screen--->•
27. C: → and if they're not paying (.8)
28. •or: (.) if you own like a fl:at
29. chi •gaze away from screen--->• (.4)
30. +and you own the:+ (.4) the like car park
31. exa +head nod-----+
32. +bit as well+ (.8)
33. exa +head nod---+
34. you have to: you have to: (1.) uhm
35. (2.) +% (.2) •er yeah like some% people (.) cause
36. exa +head beat
37. exa %eyebrow raise-----%
38. chi •gaze to screen--->•
39. you have to get the money from that as well, (.7)
40. [cause like (if you owned there.)]
41. E: ±+[>oh you'll have to get money from all over the]
42. exa ±gaze up to ceiling--->±
43. exa +head beat
44. ±place.<+ (.6) +
45. exa ±gaze to screen--->±
46. exa +head nod+
47. C: yeah if you own the like freescape thing.+ (1.7) +
48. exa +nod-----+
49. you know what I mean (.4) like the (.) the (.) car
50. park cause *then the flats pay +you* (.4) to park

Clinician-child interactions in ADOS-2 assessments – a CA perspective

51. chi *gestures-----*

52. exa +head nod--->+

53. their cars there. •

54. chi •gaze away from screen--->•

55. E: oh I see (.) yes I do see what you're

56. %saying+ (.4) so% (.)

57. exa %smiles-----%

58. exa +stops head nod

59. you're you're really thinking about (.) all the

60. different places you can earn your money from.

61. C: yeah (1.1) I don't- (.) like I don't mind working

62. and I like working (1.) but: (.) I'd rather have

63. it if •I work for myself.

64. chi •gaze to screen--->•

65. E: → ±what would (.) what •would happen if er you had if

66. exa ±gaze away from screen--->±

67. chi •gaze away from screen--->•

68. your tenants had an <absolute disaster> like the

69. one I had.± (.4)

70. exa ±gaze to screen--->±

71. [a few months ago.]

72. C: → [•(why what hap-)] •+ (.) what happened.+

73. chi •gaze to screen----•gaze away from screen--->•

74. exa +smiles-----+

75. E: ±.hh uhm: (.4) the: pipe that leads into my toilet

76. exa ±gaze away from screen--->±

In this final example, the child shares that in the future he would like the freedom to work whenever he wishes as a property developer and a landlord (not shown). The examiner in turn asks what reasons the child might need to attend the site as a landlord (lines 1-6). The child commences his response in overlap with the tail end of the examiner's question, and after a self-repair, he demonstrates knowledge of the responsibilities of a landlord (lines 7-17). After nearly a two second silence (line 19) which the child orients to as a problem that needs to be resolved (Jefferson, 1989), the child in overlap takes the floor and utters a falling intoned stretched "*uhm*" indicating his search for further information (line 20). The examiner at this point inserts her 'cliffhanger' in overlap utilising the child's topic of discussion of property to introduce her own negative experience of property. To orient the child to the significance of the 'cliffhanger', the examiner multimodally exaggerates the turn design by commencing her turn with a sharp rise in pitch and gaze shift to the ceiling, emphasis and an eyebrow raise (Ekman & Friesen, 1976; Ekman & Friesen, 1978) on her intensifier "*absolute*", and sound stretch and head nod on "*disaster*" (lines 21-23).

The examiner returns her gaze to the screen to select the child to take the floor (line 25), the child does not however provide a floor passing device in response to the examiner's 'cliffhanger'. Instead, the child prefaces his turn with a backwards looking "*and*" (lines 27) to link his current and preceding utterance (Heritage & Sorjonen, 1994). The marked emphasis on the "*and*" indicates the child's orientation to adding the incremental information to his previous response (lines 27-40). The child continues to expand on his future property endeavours which the examiner receipts with several "*oh*" prefaced turns marking her 'change-in-state' (Heritage, 1984) followed by several reformulations of the child's prior turns at talk (lines 41-63). After the child's aligning response (lines 61-64), the examiner incorporates the

Clinician-child interactions in ADOS-2 assessments – a CA perspective

child's potential role as a future landlord (lines 65-68) into a repetition of her 'cliffhanger' (lines 65-71) again marking the intensifier and the negative descriptor by slowing down the sound of her talk (line 68). At the tail end of the 'cliffhanger', the examiner returns her gaze to the screen to select the child to take the floor (line 70) and briefly pauses at a transition relevance place (line 69) before providing temporal incremental information (line 71). At the transition relevance place, the child asks the examiner "*why what happened*" before cutting his utterance short due to the overlap with the examiner's talk. After a micro pause in which neither speaker talks, the child completes his turn construction and explicitly provides the 'What go-ahead' question that satisfies the institutional agenda (lines 72-73).

For this interaction, the overlap in talk and the child's "*and*" prefaced utterance in the subsequent turn to the 'cliffhanger' indicate that the child may not have heard or understood the examiner's turn at talk as a 'cliffhanger'. The examiner in this extract oriented to the child's turns at talk and individual project and allowed the child to bring his sequence of talk to completion. The examiner utilised the child's topic to incorporate into the repetition of her 'cliffhanger'. This action generated an opportunity for the child to hear and understand the cliffhanger as a preliminary. This in turn resulted in the child providing the intended 'What go-ahead' response which therefore was documented in the child's diagnostic report "*When the assessor offered information about herself, he was able to respond with related information to continue the conversation and on a couple of occasions asked the assessor for further information by asking questions such as "what happened?" when the assessor told him that something terrible happened in her house*" (C06 diagnostic report).

6.6.5.1. Conclusion of section

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Therefore, the examiner in this example utilised her capabilities as a member of the child's culture to sensitively orient to the child's turns at talk. By providing a repetition after the overlap in talk enabled the child to provide a response that satisfied the examiner's reason for asking. If the examiner abandoned the initial 'cliffhanger', the conclusion for this particular interaction would likely have been that the child did not express an interest in the examiner's thoughts, feelings, and experiences. The examiner's interaction directly influenced the outcome of this specific interaction, as it does throughout the social communication assessment. Therefore, the examiner's communicative behaviours must not be disregarded within social communication assessments as they can impact the outcome of the diagnostic process.

6.6.6. Summary

I have shown throughout the data how the children demonstrate competence in turn-taking and sequential construction, understanding their roles in narrative and longer sequences using mechanisms, these all, in turn demonstrate attention and interest (Fasulo & Flore, 2007). The children as recipients of preliminary 'cliffhangers' understand that normal turn taking rules are suspended and refrain from substantive contributions (Jefferson, 1985; Schegloff, 1982; Stivers, 2008) as they wait for the examiners to continue their talk. Moreover, I also show how the children use a variety of continuers found in everyday communication to pass the floor back to the examiner, such as, 'uh huh', 'mm hm', 'yeah' interaction (Schegloff, 1980) and 'head nods' (Schegloff, 1982), and how the children raise problems of understanding or recognition of the 'cliffhangers' (Schegloff, 1980). Although the children in the data utilise the same resources found in everyday interaction, if they do not explicitly ask the examiners to elaborate with a 'Wh' question, the examiners in line with the coding item 'Asks for Information' document the children as displaying behaviours associated with autism symptomatology in the

Clinician-child interactions in ADOS-2 assessments – a CA perspective

diagnostic reports. Due to the specification of the coding item ‘Asks for Information’, all communicative devices that are not explicit ‘Wh’ questions are all rated as a 2) ‘Responds appropriately to examiner's comments about his or her thoughts, feelings, or experiences, but does not spontaneously inquire about them (ADOS-2: Lord et al., 2012). Therefore, for this coding item, the diagnostic reports do not represent the children’s social motivation and social-emotional capabilities.

7. Discussion

I aimed to determine how the most widely used standardised observational assessment of autism, the ADOS-2 afforded people under assessment opportunities to display capabilities in social-emotional reciprocity (i.e., displayed emotions and affect, back-and-forth conversation, and initiation or response to social interactions). I therefore aimed to analyse the interactional tasks that are specifically designed to elicit difficulties in social-emotional reciprocity 1) ‘Emotions’ task, 2) ‘Loneliness’ and the ‘Social Difficulties and Annoyance’ tasks, and 3) the ‘cliffhangers’ conversational openings. I utilised CA to sequentially analyse how interactants make sense of each turn at talk within these interactional tasks. With the interactions as a comparison, I aimed to explore how the examiners documented the children’s elicited social-emotional reciprocity within their diagnostic reports in relation to the corresponding coding items a) ‘Communication of Own Affect’, b) ‘Comments on Others’ Emotions/Empathy, and c) ‘Asks for Information’.

Therefore, the following main research questions were answered in chapters 4 through 6:

1. What kinds of opportunities do the interactions within the ‘Emotions’ tasks provide for the examinees to ‘communicate their own affect’?
2. What kinds of opportunities do the interactions within the ‘Loneliness’ and the ‘Social Difficulties and Annoyance’ tasks provide the examinees to ‘comment on others’ emotions and display empathy’?
3. What kinds of opportunities do the interactions within the ‘cliffhangers’ provide for the examinees to demonstrate social motivation and ‘ask the examiner for information’?

7.1. Chapter 4: What kinds of opportunities do the interactions within the ‘Emotions’ tasks provide for the examinees to ‘communicate their own affect’?

The purpose of the ‘Emotions’ task is to provide a context in which the examinees talk about emotions and personal experiences. The ADOS-2 protocol instructs the examiners to introduce the ‘Emotions’ task by saying “*Now I'd like to ask you a few questions*” but directs the examiners to ‘*not*’ introduce the task as an ‘*emotions*’ task. The ‘Emotions’ task primarily consists of a two-part questioning approach that has two main objectives: to determine what ‘things’ make the examinee feel an emotion (e.g., “*What do you like doing that makes you feel happy and cheerful?*”) and how each emotion ‘feels’ to the examinee (e.g., “*How do you feel when you're happy?*”). The ‘Emotions’ task consists of five emotions (*Happy, Afraid, Angry, Sad, Relaxed/Content*) and examiners are advised to start and end the ‘Emotions’ task on positive emotions but can ask the negative emotions in any order. Some of the emotions have interchangeable words (*Afraid, Frightened, Anxious*), whilst others have an inclusive preamble “*Most people have times when they feel sad*”. The design of three of the five ‘things’ questions are ‘What about’ ‘next-in-a-series’ questions (e.g., “*What about angry?*”).

The ADOS-2 manual states how ‘describing emotions is difficult for most people’ (Lord et al., 2012) but does not explain why. The findings I present in chapter 4 reveal several factors that implicate the description of emotion within the protocol design of the ‘Emotions’ task. For example, I demonstrated how the examiners manage the omitted contextual information found in the design of the ‘Emotions’ task. In extract 1, rather than follow protocol instruction, the examiner introduces the task as a discussion about emotions. After asking the ‘happiness things question’, the examiner also utilises the protocol flexibly by inserting his own questions in response to the child’s answers. I show how this semi-structured interaction in which the

Clinician-child interactions in ADOS-2 assessments – a CA perspective

examiner conversationally responds to the child's turns at talk, is shaped without difficulties for both the examiner and examinee. I show how once the examiner asks the 'happiness feels question' which does not contain the referent (i.e., physical sensation), the interaction changes from conversational to institutional. Each time the child provides a candidate answer which does not provide 'a physical sensation', the examiner provides a minimal continuer to pass the floor back to the child. In extract 2, when the examiner omits the task introduction and the 'happiness things question' entirely and instead, commences the task with the 'happiness feels question', I show how without any contextual information, the 'happiness feels question' leads to significant difficulty shaped by long silences and "*I don't know*" declarations. I show how the examiner in turn provides question reformulations ("*What does it feel like in your body when you're happy*" and "*How do you know that you're happy*") and candidate answers ("*How about when you're playing with your lego*") based on known information about the child. I present how once the examiner provided contextual information for the child, the child in turn specified his own answer. I also presented how examiners utilise different devices to manage difficulties in communication in response to specific 'Emotion' task questions.

Three of the five 'things questions' are designed as 'What about' 'next-in-a-series' questions (e.g., "*What about angry?*"). In extracts 3 and 4 I show how the children convey difficulties shaped by long silences and "*I don't know*" declarations if the examiners ask one of the three 'What about' questions as a standalone utterance. In response to the children's conveyed difficulties, the examiner in extract 3 reformulates the ADOS-2 question "*What about angry?*" to "*Does anything make you feel angry?*" and in extract 4, the examiner models an answer using the 'things' that make the examiner feel an emotion. In both examples, once further contextual information was provided by the examiners, both children formulated their own answers without difficulty.

The ADOS advises the examiners that ‘throughout the assessment the examiner should give appropriate encouragement and praise’ (Lord et al., 1999). I show how praise in the third turn is typically provided after the children demonstrate difficulty in searching for answers (marked by “*uhm*”, “*I don’t know*”, and silence). I demonstrate how when praise is used in a third turn following an answer, such as “*yeah good description*” (extract 5) and “*well done*” (extract 6), it functions as a positive evaluation of the child’s prior response. The children in both extracts in turn demonstrate learning within the task as they utilise their previously positively evaluated answer as a template for a subsequent answer.

I also demonstrate how the examiners and the children in the ‘Emotions’ task orient to the sociocultural meaning of emotion. For example, in extract 7, the child rejected ever experiencing the emotion ‘afraid’ (“*No person scares me*”), but after the examiner utilised the same question design but replaced the fear term, accepted feeling ‘frightened’ by other factors. In extract 8, the examiner oriented to the ADOS-2 preamble “*It says most people have times when they feel sad*” before inserting “*I wonder*” as a device to facilitate potentially difficult ‘feelings talk’. I present how the child in extract 9 conveyed an awareness of display norms as he described how he tries to hide his anger which he projects to sadness. I also demonstrate how the children articulated the issue of describing emotions. For example, the child in extract 8 explained how it is difficult to describe emotions as emotional experiences are not typically analysed. Moreover, I show how the child in extract 9 described how when experiencing emotion, one gets absorbed into the emotion eliciting event and not the felt experience of emotion. Similarly, I show how the child in extract 10 explained how the sensational experience of emotions do not typically make consciousness at the time of the event and therefore this experience is hard to explain as a reflective action.

Throughout the data I have shown how when the children do not provide answers to the questions that satisfy the examiners reason for asking, the examiners in general work to provide the children further opportunities to modify their answers. The examiners do this by passing the floor back to the child with continuers and silences to prompt the child to provide another answer (extract 1), and by also reformulating questions (extract 2 & 3). I show how the examiners also provide the omitted information from the ‘Emotions’ task protocol by offering model answers that incorporate known information about the child (extract 4 & 12) and by including (extract 9) and even frontloading the target answer, a physical sensation (extract 12) that is not contained in the design of the ADOS-2 questions.

Therefore, I have shown how the examiners utilise the ADOS-2 flexibly and dynamically by intuitively modifying their communication in response to the child’s answers. The examiners utilise natural conversation and their own communicative capabilities as members of a specific culture to guide the assessment. This approach to assessment changes the focus from a deficit approach (to elicit behaviours associated with autism to conclude a diagnosis) to a strengths-based approach to assessment.

7.1.1. Linked Research

The composition of the ADOS-2 ‘feels questions’ are open class questions that do not limit response types and therefore examinees should be free to formulate any type of answer (Houtkoop Steenstra, 2000). As demonstrated in the data however, the examiners work to achieve an answer containing a ‘physical sensation’ associated with an emotion, which is likely deduced from the ‘angry feel question’ which contains the word ‘inside’ (“*How do you feel 'inside' when you're angry?*”). In everyday interaction however, speakers often convey in their

Clinician-child interactions in ADOS-2 assessments – a CA perspective

question design what the content of the recipient's answer should contain (Pomerantz, 1988). Some examiners reformulate the ADOS-2 questions to contain the referent or produce 'candidate answers' which are typically offered after a 'failed' answer to provide the child with a model answer (Antaki, 2002; Pomerantz, 1988). Similarly, three of the five 'things' questions in the 'Emotions' task are 'What about' 'next-in-a-series' (Schegloff, 2007) questions in which the missing contextual information is contained in the previous protocol questions (Sacks, 1992). For the ADOS-2 however, the missing contextual information is contained in the previous but not adjacent protocol questions. The likelihood of incorrect or 'I don't know' responses increases when the 'What/How about' questions are produced as stand-alone utterances (Stickle, 2015). After the child demonstrates difficulty, the examiners reformulate the ADOS 2 question or produce a 'candidate answer'.

Occasionally, after the examiner initiates an action, if the children displayed difficulties, as guided by the ADOS-2, the examiners would give encouragement and praise which typically takes the form of a positive evaluation of the child's talk (Sinclair & Coulthard, 1975). These third turn evaluations mirror an 'Initiation-Response-Evaluation' ([IRE], Mehan, 1979) feedback approach. The children in the data 'learn within the task' as they perceive the 'correctness of their response' (Maynard, 2005) by modelling subsequent answers based on the examiner's third turn positive evaluations. The child's prior positively evaluated responses however were considered ineffective and shaped by difficulty. The clinical presentation of the examinee could differ between assessments dependent on the examiner's communication (Maynard & Marlaire, 1992). Therefore, the ADOS-2 instructions to provide encouragement and praise should expand to advise examiners on how an evaluative approach can result in 'learning within the task'.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

All children from a young age learn how to respond to and express emotions in a way that is understood by members of their culture (Wittgenstein, 1980a, 1980b). The examiners and the children demonstrated an orientation to the culturally defined differences in emotion words, in particular, how people differ in how they associate negative connotations with emotions (Siegel & Alloy, 1990). Moreover, children are sensitive to hierarchical social relationships which in turn influence how they communicate negative emotions (Underwood et al., 1992). When asked to share emotions, the children may ‘mask’ or ‘camouflage’ their natural behaviours to fit with the social norms of the relevant environment (Lai et al., 2017; Loomes et al., 2017; Pearson & Rose, 2021) to navigate social expectations based on neurotypical standards (Hull et al., 2017). Therefore, the communication of emotions has both sociocultural opportunities and constraints (Mesquita & Boiger, 2014; Parkinson, 2012). Applying culturally sensitive methods throughout interaction-based assessments can provide an accurate characterization of a child’s communication (Washington et al., 2023).

The ADOS-2 questioning requires the child to provide the ‘things’ that elicit an emotion and to recall how the emotion ‘feels’. The children in the data explicitly vocalise why describing the felt experience of a previous emotional situation is difficult. The children explain how emotions are in general experienced in the present moment and how bodily awareness can ‘disappear’ into the background as absorption into the eliciting event (Colombetti, 2011) and the emotive foreground takes focus (Leder, 1990). Therefore, due to the absorption experienced during the eliciting event, when a person is asked to describe how an emotion felt during a previous experience in a reflective activity, a person is going to be unlikely to recall the bodily sensation of a pre-reflective state (Colombetti, 2011; Gallagher, 2005; Thompson, 2010; Zahavi, 2005). This has implications for any conclusions drawn from the ‘Emotions’ task to inform diagnosis.

When the children explicitly raised issues with answering the ‘Emotions’ task questions or demonstrated difficulty, the examiners throughout the ‘Emotions’ task designed their turns at talk to assist the children in providing an answer that will satisfy their reason for asking. The examiners varied in prompting behaviours from minimally providing continuers to pass the floor back to the child, to producing ‘candidate model answers’ (Antaki, 2002; Pomerantz, 1988) containing a ‘physical sensation’. Also, occasionally the examiners would frontload contextual information as a preface to the task and within the first ‘feels’ question (i.e., physical sensation). Therefore, the examiners utilised their own capabilities to manage any difficulties in interaction. The content of the examiner’s talk affects how the interaction within the assessment unfolds, including the examinees responses. These factors have consequences for how the examinees responses are perceived, documented, and assessed as appropriate and competent (Korkiakangas et al., 2016; Maynard & Turowetz, 2017) and indicative of autism symptomatology.

7.2. Chapter 5: What kinds of opportunities do the interactions within the ‘Loneliness’ and the ‘Social Difficulties and Annoyance’ tasks provide the examinees to ‘comment on others’ emotions and display empathy’?

The purpose of the ‘Loneliness’ task is to assess the examinees ability to describe theirs and other’s emotional reaction to ‘Loneliness’ and their insight into theirs and others social situations. The focus of observation in the ‘Loneliness’ task is to evaluate whether the examinee understands the concept of loneliness and how they feel it relates to them and to other people. The purpose of the ‘Social Difficulties and Annoyance’ task is to assess the examinees insight into social difficulties and sense of responsibility for their own actions. The focus of

Clinician-child interactions in ADOS-2 assessments – a CA perspective

observation is to observe the examinees understanding of appropriateness and implications of their feelings and behaviours, and if they have tried to modify their own behaviours to fit in with others. The ADOS-2 manual instructs the examiners to ask the ‘Loneliness’ task questions (e.g., *"Do you ever feel lonely?"*) and the ‘Social Difficulties and Annoyance’ task questions (e.g., *"Have you ever had problems getting along with people at school or at work?"*) in the order provided. The ‘Loneliness’ task does not provide prompts but there are follow up prompts for the ‘Social Difficulties and Annoyance’ task questions (*"How about at home?"*, *"Do you ever get in trouble?"*, *"Why?"*, *"What for?"*). The ‘Loneliness’ and ‘Social Difficulties and Annoyance’ task questions therefore aim to prompt responses from the child that enable the examiners to rate both coding items ‘Communication of Own Affect’ and ‘Comments on Others' Emotions/Empathy’.

The findings I present in chapter 5 reveal several observations that challenge the lack of emotional awareness and lack of empathy theories in autism. For example, I show how in extract 13, after the examiner asks the protocol question *"Do you ever feel lonely"*, the child in turn agrees and provides a situation in which she feels lonely *"When no one wants to talk to me"*. Rather than provide an empathic response to encourage future sharing of emotions, the examiner continues with institutional progressivity with the next protocol question *"Do you think other people your age ever feel lonely"*. Due to the design of these closed polar questions and the absence of an empathic response, the child in this extract provides a minimal agreeable response *"Yeah sometimes"*. Without further follow up questions that request for elaboration, the examiners can only conclude that the child agrees that other people experience loneliness.

In contrast, in extract 14 after the child minimally agrees that other people experience loneliness, rather than sustain institutional progressivity and ask the next protocol question, I

Clinician-child interactions in ADOS-2 assessments – a CA perspective

show how the examiner digresses from protocol to seek further information “*Do any of your friends complain of that sometimes or not?*”. The child in turn produces a disagreeable response followed by an account “*No you don't really talk about those kind of things?*”. Similarly, the ‘Social Difficulties and Annoyance’ task interview questions are also polar questions. In extract 15 after the examiner asks the ADOS-2 polar question “*Do you do things that annoy others at all do you think?*”, the child agrees and provides a behaviour that might annoy others. Again, rather than progress with institutional progressivity, I show how the examiner digresses from protocol to specifically ask an open question “*How do you know that?*” to enable the child to comment on others’ emotions and demonstrate an ability to consider a third-persons thoughts, feelings, and beliefs “*Cause uhm they would just get annoyed with me from talking so much I think?*”.

In extract 16 after the child claims her mother is the cause of her loneliness, I show how the examiner digresses from protocol and asks the child to describe her thoughts on her mother’s motivation for her actions “*Why do you feel mum block everything on your phone do you think?*” and “*Anything else that she might be blocking it for?*”. I show how the examiner’s open questions in response to the child’s answer enabled the child to clearly demonstrate a recognition and understanding of her mother’s thoughts, feelings, and actions. When the child in extract 17 demonstrated difficulty in understanding another’s perspective, I again show how the examiner digresses from protocol to provide the child with multiple open questions to prompt the child to consider the other person’s thoughts, feelings and experiences (“*Why do they say that?*”, “*What do you make of it?*” and “*Do you think there's something that maybe you might have done that had irritated him?*”). Similarly, in extract 18, after the examiner asks the protocol question “*Do you know anybody else that got teased or bullied?*”, the child provides an agreeable answer and comments “*Yeah i think i've i have three friends i think*”.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

they're all sort of i think they were all teased a bit yeah". Again, rather than conclude that the child agrees that other people experience teasing or bullying and ask the next protocol question, I show how the examiner asks a follow up prompt to pass the floor back to the child to consider her own perspective of her peers third-person experience "*and what sort of things were they teased for did you get the sense of why?*".

In extract 19, the examiner changes the final open question from a third-person perspective format "*What about things other people do to help themselves feel better when they're lonely?*" to a second-person format "*What do you think is a good thing to do if someone feels lonely?*". I show how this restricts the child to provide an answer in the first-person. Similarly, in extract 20, after asking the final closed 'Social Difficulties and Annoyance' task question "*Are there other kids/people you know who get teased or bullied?*", the examiner provides a follow up question formulated in the second-person "*Is there anything else you can do if you see someone being teased?*" which again restricts the child to provide an answer in the first-person. I show how both the examiners second-person reformulations enable the child to reflect on their hypothetical behaviours in response to another's emotive experience.

Finally, I show how in extract 21, the examiner shares an emotive personal experience, which in turn results in the examiner incorporating herself as a direct second-person, whose thoughts, feelings, and experiences are made relevant in the immediate interaction. The child in turn aligns with the examiner's display of emotion and demonstrates an empathetic response with a smile and laughter, and by sharing a similar experience. I therefore show how the examiner's action of sharing her own emotional experience with conveyed emotion enables the child to demonstrate an empathetic reaction in response to another person.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

I have shown how the examiners utilise the ADOS-2 flexibly and dynamically by intuitively modifying their communication in response to the child's answers. Therefore, the examiners utilise natural conversation and their own communicative capabilities as members of a specific culture to guide the assessment. This approach to assessment changes the focus from a deficit approach (to elicit behaviours associated with autism to conclude a diagnosis) to a strengths-based approach to assessment.

7.2.1. Linked Research

Like, the 'Emotions' task, the 'Loneliness' and 'Social Difficulties and Annoyance' task interview questions ask the child about personal and emotional experiences. If the examiners rigidly adhere to protocol and institutional progressivity, they may lack orientation to the content contained in the child's answer to a potentially difficult emotion question. Specifically, if the child shares an emotional experience and the examiner adheres to institutional progressivity and asks the next question without a third turn empathetic response, the child may distance themselves from emotion in subsequent answers (Voutilainen & Koivisto, 2022) and withdraw from sharing further emotional information. This will in turn have consequences for conveying social emotional reciprocity.

Many of the 'Loneliness' and 'Social Difficulties and Annoyance' task interview questions are closed polar questions that are designed to invite the examinees to provide a one or two word (Silverman et al., 2016) 'yes' response concerning a particular referent (Heritage & Raymond, 2012; Pomerantz, 1984; Sacks, 1973; 1987). Due to the design of the questions, for the examinee to provide a 'no' answer with an account takes more interactional work (Houtkoop-Steenstra & Antaki, 1997). Therefore, the questions are not neutral in their design. Moreover, the design of the closed polar questions lay the terms for how examinee responses can be

Clinician-child interactions in ADOS-2 assessments – a CA perspective

constructed (Raymond, 2003) as they give the examiners more control for the benefits of coding and time constraints. This however reduces the diagnostic information that can be obtained by limiting the answer to a restricted response type. This is less efficient for the purpose of information gathering and contributes to an overly narrowly defined field of enquiry and diagnostic reasoning (Silverman et al., 2016). I present in the data how often when the examiners do not request for elaboration, the examiners can only conclude that the child agrees or disagrees that they or other people experience a certain emotion.

The ‘Loneliness’ and the ‘Social Difficulties and Annoyance’ tasks are designed to get the examinee to comment on a third-person’s emotional experience by noticing and interpreting the behaviour as a reflective socio-cognitive process (Fletcher-Watson & Bird, 2020). Some examiners facilitate this process by digressing from protocol and providing follow up prompts or modifying the task questions to generate a sequential position in which the children can comment on others’ thoughts, feelings, and experiences.

Moreover, some examiners modified the question designs to change the subject focus to ask the children to explicitly comment on how they respond to another’s emotional experience. This approach directly requires the child to position themselves and their hypothetical potential response and explain their reaction to another’s emotive experience. Therefore, the examiner’s modification of the questions to contain ‘you’ makes the children accountable to provide an answer containing the ‘I’ in the first-person. Utilising the questions to intentionally position the child in relation to another person provides the child an opportunity to describe an empathetic reaction in relation to another person’s emotional experience.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Finally, the examiner conveyed an emotional reaction as she described her own emotional experiences to prompt the child to ask her questions about her thoughts, feelings, and experiences. By sharing her own emotion eliciting and problematic experience, the examiner creates an empathetic moment (Heritage, 2011) and a communicative opportunity for the child to provide an empathetic response. The child in turn demonstrated a subtle empathetic reaction found in everyday interaction, as she smiled, laughed, and compared similar experiences (Muntigl et al., 2014). The direct and first-hand experience of empathy is typically accomplished between people when a person engages with the second person ('you') rather than as a detached process of a third-person reflection (Reddy, 2003; 2008; Rietveld, 2008; Schilbach et al., 2013). Although the corresponding coding item 'Comments on Others Emotions/Empathy' (ADOS-2; Lord et al., 2012) contains 'empathy' in the title, the design of the tasks do not however elicit demonstrations of empathy in response to the direct second person. Yet, in the direct and first-hand experience of empathy, each person works to ensure that what they understand of how another is thinking, feeling, and experiencing is accomplished jointly as an interactional achievement (Henderson, 2019).

7.3. Chapter 6: What kinds of opportunities do the interactions within the 'cliffhangers' provide for the examinees to demonstrate social motivation and 'ask the examiner for information'?

In the 'Conversation and Reporting' subsection of the ADOS-2 protocol, the examiners are informed of the reciprocal nature of the task of conversation. The examiners are directed to provide conversational leads by making brief statements about their own interests, activities, and feelings to observe whether the examinee can follow up on their comments. The examiners

Clinician-child interactions in ADOS-2 assessments – a CA perspective

are instructed to stage specific events by offering conversational openings that invite a response, such as, ‘Oh, I remember where I’ve seen one of these before’ (ADOS-2: Lord et al., 2012) to observe if the child will follow the lead. Throughout the ADOS-2, the examiner delivers several conversational openings that are structured to introduce a referent, such as, a reference to people, places, or things in a turn or turns. The conversational openings coined ‘cliffhangers’ aim to prompt the child to ‘Ask for Information’ (ADOS-2; Lord et al., 2012) about the examiner’s thoughts, feelings, or experiences.

Throughout the chapter, I show how the children remain socially oriented and demonstrate an interest in the examiners’ shared thoughts, feelings, and experiences. The examiners adopt two different approaches to embed their ‘cliffhanger’. For example, in extract 22, the examiner utilises the ‘Emotions’ task to insert a ‘cliffhanger’ by recycling the topic of fear “*There’s one thing that I’m really scared of*”. Alternatively, in extract 23, the examiner embeds his ‘cliffhanger’ as a second story in response to the child’s prompted story. In this example, I demonstrate how the examiner conveys reduced communication in his prior turns (gaze shift to paperwork and one-word receipts) due to his orientation of inserting his ‘cliffhanger’ into the conversation. In both examples, the children after noticeable silences explicitly ask the examiners to elaborate with “*What*” questions.

In most instances I show how the substantial silence that follows each of the examiner’s ‘cliffhanger’ demonstrates how the children wait for the examiners to continue their turns at talk. The children understand that an extended unit of talk has commenced and normal turn taking rules are suspended and to refrain from substantive contributions (such that the examiner can bring their telling to completion). I show how the children in the data utilise various ways of prompting the examiner to continue talking with devices found in everyday interactions such

Clinician-child interactions in ADOS-2 assessments – a CA perspective

as, smiles and laughter (extract 24), “*yeah*” (extract 25), a ‘head nod with “*Right*” (extract 26), and “*Oh*” (extract 27). Due to the requirements of the coding item ‘Asks for Information’, on each occasion, the examiners waited for several further seconds for the child to ask an explicit ‘Wh’ question before completing or abandoning the telling to continue with institutional progressivity.

Due to the atypicality of the examiners sudden change in communication, I also show how some children specifically orient to the ‘cliffhanger’ as a communicative violation. For example, in contrast to her general style of talk, the examiner produces her ‘cliffhanger’ with intensifiers, a sharp increase in volume, emphasis, and sound stretches. I show how the child in turn treats the examiners change in talk as communication that needs to be treated sensitively as she passes the floor back to the examiner with the option to share or abandon her ‘cliffhanger’ “*What was it like if you wanna say it I don't know you might not want to*” (extract 28). In extract 29, after the silence following the examiner’s ‘cliffhanger’, the child orients to the incompleteness of the examiner’s talk by requesting the examiner repeats her talk “*pardon*”. I show how after the near repetition of the ‘cliffhanger’, the child explicitly requests for elaboration “*Okay do you wanna elaborate or not?*”. Similarly, in extract 30, the examiner changes her talk as she delivers her ‘cliffhanger’ (shaped with intensifiers, repetition, and sound stretches). I show how the child in response immediately describes his previous experience of being a recipient of a ‘cliffhanger’ “*The only thing that scared me is a conversation they usually go silent for a very long time cause you- cause you're just staring at each other like*” before he re-enacts the experience by fixing a neutral facial expression and his gaze to screen for several seconds.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

In extract 31, the child orients to the ‘cliffhanger’ “*My children love to play a game a very unusual game*” by remaining silent, and by sustaining bodily orientation and gaze. After three seconds of silence in which neither interactants talk, the child does not pursue the examiner’s utterance but instead returns to the topic of his prior talk. The examiner in turn abandons the ‘cliffhanger’ and progresses with institutional progressivity. Similarly in extract 32, after the examiner delivers her ‘cliffhanger’, the child immediately returns to the topic of his prior talk. In contrast, rather than proceed with institutional progressivity, I demonstrate how the examiner allows the child to finish his direction of talk whilst sustaining fluid natural communication before embedding her ‘cliffhanger’ back into the interaction. In this instance, the child heard and understood the examiner’s ‘cliffhanger’ and in turn explicitly passed the floor back to the examiner “*Why what happened?*”.

Therefore, in chapter 6, I found that for everyday responses that are not questions in response to preliminaries, the ADOS-2 requires the examiners to match the examinees elicited behaviours to a rating of ‘2’ for coding item ‘Asks for Information’. I found how though the children utilise devices found in everyday conversations, due to the limitations of the descriptions of the rating options, rather than document observed capabilities in social-emotional reciprocity, the observations in the examinees diagnostic reports are typically written to align with the individual rating descriptions.

7.3.1. Linking Research

As seen in everyday interaction, the examiners utilised ‘cliffhangers’ to lay the groundwork and provide hints to what talk may follow by producing a turn at talk which contains an evaluative referent (Berger, 2017; Dingemanse et al., 2017; Jefferson, 1978; Sacks, 1974). Regardless of how the examiners insert their ‘cliffhanger’, as preliminaries are typically

Clinician-child interactions in ADOS-2 assessments – a CA perspective

followed by further talk, a substantial silence follows to allow the examiner space to bring their telling to completion (Mandelbaum, 2012; Jefferson, 1978; Sacks, 1974; Schegloff, 1982). The children as recipients of preliminaries therefore show an understanding that an extended unit of talk has commenced and normal turn taking rules are suspended (Jefferson, 1985; Schegloff, 1982; Stivers, 2008). After the initial silence in which the examiners do not take the floor, some children work to address the silence (Jefferson, 1989) by explicitly prompting the examiner to take the floor to complete their telling with a ‘Wh’ question formulation. Other children exhibit recognition of the ‘cliffhanger’ as incomplete, and as seen in everyday interaction, support and prompt the continuation of the examiners’ talk with minimal floor passing devices (Labov & Waletzky, 1967; Sacks 1974; Jefferson, 1978; Stivers, 2008), such as, verbal and non-verbal (“mm hm”, “yeah”, head nods) continuers (Schegloff, 1980; 1982).

Often the examiners ‘cliffhangers’ appear exaggerated as there are noticeable changes in stress, pitch, volume, sound stretches, gesticulation, gaze aversion, disfluencies, self-repairs and pauses in talk. The changes in the examiners’ communication within their ‘cliffhangers’ displays their orientation to the social and contextual configuration that the action mobilizes and constructs (Curl, 2006). The children as members of the same culture are sensitive to the changes in the preliminaries made explicit through exaggeration that do not fit habitual communicative practices (Sacks, 1992). Children will be puzzled about the examiners prior talk and work to understand ‘why that now’ to make sense of what is required from them in response (Sacks, 1974; Schegloff, 1979; Schegloff, 1980; Schegloff & Sacks, 1973; Terasaki, 2004). As recipients do not typically raise problems of understanding or recognition of preliminaries (Schegloff, 1980), rather than explicitly raise a problem with the examiners talk, the children employed different approaches to manage the atypicality of its turn design with

Clinician-child interactions in ADOS-2 assessments – a CA perspective

sensitivity (Davidson, 1984), humour (Ford & Fox, 2010; Holt, 2011), open class repair (Drew, 1997), and re-enactment of the interaction (Sidnell, 2006).

Rather than explicitly raise problems with turn design and overlaps in talk, misunderstandings can be rectified in subsidiary repair sequences (Stivers & Sidnell, 2012). As some children returned to the conversation in the talk prior to the preliminary ‘cliffhanger’, they may not have recognised the action of the turn design. When repair sequences are not mobilised, it is not possible to determine if the child heard or recognised the turn design. Therefore, rather than assume the examinees failed uptake of a turn as a lack of interest in the examiner or difficulty with the task, the examiner should orient to the child’s embodied conduct (Goodwin, 2000) and absent floor passing device as a possibility of not hearing or understanding. Typically, this would be done with a repetition or reformulation of the problem turn at talk. For example, as I demonstrate in the data, in instances when the children return to the conversation in the talk prior to the preliminary, allowing the children to bring their sequence of talk to completion before repeating the ‘cliffhanger’ provides the child with another chance to understand the examiner’s talk as a preliminary. As shown in the data, this action resulted in the child providing the intended ‘What go-ahead’ response which therefore was documented in the child’s diagnostic report.

7.4. Reflexivity

It is vital that I acknowledge the influence of my dual role as both the researcher and the CAMHS autism diagnosing clinician. Initially, before ethical approval was granted for my PhD project, I found my knowledge as a researcher whilst working in my role as an autism diagnosing clinician to be considerably conflicting, thought provoking, and in turn, invaluable. In my clinical role whilst observing ADOS-2 assessments, I knew how each interactional move

Clinician-child interactions in ADOS-2 assessments – a CA perspective

from the clinician was motivated to elicit a certain behaviour associated with autism. Over time, I also began to observe how the same interactional difficulties emerged in each assessment in response to the same task items. As a researcher of conversation analysis, I noticed how many of these interactional difficulties were situated in turns at talk that would not typically occur in everyday conversation. Therefore, I commenced data collection and analysis with motivated looking through the approach of applied conversation analysis. To manage my competing roles of researcher and autism diagnosing clinician, I remained engaged with research methods and processes that underpin mainstream research, clinical and child mental health, and constantly reflected and discussed in supervision both research and clinical practice from the medical, biopsychosocial, and social model approaches across health care sciences. Working mindfully across approaches provides a grounding that enabled me to understand clinical practice from several different perspectives which in turn enabled me to reduce conflict between these roles.

Due to my dual roles however, I do not align completely with the notion that autism is objectively measurable, nor do I align with the notion that autism is socially constructed (Biklen et al., 2005) and sits outside the measurable realm. Instead, I acknowledge that how someone presents on any measurable spectrum will differ depending on all external factors, including how another person and the social environment interacts with the individual. My clinical training, academic training, my personal values, and my background will of course influence what I perceive and choose to research. I also recognise that it is the social-political factors that influence the way any knowledge, including my own is shaped (Robson, 2011). I seek to eliminate this bias by pursuing the closest version of objectivity by describing any form of relationship. As a researcher situated in healthcare, I start from the premise that knowledge about what constitutes autism can be observed up to a point, but will also depend on external

Clinician-child interactions in ADOS-2 assessments – a CA perspective

influences. I therefore think it is vital to forefront contextual factors, such as, the social and cultural influences that impact what is observed and understood (O'Reilly & Parker, 2014), documented, and what conclusions are drawn. From this positionality, I felt my dual roles were invaluable for my research because they enabled me to continuously reflect on the implications of research on conversational norms disregarded in autism diagnosis and the implications for practice.

I recognise how my research might not be accepted as clinically relevant in the current healthcare culture, due to the value placed on evidence-based practice built upon quantitative positivist research. I feel passionate however that I have demonstrated the need for incorporating fine grained analysis to help shift the dominant medical narrative around diagnosis that fails to consider any external influences. As my dual roles and my PhD have evolved, I have become critical of evidence-based practice and how adherence can lead to diagnostic practices that fail to holistically understand the person under assessment. Through my experience I also recognise how we can improve evidence-based practice by incorporating interactionally based qualitative work which looks at how individuals within diagnostic assessments understand one another. Therefore, remaining reflexive has been vital because my research has challenged the dominant evidence-based practice and thus ways of thinking about mental health and mental health diagnosis. Although as the dual role researcher I was able to make most of the decisions (Etherington, 2001), such as determining the research aims, methods, types of data collected, and thus the knowledge produced (Gallagher, 2008), which has issues regarding power relations and epistemics, these decisions were enhanced by my insider knowledge and decisions were made with the aim to improve the process of autism diagnosis.

7.5. Limitations of thesis

Due to the global pandemic Coronavirus (COVID-19) and the necessity to maintain social distancing, non -urgent face-to-face assessments within the NHS were moved online. Assessments such as the ADOS-2 were constructed to be delivered face-to-face and therefore standardisation does not transfer however when delivered online. Research has shown that there has been a move towards online telehealth to improve access to healthcare services for individuals living in rural or distant areas (Reese et al., 2015; Vismara et al., 2013; Wainer & Ingersoll, 2015). Online telehealth has benefits such as reducing familial and service costs, transportation issues and missed work (Trott & Blignault, 1998) which in turn could expedite the diagnostic process, and early intervention services (Wainer & Ingersoll, 2015; Nazneen et al., 2015). Clinicians also consider online assessments to have more gains than face-to-face assessments. Moreover, the online ADOS-2 assessments perform comparably to face-to-face delivery (Blackmore et al., 2023). Therefore, with the move towards online telehealth, it is vital to understand social communication assessments delivered online.

Due to the nature of recording the research, the clinicians and the children might have found the recording of the online autism assessment anxiety inducing, especially if they feel the assessments were being scrutinised. Similar research has found however, that when participants are asked about their experience post a recorded health care interaction, the participants felt that once the assessment started, they did not feel nervous or less willing to talk (Hargreaves & Peppiatt, 2001). Moreover, due to recording and documentation of the assessments, the interaction between the clinician and the child may have differed as they may change their behaviour. In a study which explored child counselling which also utilised CA, Speer and Hutchby (2003) found that the child did not forget about the presence of the recording device, but instead, the child's awareness of the essential recording process however can be

Clinician-child interactions in ADOS-2 assessments – a CA perspective

incorporated into the diagnostic assessment of the child. Therefore, the process of recording does not impact the validity of the assessment (Lomax & Casey, 1998) instead, the recording becomes an integral part of the participants' interactional ecology (Fatigante & Orletti, 2014; Gordon, 2013; Mondada, 2014a). Concerns that video recordings may be detrimental and outweigh the benefits to health care services have not been demonstrated in previous research (Parry et al., 2016).

The ADOS-2 and other current tools for identifying autism are critiqued for their lack of specificity and sensitivity, especially for older, higher verbal capabilities or significant compensatory skills, and those that are not cisgender autistic boys (Ratto et al., 2023). As the children in this PhD thesis were under the care of CAMHS, they did not have an IQ in the lower range, nor did they have lower language capabilities or known significant compensatory skills. Moreover, although there was a mixed gender, all children under assessment in this PhD thesis were white and westernised. Therefore, there are limitations for addressing the ADOS-2 specificity and sensitivity issues and thus for transferring the findings of the children's demonstrations of everyday interactional capabilities from this PhD thesis to other populations.

7.6. Implications for Practice

7.6.1. Contribution to Practice

As I have shown in the data, many examiners utilise the ADOS-2 protocol to guide the assessment but rather than adhere to institutional progressivity (e.g., ask all of the "Loneliness" interview questions in the order listed 1. *"Do you ever feel lonely?"*, 2. *"Do you think other people your age ever feel lonely?"*), they find solutions to the interactional problems that may arise throughout the assessment. Examiners find solutions by asking follow up questions to ask the child to elaborate (e.g., *"How do you know"*), asking question reformulations after the

Clinician-child interactions in ADOS-2 assessments – a CA perspective

child's difficulties (e.g., "*What about being frightened? Are you frightened of anything?*"), providing question reformulations containing a model example (e.g., "*When I am happy I might get err my heartbeat might go a bit faster.*"), minimally by using continuers (e.g., "*okay*", "*yeah*", head nods) to pass the floor back to the child indicating the previous answer did not sufficiently satisfy the examiners reason for asking, and by repeating preliminaries to identify or rule out misunderstandings. Examiners also reduce difficulties by frontloading contextual information (Pomerantz, 1988) before the task questions (e.g., "*I was gonna ask a little bit about how you feel about other things*"), and in the initial questions by containing known information about the child (Antaki, 2002), and by providing the target referent (e.g., "*When you are dancing what does it feel like inside your body when you're happy? Did you get any sort of physical sensations inside?*"). Thus, I have demonstrated how when examiners provide contextual information within the question design, the children learn how to provide 'good' answers (Edwards & Mercer, 1989) that satisfy the examiner's reason for asking and the institutional agenda of the ADOS-2.

Therefore, I have shown how the examiners administer the ADOS-2 intuitively using natural conversation and their own communicative capabilities as members of a specific culture. The examiners do this by using the ADOS-2 flexibly and by modifying their communication in response to the child's answers. Delivering the ADOS-2 flexibly with acknowledgement that it is a co-constructed interaction, changes the focus from a deficit approach (to elicit behaviours associated with autism to conclude a diagnosis) to a strengths-based approach (to observe the natural behaviours of the child, including strengths, weaknesses, and differences, to conclude a diagnosis). Administering the ADOS-2 flexibly in response to the child is not done consistently throughout each interaction. At times, some examiners adhere to protocol and after a response is received, may abandon pursuit after signs of difficulty as it may be deemed these

Clinician-child interactions in ADOS-2 assessments – a CA perspective

are displays of autism symptomatology. Irrespective of the content of the child's response that may or may not depict autism symptomatology, examiners progress with the agenda and institutional progressivity. In these instances, the examiners deliver the items sequentially without follow up interaction that may identify if the child's prior response could be expanded or was a misunderstanding. In this project I show how when the examiner checks a child's understanding, the child is often able to provide a different answer which highlights strengths in interaction that go unobserved when seeking to only identify symptomatology associated with autism (medical model focus).

7.6.2. Contribution to Knowledge

The ADOS-2 is a standardised social communication assessment that claims the instrument reflects natural conversation ([ADOS-2], Lord et al., 2012). I have shown however that the ADOS-2 departs from natural conversational systems and ordinary types of sequences, which is observable in the difficulties contained in both interactants' turns at talk. This in turn has consequences for how the child understands what responses will satisfy the examiners questions and comments. Moreover, I have shown throughout the data that although the examiners ask the same questions, each adjacency pair is uniquely co-constructed between examiner and child and therefore variation in institutional interaction is inevitable (Marlaire & Maynard, 1990; Antaki et al., 2002; Maynard & Schaeffer, 2002). I have utilised everyday interactionally based research with non-autistic people and shown how it contradicts the ADOS-2 restricted conceptualisation of what behaviours constitute pathological in social interaction. I have demonstrated that there is a disconnect between what the ADOS-2 is aiming to achieve and what the child will do naturally as a member of a specific communicative culture. Due to the specific directions of behaviours for observation, communication is not being observed in relation to its everyday function and for its interactional meaning and thus

Clinician-child interactions in ADOS-2 assessments – a CA perspective

strengths in communication can often go unnoticed. The failure to include communicative norms and everyday practices into the design of the ADOS-2 result in the coding items categorising subtle everyday communicative behaviours such as, storytelling, humour, and continuers into categories that are constructed to be indicative of autism symptomatology. Therefore, the ADOS-2 misrepresents everyday social communication capabilities. As I have shown in this PhD project, applying CA to the analysis of clinical interactions and comparing how people act in real life social situations enables research to show how responses that have been pathologized are in fact, seen in everyday interactions by non-autistic people. Therefore, assessments of social interaction must be updated to reflect what we already know constitutes everyday communicative norms. Only then will assessments be able to observe social communicative competencies appropriately rather than dismissing behaviours as pathological (Fasulo & Flore, 2007).

7.6.3. Contribution to Conversation Analysis

My PhD project has contributed to two types of applied CA, ‘institutional applied CA: an illumination of routine institutional work’ and ‘Communicational applied CA: a complementary or alternative analysis of disordered talk’ (Antaki, 2014). From an institutional applied CA perspective, this project has illuminated how the institutional talk when using the ADOS-2 which has its own predefined questions and comments and entitlements to talk, both shapes the instructional delivery of the examiner’s interaction and the child’s understanding of next turn responses. This approach to applied CA has also demonstrated how the examiner and the child work to solve the difficulties that arise (Antaki, 2014). From a communicational applied CA perspective, this project also challenged the diagnostic design and process of the ADOS-2 and how it inflates autism symptomatology. The questions and comments that are designed to get responses that are indicative of difficulty associated with the construct of autism elicit difficulty

Clinician-child interactions in ADOS-2 assessments – a CA perspective

for both interactants. Difficulties are less observable when the examiners digress from institutional interaction and talk naturally as members of a communicative culture. Therefore, due to abnormality and the violations which occur within the institutional interaction of the ADOS-2, under natural conditions where the interaction has a predictable order, the behaviours would not indicate the same level of difficulty. Therefore, without denying any social communication problems experienced by the children, the success of the interaction is dependent on the cooperativeness (Antaki, 2014), attentiveness, and flexibility of the examiners.

7.7. Recommendations for ADOS-2 and Practitioners

The ADOS-2 aims to generate an interaction that appears natural so that the institutional objective remains invisible to the examinee (Lord et al., 1989). Yet as demonstrated, this is not achievable in a standardised assessment of social interaction. Moreover, clinicians are unlikely to be aware of how the tiny nuances in interaction change what is being communicated and how they can cause significant disruptions in talk. Therefore, the ADOS-2 needs to be redesigned to ensure this is communicated within the ADOS-2 assessment delivery and scoring and adopted by the examiners. The ADOS-2 manual should state that the examiner should utilise the ADOS-2 protocol flexibly and dynamically in response to the child's actual communication. By delivering the ADOS-2 as a dynamic assessment which is responsive to the child, examiners can modify their questioning to ensure comprehension is achieved. Examiners should be directed to freely use follow up questions and prompts in response to the child's answers utilising their understanding of communicative norms as members of a specific culture. The examiners' spontaneous understanding of conversation and own communicative capabilities should be used and not discarded or minimised. Otherwise as seen in the data, when interactions are restricted unnaturally, the examiners' communicative capabilities can be

Clinician-child interactions in ADOS-2 assessments – a CA perspective

distorted, which in turn can have implications for the examinees understanding of what precisely is being communicated.

7.7.1. The ‘Emotions’ Task

In the ‘Emotions’ task, the first question of the two-part emotions questions is delivered in a complete form with a referent and thus answered without difficulty. The second question of the two-part emotions questions however is asked with missing contextual information, which often leads to general difficulty in providing a suitable answer that will satisfy the examiner’s reason for asking. In these instances, the child may offer several candidate answers. The examiners often manage the issue of the second question by asking circular questions, by frontloading contextual information (Pomerantz, 1988), by containing known information about the child in the question (Antaki, 2002), and by providing the target referent in the question. When examiners provide some form of contextual information within the question design, the children learn how to provide ‘good’ answers (Edwards & Mercer, 1989) that satisfy the examiner’s reason for asking and thus the institutional agenda. Therefore, it is recommended that the second question is also delivered in a complete form containing the relevant contextual information with a referent in the question (for example, ‘Can you describe how happiness feels inside your body? and ‘What physical sensation does it feel like?’).

7.7.2. The ‘Loneliness’ and the ‘Social Difficulties and Annoyance’ Task

The ‘Loneliness’ and the ‘Social Difficulties and Annoyance’ tasks utilise closed polar questions that invite the child to affirm the content of the question (Pomerantz, 1988) as they are designed to elicit a ‘yes’ answer (Heritage, 2010; Heritage & Raymond, 2012; Pomerantz, 1984; Sacks, 1987). The design of closed polar questions lay the terms for how the child’s responses can be constructed (Raymond, 2003) and gives the examiners more control over the

Clinician-child interactions in ADOS-2 assessments – a CA perspective

child's response. This in turn limits the possible information that can be obtained by restricting the answer to a narrow response type, which can result in the child providing an answer of one or two words without elaboration (Silverman et al., 2016). Moreover, to provide a 'no' answer with an account takes more interactional work from the examinee (Houtkoop-Steenstra & Antaki, 1997). Therefore, the child's answers to closed questions might result in limited information on their thoughts, and feelings about their own and other's experiences of emotions. It is recommended that polar questions are reformulated to be open questions. Further, when the examiner asks the child to share an emotive experience yet does not orient to and engage with the content of the child's telling, but instead, progresses with institutional progressivity, this action may result in the child not sharing further emotive experiences and reactions (Voutilainen & Koivisto, 2022). Thus, it is recommended that examiners validate the child's shared emotional experiences.

7.7.3. The 'Cliffhangers' task

The ADOS-2 instructs the examiners to use 'conversational openings' which are preliminaries coined 'cliffhangers' to elicit a 'go-ahead' question (Terasaki, 2004). In everyday conversation however, preliminaries do not stand alone 'in their own right' to prompt a question. Instead, they are specifically preliminary to other talk that follows (Schegloff, 1980). I have shown how the children in this PhD project all orient to the examiner's 'cliffhangers' and understand that an extended unit of talk has commenced and normal turn taking rules are suspended by refraining from substantive contributions (Jefferson, 1985; Schegloff, 1982; Stivers, 2008). The children display recipientship as they respond appropriately to preliminary 'cliffhangers' with eye gaze, bodily orientation facial expressions and continuers, such as, 'uh huh', 'mm hm', 'yeah' interaction (Schegloff, 1980) and 'head nods' (Schegloff, 1982). As the 'cliffhangers' aim to elicit a 'go-ahead' question (Terasaki, 2004), they violate general rules of

Clinician-child interactions in ADOS-2 assessments – a CA perspective

conversation which can lead to difficulty and discomfort in the interaction, which was explicitly articulated by one child (extract 30). Therefore, the function of the preliminary ‘cliffhangers’ as intended by the ADOS-2 is not able to appropriately assess the child’s interest in the examiner. It is therefore recommended that rather than pause after a preliminary ‘cliffhanger’, the examiners should share a story about themselves (fictitious or not) and observe if the child multimodally orients to the examiner and their telling.

7.7.4. Coding items

As I have shown throughout the thesis, the coding items ‘Communication of Own Affect’, ‘Comments on Others’ Emotions/Empathy’, and ‘Asks for Information’ (ADOS-2: Lord et al., 2012) do not capture the variety of responses displayed by the children throughout the data. The examiners are therefore restricted to choose the rating description within a coding item that best ‘fits’ the observed behaviour, which may not match the reality of what happens in the interaction. This is evident in the corresponding sections of the diagnostic reports and how the documented interactions are based on the preformulated specification descriptions within the coding item. Therefore, the examiners often do not document the capabilities displayed by the children as they are restricted by the coding criteria of the ADOS-2 which guides the focus of observation.

Moreover, as the coding item ‘Comments on Others’ Emotions/Empathy’ can be rated with a score of ‘0’ (indicating no autism symptomatology observed) if the children spontaneously label several different emotions portrayed by the characters in the task, many interactions that display understanding of emotions in other people are not documented. Therefore, it is recommended that the ability to recognise facial expressions is coded separately, alongside observations of empathy, and the child’s comments on other’s emotions. Moreover, although

Clinician-child interactions in ADOS-2 assessments – a CA perspective

the examiners often deviate from protocol and engage in interaction not scripted by the ADOS-2, due to the requirements of the coding criteria, these conversations are not documented in the reports. Further, it is recommended that examiners use all interactions outside of the ADOS-2 pre-defined structured questions, comments and tasks to support their observations of the child's behaviours in relation to autism symptomatology.

7.8. Future directions

7.8.1. ADOS-2

The findings of this PhD project raise questions around the validity of both the analysed tasks and the corresponding coding items. Therefore, it is highly recommended that a systematic assessment of the entire ADOS-2 is undertaken to test its validity. As stated previously, my motivation for analysing the specific tasks were due to my experience as an autism diagnosing clinician and the difficulties that I observed within those task interactions. Further, my diagnostic experiences assessing adolescent females with the ADOS-2 have led me to also question the validity of the instrument with this particular population. In many of the ADOS-2 that I have administered or observed, when the girls are socially motivated or masking, the ADOS-2 tasks and questions are unlikely to identify autism symptomatology in these females. For example, questions that evaluate a person's conceptualisation of their own social relationships found in the 'Friends, Relationships, and Marriage' Task (e.g., '*Do you have some friends? Can you tell me about them? What does being a friend mean to you?*' ADOS-2; Lord et al., 2012) are less likely to elicit responses that portray autism symptomatology in some females due to a greater interest in peer relations, social masking, or an understanding of desirable social answers. In these instances, the ADOS-2 task items are only used as reference but the questions asked that shape the conclusion of the diagnosis are very different and based on the examiner's understanding of the female presentation of autism. Therefore, it is highly

Clinician-child interactions in ADOS-2 assessments – a CA perspective

unlikely that the ADOS-2 in its current format would detect the non Kanner's female representation of autism. Therefore, it is recommended that data is collected with both the ADOS-2 in its current format and a modified female sensitive and flexible assessment.

7.8.2. Social Interaction Training

Finally, since all practitioners engage in interactions with service users, many practitioners engage in assessments, and many interact with autistic people, it is recommended that a training package is produced. As an employee of the NHS, staff have both mandatory and optional training depending on their job specification, which is accessible to book online through their own individualised training matrix. It is recommended that a training package is produced containing video data of both every day and institutional interactions to inform practitioners on how knowledge of conversation can inform and enhance their interactions in practice. Moreover, training can be specifically targeted at autism diagnosticians to specifically focus on how subtleties in interaction, such as, continuers, gestures, facial expressions, and minimal response tokens are communicative and serve to pass the floor back to the examiner, and in turn, are not indicative of a reduced interest in the examiner.

7.8.3. Conversation Analysis of other interactionally based diagnostic assessments

In all assessments of social communication, there is an interactional substrate (Marlaire & Maynard, 1990; Maynard & Marlaire, 1992) and co-interactants will influence one another's turn at talk whether acknowledged or not. Therefore, assessments of social communication should be utilising interactional research that shifts the focus of assessment of social communication as an individual skill to social communication as mutually achieved by co-interactants to improve the validity of the design. As I have demonstrated in this PhD thesis, observing interaction on a turn-by-turn basis brings communicative resources to the foreground

Clinician-child interactions in ADOS-2 assessments – a CA perspective

that sometimes go unnoticed, such as, non-verbal or non-lexical contributions (silence, eye gaze, a gesture, a laugh, or the use of objects). All these factors are vital when considering any interaction and its meaning. Therefore, more research is needed utilising an intentionally descriptive methodology such as CA to analyse and improve assessment practices without assumptions about social rules, diagnostic constructs and group generalisations (Yu & Sterponi, 2023).

7.8.4. Applying Naturally Occurring Data to Understand Institutional Interactions

Throughout this project, by incorporating the general rules and concepts of naturally occurring conversations, I have been able to demonstrate how when everyday rules are violated in institutional interaction, as the child is a member of a specific communicative culture, this has consequences for what the child understands is required of them in the next turn, which sequentially, also implicates the examiner's subsequent actions. Therefore, it is vital to explore naturally occurring data to understand how institutional interactions can be improved. CA has already been utilised to teach clinicians how to modify their contributions in talk to give their clinical interactants a better opportunity to produce more complete and successful conversational turns (Best et al., 2016), to develop assessments and interventions for aphasia (Beeke et al., 2007; Whitworth et al., 1997), dementia (Plejert et al., 2017), and augmentative and alternative communication (Clarke & Bloch, 2013; Clarke et al., 2017). CA has already revealed capabilities in communication in autistic people which have gone unnoticed in traditional measurements of social interaction (e.g., Dindar et al., 2016; Korciakangas & Rae, 2014; Muskett & Body, 2013; Sterponi, & Shankey, 2013; Stribling et al., 2007).

7.9. Concluding Summary

I am not disputing difficulties in pragmatic skills associated with autism, nor do I aim to discount or dismiss the contribution of standardised approaches in the diagnosis of autism. I have however shown throughout the data how placing priority of institutional progressivity over natural progressivity can distort the nuances in the interaction which in turn implicates how interactants make sense of one another. Denying the influence of the examiner's communicative behaviours on the autistic child's behaviours can have significant implications for the outcome of the assessment. Especially as the child's behaviours in response to the examiner are documented in diagnostic reports as the child's capabilities in social communication. Diagnostic reports are utilised by professionals to gain an understanding of the child and provide appropriate provision. These permanent words documented by professionals deemed experts in autism diagnosis will also be viewed by the child as a representation of their own capabilities which may influence their identity. Thus, guidelines must inform examiners of the implications of restricting what occurs naturally in interaction and must be encouraged to use their own communicative capabilities as members of any given culture. Examiners should be guided to use assessments of social communication dynamically by responding how they would in everyday interaction in response to the child's communication to achieve the most appropriate outcome for the child.

Moreover, the coding items do not capture the variety of responses displayed by the children throughout the data because they are attempting to reduce multifaceted interactions down to three or four categories. Therefore, it is vital for the ADOS-2 and other social communication assessments to modernise and incorporate interaction-based research that observes communication as mutually constructed to improve assessment practices that reflect the capabilities of the examinee. I therefore argue the importance of an interdisciplinary approach

Clinician-child interactions in ADOS-2 assessments – a CA perspective

to social communication assessment and posit for considering the principles, methods, and insights of CA as a robust method for improving social communication assessment practices.

This will have significant potential for improving autism assessment practices and holistically capturing the capabilities of the autistic person.

8. References

Aaltola, E. (2014). Affective empathy as core moral agency: Psychopathy, autism and reason revisited. *Philosophical Explorations*, 17(1), 76–92.

Abbasi, A. R., Dailey, M. N., Afzulpurkar, N. V., & Uno, T. (2008). Probabilistic Prediction of Student Affect from Hand Gestures. *ARCS*, 58-63.

American Psychiatric Association. (1968). *Diagnostic and Statistical Manual of Mental Disorders* (2nd ed.).

American Psychiatric Association. (1980). *Diagnostic and Statistical Manual of Mental Disorders* (3rd ed.).

American Psychiatric Association. (1987). *Diagnostic and Statistical Manual of Mental Disorders* (3rd ed., text rev.).

American Psychiatric Association. (1994). *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.).

American Psychiatric Association. (2022). *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.).

Clinician-child interactions in ADOS-2 assessments – a CA perspective

American Psychiatric Association. (2022). *Diagnostic and Statistical Manual of Mental Disorders* (5th ed., text rev.).

Anastasiou, D., & Kauffman, J. M. (2013). The social model of disability: Dichotomy between impairment and disability. *Journal of Medicine and Philosophy*, 38(4), 441-459.

Anderson-Chavarria, M. (2022). The autism predicament: models of autism and their impact on autistic identity. *Disability & Society*, 37(8), 1321-1341.

Antaki, C. (2002). Personalised revision of failed questions. *Discourse Studies*, 4(4), 411-428.

Antaki, C. (2004). Reading minds or dealing with interactional implications? *Theory & Psychology*, 14(5), 667-683.

Antaki, C. (2014). *Applied Conversation Analysis: Intervention and Change in Institutional talk*. Palgrave Macmillan.

Antaki, C., Leudar, I., & Barnes, R. (2004). Trouble in agreeing on a client's problem in a cognitive-behavioural therapy session. *Rivista di Psicolinguistica Applicata*, 4(2-3), 127-138.

Antaki, C., & Rapley, M. (1996). Questions and answers to psychological assessment schedules: Hidden troubles in 'quality of life' interviews. *Journal of Intellectual Disability Research*, 40(5), 421-437.

Antaki, C., & Wetherell, M. (1999). Show concessions. *Discourse Studies*, 1(1), 7-27.

Antaki, C., Young, N., & Finlay, M. (2002). Shaping clients' answers: Departures from neutrality in care-staff interviews with people with a learning disability. *Disability & Society, 17*(4), 435-455.

Attwood, A., Frith, U., & Hermelin, B. (1988). The understanding and use of interpersonal gestures by autistic and Down's syndrome children. *Journal of Autism and Developmental Disorders, 18*, 241–257.

Attwood, T., Garnett, M. S., & Rynkiewicz, A. (2011). Questionnaire for autism spectrum conditions (Q-ASC). *Measurement instrument*.

Bacon, A. L., Fein, D., Morris, R., Waterhouse, L., & Allen, D. (1998). The responses of autistic children to the distress of others. *Journal of Autism and Developmental Disorders, 28*(2), 129.

Baglieri, S., & Lalvani, P. (2019). *Undoing Ableism: Teaching About Disability in K-12 Classrooms*. Routledge.

Baird, G., Charman, T., Pickles, A., Chandler, S., Loucas, T., Meldrum, D., ... & Simonoff, E. (2008). Regression, developmental trajectory and associated problems in disorders in the autism spectrum: the SNAP study. *Journal of Autism and Developmental Disorders, 38*, 1827-1836.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Ball, M. J., Perkins, M. R., Müller, N., & Howard, S. (Eds.). (2008). *The Handbook of Clinical Linguistics*. Blackwell.

Baron-Cohen, S. (1991). Do people with autism understand what causes emotion? *Child Development*, 62(2), 385-395.

Baron-Cohen, S. (1995). *Mindblindness: An Essay on Autism and Theory of Mind*. MIT Press.

Baron-Cohen, S. (2008). Theories of the autistic mind. *The Psychologist*.

Baron-Cohen, S. (2017). Editorial Perspective: Neurodiversity—a revolutionary concept for autism and psychiatry. *Journal of Child Psychology and Psychiatry*, 58(6), 744-747.

Baron-Cohen, S., Ashwin, E., Ashwin, C., Tavassoli, T., & Chakrabarti, B. (2009). Talent in autism: hyper-systemizing, hyper-attention to detail and sensory hypersensitivity. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 364(1522), 1377-1383.

Baron-Cohen, Jolliffe, T., Mortimore, C. & Robertson, M. (1997). Another advanced test of theory of mind: Evidence from very high functioning adults with autism or Asperger Syndrome. *Journal of Child Psychology and Psychiatry*, 38, 813–822.

Baron-Cohen, S., Leslie, A.M. & Frith, U. (1985). Does the autistic child have a 'theory of mind'? *Cognition*, 21, 37–46.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Baron-Cohen, S., & Wheelwright, S. (2004). The empathy quotient: an investigation of adults with Asperger syndrome or high functioning autism, and normal sex differences. *Journal of Autism and Developmental Disorders*, *34*, 163-175.

Baron-Cohen, S., Wheelwright, S., Skinner, R., Martin, J., & Clubley, E. (2001). The autism-spectrum quotient (AQ): Evidence from Asperger syndrome/high-functioning autism, males and females, scientists and mathematicians. *Journal of Autism and Developmental Disorders*, *31*, 5-17.

Barrett, L. F. (2013). Psychological construction: The Darwinian approach to the science of emotion, *Emotion Review*, *5*(4), 1-11.

Bartak, L., & Rutter, M. (1973). Special educational treatment of autistic children: A comparative study. Design of study and characteristics of units. *Journal of Child Psychology and Psychiatry*, *14*(3), 161–179.

Beach, W. A. (1993). Transitional regularities for ‘casual’ “Okay” usages. *Journal of Pragmatics*, *19*(4), 325-352.

Beach, W. A., & Metzger, T. R. (1997). Claiming insufficient knowledge. *Human Communication Research*, *23*(4), 562-588.

Beaudoin, M. J., Poirier, N., & Nader-Grosbois, N. (2022). Relationships Between Mother–Child Conversations About Emotion and Socioemotional Development of Children with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 1-13.

Beck, T. J. (2018). Tracing disorder across theories of autism, empathy, and mental health care. *Disability & Society*, 33(8), 1303-1326.

Beeke, S., Maxim, J., & Wilkinson, R. (2007). Using conversation analysis to assess and treat people with aphasia. *Seminars in Speech and Language*. 28(2) 136-147.

Beeman, W. O. (1976). Status, style and strategy in Iranian interaction. *Anthropological Linguistics*, 18(7), 305-322.

Begeer, S., Koot, H. M., Rieffe, C., Terwogt, M. M., & Stegge, H. (2008). Emotional competence in children with autism: Diagnostic criteria and empirical evidence. *Developmental Review*, 28(3), 342-369.

Begeer, S., Meerum Terwogt, M., Rieffe, C., Stegge, H., & Koot, H. M. (2007). Do children with autism acknowledge the influence of mood on behaviour? *Autism*, 11(6), 503-521.

Behrman, R. E., & Field, M. J. (2004). *Ethical conduct of clinical research involving children*. National Academies Press.

Belmonte, M. K. (2008). Does the experimental scientist have a “Theory of Mind”? *Review of General Psychology*, 12(2), 192-204.

Bennett, M. R., & Hacker, P. M. S. (2022). *Philosophical Foundations of Neuroscience*. (2nd ed.). John Wiley & Sons.

Berger, E. (2017). The interactional achievement of tellability: a study of story-openings. *Revue française de Linguistique Appliquée*, 22(2), 89-107.

Best, W., Maxim, J., Heilemann, C., Beckley, F., Johnson, F., Edwards, S. I., ... & Beeke, S. (2016). Conversation therapy with people with aphasia and conversation partners using video feedback: A group and case series investigation of changes in interaction. *Frontiers in Human Neuroscience*, 10, 562.

Biklen, D., R., Attfield, L., Bissonnette, L., Blackman, J., Burke, A., Frugone., T, R. Mukhopadhyay, & Rubin, S. (2005). *Framing autism. Autism and the myth of the person alone*. New York University Press.

Bishop, D. V., & Norbury, C. F. (2002). Exploring the borderlands of autistic disorder and specific language impairment: a study using standardised diagnostic instruments. *Journal of Child Psychology and Psychiatry*, 43(7), 917-929.

Bolden, G. B. (2009). Implementing incipient actions: The discourse marker ‘so’ in English conversation. *Journal of Pragmatics*, 41(5), 974-998.

Bolden, G. B., Hepburn, A., & Mandelbaum, J. (2023). The distinctive uses of right in British and American English interaction. *Journal of Pragmatics*, 205, 78-91.

Bollen, C. (2023). A reflective guide on the meaning of empathy in autism research. *Methods in Psychology*, 8.

Bottema-Beutel, K. (2017). Glimpses into the blind spot: Social interaction and autism. *Journal of Communication Disorders, 68*, 24-34.

Bottema-Beutel, K., Kapp, S. K., Lester, J. N., Sasson, N. J., & Hand, B. N. (2021). Avoiding ableist language: Suggestions for autism researchers. *Autism in Adulthood 3* (1).

Brody, L. R. (2000). The socialization of gender differences in emotional expression: Display rules, infant temperament, and differentiation. *Gender and Emotion: Social Psychological Perspectives, 2*(11), 122-137.

Brown, P. (1990). The name game: Toward a sociology of diagnosis. *The Journal of Mind and Behavior, 11*, (3/4), 385-406.

Brownlow, C., & O'Dell, L. (2013). Autism as a form of biological citizenship. In J. Davidson & M. Orsini (Eds.), *Worlds of Autism: Across the Spectrum of Neurological Difference* (1st ed., pp. 97-114). University of Minnesota Press.

Bucholtz, M. (2000). The politics of transcription. *Journal of Pragmatics, 32*, 1439-1465.

Buitelaar, J. K., & van der Wees, M. (1997). Are deficits in the decoding of affective cues and in mentalizing abilities independent? *Journal of Autism and Developmental Disorders, 27*(5), 539-556.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Burdelski, M. (2019). Young children's multimodal participation in storytelling. *Research on Children and Social Interaction*, 3(1-2), 6-35.

Burr, V. (2015). *Social Constructionism*. (3rd ed.). Routledge.

Butler, E. A. (2011). Temporal interpersonal emotion systems: The "TIES" that form relationships. *Personality and Social Psychology Review*, 15(4), 367–393

Butler, E. A., & Randall, A. K. (2013). Emotional coregulation in close relationships. *Emotion Review*, 5(2), 202-210.

Butler, E. A., Lee, T. L., Gross, J. J. (2007). Emotion regulation and culture: Are the social consequences of emotion suppression culture-specific? *Emotion*, 7(1), 30-48.

Button, G. (Ed.). (1991). *Ethnomethodology and the human sciences*. Cambridge University Press.

Capps, L., Kasari, C., Yirmiya, N., & Sigman, M. (1993). Parental perception of emotional expressiveness in children with autism. *Journal of Consulting and Clinical Psychology*, 61(3), 475.

Capps, L., Yirmiya, N., & Sigman, M. (1992). Understanding of simple and complex emotions in non-retarded children with autism. *Journal of Child Psychology and Psychiatry*, 33(7), 1169-1182.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Cekaite, A. (2020). Touch as embodied compassion in responses to pain and distress.

In Cekaite, A. & Mondada, L. *Touch in Social Interaction* (pp. 81-102). Routledge.

Chapman, R. (2020). The reality of autism: On the metaphysics of disorder and diversity. *Philosophical Psychology*, 33(6), 799-819.

Charman, T., Jones, C. R., Pickles, A., Simonoff, E., Baird, G., & Happé, F. (2011). Defining the cognitive phenotype of autism. *Brain research*, 1380, 10-21.

Chor, W. (2018). Sentence final particles as epistemic modulators in Cantonese conversations: A discourse pragmatic perspective. *Journal of Pragmatics*, 129, 34-47.

Christensen, S. A., & Fiechtner, A. (2010). Examining how questions function in a qualitative research interview. In *Abstracts of the 27th International Congress of Applied Psychology*, 1467-1468.

Clark, H. H. (1996). *Using language*. Cambridge University Press.

Clarke, M., & Bloch, S. (2013). AAC practices in everyday interaction. *Augmentative and Alternative Communication*, 29(1), 1-2.

Clarke, M. T., Soto, G., & Nelson, K. (2017). Language learning, recasts, and interaction involving AAC: Background and potential for intervention. *Augmentative and Alternative Communication*, 33(1), 42-50.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Cohrsen, C., Church, A., & Tayler, C. (2014). Purposeful pauses: Teacher talk during early childhood mathematics activities. *International Journal of Early Years Education*, 22(2), 169-183.

Colombino, T. (2006). Problems with a relevance-theoretic account of autism. *Theory & Psychology*, 16(2), 169-177.

Colombetti, G. (2011). Varieties of pre-reflective self-awareness: Foreground and background bodily feelings in emotion experience. *Inquiry*, 54(3), 293-313.

Constantino, J. N., Gruber, C. P., Davis, S., Hayes, S., Passanante, N., & Przybeck, T. (2004). The factor structure of autistic traits. *Journal of Child Psychology and Psychiatry*, 45(4), 719-726.

Coughlan, B., Woolgar, M., Weisblatt, E. J., & Duschinsky, R. (2021). ‘Instruments are good at eliciting information; scores are very dangerous’: The perspectives of clinical professionals regarding neurodevelopmental assessment. *Autism*, 27(4) 905–915.

Couper-Kuhlen, E. (2009). A sequential approach to affect: The case of ‘disappointment’. In Haakana, M., Laakso, M., & Lindström, J. (Eds.), *Talk in Interaction: Comparative Dimensions*, 94-123.

Couper-Kuhlen, E., & Thompson, S. A. (2005). A linguistic practice for retracting overstatements. In Hakulinen, A. & Selting, M. (Eds.), *Syntax and Lexis in Conversation: Studies on the use of Linguistic Resources*, 257-288. Benjamins.

Crompton, C. J., Ropar, D., Evans-Williams, C. V., Flynn, E. G., & Fletcher-Watson, S. (2020). Autistic peer-to-peer information transfer is highly effective. *Autism, 24*(7), 1704–1712.

Crompton, C. J., Sharp, M., Axbey, H., Fletcher-Watson, S., Flynn, E. G., & Ropar, D. (2020). Neurotype-Matching, but Not Being Autistic, Influences Self and Observer Ratings of Interpersonal Rapport. *Frontiers in Psychology, 11*.

Curl, T. S. (2006). Offers of assistance: Constraints on syntactic design. *Journal of Pragmatics, 38*, 1257–1280.

Damico, J. S., & Nelson, R. L. (2005). Interpreting problematic behavior: Systematic compensatory adaptations as emergent phenomena in autism. *Clinical Linguistics & Phonetics, 19*(5), 405-417.

Davidson, J. (1984). Subsequent versions of invitations, offers, requests, and proposals dealing with potential or actual rejection. *Structures of Social Action: Studies in Conversation Analysis, 102*, 128.

Daniels, A. M., & Mandell, D. S. (2014). Explaining differences in age at autism spectrum disorder diagnosis: A critical review. *Autism, 18*(5), 583-597.

Davies, S., Bishop, D., Manstead, A. S., & Tantam, D. (1994). Face perception in children with autism and Asperger's syndrome. *Journal of Child Psychology and Psychiatry, 35*(6), 1033-1057.

Davitz, J. R. (1969). *The language of emotion*. New York: Academic Press.

Dawson, G., Meltzoff, A. N., Osterling, J., & Rinaldi, J. (1998). Neuropsychological correlates of early symptoms of autism. *Child Development, 69*(5), 1276-1285.

de Bildt, A., Sytema, S., Ketelaars, C., Kraijer, D., Mulder, E., Volkmar, F., & Minderaa, R. (2004). Interrelationship between autism diagnostic observation schedule-generic (ADOS-G), autism diagnostic interview-revised (ADI-R), and the diagnostic and statistical manual of mental disorders (DSM-IV-TR) classification in children and adolescents with mental retardation. *Journal of Autism and Developmental Disorders, 34*, 129-137.

Debras, C. (2017). The shrug: Forms and meanings of a compound enactment. *Gesture, 16*(1), 1–34.

Decety, J., & Cowell, J. M. (2014). The complex relation between morality and empathy. *Trends in Cognitive Sciences, 18*, 337–339.

Den Houting, J. (2019). Neurodiversity: An insider's perspective. *Autism, 23*(2), 271-273.

Dennis, M., Lockyer, L., & Lazenby, A. L. (2000). How high-functioning children with autism understand real and deceptive emotion. *Autism, 4*(4), 370-381.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

De Rubeis, S., He, X., Goldberg, A. P., Poultney, C. S., Samocha, K., Ercument Cicek, A., ... & Buxbaum, J. D. (2014). Synaptic, transcriptional and chromatin genes disrupted in autism. *Nature*, *515*(7526), 209-215.

de Schipper, E., Mahdi, S., de Vries, P., Granlund, M., Holtmann, M., Karande, S., ... & Bölte, S. (2016). Functioning and disability in autism spectrum disorder: A worldwide survey of experts. *Autism Research*, *9*(9), 959-969.

De Vignemont, F., & Frith, U. (2008). Autism, morality, and empathy. In Sinnott-Armstrong, W. (Ed.). (2008). *Moral psychology: The Neuroscience of Morality: Emotion, Brain Disorders, and Development* (3), 273-280.

Dickson-Swift, V., James, E. L., Kippen, S., & Liamputtong, P. (2006). Blurring boundaries in qualitative health research on sensitive topics. *Qualitative health research*, *16*(6), 853-871.

Diener, M. L., & Lucas, R. E. (2004). Adults' desires for children's emotions across 48 countries: Associations with individual and national characteristics. *Journal of Cross-cultural Psychology*, *35*(5), 525-547.

Diener, M. L., Wright, C. A., Dunn, L., Wright, S. D., Anderson, L. L., & Smith, K. N. (2016). A creative 3D design programme: Building on interests and social engagement for students with autism spectrum disorder (ASD). *International Journal of Disability, Development and Education*, *63*(2), 181-200.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Diener, M. L., Wright, C. A., Wright, S. D., & Anderson, L. L. (2016). Tapping into technical talent: Using technology to facilitate personal, social, and vocational skills in youth with autism spectrum disorder (ASD). *Technology and the treatment of children with autism spectrum disorder*, 97-112.

DiLavore, P. C., Lord, C., & Rutter, M. (1995). The pre-linguistic autism diagnostic observation schedule. *Journal of autism and developmental disorders*, 25(4), 355-379. Drew, P. (1997). 'Open' class repair initiators in response to sequential sources of troubles in conversation. *Journal of Pragmatics*, 28(1), 69-101.

Dindar, K., Korkiakangas, T., Laitila, A., & Kärnä, E. (2016). Building mutual understanding: How children with autism spectrum disorder manage interactional trouble. *Journal of Interactional Research in Communication Disorders*, 7(1), 49-77.

Dingemans, M., Rossi, G., & Floyd, S. (2017). Place reference in story beginnings: A cross-linguistic study of narrative and interactional affordances. *Language in Society*, 46(2), 129-158.

Disla, J., Main, A., Kashi, S., & Boyajian, J. (2019). The effect of mothers' emotion-related responses to adolescent disclosures and adolescent perspective taking on the timing of future disclosures. *Social Development*, 28(3), 657-673.

Dressel, D., & Satti, I. (2021). Embodied coparticipation practices in collaborative storytelling. *Gesprächsforschung—Online-Zeitschrift zur verbalen Interaktion*, 22, 54-86.

Duchan, J. F. (2012). Historical and cultural influences on establishing professional legitimacy: A case example from Lionel Logue. *American Journal of Speech-Language Pathology*, 21(4), 387-396.

Drew, P. (1992). Contested Evidence in Courtroom Cross-Examination: The Case of a Trail for Rape, in P. Drew & J. Heritage (Eds), *Talk at Work* (pp. 470-520). Cambridge. Cambridge University Press.

DuBois, J. M. (2008). A framework for analyzing ethics cases. *Ethics in Mental Health Research*, 45-57.

Duncan, S., & Fiske, D. W. (2015). *Face-to-face interaction: Research, Methods, and Theory*. Routledge.

Duncan Jr, S., & Niederehe, G. (1974). On signalling that it's your turn to speak. *Journal of Experimental Social Psychology*, 10(3), 234-247.

Eagle, C. (2014). *Literature, Speech Disorders, and Disability: Talking Normal*. Routledge.

Edey, R., Cook, J., Brewer, R., Johnson, M. H., Bird, G., & Press, C. (2016). Interaction takes two: Typical adults exhibit mind-blindness towards those with autism spectrum disorder. *Journal of Abnormal Psychology*, 125(7), 879.

Eddy, D. M. (1990). Practice policies: where do they come from?. *Jama*, 263(9), 1265-1275.

Edwards, D., & Mercer, N. (1989). Reconstructing context: The conventionalization of classroom knowledge. *Discourse Processes, 12*(1), 91-104.

Edwards, D., & Potter, J. (1992). *Discursive Psychology*. Sage.

Edwards, D., & Potter, J. (2005). Discursive psychology, mental states and descriptions. In Molder, H. Potter, J. *Conversation and Cognition* (241-284). Cambridge University Press.

Ehlers, S., Gillberg, C., & Wing, L. (1999). A screening questionnaire for Asperger syndrome and other high-functioning autism spectrum disorders in school age children. *Journal of Autism and Developmental Disorders, 29*, 129-141.

Ekberg, K., Ekberg, S., Weinglass, L., Herbert, A., Rendle-Short, J., Bluebond-Langner, M., ... & Danby, S. (2022). Attending to child agency in paediatric palliative care consultations: Adults' use of tag questions directed to the child. *Sociology of Health & Illness, 44*(3), 566-585.

Ekman, P. (1992). Are there basic emotions? *Psychological Review, 99*, 550–553.

Ekman, P. (1993). Facial expression and emotion. *American Psychologist, 48*(4), 384.

Ekman, P., & Friesen, W. V. (1975). *Unmasking the Face: A Guide to Recognizing Emotions From Facial Clues*. Prentice-Hall.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Ekman, P., & Friesen, W. V. (1976). Measuring facial movement. *Environmental Psychology and Nonverbal Behavior*, 1, 56-75.

Ekman, P., & Friesen, W. V. (1978). Facial action coding system. *Environmental Psychology & Nonverbal Behavior*.

Engel, G. L. (1977). The need for a new medical model: a challenge for biomedicine. *Science*, 196(4286), 129-136.

Evans, B. (2013). How autism became autism: The radical transformation of a central concept of child development in Britain. *History of the Human Sciences*, 26(3), 3-31.

Fairclough, N. (2013). *Critical discourse analysis: The critical study of language*. (2nd ed.). Routledge.

Falkmer, T., Anderson, K., Falkmer, M., & Horlin, C. (2013). Diagnostic procedures in autism spectrum disorders: a systematic literature review. *European Child & Adolescent Psychiatry*, 22, 329-340.

Fasulo, A. (2015). The value of conversation analysis for the study of children's mental health. In M. O'Reilly & N. L. Lester (Eds.) *The Palgrave Handbook of Child Mental Health* (3-24). Palgrave Macmillan.

Fasulo, A. (2022). Critical perspectives in clinical psychology: autistic identities. In M. Bamberg, C. Demuth, & M. Watzlawik (Eds.) *The Cambridge Handbook of Identity*, 463-486.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Cambridge University Press

Fasulo, A., & Fiore, F. (2007). 12 A valid person: non-competence as a conversational outcome. In A Hepburn & S. Wiggins (2007). *Discursive Research in Practice: New Approaches to Psychology and Interaction*. 224-246.

Fasulo, A., Zinken, J., & Zinken, K. (2016). Asking ‘What about’ questions in chronic illness self-management meetings. *Patient Education and Counseling*, 99(6), 917-925.

Fatigante, M., & Orletti, F. (2014). Information giving and enactment of consent in written consent forms and in participants’ talk recorded in a hospital setting. *Human Studies*, 37(2), 211-238.

Fein, D., Lueci, D., Braverman, M., & Waterhouse, L. (1992). Comprehension of affect in context in children with pervasive developmental disorders. *Journal of Child Psychology and Psychiatry*, 33(7), 1157-1162.

Ferguson, A. (2009). The discourse of speech-language pathology. *International Journal of Speech-Language Pathology*, 11(2), 104-112.

Fernell, E., Eriksson, M. A., & Gillberg, C. (2013). Early diagnosis of autism and impact on prognosis: a narrative review. *Clinical Epidemiology*, 33-43.

Ferrara, K. W. (1994). *Therapeutic Ways with Words*. Oxford University Press.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Fischer, A. H. (1993). Sex differences in emotionality: Fact or stereotype? *Feminism & Psychology*, 3(3), 303-318.

Fitzgerald, D. (2013). The affective labour of autism neuroscience: Entangling emotions, thoughts and feelings in a scientific research practice. *Subjectivity*, 6, 131-152.

Fletcher-Watson, S., & Bird, G. (2020). Autism and empathy: What are the real links? *Autism*, 24(1), 3-6.

Flewitt, R. (2005). Conducting research with young children: Some ethical considerations. *Early child development and care*, 175(6), 553-565.

Fombonne, E. (2009) Epidemiology of pervasive developmental disorders, *Pediatric Research*, 65(6), 591–8.

Ford, C. E., & Fox, B. A. (2010). Multiple practices for constructing laughables. *Prosody in Interaction*, 23, 339.

Ford, C. E., Fox, B. A., & Thompson, S. A. (Eds.). (2002). *The Language of Turn and Sequence*. Oxford University Press.

Ford, J., Hepburn, A., & Parry, R. (2019). What do displays of empathy do in palliative care consultations? *Discourse Studies*, 21(1), 22-37.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Ford, C. E., & Thompson, S. A. (1996). Interactional units in conversation: Syntactic, intonational, and pragmatic resources for the management of turns. *Studies in Interactional Sociolinguistics*, *13*, 134-184.

Fox, B. A. (2007). Principles shaping grammatical practices: an exploration. *Discourse Studies*, *9*(3), 299-318.

Freud A (1937) *The Ego and the Mechanisms of Defence*. London: The Hogarth Press.

Frijda, N. H. (1986). *The Emotions*. Cambridge: Cambridge University Press.

Frijda, N. H., Kuipers, P., & Ter Schure, E. (1989). Relations among emotion, appraisal, and emotional action readiness. *Journal of Personality and Social Psychology*, *57*(2), 212.

Frith, U. (1989). *Autism: Explaining the Enigma*. Basil Blackwell.

Frith, U., & De Vignemont, F. (2005). Egocentrism, allocentrism, and Asperger syndrome. *Consciousness and Cognition*, *14*(4), 719-738.

Frith, C. D., & Frith, U. (2006). How we predict what other people are going to do. *Brain Research*, *1079*(1), 36-46.

Frith, U., & Frith, C. (2010). The social brain: allowing humans to boldly go where no other species has been. *Philosophical Transactions of the Royal Society B: Biological Sciences*, *365*(1537), 165-176.

Frith, U., & Happé, F. (1994). Autism: Beyond “theory of mind.” *Cognition*, *50*, 115–132.

Gale, J., & Newfield, N. (1992). A conversation analysis of a solution-focused marital therapy session. *Journal of Marital and Family Therapy*, *18*(2), 153-165.

Gallagher, S. (2005). *How the body shapes the mind*.

Gardner, R. (2007). The Right connections: Acknowledging epistemic progression in talk. *Language in Society*, *36*(3), 319-341.

Garth, B., & Aroni, R. (2003). 'I Value What You have to Say'. Seeking the perspective of children with a disability, not just their parents. *Disability & Society*, *18*(5), 561-576.

Georgiades, S., Szatmari, P., Boyle, M., Hanna, S., Duku, E., Zwaigenbaum, L., ... & Pathways in ASD Study Team. (2013). Investigating phenotypic heterogeneity in children with autism spectrum disorder: a factor mixture modeling approach. *Journal of Child Psychology and Psychiatry*, *54*(2), 206-215.

Gernsbacher, M. A., Stevenson, J. L., & Dern, S. (2017). Specificity, contexts, and reference groups matter when assessing autistic traits. *PloS One*, *12*(2).

Gillberg, I. C., & Gillberg, C. (1989). Asperger syndrome—some epidemiological considerations: a research note. *Journal of Child Psychology and Psychiatry*, *30*(4), 631-638.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Gillespie-Lynch, K., Kapp, S. K., Brooks, P. J., Pickens, J., & Schwartzman, B. (2017). Whose expertise is it? Evidence for autistic adults as critical autism experts. *Frontiers in Psychology*, 8, 438.

Glenn, P. (2003). *Laughter in Interaction* (Vol. 18). Cambridge University Press.

Glynn-Owen, R. (2010). Early intervention and autism: The impact of positivism and the call for change. *The International Journal of Children's Rights*, 18(3), 405-416.

Goffman, E. (1983). The interaction order: American Sociological Association, 1982 presidential address. *American Sociological Review*, 48(1), 1-17.

Goodwin, C. (1980). Restarts, pauses, and the achievement of a state of mutual gaze at turn-beginning. *Sociological Inquiry*, 50, 272–302.

Goodwin, C. (1981). *Conversational organization: Interaction between speakers and hearers*. Academic Press.

Goodwin, C. (1986). Between and within: Alternative sequential treatments of continuers and assessments. *Human Studies*, 9(2-3), 205-217.

Goodwin, C. (2000). Action and embodiment within situated human interaction. *Journal of Pragmatics*, 32(10), 1489–1522.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Goodwin, C. (2007). Participation, stance and affect in the organization of activities. *Discourse & Society* (18), 53–73.

Gordon, C. (2013). Beyond the observer's paradox: The audio-recorder as a resource for the display of identity. *Qualitative Research*, 13(3), 299-317.

Gotham, K., Risi, S., Pickles, A., & Lord, C. (2007). The Autism Diagnostic Observation Schedule: revised algorithms for improved diagnostic validity. *Journal of Autism and Developmental Disorders*, 37, 613-627.

Grice, H.P. 1957: Meaning. *Philosophical Review*, 66, 377–88.

Haakana, M. (2001). Laughter as a patient's resource: Dealing with delicate aspects of medical interaction. *Text & Talk*, 21(1-2), 187-219.

Habermas, T. (2018). *Emotion and Narrative: Perspectives in Autobiographical Storytelling*. Cambridge University Press.

Halberstadt, A. G., Denham, S. A., & Dunsmore, J. C. (2001). Affective social competence. *Social Development*, 10, 79–119

Happé, F. G. (1995). The role of age and verbal ability in the theory of mind task performance of subjects with autism. *Child Development*, 66(3), 843-855.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Happé, F. G. (1997). Central coherence and theory of mind in autism: Reading homographs in context. *British Journal of Developmental Psychology*, *15*(1), 1-12.

Happé, F. (2001). Social and nonsocial development in autism: Where are the links? In J. A. Burack, T. Charman, N. Yirmiya, & P. R. Zelazo (Eds.), *The Development of Autism: Perspectives from Theory and Research*. (1st ed., 237–253). Routledge.

Hargreaves, P. N., & Peppiatt, R. (2001). Is videotaping of consultations acceptable to patients attending a hospice day centre? *Palliative Medicine*, *15*(1), 49-54.

Hart, N., & Crawford-Wright, A. (1999). Research as therapy, therapy as research: Ethical dilemmas in new-paradigm research. *British Journal of Guidance and Counselling*, *27*(2), 205-214.

Hayes, J. (2019). *Drawing a Line in the Sand: Autism Diagnosis as Social Process*. University of Exeter.

Heasman, B., & Gillespie, A. (2018). Perspective-taking is two-sided: Misunderstandings between people with Asperger's syndrome and their family members. *Autism*, *22*(6), 740-750.

Helps, S. (2017). The ethics of researching one's own practice. *Journal of Family Therapy*, *39*(3), 348-365.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Henderson, G. E. (2019). Autistic children's explanations of their own behavior: Evidence of other attentiveness. *Journal of Interactional Research in Communication Disorders*, 10(2), 99-124.

Hepburn, A., & Potter, J. (2007). Crying receipts: Time, empathy, and institutional practice. *Research on Language and Social Interaction*, 40(1), 89-116.

Hepburn, A., & Bolden, G. B. (2017). *Transcribing for Social Research*. Sage.

Heritage, J. (1984). A change-of-state token and aspects of its sequential placement. In Atkinson, J. M., & Heritage, J. (Eds.). (1984). *Structures of Social Action. Studies in Conversation Analysis*, 346-369.

Heritage, J. (2002). Ad hoc inquiries: Two preferences in the design of routine questions in an open context. In D. W. Maynard, H. Houtkoop-Steenstra, N. C. Schaeffer & J. van der Zouwen (Eds.), *Standardization and Tacit Knowledge: Interaction and Practice in the Survey Interview* (1st ed, 313-333. John Wiley & Sons.

Heritage, J. (2010). Questioning in Medicine. In Freed, A., F. & Ehrlich, S., L. *Why Do You Ask? The Function of Questions in Institutional Discourse*, 6, 42.

Heritage, J. (2011). Territories of knowledge, territories of experience: Empathic moments in interaction. In Stivers, T., Mondada, L., & Steensig, J. (Eds.). (2011). *The Morality of Knowledge in Conversation* (29., 159-183). Cambridge University Press.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Heritage, J. (2013). *Garfinkel and Ethnomethodology*. John Wiley & Sons.

Heritage, J. (2015). Well-prefaced turns in English conversation: A conversation analytic perspective. *Journal of Pragmatics*, 88, 88-104.

Heritage, J., & Raymond, G. (2005). The terms of agreement: Indexing epistemic authority and subordination in talk-in-interaction. *Social Psychology Quarterly*, 68(1), 15-38.

Heritage, J., & Raymond, G. (2012). Navigating epistemic landscapes: Acquiescence, agency and resistance in responses to polar questions. In J. P. De Ruiter (Ed.), *Questions: Formal, Functional and Interactional Perspectives* (179–192). Cambridge University Press.

Heritage, J., & Robinson, J. D. (2006). The structure of patients' presenting concerns: physicians' opening questions. *Health Communication*, 19(2), 89-102.

Heritage, J., Robinson, J. D., Elliott, M. N., Beckett, M., & Wilkes, M. (2007). Reducing patients' unmet concerns in primary care: the difference one word can make. *Journal of General Internal Medicine*, 22(10), 1429–1433.

Heritage, J., & Sorjonen, M. L. (1994). Constituting and maintaining activities across sequences: And-prefacing as a feature of question design. *Language in Society*, 23(1), 1-29.

Hill, E. L. (2004). Executive dysfunction in autism. *Trends in Cognitive Sciences*, 8(1), 26-32.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Hill, E., Berthoz, S., & Frith, U. (2004). Brief report: Cognitive processing of own emotions in individuals with autistic spectrum disorder and in their relatives. *Journal of Autism and Developmental Disorders*, 34, 229–235.

Hobson, R. P., & Lee, A. (1998). Hello and goodbye: a study of social engagement in autism. *Journal of Autism & Developmental Disorders*, 28(2).

Hobson, R. P., Ouston, J., & Lee, A. (1988). Emotion recognition in autism: Coordinating faces and voices. *Psychological Medicine*, 18(4), 911-923.

Holt, E. (2000). Reporting and reacting: Concurrent responses to reported speech. *Research on Language and Social Interaction*, 33, 425–454.

Holt, E. (2011). On the nature of “laughables” Laughter as a response to overdone figurative phrases. *Pragmatics. Quarterly Publication of the International Pragmatics Association (IPrA)*, 21(3), 393-410.

Holt, L. (2004). The ‘voices’ of children: de-centring empowering research relations. *Children's Geographies*, 2(1), 13-27.

Houtkoop-Steenstra, H. (2000). *Interaction and the Standardized Survey Interview: The Living Questionnaire*. Cambridge University Press.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Houtkoop-Steenstra, H., & Antaki, C. (1997). Creating happy people by asking yes-no questions. *Research on Language and Social Interaction*, 30(4), 285-313.

Howlin, P. (1998). Psychological and educational treatments for autism. *The Journal of Child Psychology and Psychiatry and Allied Disciplines*, 39(3), 307-322.

Hughes, C., & Russell, J. (1993). Autistic children's difficulty with mental disengagement from an object: Its implications for theories of autism. *Developmental Psychology*, 29(3), 498.

Hull, L., Petrides, K. V., Allison, C., Smith, P., Baron-Cohen, S., Lai, M. C., & Mandy, W. (2017). "Putting on my best normal": Social camouflaging in adults with autism spectrum conditions. *Journal of Autism and Developmental Disorders*, 47, 2519-2534.

Hutchby, I. (2002). Resisting the incitement to talk in child counselling: Aspects of the utterance 'I don't know'. *Discourse Studies*, 4(2), 147–168.

Hutchby, I. (2005). "Active Listening": Formulations and the Elicitation of Feelings-Talk in Child Counselling. *Research on language and Social Interaction*, 38(3), 303-329.

Hutchby, I., O'Reilly, M., Drewett, A., & Stafford, V. (2020). 'I was just thinking': Cognitive self-reports and engagement with feelings-talk in child mental health assessments. *Research on Children and Social Interaction*, 4(2), 145-167.

Ingram, D. G., Takahashi, T. N., & Miles, J. H. (2008). Defining autism subgroups: a taxometric solution. *Journal of autism and developmental disorders*, 38, 950-960.

Izard, C. E. (2007). Basic emotions, natural kinds, emotion schemas, and a new paradigm. *Perspectives on Psychological Science*, 2(3), 260-280.

Jaedicke, S., Storoschuk, S., & Lord, C. (1994). Subjective experience and causes of affect in high-functioning children and adolescents with autism. *Development and Psychopathology*, 6(2), 273-284.

James, R., Blair, R. (1996). Brief report: Morality in the autistic child. *Journal of Autism and Developmental Disorders* 26, 571–579

Jefferson, G. (1964). At first I thought. *Pragmatics & Beyond New Series*. In Lerner, G. H. *Conversation Analysis: Studies from the First Generation* (pp. 131-167). John Benjamins Publishing Company.

Jefferson, G. (1974). Error correction as an interactional resource¹. *Language in Society*, 3(2), 181-199.

Jefferson, G. (1978). Sequential aspects of storytelling in conversation. In *Studies in the Organization of Conversational Interaction*. 219-248.

Jefferson, G. (1979). A technique for inviting laughter and its subsequent acceptance/declination. In G. Psathas (Ed.), *Everyday Language: Studies in Ethnomethodology* (pp. 79–96). Irvington Publishers.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

- Jefferson, G. (1984). On the organization of laughter in talk about troubles. In J. M. Atkinson & J. Heritage (Eds.), *Structures of Social Action: Studies in Conversation Analysis*, 346–369.
- Jefferson, G. (1985). On the interactional unpacking of a ‘gloss’. *Language in Society*, 14(4), 435-466.
- Jefferson, G. (1987). Exposed and embedded corrections. *Talk and Social Organisation*, 1(1), 86-100.
- Jefferson, G. (1989). Preliminary notes on a possible metric which provides for a 'standard maximum' silence of approximately one second in conversation. *Conversation: An Interdisciplinary Perspective*, 166-196.
- Jefferson, G. (2004). Glossary of transcript symbols with an introduction. *Pragmatics and Beyond New Series*, 125, 13-34.
- Jones, J. L., Gallus, K. L., Viering, K. L., & Oseland, L. M. (2015). ‘Are you by chance on the spectrum’ Adolescents with autism spectrum disorder making sense of their diagnoses. *Disability & Society*, 30(10), 1490-1504.
- Jones, D., Wilkinson, R., Jackson, C., & Drew, P. (2020). Variation and interactional non-standardization in neuropsychological tests: The case of the Addenbrooke’s Cognitive Examination. *Qualitative Health Research*, 30(3), 458-470.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Jordan, R., Kalvin, C. B., Ibrahim, K., & Sukhodolsky, D. G. (2021). Parent emotion socialization in children with autism spectrum disorder and co-occurring anxiety. *Research on Child and Adolescent Psychopathology*, 49, 125-137.

Joseph, R. M., Tager-Flusberg, H., & Lord, C. (2002). Cognitive profiles and social-communicative functioning in children with autism spectrum disorder. *Journal of Child Psychology and Psychiatry*, 43(6), 807-821.

Kaat, A. J., Shui, A. M., Ghods, S. S., Farmer, C. A., Esler, A. N., Thurm, A., ... & Bishop, S. L. (2021). Sex differences in scores on standardized measures of autism symptoms: a multisite integrative data analysis. *Journal of Child Psychology and Psychiatry*, 62(1), 97-106.

Kamp-Becker, I., Albertowski, K., Becker, J., Ghahreman, M., Langmann, A., Mingeback, T., ... & Stroth, S. (2018). Diagnostic accuracy of the ADOS and ADOS-2 in clinical practice. *European Child & Adolescent Psychiatry*, 27, 1193-1207.

Kanner, L. (1943). Autistic disturbances of affective contact. *Nervous Child*, 2(3), 217-250.

Kapp, S. (2013). Interactions between theoretical models and practical stakeholders: the basis for an integrative, collaborative approach to disabilities. In Autistic Self Advocacy Network, *Empowering Leadership: A Systems Change Guide for Autistic College Students and Those with Other Disabilities* (104–113). The Autism Press.

Kapp, S. K. (2020). *Autistic Community and the Neurodiversity Movement: Stories from the Frontline*. Springer Nature.

Kapp, S. K., Gillespie-Lynch, K., Sherman, L. E., & Hutman, T. (2013). Deficit, difference, or both? Autism and neurodiversity. *Developmental Psychology, 49*(1), 59-71.

Kasari, C., Sigman, M., Mundy, P., & Yirmiya, N. (1990). Affective sharing in the context of joint attention interactions of normal, autistic, and mentally retarded children. *Journal of Autism and Developmental Disorders, 20* (1), 87–100.

Keith, J. M., Jamieson, J. P., & Bennetto, L. (2019). The importance of adolescent self-report in autism spectrum disorder: Integration of questionnaire and autonomic measures. *Journal of Abnormal Child Psychology, 47*, 741-754.

Kendrick, K. H., & Drew, P. (2014). The putative preference for offers over requests. In P. Drew, & E. Couper-Kuhlen (Eds.). *Requesting in Social Interaction*, (26., 87-113). John Benjamins Publishing Company.

Kendon, A. (1967). Some functions of gaze-direction in social interaction. *Acta Psychologica, 26*, 22-63.

Kendon, A. (2002). Some uses of the head shake. *Gesture, 2*(2), 147-182.

Kidd, J., & Finlayson, M. (2006). Navigating uncharted water: Research ethics and emotional engagement in human inquiry. *Journal of Psychiatric and Mental Health Nursing, 13*(4), 423-428.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Kieras, J. E., Tobin, R. M., Graziano, W. G., & Rothbart, M. K. (2005). You can't always get what you want: Effortful control and children's responses to undesirable gifts. *Psychological Science, 16*(5), 391-396.

Kitayama, S., Mesquita, B., & Karasawa, M. (2006). Cultural affordances and emotional experience: socially engaging and disengaging emotions in Japan and the United States. *Journal of Personality and Social Psychology, 91*(5), 890.

Kitchener, K. S. (1988). Dual role relationships: What makes them so problematic. *Journal of Counseling & Development, 67*(4), 217-221.

Klin, A., Jones, W., Schultz, R., & Volkmar, F. (2003). The enactive mind, or from actions to cognition: Lessons from autism. *Philosophical Transactions of the Royal Society of London, Series B Biological Sciences, 358*, 345–360.

Korkiakangas, T., & Rae, J. (2014). The interactional use of eye-gaze in children with autism spectrum disorders. *Interaction Studies, 15*(2), 233-259.

Korkiakangas, T., Dindar, K., Laitila, A., & Kärnä, E. (2016). The Sally–Anne test: An interactional analysis of a dyadic assessment. *International Journal of Language & Communication Disorders, 51*(6), 685-702.

Kövecses, Z. (2000). The concept of anger: Universal or culture specific? *Psychopathology, 33*(4), 159-170.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Kratochwill, T., & Shernoff, E. S. (2004). Evidence-based practice: Promoting evidence-based interventions in school psychology. *School Psychology Review*, 33, 34–48.

Kremer-Sadlik, T. (2004). How children with autism and Asperger syndrome respond to questions: A ‘naturalistic’ theory of mind task. *Discourse Studies*, 6(2), 185-206.

Kupetz, M. (2014). Empathy displays as interactional achievements—Multimodal and sequential aspects. *Journal of Pragmatics*, 61, 4-34.

Kupetz, M. (2019). Embodying Empathy in Everyday and Institutional Settings: On the Negotiation of Resources, Rights, and Responsibilities in Comforting Actions. In E. Reber & C. Gerhardt (Eds), *Embodied Activities in Face-to-Face and Mediated Settings: Social Encounters in Time and Space* (1st ed., 329-367). Palgrave Macmillan.

Kupetz, M. (2020). Comment on “A relational framework for integrating the study of empathy in children and adults”: A conversation analytic perspective. *Emotion Review*, 12(4), 293-294.

Kuroshima, S., & Iwata, N. (2016). On displaying empathy: Dilemma, category, and experience. *Research on Language and Social Interaction*, 49(2), 92-110.

Labov, W., & Waletzky, J. (1997). Narrative analysis: Oral versions of personal experience. *Journal of Narrative and Life History*, 7(1-4), 3-38.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Lai, M. C., Lombardo, M. V., Ruigrok, A. N., Chakrabarti, B., Auyeung, B., Szatmari, P., ... & MRC AIMS Consortium. (2017). Quantifying and exploring camouflaging in men and women with autism. *Autism, 21*(6), 690-702.

Lam, G. Y. H., Holden, E., Fitzpatrick, M., Raffaele Mendez, L., & Berkman, K. (2020). “Different but connected”: Participatory action research using Photovoice to explore well-being in autistic young adults. *Autism, 24*(5), 1246-1259.

Lambie, J. A., & Marcel, A. J. (2002). Consciousness and the varieties of emotion experience: a theoretical framework. *Psychological Review, 109*(2), 219.

Landa, R. J. (2008). Diagnosis of autism spectrum disorders in the first 3 years of life. *Nature Clinical Practice Neurology, 4*(3), 138-147.

Langdell, T. (1981). *Face Perception: An Approach to the Study of Autism*.

Launer, J. (2002). *Narrative-Based Primary Care: A Practical Guide* (1st ed). CRC Press.

Lavin, D., & Maynard, D. W. (2001). Standardization vs. rapport: Respondent laughter and interviewer reaction during telephone surveys. *American Sociological Review, 453-479*.

Lawrence, E. J., Shaw, P., Baker, D., Baron-Cohen, S., & David, A. S. (2004). Measuring empathy: Reliability and validity of the empathy quotient. *Psychological Medicine, 34*, 911–920.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Le Couteur, A., Rutter, M., Lord, C., Rios, P., Robertson, S., Holdgrafer, M., & McLennan, J. (1989). Autism diagnostic interview: a standardized investigator-based instrument. *Journal of Autism and Developmental Disorders*, *19*, 363-387.

Leder, D. (1990). *The Absent Body*. University of Chicago Press.

Lee, E. A. L., Black, M. H., Tan, T., Falkmer, T., & Girdler, S. (2019). “I’m destined to ace this”: Work experience placement during high school for individuals with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, *49*(8), 3089-3101.

Legrand, D. (2007). Pre-reflective self-consciousness: on being bodily in the world. *Janus Head*, *9*(2), 493-519.

Lenne, B. S., & Waldby, C. (2011). Sorting out autism spectrum disorders: Evidence-based medicine and the complexities of the clinical encounter. *Health Sociology Review*, *20*(1), 70-83.

Lenroot, R. K., & Yeung, P. K. (2013). Heterogeneity within autism spectrum disorders: what have we learned from neuroimaging studies? *Frontiers in Human Neuroscience*, *7*, 733.

Leudar, I., & Costall, A. (2009). On the historical antecedents of the theory of mind paradigm. In I. Leudar & A. Costall (eds), *Against Theory of Mind* (1st ed., 19-38). Palgrave Macmillan.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Liddicoat, A. J. (2021). *An Introduction to Conversation Analysis* (3rd ed). Bloomsbury Publishing.

Lindholm, C. (2015). Parallel realities: The interactional management of confabulation in dementia care encounters. *Research on Language and Social Interaction*, 48(2), 176-199.

Local, J., & Walker, G. (2005). Methodological imperatives for investigating the phonetic organization and phonological structures of spontaneous speech. *Phonetica*, 62(2-4), 120-130.

Local, J. K., & Walker, G. (2008). Stance and affect in conversation: On the interplay of sequential and phonetic resources. *Text & Talk*, 28(6), 723–747

Local, J. K., Wells, W. H., & Sebba, M. (1985). Phonology for conversation: Phonetic aspects of turn delimitation in London Jamaican. *Journal of Pragmatics*, 9(2-3), 309-330.

Local, J., & Wootton, T. (1995). Interactional and phonetic aspects of immediate echolalia in autism: A case study. *Clinical Linguistics & Phonetics*, 9(2), 155-184.

Loftus, E. F., & Palmer, J. C. (1974). Reconstruction of automobile destruction: An example of the interaction between language and memory. *Journal of Verbal Learning & Verbal Behavior*, 13(5), 585–589.

Lomax, H., & Casey, N. (1998). Recording social life: Reflexivity and video methodology. *Sociological Research Online*, 3(2), 121-146.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Loomes, R., Hull, L., & Mandy, W. P. L. (2017). What is the male-to-female ratio in autism spectrum disorder? A systematic review and meta-analysis. *Journal of the American Academy of Child & Adolescent Psychiatry*, 56(6), 466-474.

Lord, C., Brugha, T. S., Charman, T., Cusack, J., Dumas, G., Frazier, T., ... & Veenstra-VanderWeele, J. (2020). Autism spectrum disorder. *Nature Reviews Disease Primers*, 6(1), 1-23.

Lord, C., Elsabbagh, M., Baird, G., & Veenstra-Vanderweele, J. (2018). Autism spectrum disorder. *The Lancet*, 392(10146), 508-520.

Lord, C., Risi, S., Lambrecht, L., Cook, E. H., Leventhal, B. L., DiLavore, P. C., ... & Rutter, M. (2000). The Autism Diagnostic Observation Schedule—Generic: A standard measure of social and communication deficits associated with the spectrum of autism. *Journal of Autism and Developmental Disorders*, 30, 205-223.

Lord, C., Rutter, M., & DiLavore, P. C. (1999). Autism diagnostic observation schedule--Generic. *Dissertation Abstracts International Section A: Humanities and Social Sciences*.

Lord, C., Rutter, M., DiLavore, P., & Risi, S. (1999). *Autism Diagnostic Observation Schedule: Manual*. Western Psychological Services.

Lord, C., Rutter, M., DiLavore, P., Risi, S., Gotham, K., & Bishop, S. (2012). *Autism Diagnostic Observation Schedule Second Edition (ADOS-2) [Manual: Modules 1-4]*. Western Psychological Services.

Lord, C., Rutter, M., Goode, S., Heemsbergen, J., Jordan, H., Mawhood, L., & Schopler, E. (1989). Autism diagnostic observation schedule: A standardized observation of communicative and social behavior. *Journal of Autism and Developmental Disorders, 19*(2), 185-212.

Lord, C., Rutter, M., & Le Couteur, A. (1994). Autism Diagnostic Interview-Revised: a revised version of a diagnostic interview for caregivers of individuals with possible pervasive developmental disorders. *Journal of Autism and Developmental Disorders, 24*(5), 659-685.

Loomes, R., Hull, L., & Mandy, W. P. L. (2017). What is the male-to-female ratio in autism spectrum disorder? A systematic review and meta-analysis. *Journal of the American Academy of Child & Adolescent Psychiatry, 56*(6), 466-474.

Losh, M., & Capps, L. (2006). Understanding of emotional experience in autism: Insights from the personal accounts of high-functioning children with autism. *Developmental Psychology, 42*, 809–818.

Loveland, K. A., & Tunali, B. (1991). Social scripts for conversational interactions in autism and Down syndrome. *Journal of Autism and Developmental Disorders, 21*(2), 177-186.

Loveland, K. A., Tunali-Kotoski, B., Pearson, D. A., Brelsford, K. A., Ortegon, J., & Chen, R. (1994). Imitation and expression of facial affect in autism. *Development and Psychopathology, 6*(3), 433-444.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Maenner, M. J., Shaw, K. A., Baio, J., Washington, A., Patrick, M., DiRienzo, M., ... & Dietz, P. M. (2020). Prevalence of autism spectrum disorder among children aged 8 years—autism and developmental disabilities monitoring network, 11 sites, United States, 2016. *MMWR Surveillance Summaries*, *69*(4), 1.

Main, A., Lougheed, J. P., Disla, J., & Kashi, S. (2019). Timing of adolescent emotional disclosures: The role of maternal emotions and adolescent age. *Emotion*, *19*(5), 829.

Malatesta, C. Z., & Haviland, J. M. (1982). Learning display rules: The socialization of emotion expression in infancy. *Child Development*, *53*(4), pp. 991-1003.

Malatesta-Magai, C., Leak, S., Tesman, J., Shepard, B., Culver, C., & Smaggia, B. (1994). Profiles of emotional development: Individual differences in facial and vocal expression of emotion during the second and third years of life. *International Journal of Behavioral Development*, *17*(2), 239-269.

Mandell, D. S., Morales, K. H., Xie, M., Lawer, L. J., Stahmer, A. C., & Marcus, S. C. (2010). Age of diagnosis among Medicaid-enrolled children with autism, 2001–2004. *Psychiatric Services*, *61*(8), 822-829.

Mandell, D. S., Wiggins, L. D., Carpenter, L. A., Daniels, J., DiGuseppi, C., Durkin, M. S., ... & Kirby, R. S. (2009). Racial/ethnic disparities in the identification of children with autism spectrum disorders. *American Journal of Public Health*, *99*(3), 493-498.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Mandelbaum, J. (2012). Storytelling in conversation. In J. Sidnell & T. Stivers (Eds.), *The Handbook of Conversation Analysis* (1st., 492-507). Blackwell Publishing Ltd.

Mandy, W., Charman, T., Puura, K., & Skuse, D. (2014). Investigating the cross-cultural validity of DSM-5 autism spectrum disorder: Evidence from Finnish and UK samples. *Autism, 18*(1), 45-54.

Markram, K. & Markram, H. (2010). The Intense World Theory: A unifying theory of the neurobiology of autism. *Frontiers in Human Neuroscience, 4*, 224.

Marlaire, C. L., & Maynard, D. W. (1990). Standardized testing as an interactional phenomenon. *Sociology of Education 63*(2), 83-101.

Mascolo, M. F. (2004). The coactive construction of selves in cultures. *New Directions for Child and Adolescent Development, (104)*, 79-90.

Mascolo, M. F. (2009). Wittgenstein and the discursive analysis of emotion. *New Ideas in Psychology, 27*, 258–274.

Maynard, D. W. (2005). Social actions, gestalt coherence, and designations of disability: Lessons from and about autism. *Social Problems, 52*(4), 499-524.

Maynard, D. W. (2019). Why social psychology needs autism and why autism needs social psychology: Forensic and clinical considerations. *Social Psychology Quarterly, 82*(1), 5-30.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Maynard, D. W., & Marlaire, C. L. (1992). Good reasons for bad testing performance: The interactional substrate of educational exams. *Qualitative Sociology*, 15(2), 177-202.

Maynard, D. W., & Schaeffer, N. C. (2002). Standardization and its discontents. In D. W. Maynard, H. Houtkoop-Steenstra, N. C. Schaeffer & J. van der Zouwen (Eds.), *Standardization and Tacit knowledge: Interaction and Practice in the Survey Interview* (3-45). John Wiley & Sons.

Maynard, D. W., & Turowetz, J. (2017). Doing diagnosis: Autism, interaction order, and the use of narrative in clinical talk. *Social Psychology Quarterly*, 80(3), 254-275.

Maynard, D. W., & Turowetz, J. (2019). Doing abstraction: autism, diagnosis, and social theory. *Sociological Theory*, 37(1), 89-116.

Maynard, D. W., & Turowetz, J. (2020). Sequence and Consequence: Transposing Responsive Actions into Provocations in Forensic and Clinical Encounters Involving Youths with Autism. In R. Wilkinson, J. P. Rae & G. Rasmussen (Eds.) *Atypical Interaction: The Impact of Communicative Impairments within Everyday Talk* (1^{st.}, 39-63). Palgrave Macmillan Cham. Switzerland.

Maynard, D. W., & Turowetz, J. (2022). *Autistic Intelligence: Interaction, Individuality, and the Challenges of Diagnosis*. University of Chicago Press.

Mazurek, M. O., Handen, B. L., Wodka, E. L., Nowinski, L., Butter, E., & Engelhardt, C. R. (2014). Age at first autism spectrum disorder diagnosis: the role of birth cohort, demographic

Clinician-child interactions in ADOS-2 assessments – a CA perspective

factors, and clinical features. *Journal of Developmental & Behavioral Pediatrics*, 35(9), 561-569.

McCabe, R., Leudar, I., & Antaki, C. (2004). Do people with schizophrenia display theory of mind deficits in clinical interactions? *Psychological Medicine*, 34(3), 401-412.

McClave E. Z. (2000). Linguistic functions of head movements in the context of speech. *Journal of Pragmatics*, 32, 855-878.

McDaniel, B., D'Mello, S., King, B., Chipman, P., Tapp, K., & Graesser, A. (2007). Facial features for affective state detection in learning environments. *Proceedings of the Annual Meeting of the Cognitive Science Society*, 29 (467-472).

Mead, G. H. (1934). *Mind, Self, and Society* (111). Chicago: University of Chicago press.

Mehan, H. (1979). 'What time is it, Denise?': Asking known information questions in classroom discourse. *Theory into Practice*, 18(4), 285–294.

Meilleur, A. A. S., Jelenic, P., & Mottron, L. (2015). Prevalence of clinically and empirically defined talents and strengths in autism. *Journal of autism and developmental disorders*, 45, 1354-1367.

Mesquita, B. (2003). Emotions as dynamic cultural phenomena. In R. Davidson, H. Goldsmith, & K. R. Scherer (Eds.), *Handbook of Affective Sciences* (871–890). Oxford University Press.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Mesquita, B., & Boiger, M. (2014). Emotions in context: A sociodynamic model of emotions. *Emotion Review*, 6(4), 298-302.

Mesquita, B., & Frijda, N. H. (1992). Cultural variations in emotions: a review. *Psychological Bulletin*, 112(2), 179.

Milton, D. (2011). “Who am I meant to be?” In search of a psychological account of autism from the viewpoint of an insider. *In Critical Autism Studies Seminar Day*.

Milton, D. E. (2012). On the ontological status of autism: The ‘double empathy problem’. *Disability & Society*, 27(6), 883-887.

Milton, D., Ridout, S., Murray, D., Martin, N., & Mills, R. (2020). *The neurodiversity reader: Exploring concepts, lived experiences and implications for practice*. Pavilion.

Mondada, L. (2012). Conversation Analytic Approach to Data Collection. In J. Sidnell & T. Stivers (Eds.), *The Handbook of Conversation Analysis* (1st., 32-56). Blackwell Publishing Ltd.

Mondada, L. (2014a). Ethics in action: Anonymization as a participant’s concern and a participant’s practice. *Human Studies*, 37(2), 179-209.

Mondada, L. (2014b). The local constitution of multimodal resources for social interaction. *Journal of Pragmatics* 65, 137–156.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Mondada, L. (2014c). Shooting as a research activity: The embodied production of video data. In *Studies of video practices* (pp. 33-62). Routledge.

Mondada, L. (2018). Multiple temporalities of language and body in interaction: Challenges for transcribing multimodality. *Research on Language and Social Interaction*, 51(1), 85-106.

Mondada, L. (2019). Transcribing silent actions: a multimodal approach of sequence organization. *Social Interaction. Video-Based Studies of Human Sociality*, 2(1).

Morrison, K. E., DeBrabander, K. M., Jones, D. R., Faso, D. J., Ackerman, R. A., & Sasson, N. J. (2020). Outcomes of real-world social interaction for autistic adults paired with autistic compared to typically developing partners. *Autism*, 24(5), 1067–1080.

Morrow, V., & Richards, M. (1996). The ethics of social research with children: An overview. *Children & society*, 10(2), 90-105.

Moses, L. J. (2001). Executive accounts of theory-of-mind development. *Child Development*, 72(3), 688-690.

Muncer, S. J., & Ling, J. (2006). Psychometric analysis of the empathy quotient (EQ) scale. *Personality and Individual Differences*, 40(6), 1111-1119.

Muntigl, P., Knight, N., & Watkins, A. (2014). Empathic practices in client-centred psychotherapies. In E-M. Graf, T. Spranz-Fogasy & M. Sator. *Discourses of Helping Professions* (33-57). John Benjamins Publishing Company.

Muskett, T., & Body, R. (2013). The case for multimodal analysis of atypical interaction: Questions, answers and gaze in play involving a child with autism. *Clinical Linguistics & Phonetics*, 27(10-11), 837-850.

Nazneen, N., Matthews, N., Smith, C. J., Rozga, A., Abowd, G. D., Oberleitner, R., ... & Arriaga, R. I. (2015). Use of a novel imaging technology for remote autism diagnosis: a reflection on experience of stakeholders. *Procedia Manufacturing*, 3, 293-300.

Nichols, J., Peterson, D. A., & Barnes, J. (2004). Transitivity and detransitivizing languages. *Linguistic Typology*, 8(2), 149-211.

Norbury, C. F., & Sparks, A. (2013). Difference or disorder? Cultural issues in understanding neurodevelopmental disorders. *Developmental Psychology*, 49(1), 45.

Novin, S., Banerjee, R., Dadkhah, A., & Rieffe, C. (2009). Self-reported use of emotional display rules in the Netherlands and Iran: Evidence for sociocultural influence. *Social Development*, 18(2), 397-411.

Muratori, F. & Maestro, S. (2007). Autism as a downstream effect of primary difficulties in intersubjectivity interacting with abnormal development of brain connectivity. *International Journal for Dialogical Science*, 2(1), 93-118.

Ochs, E. (1979). Transcription as theory. *Developmental Pragmatics*, 10(1), 43-72.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Ochs, E. (1982). Talking to children in Western Samoa. *Language in Society*, 11(1), 77-104.

Ochs, E. (1988). *Culture and Language Development: Language Acquisition and Language Socialization in a Samoan village. Studies in the Social and Cultural Foundations of Language* (6th ed). Cambridge University Press.

Ochs, E., Kremer-Sadlik, T., Sirota, K. G., & Solomon, O. (2004). Autism and the social world: An anthropological perspective. *Discourse Studies*, 6(2), 147-183.

Ochs, E., & Schieffelin, B. B. (1982). Language Acquisition and Socialization: Three Developmental Stories and Their Implications. In A. Duranti (Ed). *Linguistic Anthropology: A Reader* (2nd. 263-301). John Wiley & Sons.

Ochs, E., & Solomon, O. (2010). Autistic sociality. *Ethos*, 38(1), 69-92.

Ochs, E., & Solomon, O. (2004). Introduction: Discourse and autism. *Discourse Studies*, 6(2), 139-146.

O'Donnell-Trujillo, N., & Adams, K. (1983). Heheh in conversation: Some coordinating accomplishments of laughter. *Western Journal of Communication*, 47(2), 175-191.

Oelschlaeger, M. L., & Damico, J. S. (2000). Partnership in conversation: A study of word search strategies. *Journal of Communication Disorders*, 33 (3), 205– 225.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Ogden, R. (2020). Audibly not saying something with clicks. *Research on Language and Social Interaction*, 53(1), 66-89.

Oliver, M., & Barnes, C. (2012). *The New Politics of Disablement*. Bloomsbury Publishing.

O'Reilly, M., & Parker, N. (2014). *Doing Mental Health Research with Children and Adolescents: A Guide to Qualitative Methods*. Sage Publications Ltd.

O'Reilly, M., Parker, N., & Hutchby, I. (2011). Ongoing processes of managing consent: The empirical ethics of using video-recording in clinical practice and research. *Clinical Ethics*, 6(4), 179-185.

Ortega, F. (2013). Cerebralizing autism within the neurodiversity movement. In J. Davidson & M. Orsini (Eds.), *Worlds of Autism: Across the Spectrum of Neurological Difference* (1st ed., pp. 73-95). University of Minnesota Press.

Ozonoff, S., Pennington, B. F., & Rogers, S. J. (1990). Are there emotion perception deficits in young autistic children? *Journal of Child Psychology and Psychiatry*, 31(3), 343-361.

Palermo, M. T. (2013). Developmental disorders and political extremism: A case study of Asperger syndrome and the Neo-Nazi subculture. *Journal of Forensic Psychology Practice*, 13, 341–354.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Panksepp, J., Knutson, B., & Pruitt, D. L. (1998). *Toward a neuroscience of emotion: The epigenetic foundations of emotional development*. In M. F. Mascolo & S. Griffin (Eds.), *What Develops in Emotional Development?* (1st 53-84). Springer.

Parikh, C., Kurzius-Spencer, M., Mastergeorge, A. M., & Pettygrove, S. (2018). Characterizing health disparities in the age of autism diagnosis in a study of 8-year-old children. *Journal of Autism and Developmental Disorders*, *48*, 2396-2407.

Parker, E. H., Hubbard, J. A., Ramsden, S. R., Relyea, N., Dearing, K. F., Smithmyer, C. M., & Schimmel, K. D. (2001). Children's use and knowledge of display rules for anger following hypothetical vignettes versus following live peer interaction. *Social Development*, *10*(4), 528-557.

Parkinson, B. (2012). Piecing together emotion: Sites and time-scales for social construction. *Emotion Review*, *4*(3), 291-298.

Parry, R., Pino, M., Faull, C., & Feathers, L. (2016). Acceptability and design of video-based research on healthcare communication: evidence and recommendations. *Patient Education and Counseling*, *99*(8), 1271-1284.

Pearson, A., & Rose, K. (2021). A conceptual analysis of autistic masking: Understanding the narrative of stigma and the illusion of choice. *Autism in Adulthood*, *3*(1), 52-60.

Pellicano, E. (2007). Links between theory of mind and executive function in young children with autism: clues to developmental primacy. *Developmental Psychology*, *43*(4), 974.

Pennington, B. F., & Ozonoff, S. (1996). Executive functions and developmental psychopathology. *Journal of Child Psychology and Psychiatry*, 37(1), 51-87.

Peräkylä, A., & Ruusuvuori, J. E. (2012). Facial expression and interactional regulation of emotion. *Emotion in Interaction*. 64-91.

Peräkylä, A., & Vehviläinen, S. (2003). Conversation analysis and the professional stocks of interactional knowledge. *Discourse & Society*, 14(6), 727-750.

Perner, J. (1991). *Understanding the representational mind*. The MIT Press.

Perner, J., Frith, U., Leslie, A. M., & Leekam, S. R. (1989). Exploration of the autistic child's theory of mind: Knowledge, belief, and communication. *Child Development*, 60(3), 689-700.

Peters, S. (2010). Qualitative research methods in mental health. *BMJ Ment Health*, 13(2), 35-40.

Pettit, G. S., McClaskey, C. L., Brown, M. M., & Dodge, K. A. (1987). The generalizability of laboratory assessments of children's socially competent behavior in specific situations. *Behavioral Assessment*, 9(1), 81-96.

Petukhova, V., & Bunt, H. (2009). Grounding by nodding. *Proceedings of GESPIN*, Conference on Gestures and Speech in Interaction. Poznań.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Phillips, H., Wright, B., Allgar, V., McConachie, H., Sweetman, J., Hargate, R., Hodkinson, R., Bland, M., George, H., Hughes, A., Hayward, E., De Las Heras, V. F. G., & Le Couteur, A. (2022). Adapting and validating the Autism Diagnostic Observation Schedule Version 2 for use with deaf children and young people. *Journal of Autism and Developmental Disorders*, 52(2), 553–568.

Plejert, C., Lindholm, C., & Schrauf, R. W. (2017). *Multilingual Interaction and Dementia: Communication Disorders Across Languages* (16th ed.). Multilingual Matters.

Pomerantz, A. (1984) Pursuing a response. In J. M. Atkinson & J. Heritage (Eds.), *Structures of Social Action, Studies in Emotion and Social Interaction* (152-166). Cambridge University Press.

Pomerantz, A. (1988). Offering a candidate answer: An information seeking strategy. *Communications Monographs*, 55(4), 360-373.

Ponnet, K., Buysse, A., Roeyers, H., & De Corte, K. (2005). Empathic accuracy in adults with a pervasive developmental disorder during an unstructured conversation with a typically developing stranger. *Journal of Autism and Developmental Disorders*, 35, 585-600.

Ponnet, K. S., Roeyers, H., Buysse, A., De Clercq, A., & Van Der Heyden, E. (2004). Advanced mind-reading in adults with Asperger syndrome. *Autism*, 8(3), 249-266.

Potter, J. (2002). Two kinds of natural. *Discourse Studies*, 4(4), 539-542.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Potter, J., & Wetherell, M. (1987). *Discourse and social psychology: Beyond attitudes and behaviour*. Sage Publications, Inc.

Provine, R. R., & Hamernik, H. B. (1986). Yawning: effects of stimulus interest. *Bulletin of the Psychonomic Society*, 24(6), 437-438.

Ratto, A. B. (2021). Commentary: What's so special about girls on the autism spectrum? A commentary on Kaat et al. (2020). *Journal of Child Psychology and Psychiatry*, 62(1), 107-109.

Ratto, A. B., Bascom, J., daVanport, S., Strang, J. F., Anthony, L. G., Verbalis, A., ... & Kenworthy, L. (2023). Centering the Inner Experience of Autism: Development of the Self-Assessment of Autistic Traits. *Autism in Adulthood*, 5(1), 93-105.

Raymond, G. (2003). Grammar and social organization: Yes/no interrogatives and the structure of responding. *American Sociological Review*, 68(6), 939-967.

Raymond, G. (2004). Prompting action: The stand-alone "so" in ordinary conversation. *Research on Language and Social Interaction*, 37(2), 185-218.

Reese, R. M., Jamison, T. R., Braun, M., Wendland, M., Black, W., Hadorn, M., ... & Prather, C. (2015). Brief report: Use of interactive television in identifying autism in young children: Methodology and preliminary data. *Journal of Autism and Developmental Disorders*, 45(5), 1474-1482.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Reddy, V. (1996). Omitting the second person in social understanding. *Behavioral and Brain Sciences*, 19(1), 140-141.

Reddy, V. (2003). On being the object of attention: implications for self–other consciousness. *Trends in Cognitive Sciences*, 7(9), 397-402.

Reddy, V. (2008) Experiencing others A second-person approach to other-awareness. In U. Mueller, J. I. Carpendale, N. Budwig & B. Sokol (Eds.). *Social Life and Social Knowledge: Toward a Process Account of Development* (1st ed, 123-144). Psychology Press.

Rhys, C. S. (2016). Grammar and epistemic positioning: When assessment rules. *Research on Language and Social Interaction*, 49(3), 183-200.

Rickman, P., & Rudanko, J. (2018). *Corpus-Based Studies on Non-Finite Complements in Recent English*. Springer.

Rieffe, C., Meerum Terwogt, M., & Kotronopoulou, K. (2007). Awareness of single and multiple emotions in high-functioning children with autism. *Journal of Autism and Developmental Disorders*, 37, 455-465.

Rietveld, E. (2008). Situated normativity: The normative aspect of embodied cognition in unreflective action. *Mind*, 117(468), 973-1001.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Rifai, O. M., Fletcher-Watson, S., Jiménez-Sánchez, L., & Crompton, C. J. (2021). Investigating Markers of Rapport in Autistic and Nonautistic Interactions. *Autism in Adulthood*, 4(1), 3-11.

Rinehart, N. J., Bradshaw, J. L., Moss, S. A., Brereton, A. V., & Tonge, B. J. (2000). Atypical interference of local detail on global processing in high-functioning autism and Asperger's disorder. *The Journal of Child Psychology and Psychiatry and Allied Disciplines*, 41(6), 769-778.

Risi, S., Lord, C., Gotham, K., Corsello, C., Chrysler, C., Szatmari, P., ... & Pickles, A. (2006). Combining information from multiple sources in the diagnosis of autism spectrum disorders. *Journal of the American Academy of Child & Adolescent Psychiatry*, 45(9), 1094-1103.

Robertson, J. M., Tanguay, P. E., L'ecuyer, S., Sims, A., & Waltrip, C. (1999). Domains of social communication handicap in autism spectrum disorder. *Journal of the American Academy of Child & Adolescent Psychiatry*, 38(6), 738-745.

Roman-Urrestarazu, A., van Kessel, R., Allison, C., Matthews, F. E., Brayne, C., & Baron-Cohen, S. (2021). Association of race/ethnicity and social disadvantage with autism prevalence in 7 million school children in England. *JAMA Pediatrics*, 175(6), 1-11.

Rosen, N. E., Lord, C., & Volkmar, F. R. (2021). The diagnosis of autism: From Kanner to DSM-III to DSM-5 and beyond. *Journal of Autism and Developmental Disorders*, 51, 4253-4270.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Rosenberg, C. E. (2002). The tyranny of diagnosis: specific entities and individual experience. *The Milbank Quarterly*, 80(2), 237-260.

Rossano, F. (2012). Gaze in Conversation. In J. Sidnell & T. Stivers (Eds.), *The Handbook of Conversation Analysis* (1st., 308-329). Blackwell Publishing Ltd.

Rossano, F., Brown, P., & Levinson, S. C. (2009). Gaze, questioning and culture. In J. Sidnell (Ed.), *Conversation Analysis: Comparative Perspectives*, (187-249). Cambridge University Press.

Rossen, C. B., Schriver, K. N., Tarber, C., Nordahl, D. V., Thygesen Rasmussen, G., Ong, B., & Buus, N. (2020). “Y, what do you think about what X just said?” Conversation analysis of stance-eliciting questions in open dialogue network meetings. *Journal of Marital and Family Therapy*, 46(4), 719-731.

Rosset, D. B., Rondan, C., Da Fonseca, D., Santos, A., Assouline, B., & Deruelle, C. (2008). Typical emotion processing for cartoon but not for real faces in children with autistic spectrum disorders. *Journal of Autism and Developmental Disorders*, 38, 919-925.

Roter, D. L., & Hall, J. A. (1987). Physicians' interviewing styles and medical information obtained from patients. *Journal of General Internal Medicine*, 2, 325-329.

Roth, A., & Olsher, D. (1997). Some standard uses of "What about"-prefaced interrogatives in the broadcast news interview. *Issues in Applied Linguistics*, 8(1) 3-25.

Russell, J. A. (1991). Culture and the categorization of emotions. *Psychological Bulletin*, 110(3), 426.

Russell, J. (1997). How executive disorders can bring about an inadequate 'theory of mind'. In J. Russell, (Ed.), *Autism as an Executive Disorder*, 256–304. Oxford University Press.

Russell, G., Kapp, S. K., Elliott, D., Elphick, C., Gwernan-Jones, R., & Owens, C. (2019). Mapping the autistic advantage from the accounts of adults diagnosed with autism: A qualitative study. *Autism in Adulthood*, 1(2), 124-133.

Russell, G., Stapley, S., Newlove-Delgado, T., Salmon, A., White, R., Warren, F., ... & Ford, T. (2022). Time trends in autism diagnosis over 20 years: a UK population-based cohort study. *Journal of Child Psychology and Psychiatry*, 63(6), 674-682.

Russo, N., Flanagan, T., Iarocci, G., Berringer, D., Zelazo, P. D., & Burack, J. A. (2007). Deconstructing executive deficits among persons with autism: Implications for cognitive neuroscience. *Brain and Cognition*, 65(1), 77-86.

Rutter, M. (1972). Childhood schizophrenia reconsidered. *Journal of Autism and Childhood Schizophrenia*, 2(3), 315–337.

Rutter, M. (1978). Diagnosis and definition of childhood autism. *Journal of Autism and Childhood Schizophrenia*, 8(2), 139–161.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Rutter, M. (1985). Infantile autism. *A Clinician's Guide to Child Psychiatry*, 48-78.

Rutter, M., Le Couteur, A., & Lord, C. (2003). Autism Diagnostic Interview-Revised. *Western Psychological Services*.

Rutter, M., LeCouteur, A., Lord, C., Macdonald, H., Rios, P., & Folstein, S. (1988). Diagnosis and subclassification of autism: Concepts and instrument development. In E. Schopler & G. B. Mesibov (Eds.), *Diagnosis and Assessment in Autism. Current Issues in Autism*. (1st ed.), 239-259. Springer.

Rutter, M., & Schopler, E. (1987). Autism and pervasive developmental disorders: Concepts and diagnostic issues. *Journal of Autism and Developmental Disorders*, 17(2), 159-186.

Saarni, C. (1999). *The Development of Emotional Competence*. Guilford Press.

Sackett, D. L., Rosenberg, W. M., Gray, J. M., Haynes, R. B., & Richardson, W. S. (1996). Evidence based medicine: what it is and what it isn't. *Bmj*, 312(7023), 71-72.

Sacks, H. (1974). Some consideration of a story told in ordinary conversations. *Poetics*, 15, 127-138.

Sacks, H. (1987). On the preferences for agreement and contiguity in sequences in conversation. In P. Griffiths, A. J. Merrison, & A. Bloomer, *Talk and Social Organisation*, (1st ed., 54-69). Routledge.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Sacks, H. (1992). *Lectures on Conversation. Volumes I & II*. Blackwell.

Sacks, H., Schegloff, E. A., & Jefferson, G. (1978). A simplest systematics for the organization of turn taking for conversation. In J. Schenkein (Ed.), *Studies in the Organization of Conversational Interaction* (7-55). Academic Press.

Sarbin, T. R. (1989). Emotions as narrative emplotments. In M. J. Packer & R. B. Addison (Eds.), *Entering the Circle: Hermeneutic Investigation in Psychology* (185–201). State University of New York Press.

Sasson, N. J., Faso, D. J., Nugent, J., Lovell, S., Kennedy, D. P., & Grossman, R. B. (2017). Neurotypical peers are less willing to interact with those with autism based on thin slice judgments. *Scientific Reports*, 7(1), 1-10.

Schachter, S., Christenfeld, N., Ravina, B., & Bilous, F. (1991). Speech disfluency and the structure of knowledge. *Journal of Personality and Social Psychology*, 60(3), 362.

Schegloff, E. A. (1978). On Some Questions and Ambiguities in Conversation” In Dressler, W. U. (1978). *Current Trends in Textlinguistics*, 2(81), 81–103.

Schegloff, E. A. (1979). The relevance of repair to syntax-for-conversation. *Discourse and Syntax*, 12, 261-286.

Schegloff, E. A. (1980). Preliminaries to preliminaries: ‘Can I ask you a question?’ *Sociological Inquiry*, 50(3–4), 104–152.

Schegloff, E. A. (1982). Discourse as an interactional achievement: Some uses of 'uh huh' and other things that come between sentences. In D. Tannen (Ed.), *Georgetown University Round Table on Languages and Linguistics (GURT) 1981: Analyzing Discourse: Text and Talk*, (71–93). Georgetown University Press.

Schegloff, E. A. (1992). Repair after next turn: The last structurally provided defence of intersubjectivity in conversation. *American Journal of Sociology*, 97(5), 1295-1345.

Schegloff, E. A. (1996). Turn organization: one intersection of grammar and interaction/Emanuel A. Schegloff. *Interaction and Grammar*, 52-133.

Schegloff, E. A. (2000). Overlapping talk and the organization of turn-taking for conversation. *Language in Society*, 29(1), 1–63.

Schegloff, E. A. (2003). Conversation analysis and communication disorders. In C. Goodwin (Ed.), *Conversation and Brain Damage* (21-55). Oxford University Press.

Schegloff, E. A. (2007). *Sequence Organization in Interaction: A Primer in Conversation Analysis I* (1), 19-209

Schegloff, E. A., Jefferson, G., & Sacks, H. (1977). The preference for self-correction in the organization of repair in conversation. *Language*, 53(2), 361-382.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Schegloff, E. A., & Lerner, G. H. (2009). Beginning to respond: Well-prefaced responses to wh-questions. *Research on Language and Social Interaction*, 42(2), 91-115.

Schegloff, E. A., & Sacks, H. (1973). Opening up closings. *Semiotica*, 8 (4), 289-327.

Schenkein, J. (Ed.). (2014). *Studies in the Organization of Conversational Interaction: Language, Thought, and Culture*. Academic Press.

Schieffelin, B. B., & Ochs, E. (1986). Language socialization. *Annual Review of Anthropology*, 15(1), 163-191.

Schieffelin, B. B. (1990). *Studies in the Social and Cultural Foundations of Language: The Give and Take of Everyday Life: Language, Socialization of Kaluli Children* (9th ed.). Cambridge University Press.

Schiffrin, D. (1987). *Discourse Markers* (No. 5). Cambridge University Press.

Schilbach, L., Timmermans, B., Reddy, V., Costall, A., Bente, G., Schlicht, T., & Voegeley, K. (2013). Toward a second-person neuroscience¹. *Behavioral and Brain Sciences*, 36(4), 393-414.

Schopler, E., Rutter, M., & Chess, S. (1979). Change of journal scope and title. *Journal of Autism and Developmental Disorders*, 9, 1-10.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Sedgewick, F., Hill, V., Yates, R., Pickering, L., & Pellicano, E. (2016). Gender differences in the social motivation and friendship experiences of autistic and non-autistic adolescents. *Journal of Autism and Developmental Disorders*, *46*, 1297-1306.

Sert, O., & Jacknick, C. M. (2015). Student smiles and the negotiation of epistemics in L2 classrooms. *Journal of Pragmatics*, *77*, 97-112.

Shamay-Tsoory, S. G., Tomer, R., Yaniv, S., & Aharon-Peretz, J. (2002). Empathy deficits in Asperger syndrome: A cognitive profile. *Neurocase*, *8*(2), 245-252.

Sheppard, E., Pillai, D., Wong, G. T. L., Ropar, D., & Mitchell, P. (2016). How easy is it to read the minds of people with autism spectrum disorder? *Journal of Autism and Developmental Disorders*, *46*, 1247-1254.

Shields, S. A. (2000). Thinking about gender, thinking about theory: Gender and emotional experience. *Gender and Emotion*, *1*, 3-23.

Sidnell, J. (2006). Coordinating gesture, talk, and gaze in reenactments. *Research on Language and Social Interaction*, *39*(4), 377-409.

Sidnell, J. (2012). “Who knows best?”: Evidentiality and epistemic asymmetry in conversation. *Pragmatics and Society*, *3*(2), 294-320.

Sidnell, J., & Enfield, N. J. (2012). Language diversity and social action: A third locus of linguistic relativity. *Current Anthropology*, *53*(3), 302-333.

Sidnell, J., & Stivers, T. (Eds.). (2012). *The Handbook of Conversation Analysis*. John Wiley & Sons.

Siegel, S. J., & Alloy, L. B. (1990). Interpersonal perceptions and consequences of depressive-significant other relationships: a naturalistic study of college roommates. *Journal of Abnormal Psychology, 99*(4), 361.

Siegel, B., Pliner, C., Eschler, J., & Elliott, G. R. (1988). How children with autism are diagnosed: Difficulties in identification of children with multiple developmental delays. *Journal of Developmental & Behavioral Pediatrics, 9*(4), 199-204.

Sigman, M., Dijamco, A., Gratier, M., & Rozga, A. (2004). Early detection of core deficits in autism. *Mental Retardation and Developmental Disabilities Research Reviews, 10*(4), 221-233.

Sigman, M. D., Kasari, C., Kwon, J. H., & Yirmiya, N. (1992). Responses to the negative emotions of others by autistic, mentally retarded, and normal children. *Child Development, 63*(4), 796-807.

Silverman, C. (2008). Fieldwork on another planet: Social science perspectives on the autism spectrum. *BioSocieties, 3*(3), 325-341.

Silverman, J., Kurtz, S., & Draper, J. (2016). *Skills for Communicating with Patients* (3rd ed.). CRC Press.

Sinclair, J., & Coulthard, M. (2013). Advances in Spoken Discourse Analysis. In M. Coulthard (Ed.), *Towards an Analysis of Discourse* (1st ed., 1-34). Routledge.

Singh, J. S. (2015). *Multiple Autisms: Spectrums of Advocacy and Genomic Science*. University of Minnesota Press.

Singh, I., & Keenan, S. (2010). The challenges and opportunities of qualitative health research with children. *The SAGE handbook of qualitative methods in health research* (pp. 696-713). Sage Publications Ltd.

Snow, M. E., Hertzog, M. E., & Shapiro, T. (1987). Expression of emotion in young autistic children. *Journal of the American Academy of Child & Adolescent Psychiatry*, 26(6), 836-838.

Solomon, O. (2008). Language, autism, and childhood: An ethnographic perspective. *Annual Review of Applied Linguistics*, 28, 150-169.

Solomon, O. (2015). But-he'll fall!": Children with autism, interspecies intersubjectivity, and the problem of 'being social. *Culture, Medicine, and Psychiatry*, 39, 323-344.

Soto, S., Linas, K., Jacobstein, D., Biel, M., Migdal, T., & Anthony, B. J. (2015). A review of cultural adaptations of screening tools for autism spectrum disorders. *Autism*, 19(6), 646-661.

Speer, S. A., & Hutchby, I. (2003). From ethics to analytics: Aspects of participants' orientations to the presence and relevance of recording devices. *Sociology*, 37(2), 315-337.

Stein, N. L., Trabasso, T., & Liwag, M. (1993). The representation and organization of emotional experience: Unfolding the emotion episode. In M. Lewis & J. M. Haviland (Eds.), *Handbook of Emotions*, 279–300.

Sterponi, L., & Shankey, J. (2014). Rethinking echolalia: Repetition as interactional resource in the communication of a child with autism. *Journal of Child Language*, 41(2), 275-304.

Sterponi, L., de Kirby, K., & Shankey, J. (2015). Rethinking language in autism. *Autism*, 19(5), 517-526.

Stickle, T. (2015). *Epistemic Stance Markers and the Function of I Don't Know in the Talk of Persons with Dementia and Children with Autism* (Doctoral dissertation, The University of Wisconsin-Madison).

Stivers, T. (2008). Stance, alignment, and affiliation during storytelling: When nodding is a token of affiliation. *Research on Language and Social Interaction*, 41(1), 31-57.

Stivers, T., & Rossano, F. (2010). Mobilizing response. *Research on Language and social interaction*, 43(1), 3-31.

Stivers, T., & Sidnell, J. (Eds.). (2012). *The Handbook of Conversation Analysis*. John Wiley & Sons.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Stokoe, E., & Edwards, D. (2008). Did you have permission to smash your neighbour's door? Silly questions and their answers in police—suspect interrogations. *Discourse Studies*, 10(1), 89-111.

Stone, W. L., Lee, E. B., Ashford, L., Brissie, J., Hepburn, S. L., Coonrod, E. E., & Weiss, B. H. (1999). Can autism be diagnosed accurately in children under 3 years. *The Journal of Child Psychology and Psychiatry and Allied Disciplines*, 40(2), 219-226.

Stribling, P., Rae, J., & Dickerson, P. (2007). Two forms of spoken repetition in a girl with autism. *International Journal of Language & Communication Disorders*, 42(4), 427-444.

Suchman, L., & Jordan, B. (1990). Interactional troubles in face-to-face survey interviews. *Journal of the American statistical Association*, 85(409), 232-241.

Suchman, A. L., Markakis, K., Beckman, H. B., & Frankel, R. (1997). A model of empathic communication in the medical interview. *Jama*, 277(8), 678-682.

Tager-Flusberg, H., Joseph, R., & Folstein, S. (2001). Current directions in research on autism. *Mental Retardation and Developmental Disabilities Research Reviews*, 7(1), 21-29.

Tantam, D., Monaghan, L., Nicholson, H., & Stirling, J. (1989). Autistic children's ability to interpret faces: A research note. *Journal of Child Psychology and Psychiatry*, 30(4), 623-630.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Tarplee, C., & Barrow, E. (1999). Delayed echoing as an interactional resource: A case study of a 3-year-old child on the autistic spectrum. *Clinical Linguistics & Phonetics*, 13(6), 449-482.

Taylor, E. H. (2006). The weaknesses of the strengths model. *Best Practices in Mental Health*, 2(1), 1-30.

Taylor, L. J., Eapen, V., Maybery, M. T., Midford, S., Paynter, J., Quarmby, L., . . . Whitehouse, A. J. (2016). Diagnostic evaluation for autism spectrum disorder: a survey of health professionals in Australia. *BMJ Open*, 6(9), e012517.

Teitelbaum, P., Teitelbaum, O., Nye, J., Fryman, J., & Maurer, R. G. (1998). Movement analysis in infancy may be useful for early diagnosis of autism. *Proceedings of the National Academy of Sciences*, 95(23), 13982-13987.

Terasaki, A. K. (2004). Pre-announcement sequences in conversation. In G. H. Lerner (Ed.), *Conversation Analysis Studies from the first generation* (171–223). John Benjamins Publishing Company.

Ter Hark, M. (2012). *Beyond the Inner and the Outer: Wittgenstein's Philosophy of Psychology* (214).

Thomas, H., & Boellstorff, T. (2017). Beyond the spectrum: Rethinking autism. *Disability Studies Quarterly*, 37(1).

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Thompson, E. (2010). *Mind in Life: Biology, Phenomenology, and the Sciences of Mind*. Harvard University Press.

Timimi, S., Milton, D., Bovell, V., Kapp, S., & Russell, G. (2019). Deconstructing diagnosis: Four commentaries on a diagnostic tool to assess individuals for autism spectrum disorders. *Autonomy, 1*(6).

Toal, F., Daly, E. M., Page, L., Deeley, Q., Hallahan, B., Bloemen, O., ... & Murphy, D. G. M. (2010). Clinical and anatomical heterogeneity in autistic spectrum disorder: a structural MRI study. *Psychological Medicine, 40*(7), 1171-1181.

Towbin, K. E. (2005). Pervasive developmental disorder not otherwise specified. *Handbook of autism and pervasive developmental disorders, 1*, 165-200.

Towbin K. Pervasive developmental disorder not otherwise specified (1997). In: Cohen DJ, Volkmar FR, editors. *Handbook of autism and pervasive developmental disorders*. (2nd ed.). (123–147). Wiley.

Tregaskis, C. (2004). *Constructions of Disability*. Routledge.

Trevarthen, C. & Delafield-Butt, J. T. (2013). Autism as a developmental disorder in intentional movement and affective engagement. *Frontiers in Integrative Neuroscience, 7*, 49.

Trott, P., & Blignault, I. (1998). Cost evaluation of a telepsychiatry service in northern Queensland. *Journal of Telemedicine and Telecare, 4*(1), 66-68.

Turowetz, J. (2015a). Citing conduct, individualizing symptoms: accomplishing autism diagnosis in clinical case conferences. *Social Science & Medicine*, *142*, 214-222.

Turowetz, J. (2015b). The interactional production of a clinical fact in a case of autism. *Qualitative Sociology*, *38*, 57-78.

Turowetz, J. (2017). On the use of “I just thought” formulations for modifying one’s stance toward a problematic action. *Research on Language and Social Interaction*, *50*(4), 348-362.

Turowetz, J., & Maynard, D. W. (2016). Category attribution as a device for diagnosis: fitting children to the autism spectrum. *Sociology of Health & Illness*, *38*(4), 610-626.

Turowetz, J., & Maynard, D. W. (2018). Narrative methods for differential diagnosis in a case of autism. *Symbolic Interaction*, *41*(3), 357-383.

Turowetz, J., & Maynard, D. W. (2019). Documenting diagnosis: testing, labelling, and the production of medical records in an autism clinic. *Sociology of Health & Illness*, *41*(6), 1023-1039.

Underwood, M. K., Coie, J. D., & Herbsman, C. R. (1992). Display rules for anger and aggression in school-age children. *Child Development*, *63*(2), 366-380.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Vismara, L. A., McCormick, C., Young, G. S., Nadhan, A., & Monlux, K. (2013). Preliminary findings of a telehealth approach to parent training in autism. *Journal of Autism and Developmental Disorders, 43*, 2953-2969.

Volkmar, F. R., Cicchetti, D. V., Cohen, D. J., & Bregman, J. (1992). Brief report: Developmental aspects of DSM-III-R criteria for autism. *Journal of Autism and Developmental Disorders, 22*(4), 657-662.

Volkmar, F. R., Lord, C., Bailey, A., Schultz, R. T., & Klin, A. (2004). Autism and pervasive developmental disorders. *Journal of Child Psychology and Psychiatry, 45*(1), 135-170.

Voutilainen, L., & Koivisto, A. (2022). ‘Delayed response’ in psychodynamic psychotherapy. *Discourse Studies, 24*(2), 249-265.

Waddell, C., & Godderis, R. (2005). Rethinking evidence-based practice for children’s mental health. *BMJ Ment Health, 8*(3), 60-62.

Wainer, A. L., & Ingersoll, B. R. (2015). Increasing access to an ASD imitation intervention via a telehealth parent training program. *Journal of Autism and Developmental Disorders, 45*, 3877-3890.

Waltz, M. (2008). Autism= death: The social and medical impact of a catastrophic medical model of autistic spectrum disorders. *Popular narrative media, 1*(1), 13-24.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Ware, L. (2004). The Politics of Ideology: A Pedagogy of Critical Hope. *Counterpoints*, 270, 183-203.

Waterhouse, L., Wing, L., Spitzer, R. L., & Siegel, B. (1993). Diagnosis by DSM-III-R versus ICD-10 criteria. *Journal of autism and developmental disorders*, 23(3), 572-573.

Washington, K. N., Karem, R. W., Kokotek, L. E., & León, M. (2023). Supporting Culturally Responsive Assessment Practices with Preschoolers: Guidance from Methods in the Jamaican Context. *Journal of Speech, Language, and Hearing Research*, 66(12), 4716-4738.

Weatherall, A. (2011). I don't know as a Prepositioned Epistemic Hedge. *Research on Language & Social Interaction*, 44(4), 317-337.

Weatherall, A. (2021). Displaying emotional control by how crying and talking are managed. In A. Weatherall & J. S. Robles (Eds.), *How Emotions are Made in Talk* (77-98). John Benjamins Publishing Company.

Weiste, E., & Peräkylä, A. (2014). Prosody and empathic communication in psychotherapy interaction. *Psychotherapy Research*, 24(6), 687-701.

Werling, D. M., & Geschwind, D. H. (2013). Sex differences in autism spectrum disorders. *Current Opinion in Neurology*, 26(2), 146.

Western Psychological Services (2023). *Published Translations WPS Titles in Commercial Translation*. <https://www.wpspublish.com/published-translations>

Western Psychological Services (2023). (*ADOS®-2*) *Autism Diagnostic Observation Schedule™*, *Second Edition*. <https://www.wpspublish.com/ados-2-autism-diagnostic-observation-schedule-second-edition>

Whitehead, K. A. (2011). Some uses of head nods in “third position” in talk-in-interaction. *Gesture*, *11*(2), 103-122.

Whitehouse, A. J., Evans, K., Eapen, V., & Wray, J. (2018). A national guideline for the assessment and diagnosis of autism spectrum disorders in Australia. *Brisbane, Australia: Autism Cooperative Research Centre (CRC)*.

Whitworth, A., Perkins, L., & Lesser, R. (1997). *Conversation Analysis Profile for People with Aphasia*.

Wilkinson, S., & Kitzinger, C. (2006). Surprise as an interactional achievement: Reaction tokens in conversation. *Social Psychology Quarterly*, *69*(2), 150–182.

Williams, G. L., Wharton, T., & Jagoe, C. (2021). Mutual (Mis)understanding: Reframing Autistic Pragmatic “Impairments” Using Relevance Theory. *Frontiers in Psychology*, *12*, 1277.

Wing, L. (1981). Asperger's syndrome: a clinical account. *Psychological Medicine*, *11*(1), 115-129.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Wing, L. (1993). The definition and prevalence of autism: A review. *European child & adolescent psychiatry*, 2, 61-74.

Wing, L., Leekam, S. R., Libby, S. J., Gould, J., & Larcombe, M. (2002). The diagnostic interview for social and communication disorders: Background, inter-rater reliability and clinical use. *Journal of Child Psychology and Psychiatry*, 43(3), 307-325.

Wittgenstein, L. (1953). *Philosophical investigations* (G. E. M. Anscombe, Trans.). Blackwell.

World Health Organization. (1987). *The ICD-10 Classification of Mental and Behavioural Disorders: Diagnostic Criteria for Research*. World Health Organization.

Woodhead, M., & Faulkner, D. (2000). 1 Subjects, Objects or Participants?. In P. Christensen, & A. James (Eds.), *Research with children: Perspectives and practices*, (2nd ed.), 10-40. Routledge.

Wootton, A. J. (1999). An investigation of delayed echoing in a child with autism. *First Language*, 19(57), 359-381.

Yergeau, M. (2013). Clinically significant disturbance: On theorists who theorize theory of mind. *Disability Studies Quarterly*, 33(4).

Yirmiya, N., Sigman, M. D., Kasari, C., & Mundy, P. (1992). Empathy and cognition in high-functioning children with autism. *Child Development*, 63(1), 150-160.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Yirmiya, N., Kasari, C., Sigman, M., & Mundy, P. (1989). Facial expressions of affect in autistic, mentally retarded and normal children. *Journal of Child Psychology and Psychiatry*, 30(5), 725-735.

Yirmiya, N., Sigman, M. D., Kasari, C., & Mundy, P. (1992). Empathy and cognition in high-functioning children with autism. *Child Development*, 63(1), 150-160.

Yu, B., & Sterponi, L. (2023). Toward neurodiversity: How conversation analysis can contribute to a new approach to social communication assessment. *Language, Speech, and Hearing Services in Schools*, 54(1), 27-41.

Zahavi, D. (2005). *Subjectivity and Selfhood: Investigating the First-Person Perspective*. MIT Press.

Zalla, T., Barlassina, L., Buon, M., & Leboyer, M. (2011). Moral judgment in adults with autism spectrum disorders. *Cognition*, 121(1), 115-126.

Zeman, J., & Garber, J. (1996). Display rules for anger, sadness, and pain: It depends on who is watching. *Child Development*, 67(3), 957-973.

Zwaigenbaum, L., & Penner, M. (2018). Autism spectrum disorder: advances in diagnosis and evaluation. *BJM*, (361).

9. Appendices

Appendix 1.

HRA and Health Care Research Wales (HCRW) Approval Letter



Miss Leanne Chrisostomou
243 Stoughton Road
Stoughton
Guildford
GU2 9PG

Email: approvals@hra.nhs.uk
HCRW.approvals@wales.nhs.uk

04 February 2021

Dear Miss Chrisostomou

**HRA and Health and Care
Research Wales (HCRW)
Approval Letter**

Study title:	Delivering Autism Spectrum Condition (ASC) Diagnostic Assessments Online
IRAS project ID:	287846
Protocol number:	1
REC reference:	20/PR/0958
Sponsor	University of Portsmouth

I am pleased to confirm that [HRA and Health and Care Research Wales \(HCRW\) Approval](#) has been given for the above referenced study, on the basis described in the application form, protocol, supporting documentation and any clarifications received. You should not expect to receive anything further relating to this application.

Please now work with participating NHS organisations to confirm capacity and capability, [in line with the instructions provided in the "Information to support study set up" section towards the end of this letter.](#)

How should I work with participating NHS/HSC organisations in Northern Ireland and Scotland?

HRA and HCRW Approval does not apply to NHS/HSC organisations within Northern Ireland and Scotland.

If [you](#) indicated in your IRAS form that you do have participating organisations in either of these devolved administrations, the final document set and the study wide governance report (including this letter) have been sent to the coordinating centre of each participating nation. The relevant national coordinating function/s will contact you as appropriate.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Please see [IRAS Help](#) for information on working with NHS/HSC organisations in Northern Ireland and Scotland.

How should I work with participating non-NHS organisations?

HRA and HCRW Approval does not apply to non-NHS organisations. You should work with your non-NHS organisations to [obtain local agreement](#) in accordance with their procedures.

What are my notification responsibilities during the study?

The standard conditions document "[After Ethical Review – guidance for sponsors and investigators](#)", issued with your REC favourable opinion, gives detailed guidance on reporting expectations for studies, including:

- Registration of research
- Notifying amendments
- Notifying the end of the study

The [HRA website](#) also provides guidance on these topics, and is updated in the light of changes in reporting expectations or procedures.

Who should I contact for further information?

Please do not hesitate to contact me for assistance with this application. My contact details are below.

Your IRAS project ID is 287846. Please quote this on all correspondence.

Yours sincerely,
Amber Ecclestone

Approvals Specialist

Email: approvals@hra.nhs.uk

Copy to: *Dr Iris*

Nomikou, University of Portsmouth

Appendix 2.

UPR16 Form

FORM UPR16		Research Ethics Review Checklist	
Please include this completed form as an appendix to your thesis (see the Research Degrees Operational Handbook for more information)			
Postgraduate Research Student (PGRS) Information		Student ID:	up877842
PGRS Name:	Ms Leanne Danielle Chrisostomou		
Department:	Psychology	First Supervisor:	Dr Iris Nomikou
Start Date: (or progression date for Prof Doc students)	01/10/2018		
Study Mode and Route:	Part-time <input type="checkbox"/>	MPhil <input type="checkbox"/>	MD <input type="checkbox"/>
	Full-time <input checked="" type="checkbox"/>	PhD <input type="checkbox"/>	Professional Doctorate <input type="checkbox"/>
Title of Thesis:	Clinician and child interactions in ADOS-2 informed online autism assessments from the perspective of Conversation Analysis		
Thesis Word Count: (excluding ancillary data)	80000		
<p>If you are unsure about any of the following, please contact the local representative on your Faculty Ethics Committee for advice. Please note that it is your responsibility to follow the University's Ethics Policy and any relevant University, academic or professional guidelines in the conduct of your study</p> <p>Although the Ethics Committee may have given your study a favourable opinion, the final responsibility for the ethical conduct of this work lies with the researcher(s).</p>			
UKRIO Finished Research Checklist:			
(If you would like to know more about the checklist, please see your Faculty or Departmental Ethics Committee rep or see the online version of the full checklist at: https://ukrio.org/publications/code-of-practice-for-research)			
a) Have all of your research and findings been reported accurately, honestly and within a reasonable time frame?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	
b) Have all contributions to knowledge been acknowledged?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	
c) Have you complied with all agreements relating to intellectual property, publication and authorship?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	
d) Has your research data been retained in a secure and accessible form and will it remain so for the required duration?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	
e) Does your research comply with all legal, ethical, and contractual requirements?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	
Candidate Statement:			
I have considered the ethical dimensions of the above named research project, and have successfully obtained the necessary ethical approval(s)			
Ethical review number(s) from Faculty Ethics Committee (or from NRES/SCREC):	IRAS ID: 287846 REC: 20/PR/0958		
If you have not submitted your work for ethical review, and/or you have answered 'No' to one or more of questions a) to e), please explain below why this is so:			
Signed (PGRS):	<i>L. Chrisostomou</i>		Date: 30/12/2023

Appendix 3.*Participant Information Sheet (PIS) for Clinicians*

PARTICIPANT INFORMATION SHEET (PIS) FOR CLINICIANS

Project title: *Delivering Autism Spectrum Condition (ASC) Diagnostic Assessments Online*

Version: 0.6

1. What is the purpose of the project?

In the UK there is an average delay from a referral of suspected Autism Spectrum Condition (ASC) to receiving a diagnosis of approximately 3.5 years (Crane, Chester, Goddard, Henry & Hill, 2016). This delay causes consequences in terms of support and familial wellbeing. Therefore, the NHS have moved ASC diagnostic services online during COVID-19. Consequently, this should increase the opportunity for early intervention and access to services. This will, in turn, improve wellbeing for young people with ASC and their families (Alfuraydan et al, 2020). Therefore, clinicians are having to modify previous ASC face to face assessment practices to fit the confines of online assessment delivery. Currently however, there are no established guidelines or research on how best to deliver online ASC assessments. Video-based research in other areas of healthcare have increasingly been applied to explore how to improve healthcare communication (Parry, 2010; Sidnell & Stivers, 2012; Heritage &

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Maynard, 2006; Clayman & Gill, 2004) which has resulted in effective training, interventions and assessments (Themessl-Huber, Humphris, Dowell, Macgillivray, Rushmer, & Williams, 2008). The training and interventions enable healthcare professionals to enhance their health related communication skills in order to deliver optimum care for their service users (Antaki, 2011; Heritage, Robinson, Elliott, Beckett & Wilkes, 2007; Jenkins & Reuber, 2014; Leydon, Ekberg, Kelley & Drew, 2013 Sheon, Lee & & Facente 2010). Research has also found that exploring clinician's perspectives post online telehealth assessment generates an effective opportunity to upskill clinician's online assessment delivery which will, in turn, improve care for their service users (Iacono et al., 2016; Vismara, Young, Stahmer, Griffith & Rogers, 2009). Moreover, no research to date has collected the perspectives of young people who experience online ASC assessments.

2. Why have I been chosen?

You have been chosen because you are a clinician in the ASC diagnostic service within the Behavioural and Neurodevelopmental (BEN) team, Child and Adolescent Mental Health Service (CAMHS), South West (SW), Surrey and Borders Partnership (SABP). Specifically, you have been trained to administer the Autism Diagnostic Observation Schedule Version-2 (ADOS-2) and you will have conducted at least one online ASC assessment.

3. How many participants will be involved in the project?

The intention is for every clinician within the BEN team (n= 15) to participate in this project. The young people with ASC characteristics and their families will also be invited to partake in the project.

4. Do I have to take part?

No, you do not have to take part and your participation in this project is voluntary. You can also choose to only take part in one part of the project and not the other: the semi-structured interview or the recordings of online ASC assessments. You are free to withdraw at any time without giving any reason. Your work relations will not be affected regardless of whether you choose to participate.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

5. What will happen if I agree to take part?

The Chief Investigator (Leanne Chrisostomou) will deliver a semi-structured interview for each of the clinicians. The interview will be conducted online through the online videoconferencing platform Microsoft teams at a time to suit both the clinician and the Chief Investigator and will last no more than half an hour. There will be a selection of open questions to elicit the clinician's perspectives of their experience of online ASC assessments. There will be an array of further prompts to follow if required. The interview will take place after the clinician has conducted at least one online ASC assessment. The interviews will be recorded on Microsoft Teams and stored on an encrypted device. The data will be transcribed and analysed. The second part of this project will involve recording the online ASC assessments via Microsoft teams. If the assessing clinician provides consent to have each of their facilitated online ASC assessments recorded (clinicians can also choose to not have each assessment recorded without justification), the assessing clinician will verbally confirm that the family still provide consent to record the online ASC assessment before the assessment commences. Note, the young person and the family will have previously consented to the research prior to the assessment date. The online ASC assessment will continue as normal – the project will not change anything about the process. The assessment video data will be stored on an encrypted device to be later transcribed and analysed.

6. What are the possible disadvantages and risks of taking part?

Clinicians might find the interview and/or online assessment anxiety inducing because their perspectives and/or their assessment practice will be documented. Recordings are essential to ensure that no important details of their experience go unmissed. If the clinician shows signs of distress or frustration during the semi-structured interview or online ASC assessment, the interview will end and the data will be destroyed.

7. What are the possible benefits of taking part?

The information we collect will help the BEN team to possibly improve how to assess other young people with ASC characteristics online and face-to-face. This research will be disseminated in NHS

Clinician-child interactions in ADOS-2 assessments – a CA perspective

reports and scientific journals with the intention of reaching external ASC diagnosing clinicians. Thus, this research will deliver a wider benefit to society and thus others with potential ASC.

8. What if new information becomes available?

In the future we may carry out further analyses on the data set. This secondary analysis might be done separately to this project. There is an additional optional tick box in the consent form you can choose to tick if you consent to the data being used for further analysis. In this instance, the Chief Investigator (Leanne Chrisostomou) will contact the BEN team to share further publications.

9. Will taking part in this project be kept confidential?

All information which is collected about you, the young person and their family during the course of the research will be kept strictly confidential. Therefore, any identifiable information which is not being analysed by the research team will have names removed and video and audio data anonymised.

The young person's medical CAMHS notes are only available to the clinical team. Our procedures for handling, processing, storage and destruction of data are compliant with the Data Protection Act 1998.

10. What will happen if I do not want to carry on with the research?

You are free to withdraw from this research at any time. If you withdraw from the project, your identifiable data will be destroyed.

11. What will happen to the results of the research project?

When the project has finished, the findings will be presented to the BEN clinicians in the CAMHS SW team, therefore, all clinicians will receive the results of the study in both presentation and publication form. The publications will contain direct quotations which are essential for validity. All feedback from the clinical team will be appreciated and considered in further data analyses. The results will be published within relevant journals to ensure that the contribution to this project has the widest scope to reach other clinicians who work in ASC assessment practice. The results will also be included as part of the Chief Investigator's (Leanne Chrisostomou's) educational qualification.

12. Who is organising and funding the research?

Researchers at the University of Portsmouth and Dr Charlotte Wilkinson (CAMHS) are organising this project. They will not get any extra money for doing this research. The Chief Investigator is supported and paid a bursary for her PhD studies by the South Coast Doctoral Training Partnership (<http://southcoastdtp.ac.uk/>) on behalf of the Economic and Social Research Council (ESRC).

13. Who has reviewed the project?

This project has ethical approval by Surrey and Borders Partnership (SABP) NHS Foundation Trust Research and Development Ethics Committee and the University of Portsmouth Ethics Committee.

14. What if there is a problem?

Any concerns will be dealt with by the Chief Investigator, please contact:

Name: Leanne Chrisostomou

Designation: Assistant Psychologist and PhD Candidate

Email: leanne.chisostomou@port.ac.uk

Work addresses:

- University - University of Portsmouth, King Henry Building, Portsmouth PO1 2DY
- NHS SABP - Theta, Lyon Way, Frimley, Surrey GU16 7ER

If you wish to complain about the Chief Investigator (Leanne Chrisostomou) please contact:

Name: Susan Thomas

Designation: PALS and Complaints Coordinator

Email: rxx.palsandcomplaintssabp@nhs.net

Telephone: 01372 216245

Send a SMS text: 07786 202 545

Complaints are acknowledged within three working days.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Thank you for taking the time to read this information sheet. If you would like any further information about this project, please contact Leanne.

Further information: General Data Protection Regulation (GDPR)

How will we use information about you?

We will need to use your contact details for this research project. This information will include your name and email. The data will be transferred to the sponsor (University of Portsmouth) and identifiable information will now be minimalised, for example, the University will not have access to your contact details. You will be identifiable in the videos, however the data will only be viewed by the research team which consists of the Chief Investigator and her three supervisors. People will use this information to do the research and to check that the research is being done properly.

People who do not need to know who you are will not be able to see your name or contact details. Your data will have a code number and a pseudonym (fake name) instead. We will keep all information about you safe and secure.

What are your choices about how your information is used?

- You can stop being part of the study at any time, without giving a reason, but we will keep information about you that we already have.
- We need to manage your records in specific ways for the research to be reliable. This means that we will not be able to let you see or change the data we hold about you.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

- If you agree to take part in this study, you will have the option to take part in future research using your data saved from this study. Please see the University of Portsmouth's Research Portal <https://researchportal.port.ac.uk/portal/>

Where can you find out more about how your information is used?

You can find out more about how we use your information

- at www.hra.nhs.uk/information-about-patients/
- our leaflet available from www.hra.nhs.uk/patientdataandresearch
- by asking one of the research team
- by sending an email to leanne.chrisostomou@port.ac.uk, or
- by ringing us on 07817697171.

Thank you for taking the time to read this – please ask any questions if you need to.

Appendix 4.

Participant Information Sheet for Parents/Care-Providers



PARTICIPANT INFORMATION SHEET FOR PARENTS/CARE-PROVIDERS

Project title: *Delivering Autism Spectrum Condition (ASC) Diagnostic Assessments Online***Version:** 0.6**1. What is the purpose of the project?**

Due to the impact of the global pandemic Coronavirus (COVID-19), assessments and interventions within Child and Adolescent Mental Health Services (CAMHS) have moved to online platforms. Therefore, we will be conducting an online assessment to determine whether your child is a young person with autism. Usually, a diagnosis of autism is given face-to-face utilising a semi-structured assessment of social interaction, communication, play and imagination. Due to Covid-19, clinicians will modify their previous practices to assess your child online in the comfort of your own home. As this is a new approach of providing assessments for autism, we need to determine how young people such as your child experience the online assessment and how the clinicians can best manage their practice. As we do not know how long social distancing will remain in CAMHS research is needed to understand how we can enhance online diagnostic practices for young people with characteristics of autism based on the needs of these young people.

2. Why have we been chosen?

Your child has been chosen because they have been offered an online autism assessment.

3. Do we have to take part?

No, your child does not have to take part. It is up to you and your child to decide to join the project. The Chief Investigator, Leanne will explain the project and if you and your child agree to take part, Leanne will ask you both to sign consent forms. You will be given a copy of the information sheets and the signed consent forms to keep for your records. You and your child are free to withdraw at

Clinician-child interactions in ADOS-2 assessments – a CA perspective

any time, without giving a reason. Your choice to participate will not affect your child's autism assessment or the standard of care your child receives at CAMHS.

4. What will we have to do if we agree to take part?

This project has two stages (and your child can do both or either):

Recording of the assessment: If you and your child consent to this research nothing will be expected of you both. The clinician will ask you at the beginning of the assessment if you still consent to the online assessment being recorded and that is it. The only difference is that the clinician will record the assessment. This recording will be utilised by the research team to gain knowledge on how online assessments are carried out and how the young person responds to this new way of diagnosing autism.

Discussion: In this part of the project we are interested in finding out more about your child's experience of the assessment. The chief investigator will call you to arrange a date she can call your child. The video call with your child will be an informal discussion for no more than half an hour to capture your child's experience of their online autism assessment. This video call will also be recorded. If your child does not want to be video recorded, there is the option to either audio record or discuss the assessment through text-based communication. Moreover, your child will be asked if they would like to draw their experience of the assessment to discuss whilst we chat. This is an option for your child to focus on the drawing whilst talking and reduce any potential anxiety attached to the discussion. The drawing will also be explored in the discussion.

5. What are the possible disadvantages and risks of taking part?

People might sometimes feel uncomfortable or even anxious about being recorded. Although people tend to relax after the discussion has commenced, if your child feels uncomfortable, please do not hesitate to tell the clinician who will stop the recording or Leanne who will stop the

Clinician-child interactions in ADOS-2 assessments – a CA perspective

discussion. Moreover, in the collected data your child will be visually and/or audibly identifiable which may be of concern due to confidentiality. The data in this form will remain only on the chief investigators encrypted device. All video data will be visually anonymised (see figure 1 for anonymised data) and all personal identifiable data such as names will be replaced with a pseudonym or will be blanked out.

6. What are the possible benefits of taking part?

Taking part in this project will not directly benefit your child, however, the information we collect may help us to improve how to assess and diagnose other children with autistic characteristics online and face-to-face in the future.

7. What if new information becomes available?

It is likely that in the future we will find further information within your child's online autism assessment that will help inform assessment practice. This might lead us to analyse the data again and this might be done separately to this project. There is an additional optional tick box in the consent form you can choose to tick if you consent to further analysis of the data.

8. Will taking part in this project be kept confidential?

All information which is collected about your child during the course of the research will be kept strictly confidential. Your child's medical CAMHS notes are only available to the clinical team and not to the research team. Any data from your child which leaves CAMHS and the research team will have their name removed and video and audio data anonymised so that your child cannot be recognised from it. Our procedures for handling, processing, storage and destruction of data are compliant with the Data Protection Act 1998.

9. What will happen if we decide we do not want to carry on with the research?

Clinician-child interactions in ADOS-2 assessments – a CA perspective

You are free to withdraw from this research at any time. If you withdraw from the project, we will destroy your child's data.

10. What will happen to the results of the research project?

When the project has finished, Leanne will present the findings to the clinicians in the CAMHS team that diagnose young people with autism. The results will be placed in publications to reach other clinicians who work in autism assessment practice to make sure your child's engagement and essential contribution to this research helps as many young people as possible. Leanne will send via email the published results from the study to each of the participating families. A meeting can be organised to discuss the results. The publications will contain direct quotations to exemplify the results. The results will also be included as part of the Chief Investigator's (Leanne Chrisostomou's) educational qualification. The results in the qualification will be anonymous.

0. Who is organising and funding the research?

Researchers at the University of Portsmouth and CAMHS are organising this project. They will not get any extra money for doing this research. The researcher is supported and paid a bursary for her PhD studies by the South Coast Doctoral Training Partnership (<http://southcoastdtp.ac.uk/>) on behalf of the Economic and Social Research Council (ESRC).

0. Who has reviewed the project?

This project has ethical approval by Surrey and Borders Partnership (SABP) NHS Foundation Trust Research and Development and the University of Portsmouth ethics committees.

0. What if there is a problem?

Any concerns will be dealt with by the Chief Investigator Leanne, please contact:

Name: Leanne Chrisostomou

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Designation: Assistant Psychologist and PhD Candidate

Email: leanne.chisostomou@port.ac.uk

Work addresses:

- University - University of Portsmouth, King Henry Building, Portsmouth PO1 2DY
- NHS SABP - Theta, Lyon Way, Frimley, Surrey GU16 7ER

If you wish to complain about the Chief Investigator (Leanne Chrisostomou) please contact:

Name: Susan Thomas

Designation: PALS and Complaints Coordinator

Email: rxx.palsandcomplaintssabp@nhs.net

Telephone: 01372 216245

Send a SMS text: 07786 202 545

Complaints are acknowledged within three working days.

16. Future research projects

If you and your child consent to contact about new research related to autism, Leanne may contact you in the future to ask if your child would like to participate in further research.

Further information: General Data Protection Regulation (GDPR)

How will we use information about your child?

Clinician-child interactions in ADOS-2 assessments – a CA perspective

We will need to use information from your child's medical records for this research project. This information will include your child's name and contact details. The data will be transferred to the sponsor (University of Portsmouth) and identifiable information will now be minimalised, for example, the University will not have access to your child's contact details unless you agree to be contacted about future research. Your child will be identifiable in the videos, however the data will only be viewed by the research team which consists of the Chief Investigator and her three supervisors. People will use this information to do the research and to check that the research is being done properly.

People who do not need to know who your child is will not be able to see their name or contact details. Your child's data will have a code number and a pseudonym (fake name) instead. We will keep all information about your child safe and secure.

What are your choices about how your child's information is used?

- You can stop being part of the study at any time, without giving a reason, but we will keep information about your child that we already have.
- We need to manage your child's records in specific ways for the research to be reliable. This means that we will not be able to let you see or change the data we hold about your child.
- If you agree to take part in this study, you will have the option to take part in future research using your child's data saved from this study. Please see the University of Portsmouth's Research Portal <https://researchportal.port.ac.uk/portal/>

Where can you find out more about how your child's information is used?

You can find out more about how we use your child's information

- at www.hra.nhs.uk/information-about-patients/

Clinician-child interactions in ADOS-2 assessments – a CA perspective

- our leaflet available from www.hra.nhs.uk/patientdataandresearch
- by asking one of the research team
- by sending an email to leanne.chrisostomou@port.ac.uk, or
- by ringing us on 07817697171.

Thank you for taking the time to read this – please ask any questions if you need to.

Appendix 5.

Participant Information Sheet for Children



PARTICIPANT INFORMATION SHEET FOR CHILDREN

Project title: *Delivering Autism Spectrum Condition (ASC) Diagnostic
Assessments Online*

Version: 0.5

We would like your help with research. Please read this page and talk to your parents or carers about this project. Please ask me, (my name is Leanne and I'm the researcher) and your parents/carers if there is anything that does not make sense or if you want to know more.



1. Why are we doing this research?

Because of Covid-19, at CAMHS we have had to do our assessments online rather than face-to-face. We want to find out more about how we do assessments online while children like yourself stay in the comfort of their home.



0. Why have I been asked to take part?

You have been chosen because you have been invited to do an online autism assessment.

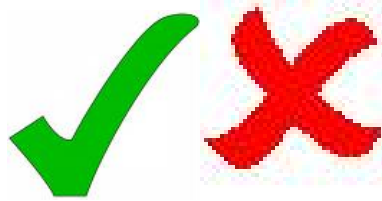


0. Do I have to take part?

It is up to you if you want to help us with our project. If you do not, it is okay, you will be assessed online just the same. If you do decide to take part:

- You will be asked to sign a form to say that you agree to take part.
- You will be given this information sheet and a copy of your signed form to keep.
- Your parents or carers also have to agree for you to take part so they will also be given an information sheet and a form to sign.

You can stop taking part at any time during the research without giving a reason. If you decide to stop, this will not affect the care and attention you get at CAMHS.



0. What will happen to me if I take part?

The only thing that changes is that when you have your online autism assessment, the clinician will use a camera on their computer to record the assessment on the screen and that's it.

Within a week of the online autism assessment, if you want to, Leanne, will call you to have a chat with you about the online assessment. I am very interested in hearing how it went and anything you might want to say about the assessment you had. This will also be done through an online call on your parent's computer. If you want to, you can talk to me through text. Before we talk, you can draw a picture of how you remember the assessment and we can talk about it.



0. Is there anything else to be worried about if I take part?

There is nothing you need to do. We will take some information from your clinical notes about your care, but no extra clinic visits will be needed.



0. Will the project help me?

The project will not help you right now, but the information we get will help children who need assessments for autism in the future.



0. What happens when the project stops?

We will collect all the information together and decide if we can do online autism assessments better in the future.

0. What if I do not want to do the research anymore?

Just tell your parents, carers, clinician or me, Leanne at any time. No one will be cross with you. You will still have the same care if you come back to CAMHS.



0. Will anyone else know I am doing this?

The people in our research team and the clinician doing your assessment will know you are taking part and that is it. Nobody else will know.



All information that is collected about you during the research will be kept a safe secret. No one outside of CAMHS and the research team is allowed to know. In research you will be given a made-up name and if the researchers need to use an image from the recording then a cartoon sketch of the assessment will be used instead so that you cannot be recognised.



0. What will happen to the results of the research project?

When the project has finished, we will show our findings to the clinicians in our CAMHS team that diagnose young people with autism. We will put the results in papers that people who do autism assessments and research read to make sure your help in this research helps as many people as possible. Leanne will send the findings from the study to your family. We can meet to chat about the findings. The finding might have some of your words in them. The results will also be included as part of Leanne's education qualification.



0. Who is planning the research?

Researchers at University of Portsmouth and a psychologist at CAMHS are planning this project.



UNIVERSITY OF
PORTSMOUTH



12. Future research projects

If you and your parents want to, Leanne might contact you in the future to ask you if you would like to take part in more research.

Further information about research: (GDPR)

What is information?

When you go to CAMHS, the clinicians and others looking after you will record things about your health. This will include your mental health, and the tests and

Clinician-child interactions in ADOS-2 assessments – a CA perspective

treatment they you have had. They might want to know about your family, such as what work your parents do. This is called information.

It is important to all of us that information about your health care and information that can show who you are (like your name) is kept a secret and only the people who need to know these things about you can. There are special rules to keep secret information about you safe.

If you want to take part in the study, Leanne may look at your information and put it in some special forms with the information from other children in the study. This special information is research information.

How will we use information about you?

We will need to use information from your medical records for this research project. This information will include your name and contact details (such as your parents or care-providers phone number). The information will be transferred to the University of Portsmouth and we will keep your name and contact details safe. The University will not see your name and phone number details unless you and your parents/care-providers want to do future research. We can see you in the videos, these videos will only be viewed by the research

Clinician-child interactions in ADOS-2 assessments – a CA perspective

team and this is Leanne and her three bosses. People will use this information to do the research and to make sure that the research is being done properly.

People who do not need to know who you are will not be able to see your name or contact details. Your information will have a number and a fake name instead. We will keep all information about you safe and secure.

What are your choices about how your information is used?

- You can stop being part of the study at any time, without giving a reason, but we will keep information about you that we already have.
- We need to manage your records in special ways for the research to work properly. This means that we will not be able to let you see or change the information that have about you.
- If you agree to take part in this study, you can take part in future research if you want to using your information saved from this study. You can look at what this may look like by looking at the University of Portsmouth's Research Portal <https://researchportal.port.ac.uk/portal/>

Where can you find out more about how your information is used?

Clinician-child interactions in ADOS-2 assessments – a CA perspective

You can find out more about how we use your information

- at www.hra.nhs.uk/information-about-patients/
- our leaflet available from www.hra.nhs.uk/patientdataandresearch
 - by asking one of the research team
- by sending an email to leanne.chrisostomou@port.ac.uk, or
 - by ringing us on 07817697171.

Thank you for taking the time to read this – please ask any questions if you want to.

Appendix 6.

Participant Information Sheet for Young People



PARTICIPANT INFORMATION SHEET FOR YOUNG PEOPLE

Study title: *Delivering Autism Spectrum Conditions (ASC) Diagnostic Assessments Online*

Version: 0.6

1. Invitation paragraph

We would like your help in a research project. Please read this information carefully and talk to your parents or carers about this study. Please ask me, (my name is Leanne Chrisostomou and I'm the researcher) and your parents/carers if there is anything that does not make sense or if you want to know more about this project. It is up to you if you want to help us with our project. If you do not, it is okay, you will be assessed online just the same.

2. Why are we doing this research?

Because of Covid-19 we have had to do our assessment online rather than face-to-face, as this is a new way of doing autism assessments, we need to find out how young people such as yourself respond to the online assessment in the comfort of their home.

3. Why have I been asked to take part?

Clinician-child interactions in ADOS-2 assessments – a CA perspective

You have been chosen because you have been invited to do an online autism assessment. We are inviting all children that have been invited to do an online autism assessment to participate in this study.

4. Do I have to take part?

No, it is completely your choice. If you do decide to take part:

- You will be asked to sign a form to say that you agree to take part (a consent form).

- You will be given this information sheet and a copy of your signed consent form to keep.

- Your parents will also be given an information sheet and a consent for to sign.

You are free to stop taking part at any time during the research without giving a reason. If you decide to stop, this will not affect the care and attention you will receive whilst under CAMHS.

5. What will happen to me if I take part?

The only thing that changes is that when you have your online autism assessment, the clinician will record the assessment on the screen and that's it! Nothing else will change.

Within a week of the online autism assessment, if you agree, Leanne, the researcher will have a chat with you about your experience of your online assessment. This will also be done through an online call. If you prefer, you have the option of talking with Leanne through text.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Beforehand, you are welcome to draw a picture of how you remember the assessment and you can discuss it with Leanne.

6. Is there anything else to be worried about if I take part?

There is nothing you need to do. We will take some information from your clinical notes about your care, but no extra clinic visits will be needed.

7. Will the project help me?

No, the project will not help you personally, but the information we get will help other young people who need assessments for autism in the future.

8. What happens when the research study stops?

We will collect all the information together and see how the online autism assessments went and consider if they are a good idea to do online in the future post Covid-19.

9. What if new information comes along?

Sometimes during research, new things are found out as we look at different aspects of the assessment. If you are interested in the research, we can send you updates.

10. What if I do not want to do the research anymore?

Just tell your parents/carer, CAMHS clinician or Leanne at any time. No one will not be cross with you. You will still have the same care if you come back to CAMHS.

11. Will anyone else know I am doing this?

The people in our research team and the clinician's doing your assessment will know you are taking part in this project and that is it. All information that is collected about you during the research will be kept strictly confidential. No one outside of CAMHS and the research team is allowed to know. In the project you will be given a made-up name and if we need to show an image of the recording a cartoon sketch will be used instead so that you cannot be recognised.

12. What will happen to the results of the research study?

When the study has finished, we will present our findings to the other clinicians in our CAMHS team that diagnose young people with autism. We will put the results in publications that people who do autism assessments and research read to make sure your help in this research helps as many young people as possible. Leanne will send via email the published results from the study to everyone who participates in the study, including you. A meeting can be organised to discuss the results. The publications will contain direct quotations to demonstrate the results. The results will also be included as part of the researcher's (Leanne Chrisostomou's) educational qualification. They will be anonymous, which means that no one will know you or any other young people were in the study.

13. Who is organising and funding the research?

Researchers at University of Portsmouth and CAMHS are organising this study. They will not get any extra money for doing this research. The researcher, Leanne is supported and paid a bursary for her PhD studies by South Coast Doctoral Training Partnership (<http://southcoastdtp.ac.uk/>) on behalf of the Economic and Social Research Council (ESRC).

Clinician-child interactions in ADOS-2 assessments – a CA perspective

14. Who has checked the study?

Before any research goes ahead it has to be checked by a Research Ethics Committee. This is a group of people who make sure that the research is safe and okay to do. This study has been looked at by the Surrey and Borders Partnership NHS Foundation Trust Research and Development Ethics Committee and the University of Portsmouth Ethics Committee.

15. Contact for further information

If you would like any further information about this project you should contact:

Name: Leanne Chrisostomou

Designation: Assistant Psychologist and PhD Student

Email: leanne.chisostomou@port.ac.uk

Work addresses: University - University of Portsmouth, King Henry Building, Portsmouth PO1 2DY or NHS SABP - Theta, Lyon Way, Frimley, Surrey GU16 7ER

16. Future research projects

If you and your parents consent to contact about new research related to autism, Leanne may contact you in the future to ask if you would like to participate in more research.

Further information: General Data Protection Regulation

(GDPR)

How will we use information about you?

We will need to use information from your medical records for this research project. This information will include your name and contact details. The data will be transferred to the sponsor (University of Portsmouth) and identifiable information will now be minimalised, for example, the University will not have access to your contact details unless you and your parents/care-providers agree to be contacted about future research. You will be identifiable in the videos, however the data will only be viewed by the research team which consists of the Chief Investigator and her three supervisors. People will use this information to do the research and to check that the research is being done properly.

People who do not need to know who you are will not be able to see your name or contact details. Your data will have a code number and a pseudonym (fake name) instead. We will keep all information about you safe and secure.

What are your choices about how your information is used?

- You can stop being part of the study at any time, without giving a reason, but we will keep information about you that we already have.
- We need to manage your records in specific ways for the research to be reliable. This means that we will not be able to let you see or change the data we hold about you.
- If you agree to take part in this study, you will have the option to take part in future research using your data saved from this study. Please see the University of Portsmouth's Research Portal <https://researchportal.port.ac.uk/portal/>

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Where can you find out more about how your information is used?

You can find out more about how we use your information

- at www.hra.nhs.uk/information-about-patients/
- our leaflet available from www.hra.nhs.uk/patientdataandresearch
- by asking one of the research team
- by sending an email to leanne.chrisostomou@port.ac.uk, or
- by ringing us on 07817697171.

Thank you for taking the time to read this – please ask any questions if you need to.

Appendix 7.

Consent Form for Clinicians



CONSENT FORM FOR CLINICIANS

Title of Project: Delivering Autism Spectrum Condition (ASC) Diagnostic Assessments Online

IRAS ID: 287846

Version: 0.6

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Centre: BEN CAMHS SABP SW

Name of Researcher: Leanne Chrisostomou (Chief Investigator)

Participant Identification Number for this trial:

Please read the following statements. If any questions arise, please ask the researcher for more information. If you agree with a statement, please put your initials in the box on the right.

Please
initial box

1. I confirm that I have read the information sheet on / /2021 for the above project.
I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.
2. I understand why this research is being carried out and any foreseeable risks involved.
3. I understand that my work relations will not be affected regardless of my choice to participate in this project.
4. I understand that the results of the project may be presented in research reports, scientific conferences and journal publications. I understand the information I provide for the project will remain confidential.
5. I understand that I will not benefit financially from this research or any future research using my data.
6. I understand that data I provide will be stored in a secure format, analysed confidentially and that any publication of data will not include personal details.
7. I consent to my data being utilised for training purposes. **Please circle choice YES / NO**

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Phase 1:

8. I agree to provide information about my past assessment experience within the semi-structured interview.
9. I understand that I am free to stop the interview at any time. I understand that I do not have to answer the questions or provide a reason for refusing to answer a question.
10. I understand that the interview will be recorded on Microsoft Teams software, fully transcribed and stored only for research purposes.

Phase 3 (Phase 2 is the semi-structured interviews for young people):

11. I consent to the online ASD assessments that I facilitate or participate in to be recorded on Microsoft Teams software and stored only for research purposes.
12. I understand that my participation in the online ASD assessment recording is voluntary and that I am free to withdraw at any time without giving any reason.
13. I understand that data collected from the ASD assessments will be used to support secondary or further research in the future and may be shared anonymously with other researchers.
14. I agree to take part in the above project.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

_____	_____	_____
Name of Participant	Date	Signature
_____	_____	_____
Name of Researcher	Date	Signature

Appendix 8.*Consent Form for Parents/Care-Providers (Autism Assessment)*

Consent Form for Parents/Care-Providers (Autism Assessment)

Title of Project: Delivering Autism Spectrum Condition (ASC) Diagnostic Assessments

Online

IRAS ID: 287846

Version: 0.6

Centre: BEN CAMHS SABP SW

Name of Researcher: Leanne Chrisostomou (Chief Investigator)

Participant Identification Number for this trial:

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Please read the following statements. If any questions arise, please ask the researcher for more information. If you agree with a statement, please put your initials in the box on the right.

Please
initial
box

15. I confirm that I have read the information sheet on / / **2021** for the above project. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.
16. I understand why this research is being carried out and any foreseeable risks involved.
17. I understand that my child's medical notes will not be looked at by the research team at the University of Portsmouth. The researchers may look at the ASC diagnostic report where relevant to the research. I give permission for these individuals to have access to the diagnostic report.
18. I understand that I nor my child will not benefit financially from this research or any future research using their data.
19. I understand that data my child provides will be stored in a secure format,

Clinician-child interactions in ADOS-2 assessments – a CA perspective

analysed confidentially and that any publication of data will not include personal details.

20. I understand that data collected from my child will be used to support secondary or further research in the future. The data which does not identify my child may be shared anonymously with other researchers
21. I consent to my child's data being utilised for training purposes. **Please circle choice YES / NO**
22. I understand that the results of the project may be presented in research reports, scientific conferences and journal publications. I understand the information my child provides for the project will remain confidential.
23. I consent to the University of Portsmouth contacting me and my child in regard to future research. In this case, my child's contact details (parent's name, email, telephone, child's name, child's DOB and child's gender) will be kept on an encrypted device within the University of Portsmouth).
Please circle choice YES / NO
24. My child and I understand that my child's participation in the online ASC assessment recording is voluntary. My child and I understand that they are free to withdraw at any time without giving any reason without their medical care or legal rights being affected.

25. My child and I understand that the online ASC assessment will be recorded on the video conferencing platform Microsoft Teams software and stored only for research purposes.

26. I understand that I am free to stop the recording of the ASC online assessment at any time and do I have to provide a reason for wanting to stop the assessment.

27. I agree for my child to take part in the above project.

_____	_____	_____
Name of Person (parent/ care-provider) taking consent	Date	Signature

_____	_____	_____
Name of Researcher	Date	Signature

Appendix 9.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Consent Form for Young People (Autism Assessment)



CONSENT FORM FOR YOUNG PEOPLE (AUTISM ASSESSMENT)

Title of Project: Delivering Autism Spectrum Condition (ASC) Diagnostic Assessments

Online

IRAS ID: 287846

Version: 0.6

Centre: BEN CAMHS SABP SW

Name of Researcher: Leanne Chrisostomou (Chief Investigator)

Participant Identification Number for this trial:

Please read the following statements. If any questions arise, please ask the researcher for more information. If you agree with a statement, please put your initials in the box on the right.

Please
initial
box

28. I confirm that I have read the information sheet on / /2021 for the above project. I have had the opportunity to think about the project, ask questions and have had these answered.
29. I understand why this research is being carried out and any possible risks involved.
30. I understand that my medical notes will not be looked at by the research team at the University of Portsmouth. Researchers may look at my ASC diagnostic report where relevant to the research. I give permission for these individuals to have access to the diagnostic report.
31. I understand that the results of the project may be presented in research reports, at scientific conferences and journal publications. I understand the information I provide for the project will remain confidential (your identity will be hidden).
32. I understand that I will not benefit financially from this research or any future research using my data.
33. I understand that the data I provide will be stored in a secure format, analysed confidentially and that any publication of data will not include personal details.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

34. I understand that the information collected about me will be used to support other research in the future and may be shared anonymously (your identity will be hidden) with other researchers.
35. I consent to my data being utilised for training purposes. **Please circle choice YES /No**
36. I consent to the University of Portsmouth contacting in regard to future research. Therefore, my contact details (parent's name, email, telephone, your name, your date of birth and your gender) will be kept on an encrypted device within the University of Portsmouth. **Please circle choice YES / NO**
37. I understand that my participation in the online ASC assessment recording is voluntary and that I am free to withdraw at any time without giving any reason. My care and legal rights will not be affected.
38. I understand that the online ASC assessment will be recorded on Microsoft Teams software, stored and later transcribed and analysed only for research purposes.
39. I understand that I am free to stop the recording of the ASC online assessment at any time and do I have to provide a reason for wanting to stop the assessment.
40. I agree to take part in the above project.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Name of Participant Date Signature

Name of Person (parent/
care-provider) Date Signature
taking consent

Name of Researcher Date Signature

Appendix 10.*Consent Form for Children (Autism Assessment)*

Consent Form For Children (Autism Assessment)

Title of Project: Delivering Autism Spectrum Condition (ASC) Diagnostic Assessments**Online****IRAS ID: 287846****Version: 0.6****Centre: BEN CAMHS SABP SW****Name of Researcher: Leanne Chrisostomou (Chief Investigator)****Participant Identification Number for this trial:**

Please read the following points. If you have any questions, please ask Leanne what you would like to know. If you agree with a point, please tic the boxes on the right.

Please
initial
box

41. I have read the information sheet on / / **2021** for the project. I have had asked my parents and Leanne questions.

42. I know that it is up to me if I want to be in this project or not. I can tell my parents or Leanne any time that I do not want to be in this project anymore.

43. I understand that this project may be shared with other people and in papers and books.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

44. I understand that my face, name and other things about me will be kept secret at all times.

45. I am happy with my details being used to teach other people. **Please circle choice**
YES / NO

46. I am happy to have my online assessment recorded.

47. I know that nothing will change in my assessment if it is recorded.

48. I understand that the online assessment will be recorded only for research.

49. I know that I can ask my parents or the CAMHS person to stop the recording at any time and I do not need to tell anyone why I want to stop the assessment being recorded.

50. I want to take part in this project.

Name of Participant

Date

Signature

_____	_____	_____
Name of Person (parent/ care-provider) taking consent	Date	Signature
_____	_____	_____
Name of Researcher	Date	Signature

Appendix 11.

Anonymised ADOS-2 Informed Diagnostic Report

Anonymised ADOS-2 Informed Diagnostic Report in non-italicised text - *corresponding ADOS-2 module 4 coding criteria in italics.*

Informed Interactive Assessment: Autism Diagnostic Observation Schedule – ADOS

(Module 4)

Due to the Covid-19 pandemic, a direct observation of NAME OF CHILD was carried via video call in Microsoft Teams. The ADOS-informed assessment was conducted by ... This observation was informed by the Autism Diagnostic Observation Schedule (ADOS-2) and used a select number of items that could be delivered virtually. The ADOS-2 is a semi-structured, standardised assessment of communication, social interaction, and play or imaginative use of materials, used with individuals who possess possible social communication difficulties.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

This assessment provided a ‘snapshot’ of social communication and therefore it is acknowledged it may not reflect the whole range of a young person’s strengths and difficulties. On this occasion, no ratings were allocated due to the ADOS-2 not being administered in its standardised form. The descriptions provided below involve only those behaviours and clinical impressions that provide useful information about NAME OF CHILD’s social communication abilities.

Overall Behaviour and Presentation during Observation:

NAME OF CHILD co-operated with the assessment and completed all of the tasks. He remained seated throughout and was not overly active or fidgety.

Language and Communication

Social communication is a term used to refer to a wide range of behaviours concerning the way a child speaks and communicates with others. In particular, this section of the assessment refers to the social use of language and the ability to sustain and initiate conversation, conversational exchanges and use of gestures.

ADOS-2 module 4 coding criteria:

A1. Overall level of non-echoed spoken language.

The rating for this item should reflect the majority of the participant's utterances, not merely the best ones. For the purposes of the ADOS-2, a complex sentence is defined as an utterance with two or more clauses. Examples include "I didn't go to the zoo because it rained" or "I think wasps are really scary." In contrast, "I have two sisters and one brother" would not be considered a complex sentence.

0 = Uses sentences in a largely correct fashion. (must use some complex speech).

Clinician-child interactions in ADOS-2 assessments – a CA perspective

1 = Some relatively complex speech (occasional utterances with two or more clauses), but with recurrent grammatical errors not associated with use of dialect.

2 = Non-echoed speech is mostly utterances of at least three words, but without complex language as described above.

3 = Non-echoed language is mostly simple phrases.

Through the assessment, NAME OF CHILD demonstrated some relatively complex speech (occasional utterances with two or more clauses), but with recurrent but subtle pronunciation and grammatical errors not associated with use of dialect, such as, ‘more quicker’. NAME OF CHILD also occasionally incorrectly utilised words, for example, when describing how he typically feels, NAME OF CHILD incorrectly uttered ‘concentrated’ rather than his intended meaning ‘concentrating’.

ADOS-2 module 4 coding criteria:

A2. Speech abnormalities associated with autism (intonation/volume/rhythm/rate).

The focus of this item is on speech abnormalities that are characteristic of autism.

Because of the variability within the autism spectrum, speech patterns in intonation, volume, rhythm, or rate (not articulation) that are unusual, but not obviously characteristic of autism, should receive a rating of 1. Code this item relative to the participant's expressive language level.

0 = Appropriately varying intonation, reasonable volume, and normal rate of speech, with regular rhythm coordinated with breathing.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

1 = Little variation in pitch and tone; rather flat or exaggerated intonation, but not obviously peculiar, OR slightly unusual volume, AND/OR speech that tends to be somewhat unusually slow, fast, or jerky.

2 = Speech that is clearly abnormal for ANY of the following reasons: slow and halting; inappropriately rapid; jerky and irregular in rhythm (other than ordinary stutter/stammer), such that there is some interference with intelligibility; odd intonation or inappropriate pitch and stress; markedly flat and toneless ("mechanical"); consistently abnormal volume.

7 = Stutter or stammer or other fluency disorder (if odd intonation is also present, code 1 or 2 accordingly).

Examinees diagnostic report:

NAME OF CHILD demonstrated speech abnormalities associated with autism but they were not obviously peculiar. For example, NAME OF CHILD's voice was monotonous, had reduced variation in pitch and tone, that was somewhat mechanical.

ADOS-2 module 4 coding criteria:

A3. Immediate Echolalia

This item pertains to the participant's immediate repetition of the last statement or series of statements made by the examiner or another person. When coding, do not include repetitions that are a lead-in to a response to the examiner or that are used as a memory device in specific tasks.

0 = Does not repeat others' speech.

1 = Occasional echoing.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

2 = Echoing words and phrases regularly, but some spontaneous language, which can be stereotyped.

3 = Speech largely consists of immediate echolalia.

Examinees diagnostic report:

NAME OF CHILD did not repeat (immediate echolalia) the examiner's speech during the assessment. This pertains to NAME OF CHILD's immediate repetition of the last statement or series of statements made by another person.

*ADOS-2 module 4 coding criteria:**A4. Stereotyped/Idiosyncratic Use of Words or Phrases*

Coding for this item includes delayed echolalia or other highly repetitive utterances with consistent intonation patterns. These words or phrases can be intended meaningfully and can be appropriate to conversation at some level. The focus of the item is on the stereotyped or idiosyncratic quality of the phrasing.

unusual use of words or formation of utterances, and/or their arbitrary association with a particular meaning. Neologisms and referring to oneself by name should be coded here, as well as clear evidence of a pronoun error across person (e.g., you or he or she to mean I). Code relative to the participant's expressive language level.

0 = Rarely or never uses stereotyped or idiosyncratic words or phrases.

1 = Use of words or phrases tends to be more repetitive or formal than that of most individuals at the same level of expressive language, but not obviously odd,

OR occasional stereotyped utterances or odd use of words or phrases, with substantial spontaneous, flexible language as well.

2 = Frequently uses odd or stereotyped speech, and rarely uses non-stereotyped spontaneous speech.

Examinees diagnostic report:

NAME OF CHILD rarely or never used stereotyped or idiosyncratic words or phrases during the assessment. NAME OF CHILD did repetitively say “I guess”, “bond” and “literally” but this was not odd or idiosyncratic.

*ADOS-2 module 4 coding criteria:**A5. Offers Information*

The focus of this item is on the participant's spontaneous, appropriate offering of personal information, new to the examiner. It does not have to occur in context or be part of a sustained interaction. It can occur as the elaboration of responses to questions, but must include new information, not specified by the question. It can be related to the participant's interests, but should not be related solely to preoccupations. Comments about facts (e.g., "Did you know that whales are mammals?") are not coded here, but can be considered in assigning a rating under "Conversation" later in this section. Comments about relationships or possessions (e.g., "I have two brothers" or "Our family has a boat") can be coded here if they refer to an activity rather than a list of characteristics or objects. Lists of multiple characteristics (e.g. "I like to hike, sail, and fish") should be counted as one instance of offering information unless they are part of compulsive listing behaviour, which does not receive credit here.

0 = Spontaneously offers information about his or her own thoughts, feelings, or experiences on several occasions.

1 = Occasionally offers information spontaneously about his or her own thoughts, feelings, or experiences.

2 = Rarely or never offers information spontaneously, except about circumscribed interests or preoccupations, OR offers information about facts or general knowledge, including preoccupations or circumscribed interests.

Examinees diagnostic report:

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Throughout the assessment NAME OF CHILD offered information about his own thoughts, feelings, or experiences on several occasions. This occurred as an elaboration of his response to questions and included new information that was not specified by the question. This was particularly noticeable when NAME OF CHILD shared his experience of holidaying in his family home in Cyprus, saving's and his household responsibilities, and reflecting on his anxieties.

ADOS-2 module 4 coding criteria:

A6. Asks for Information

The focus of this item is on the participant's spontaneous expression of interest in the examiner's ideas, experiences, or reactions. This should not be part of a preoccupation. When assigning a rating, exclude asking for information that is not related to the examiner, or about the ADOS-2 materials, or about particular facts not specific to the examiner; instead, include these when assigning a rating under "Conversation." For this item, questions do not necessarily have to lead to a sustained conversation. Questions about relationships or possessions may be coded here if they refer to the examiner's experiences rather than filling in a list.

0 = Asks the examiner about his or her thoughts, feelings, or experiences on several occasions.

1 = Occasionally (at least one clear example) asks the examiner about his or her thoughts, feelings, or experiences.

2 = Responds appropriately to examiner's comments about his or her thoughts, feelings, or experiences, but does not spontaneously inquire about them.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

3 = Rarely or never expresses interest in the examiner's thoughts, feelings, or experiences.

Examinees diagnostic report:

Occasionally, NAME OF CHILD spontaneously expressed an interest in the examiner and asked about his thoughts, feelings, or experiences. For example, when the examiner told a story about eating ice cream, NAME OF CHILD asked ‘what happened?’. NAME OF CHILD’s interests in the examiner however were inconsistent.

ADOS-2 module 4 coding criteria:

A7. Reporting of Events

The focus of this item is on the participant's ability to select an event spontaneously or in response to the examiner's general questioning, and to describe it in a comprehensible fashion without requiring specific probes. This should involve a sequential description of an event outside the immediate environment. Code the "best" example, given the rating constraints described below with regard to preoccupations and probes.

0 = Reports a specific nonroutine event (e.g., a holiday, a vacation, a shopping trip) that is not part of any preoccupations or intense interests and seems likely to be real. Gives a reasonable account without specific probes, but may need to be asked a general question to get started.

1 = Gives a reasonable account of a routine event (e.g., playing a favourite game, usual routine when he or she arrives home from work or school) that is not part of a preoccupation or intense interest and seems likely to be real. Gives

Clinician-child interactions in ADOS-2 assessments – a CA perspective

the account without specific probes, but initially may need to be asked to describe the event. Include accounts from the "Demonstration Task" here.

2 = Provides an account of routine or non-routine events, but dependent on specific probes, OR only describes an event that seems unlikely to have been real.

3 = Inconsistent or insufficient responses, even to specific probes.

Examinees diagnostic report:

NAME OF CHILD gave a reasonable account of a routine event of visiting the family home in Cyprus that was not part of a preoccupation or intense interest. NAME OF CHILD gave the account without specific probes, but initially needed to be asked to describe the event and needed scaffolding to elaborate further. It was noted that NAME OF CHILD's description of his experiences in Cyprus were given in a 'list' format.

ADOS-2 module 4 coding criteria:

A8. Conversation

This is a summary item that focuses on the to-and-fro use of words and phrases in social conversation. Code this item relative to the participant's expressive language level. Code evidence of (or lack of) nonverbal reciprocity under "Amount of Reciprocal Social Communication" in section B of this protocol. This rating should consider all opportunities for conversation, not merely the best.

0 = Conversation flows, building on the examiner's dialogue. This rating requires that much of the participant's speech provide both a response to the examiner's speech and some additional talking (not necessarily a question) that builds on what has just been said and allows a response from the examiner (i.e., sequences

Clinician-child interactions in ADOS-2 assessments – a CA perspective

of at least four elements: examiner opens, participant comments, examiner responds, participant responds to response).

1 = Speech includes some spontaneous elaboration of the participant's own responses for the examiner's benefit OR provides leads for the examiner to follow, but either this is less in amount than would be expected for the participant's expressive language level or it is limited in flexibility.

2 = Little reciprocal conversation sustained by the participant; may follow his or her own train of thought rather than participate in an interchange; may have some spontaneous offering of information or comments, but little sense of reciprocity.

3 = Little spontaneous communicative speech (although there may be much echoed or noncommunicative speech). This rating can be used to describe participants who make some limited, but very few, responses to conversational initiations by the examiner.

Examinees diagnostic report:

NAME OF CHILD's speech included some spontaneous elaboration of his own responses for the examiner's benefit and he provided leads for the examiner to follow, but these were less in amount than would be expected for his expressive language level. This focuses on the to-and-fro use of words and phrases in social conversation. NAME OF CHILD could sustain dialogue that was highly structured on the examiners question and prompts but he had difficulties in communicative reciprocity.

ADOS-2 module 4 coding criteria:

A9. Descriptive, Conventional, Instrumental, or Informational Gestures

Clinician-child interactions in ADOS-2 assessments – a CA perspective

The focus of this item is on descriptive gestures that enact or represent an object or event (such as acting out rinsing a toothbrush or showing how a roller coaster curves through the air). Gestures that are conventional (e.g., clapping for "well done"), informational, or instrumental (e.g., pointing, shrugging, head nodding, or head shaking) receive partial credit. When coding, exclude emphatic gestures (e.g., "beats" accompanying speech, which are rated in the next item); include behaviours that occur during the "Demonstration Task" and throughout the ADOS-2 evaluation. The emphasis is on how the participant uses gestures before he or she is prompted or asked to do so, or gestures that the participant adds as he or she responds to a requested description (e.g., pretending to spit after demonstrating how to use a toothbrush, as requested). Pointing is included here as an instrumental gesture, as it is not coded separately in Module 3. Grabbing and reaching are not coded here.

0 = Spontaneous use of several descriptive gestures. These gestures may be typical or idiosyncratic, but must be communicative. May also use conventional or instrumental gestures.

1 = Some spontaneous use of descriptive gestures, but exaggerated or limited in range and/or contexts (e.g., occur only during "Demonstration Task"), OR frequent use of conventional or instrumental gestures, but rare or no use of descriptive gestures.

2 = Some spontaneous use of informational, conventional, or instrumental gestures, but rare or no use of descriptive gestures.

3 = No or very limited spontaneous use of conventional, instrumental, informational or descriptive gestures.

8= N/A (e.g., limited by physical disability).

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Examinees diagnostic report:

NAME OF CHILD made some spontaneous use of descriptive gestures, but they were limited in range. For example, NAME OF CHILD utilised no instrumental gestures but he did use descriptive gestures when demonstrating how to brush his teeth with an electric toothbrush and an informational gesture when describing a house.

ADOS-2 module 4 coding criteria:

A9. Empathic or Emotional Gestures

The focus of this item is on empathic (e.g., natural, rhythmic “beats” that often accompany speech) or emotional gestures (e.g., hand to mouth or hands up for “wow”). The rating for this item should be assigned on the basis of the timing of the gestures as they occur during speech. Other aspects of coordination of gestures, such as integration with gaze, should be coded under “Language Production and Linked Nonverbal Communication” or “Quality of Social Overtures” in section B.

0 = Variety of appropriate emphatic and/or emotional gestures that are well integrated with speech.

1 = Some emphatic or emotional gestures, but exaggerated or limited in frequency appropriateness, integration and style.

2 = Odd, excessive, or definitely awkwardly integrated emphatic or emotional gestures.

3 = No or very limited emphatic or emotional gestures.

8= N/A (e.g., limited by physical disability).

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Examinees diagnostic report:

NAME OF CHILD demonstrated some emphatic gestures to express emotions during the assessment, but these were limited in frequency.

Reciprocal Social Interaction

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Reciprocal social interaction refers to the way a child interacts in the social world. It is particularly concerned with social responses, ability to initiate verbal and non-verbal interactions with others, the use of eye contact and facial expression and the ability to empathise with others, convey feeling and show insight into the thoughts and feelings of others.

ADOS-2 module 4 coding criteria:

B1. Unusual Eye Contact

Coding for this item requires that clear, flexible, socially modulated, and appropriate gaze that is used for a variety of purposes be distinguished from gaze that is limited in flexibility, appropriateness, or contexts. If the participant is shy initially, and his or her gaze changes markedly and consistently as he or she becomes more comfortable, do not base the code on earlier impressions. However, if eye contact never improves, coding must be based on what is observed, even if the participant seems shy. Do not code eye contact that occurs between the participant and individuals other than the examiner who may be in the ADOS-2 assessment room.

0 = Appropriate gaze with subtle changes meshed with other communication.

2 = Uses poorly modulated eye contact to initiate, terminate, or regulate social interaction.

Examinees diagnostic report:

NAME OF CHILD demonstrated appropriate gaze that was flexible and socially modulated, with subtle changes meshed with other communication. Note, the limitations of assessing for eye contact on telehealth video conferencing platforms.

*ADOS-2 module 4 coding criteria:**B2. Facial Expressions Directed to Examiner*

The rating for this item should indicate whether the participant's facial expressions are directed to the examiner for the purpose of communicating affective (e.g., enjoyment, frustration) or cognitive (e.g., puzzlement, scepticism) states. Facial expressions that are directed to objects or other people in the room, or that are undirected, are not rated here. Appropriate or slightly exaggerated facial expressions should be coded even if there are also odd expressions.

0 = Directs a range of appropriate facial expressions to the examiner in order to communicate affective or cognitive states.

1 = Some direction of facial expressions to the examiner (e.g., directs only expressions indicating emotional extremes) or occasionally directs wider range of expressions). A participant who has a limited range of facial expressions, but who directs almost all of his or her facial expressions to the examiner, may be rated here.

2 = Does not direct appropriate facial expressions to the examiner.

Examinees diagnostic report:

NAME OF CHILD directed some facial expressions to the examiner but had a limited range of facial expressions, for example, NAME OF CHILD conveyed embarrassment when discussing receiving birthday cakes from the restaurant in Cyprus, smiled in response to the examiners stories and play, was expressive with his eyebrows and had a recognisable thinking facial expression.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

ADOS-2 module 4 coding criteria:

B3. Language Production and Linked Nonverbal Communication

The purpose of this item is to code the degree to which, when the participant vocalizes, the vocalization is accompanied by subtle changes in gaze, facial expression, and gesture. This item should be coded on the basis of the vocalizations used, regardless of their frequency. Code the most typical occurrences, not merely the best ones. When assigning a rating, include vocalizations used to maintain interaction or to respond to the examiner, as well as initiations. A rating of 8 (encodable) should be assigned by default if one or more of the following behaviours coded earlier in this protocol received a rating of 2: "Unusual Eye Contact," "Facial Expressions Directed to Examiner," or "Descriptive, Conventional, Instrumental, or Informational Gestures."

0 = Vocalization usually accompanied by subtle and socially appropriate changes in gesture, gaze, and facial expression.

1 = Vocalization accompanied by abnormal, limited, or less than usual frequency and/or range of gesture, gaze, and facial expression, OR use of one modality almost exclusively (e.g., frequent use of gaze, but limited use of gesture and facial expression).

2 = Little or no nonverbal communication linked with vocalization.

3 = Some avoidance of direct eye gaze, particularly at the beginning of the session, perhaps because of shyness, but shows some modulation and coordination of language and nonverbal behaviour.

8 = N/A; no vocalization OR no or minimal use of gesture, facial expression, or socially directed gaze. This code should be assigned automatically if the absence

Clinician-child interactions in ADOS-2 assessments – a CA perspective

of linking can be accounted for by the limited frequency of unusual eye contact, facial expressions, and/or gestures.

Examinees diagnostic report:

In general, NAME OF CHILD's vocalisations were accompanied by a limited range of gestures and facial expressions, he most noticeably utilised one modality almost exclusively (i.e., frequent use of gaze, but limited use of gesture and facial expression). NAME OF CHILD however, emmeshed vocalisations, gaze and gestures whilst demonstrating how to brush his teeth.

ADOS-2 module 4 coding criteria:

B4. Shared Enjoyment in Interaction

Rate the participant's directed pleasure during any of the tasks or conversation. This item should not be used to indicate his or her general emotional state during the ADOS-2 evaluation. The rating applies to the participant's ability to indicate pleasure to the examiner, not just to interact or respond.

0 = Shows definite pleasure appropriate to context during interactive participation or conversation with the examiner in more than one task or conversational topic.

1 = Shows some pleasure appropriate to context during interactions with the examiner, OR shows definite pleasure during one interaction.

2 = Shows little or no expressed pleasure during interaction with the examiner, but shows pleasure in his or her own speech or actions or in non interactive components of the ADOS-2 materials or activities.

3 = Little or no expressed pleasure during the ADOS-2 evaluation.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Examinees diagnostic report:

NAME OF CHILD showed definite pleasure appropriate to context during interactive participation and conversation with the examiner in more than one task or conversational topic.

NAME OF CHILD was observed to share humour with the examiner, such as, when he relayed his version of the story book and when he smiled at the examiners stories and play.

ADOS-2 module 4 coding criteria:

B5. Communication of Own Affect

The focus here is on the participant's ability to convey a range of his or her own emotions using words and facial expression, tone of voice, vocalization, and/or gesture. The coding for this item should reflect the range of emotion and the effectiveness of the communication (rather than the presence of specific emotions).

Descriptions elicited during socioemotional questions may be rated here, as well as spontaneous comments and reports.

0 = Effective communication of a range of emotions that he or she is feeling or has felt.

1 = Some description of experiencing several emotions, but limited effectiveness of communication, AND/OR effective communication of at least one emotion.

2 = Some communication about at least one emotion.

3 = Minimal or no communication of his or her own affect.

Examinees diagnostic report:

NAME OF CHILD shared some descriptions of experiencing several emotions, but was limited in the effectiveness of his communication. For example, NAME OF CHILD could

Clinician-child interactions in ADOS-2 assessments – a CA perspective

effectively communicate what makes him feel happy, scared, angry, sad and relaxed.

NAME OF CHILD however, had difficulty in describing how emotions physically feel.

ADOS-2 module 4 coding criteria:

B6. Comments on Others' Emotions/Empathy

The focus of this item is on the participant's communication of his or her recognition, understanding, and/or response to the feelings of other people or characters, real or conveyed in stories or other tasks. Exclude shared enjoyment with the examiner, which is rated in a preceding item.

0 = Spontaneously communicates clear understanding or labelling of and/or appropriate response to several different emotions in other people/characters. Labelling several emotions in others is sufficient but not necessary if there are other clear indications of understanding and/or appropriate response.

1 = Communicates some understanding, labelling, or response to an emotion in others (e.g., spontaneously and correctly identifies at least one emotion in another person/character).

2 = No or minimal identification/communication of understanding of emotion in others.

Examinees diagnostic report:

NAME OF CHILD spontaneously communicated a clear understanding by labelling several different emotions in other people/characters. For example, after a prompt from the examiner when describing a picture, NAME OF CHILD explained that he ‘could see a lot of smiles in the picture and that he did not see any frowns anywhere’. Moreover, when

Clinician-child interactions in ADOS-2 assessments – a CA perspective

retelling a story from the book, NAME OF CHILD described the characters as being surprised, confused, angry and upset.

ADOS-2 module 4 coding criteria:

B7. Insight Into Typical Social Situations and Relationships

The focus of this item is on the participant's ability to provide spontaneous examples of insight into the nature of social relationships. These can include ongoing relationships, such as friendships or marriage, or interactive situations, such as getting along with other students or co-workers. that may be discussed in conversation or in response to the socioemotional questions. Two separate aspects of relationships are coded: (a) the nature of specific relationships (e.g., what is friendship), and (b) the participant's role in these relationships.

0 = Shows examples of insight into the nature of several typical social relationships (without evidence of lack of insight into those same relationships), including his or her own role in at least one. May show no more than one example of inaccurate understanding of other social relationships.

1 = Shows examples of insight into several typical social relationships, but not into his or her own role, OR into only one relationship including his or her own role.

2 = Shows some insight into one typical social relationship, though not necessarily about his or her own role in it.

3 = Shows no or limited insight into typical social relationships.

Examinees diagnostic report:

Clinician-child interactions in ADOS-2 assessments – a CA perspective

NAME OF CHILD showed insight into the nature of several typical social relationships, such as, his friendships and marriage. When asked to reflect on why people get married, NAME OF CHILD explained that he ‘does not think anyone’s life is complete until they get married and have children’ and that marriage is defined by ‘having a bond and someone to love’.

ADOS-2 module 4 coding criteria:

B8. Responsibility

This item focuses on the participant's references to and descriptions of being responsible for his or her own actions in typical daily living situations, in responding to normal social mores and expectations (from getting a haircut to finding a job) in an active, independent way.

0 = Describes himself or herself as responsible for his or her own actions in several contexts, including dealing with minor problems in daily living.

1 = Provides at least one clear indication of being responsible for his or her own actions, but not consistent across contexts or consistently less straightforward than what is described above for a rating of 0. May show no more than one clear example of a lack of responsibility.

2 = Shows limited indication of a sense of responsibility for his or her own actions or shows more than one clear example of lack of responsibility that would be appropriate for his or her chronological age, taking into account developmental level.

Examinees diagnostic report:

NAME OF CHILD provided at least one clear indication of being responsible for his own actions, but these were not consistent across contexts. For example, NAME OF CHILD clearly

Clinician-child interactions in ADOS-2 assessments – a CA perspective

described that he has household chores that he needs to complete to receive pocket money in order to save money to purchase something for himself.

ADOS-2 module 4 coding criteria:

B9. Quality of Social Overtures

This is a summary item that focuses on the quality of the participant's attempts to initiate social interaction with the examiner, not on the frequency of such attempts. Special attention should be given to the form of the overture and its appropriateness to the social context. The rating should reflect the majority of social overtures to the examiner, not merely the best ones.

0 = Effectively uses nonverbal and verbal/vocal means to make clear social overtures to the examiner. The overtures must be appropriate to immediate contexts.

1 = Slightly unusual quality of some social overtures. Overtures may be restricted to personal demands or related to the participant's own interests, but with some attempt to involve the examiner in those interests.

2 = Inappropriate overtures; many overtures lack integration into context AND/OR social quality. This includes the participant's bringing up preoccupations with little attempt to involve the examiner in them.

3 = No social overtures of any kind.

Examinees diagnostic report:

NAME OF CHILD had a slight unusual quality to some of his social overtures. This focuses on the quality of his attempts to initiate social interaction with the examiner. NAME OF CHILD's

Clinician-child interactions in ADOS-2 assessments – a CA perspective

social overtures were somewhat awkward however he demonstrated attempts to initiate social interaction, such as, welcoming of the examiner and being apologetic whilst he was taking time to consider his creative story.

ADOS-2 module 4 coding criteria:

B10. Amount of Social Overtures/Maintenance of Attention

The focus of this item is on the number of the participant's attempts to get, maintain, or direct the examiner's attention, AND/OR to direct the examiner's attention to objects, actions, or topics of interest to the participant. The rating for this item may include verbal or nonverbal behaviours if they are neither related to preoccupations nor aimed at getting objects, but seem to function primarily as a method of social contact. Do not include requests when rating this item except for a code 3.

0 = Frequent attempts to get or maintain the examiner's attention AND/OR to direct the examiner's attention to objects, actions, or topics of interest to the participant.

1 = Some attempts at getting, maintaining, or directing the examiner's attention as described above for a rating of 0, but reduced in frequency or the number of different activities in which they are used.

2 = Makes occasional attempts to get, maintain, or direct the examiner's attention, including overtures solely related to preoccupations.

3 = Shows relatively little concern as to whether the examiner is paying attention to him or her unless he or she needs help (e.g., initiate social contact only when requesting).

Clinician-child interactions in ADOS-2 assessments – a CA perspective

7 = Unusually frequent, intense, or excessive demands for attention.

Examinees diagnostic report:

NAME OF CHILD made some attempts at getting, maintaining, or directing the examiner's attention but this was reduced in frequency or the number of different activities in which they are used. For example, in the telling a story task, NAME OF CHILD began his reiteration of the story with an animated "Once upon a time...". NAME OF CHILD was also able to maintain the examiners attention by elaborating on discussion points regardless of the examiners scaffolding.

ADOS-2 module 4 coding criteria:

B11. Quality of Social Response

This is a summary item that focuses on the participant's social responses throughout the ADOS-2 evaluation.

0 = Shows a range of appropriate responses that are varied according to immediate social situations and presses.

1 = Shows responsiveness to most social contexts, but somewhat limited, socially awkward, inappropriate, inconsistent, or consistently negative.

2 = Odd, stereotyped responses, or responses that are restricted in range or inappropriate to the context.

3 = Minimal or no response to the examiner's attempts to engage the participant.

Examinees diagnostic report:

Clinician-child interactions in ADOS-2 assessments – a CA perspective

NAME OF CHILD showed a range of appropriate responses that are varied according to immediate social situations and presses. For example, when the examiner described a story about ice cream, NAME OF CHILD asked the examiner to elaborate on the story.

ADOS-2 module 4 coding criteria:

B12. Amount of Reciprocal Social Communication

The focus of this item is on the frequency with which reciprocal interchanges occur during the course of the ADOS-2 evaluation, using any mode of communication. Frequency here is defined both by absolute number of occurrences and distribution across a range of contexts. The rating for this summary item should describe aspects of nonverbal and verbal/vocal behaviour that need not be coordinated but must result in at least brief reciprocal interchanges with the examiner (not others who may be present in the ADOS-2 assessment room).

0 = Extensive use of verbal or nonverbal behaviours (at whatever level attained) for social interchange (i.e. chat, comments, remarks, or nonverbal behaviours that appear to have reciprocal intent).

1 = Some reciprocal social communication (as described above for a rating of 0), but reduced in frequency or amount, or in the number of contexts in which such behaviours occur (regardless of the amount of non-social talk).

2 = Most communication is either object-oriented (i.e., to ask for things), OR response to questions, OR echolalic, OR concerned with particular preoccupations; little or no social chat or give-and-take.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

3 = Little or no communication with the examiner.

Examinees diagnostic report:

NAME OF CHILD demonstrated some reciprocal social communication, such as, the use of verbal or nonverbal behaviours for social interchange (i.e. chat, comments, remarks, or nonverbal behaviours that appear to have reciprocal intent), but these were reduced in frequency or amount, or in the number of contexts in which such behaviours occur. For example, NAME OF CHILD often smiled at the examiner's stories and contributions to the assessment and contributed his own humour and personality to the assessment.

ADOS-2 module 4 coding criteria:

B13. Overall Quality of Rapport

The code for this item is a summary rating that reflects the examiner's overall judgment of the rapport established with the participant during the ADOS-2 evaluation. The rating should particularly take into account the degree to which the examiner had to modify his or her own behaviour to maintain the interaction successfully.

0 = Comfortable interaction between the participant and examiner that is appropriate to the context of the ADOS-2 assessment.

1 = Interaction sometimes comfortable, but not sustained (e.g., sometimes feels awkward or stilted, or the participant's behaviour seems mechanical or slightly inappropriate).

2 = One-sided or unusual interaction resulting in a consistently mildly uncomfortable session or a session that would have been difficult if the examiner

Clinician-child interactions in ADOS-2 assessments – a CA perspective

had not continuously modified the structure of the situation beyond the standard activities in the ADOS-2 evaluation.

3 = The participant shows minimal regard for the examiner, OR the session is markedly uncomfortable for a significant proportion of the time.

Examinees diagnostic report:

The interaction between NAME OF CHILD and the examiner was comfortable and appropriate to the context of the autism assessment. NAME OF CHILD often smiled and shared humour with the examiner.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Creativity and Imagination

Social imagination refers to children's ability to play imaginatively and think creatively.

Although abilities within social imagination are no longer considered as part of the diagnostic criteria for ASD, it present as an area where children with ASD commonly experience difficulties and therefore is useful to consider qualitatively.

ADOS-2 module 4 coding criteria:

C1. Imagination/Creativity

This item should be assigned a rating that reflects the degree to which any of several forms of creativity/ inventiveness are exhibited by the participant throughout the ADOS-2 evaluation, either in his or her use of objects or through verbal descriptions

0 = Several different spontaneous, inventive, creative activities or comments in conversation.

1 = Some creative or make-believe actions, but limited in range or occurring only in response to one structured situation (e.g. creating a story).

2 = Little spontaneous creative or make-believe actions, OR only actions that are repetitive OR stereotyped in quality.

3 = No creative or inventive actions (not even stereotyped or repetitive).

Examinees diagnostic report:

NAME OF CHILD demonstrated some creative or make-believe actions, but they were slightly limited in range. For example, when creating a story with objects, he utilized cotton to represent a

Clinician-child interactions in ADOS-2 assessments – a CA perspective

man (abstract representation) but the remaining objects were used literally which reflected their true function, such as, the ball became an indestructible ball. Therefore, his imagination was limited in this task. NAME OF CHILD's imagination was instead demonstrated during the telling a story task. NAME OF CHILD also comprehended several but not all metaphors.

Stereotyped Behaviour and Restricted Interests

This feature refers to the possible presence of a preoccupation with interests or objects, to the exclusion of other possible interests. Included within this may be preoccupation with non-functional or sensory elements of play materials. Further, adherence to specific non-functional routines and rituals may be evident, as well as repetitive motor mannerisms.

ADOS-2 module 4 coding criteria:

D1. Unusual Sensory Interest in Play Material/Person

Rate the participant's interest in or unusual behaviours associated with sensory aspects of toys or surroundings (e.g., sniffing, repetitive feeling of texture, licking, mouthing, or biting, unusually strong interest in the repetition of certain sounds, unusual or prolonged visual examination). If the participant has a preoccupation that is based on a sensory interest, this may be coded here as one unusual sensory interest. For example, if he or she shows an interest in radiators or plumbing, that is coded later in this section of the protocol under "D4. Excessive Interest in or

References to Unusual or Highly Specific Topics or Objects or Repetitive Behaviours." If the participant is interested in the radiator in the room because he or she likes to look at it, as shown by peering at it while tilting his or her head, rocking from side to side, and jiggling his or her hands, this should be coded

Clinician-child interactions in ADOS-2 assessments – a CA perspective

under "D2. Hand and Finger and Other Complex Mannerisms," but it may also be coded here because of the sensory component involved. If the participant likes to look out of the corner of his or her eye at the radiator, the corners of the room, the doors on the cabinets, and the slats of the window blinds, but does not become overly preoccupied with any of these objects and does not move in unusual ways as he or she does so, he or she should be coded here for unusual sensory interests but not under "Hand and Finger and Other Complex Mannerisms" or under item "D4. Excessive Interest..." If the ADOS-2 assessment occurs in a room with a one-way mirror, looking into the mirror is not coded as an unusual sensory interest. Do not code here for touching the pin art. Sensory aversions are also not coded here.

0 = No unusual sensory interests or sensory-seeking behaviours.

1 = Several possible sensory interests not as clear as specified below for a rating of 2 AND/OR only one clear occurrence of an unusual sensory interest or a sensory-seeking behaviour. One "possible" sensory interest should be coded 0.

2 = Definite interest in sensory elements of objects or of play materials, OR sensory examination of himself or herself or others; two or more clear occurrences must be observed. May be observed during the same activity.

3 = Definite unusual sensory seeking behaviours occur frequently; during at least two different tasks or activity, and may interfere with the ADOS-2 assessment.

Examinees diagnostic report:

NAME OF CHILD demonstrated no unusual sensory interests or sensory-seeking behaviours associated with sensory aspects of toys or surroundings.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

ADOS-2 module 4 coding criteria:

D2. Hand and Finger and Other Complex Mannerisms

Rate unusual and/or repetitive movements or posturing of the hands and fingers, arms, or body. Repetitive clapping may be coded here. Do not include body rocking unless it involves more than the torso. Finger tapping, nail biting, hair twisting, and thumb sucking are also not coded here. The participant does not have to watch the movements of his or her fingers or hands for the movements to be coded here.

0 = None.

1 = Unusual and/or repetitive hand and finger mannerisms or complex mannerisms not as clear as specified below for a rating of 2.

2 = Definite finger flicking or twisting, AND/OR hand or finger or complex mannerisms, stereotypies, or posturing. May be brief and/or rare if clear.

3 = Mannerisms, as described above, occur frequently, during at least two different tasks or activities, and/or may interfere with the ADOS-2 assessment.

Examinees diagnostic report:

NAME OF CHILD demonstrated no hand and finger or other complex mannerisms such as unusual or repetitive movements or posturing of the hands and fingers, arms, or body.

ADOS-2 module 4 coding criteria:

D3. Self-Injurious Behaviour

Clinician-child interactions in ADOS-2 assessments – a CA perspective

Rate behaviours that involve any kind of aggressive act to self, even if not clearly harmful.

0 = No attempts to harm self.

1 = Dubious or possible self-injury, and/or rare but clear self-injury (e.g., one clear example of biting at own hand or arm, pulling own hair, slapping own face, or banging own head).

2 = More than one clear example of self-injury, such as head banging, face slapping, hair pulling, or self-biting.

Examinees diagnostic report:

Throughout the assessment NAME OF CHILD demonstrated no attempts to harm self.

ADOS-2 module 4 coding criteria:

D4. Excessive Interest in or References to Unusual or Highly Specific Topics or Objects or Repetitive Behaviours

Because circumscribed interests, preoccupations, or unusual behaviours are often difficult to judge during a brief observation, the focus of this item is on any references that (a) are unexpectedly high in frequency, (b) pertain to an unusual or odd topic, (c) are not well integrated into the conversation, or any behaviours that (d) pertain to use of an object in a manner highly specific to the participant, or (e) pertain to use of the participant's own body in a highly specific manner not clearly associated with behaviours coded under items D1 (Sensory Interests) or D2 (Hand/ Finger Mannerisms); for example, putting his or her hands over and/or fingers in his or her ears should be considered here. Persistent aversive

Clinician-child interactions in ADOS-2 assessments – a CA perspective

reactions that are unusual in form and/or intensity to sensory stimuli (e.g., the feel of the laminated picture, the sound of the examiner clearing his or her throat can be coded here as 1, 2, or 3, as appropriate. Topics that are developmentally or age appropriate should not be coded here (e.g., a participant with a mental age of 8 years who repeatedly talks about a recent vacation in general terms would not be coded here; if he or she repeatedly talks about staying in hotel room 465, that behaviour would be considered here).

The focus of this item is on the topic of references and/or unusual forms of behaviour. Use of unusual terms (e.g., stereotyped phrases) and/or lack of conversational flexibility are coded elsewhere. Behaviours may be coded in two ways if they represent separate instances of each domain. For instance, if the participant repeatedly says "Do they need room service in room 465?", uses the same phrase in several other contexts ("No more room service!", "Room service now!"), and makes other statements about hotel room numbers, this would be coded both here and under "A4. Stereotyped /Idiosyncratic Use of Words or Phrases" earlier in this protocol. Repetitive behaviours involving objects that have a clear sequence (e.g., touching objects in a particular order) should be coded under the following item, "Compulsions or Rituals."

0 = No excessive interest in or references to unusual or highly specific or restricted topics or objects or repetitive behaviours.

1 = Occasional references to unusual or highly specific topics or patterns of interest, occurring to an unusual degree, or occasional repetitive behaviours.

2 = Definite, stereotyped, or unusual patterns of interest that may or may not intrude and/or interfere with social communication and/or definite repetitive behaviours.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

3 = Definite preoccupation(s) and/or repetitive behaviours to a degree that interferes with the ADOS-2 assessment.

Examinees diagnostic report:

NAME OF CHILD demonstrated no excessive interest in or references to unusual or highly specific or restricted topics or objects or repetitive behaviours throughout the assessment.

ADOS-2 module 4 coding criteria:

D5. Compulsions or Rituals

The emphasis for compulsions or rituals in this context is on the participant's determination to carry out an activity that involves a predictable sequence, endpoint, or manner that is not required as part of an ADOS-2 task (e.g., checking if a wallet is in a purse; insistence on completing the book used for the storytelling task; careful placement of materials as they were initially presented; reciting a list of classmates as friends). Provision of lists should be rated here.

0 = No obvious activities or verbal routines that must be completed in full or according to a sequence that is not part of the task.

1 = Unusually routinized in speech or activities (includes insistence on finishing the book or providing a list that is not relevant to the conversation), but no behaviour that appears clearly compulsive in quality.

2 = One or more activities or verbal routines that the participant has to perform or say in a special way. The participant appears under pressure or becomes anxious if an activity is disrupted (i.e., compulsive quality is present). Include the recitation of lists that must be completed or that the examiner is asked to record

Clinician-child interactions in ADOS-2 assessments – a CA perspective

(e.g., friends, favourite foods) or insistence that the examiner respond in a specific way.

Examinees diagnostic report:

NAME OF CHILD did not demonstrate any compulsive need to complete any obvious activities or verbal routines in full or according to a sequence that was not part of the assessment.

Other Abnormal Behaviours

Unless stated otherwise, code these items without reference to developmental level or estimated expressive language skills.

ADOS-2 module 4 coding criteria:

El. Overactivity/ Agitation

This item describes excessive movement or physical agitation.

0 = Sits still appropriately throughout the ADOS-2 assessment.

1 = Sits, but often fidgets or moves about in the chair. Difficulties in the ADOS-2 assessment are not principally due to overactivity or agitation.

2 = Difficulty sitting; moves either in or out of the chair or handles or manipulates objects in a way that is mildly disruptive.

3 = Overactive behaviours are difficult to interrupt. The level of activity disrupts (the ADOS-2 assessment).

7 = Underactive.

Examinees diagnostic report:

NAME OF CHILD could sit appropriately throughout the assessment and demonstrated no excessive movement or physical agitation.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

ADOS-2 module 4 coding criteria:

E2. Tantrums, Aggression. Negative or Disruptive Behaviour

This item includes any form of anger or disruption beyond communication of mild frustration or whining.

0 = Not disruptive, destructive, negative, or aggressive during the ADOS-2 assessment.

1 = Displays an example of mild disruption, anger, or aggression or negative behaviour to the examiner (includes verbal threats, swearing, or a deliberately loud voice).

2 = More than one intentionally disruptive or negative incident. Loud talking or repeated swearing is coded here.

3 = Shows marked or repeated temper tantrums or significant aggression (e.g., throwing things, hitting or biting others). Screaming or yelling is included here.

Examinees diagnostic report:

NAME OF CHILD demonstrated no disruptive, destructive, negative, or aggressive behaviour during the assessment.

ADOS-2 module 4 coding criteria:

E3. Anxiety

Anxiety includes initial wariness or self-consciousness, as well as more obvious signs of worry, upset, or concern.

Clinician-child interactions in ADOS-2 assessments – a CA perspective

0 = No obvious anxiety (e.g., trembling or jumpiness).

1 = Mild signs of anxiety or self-consciousness, especially at the beginning of the ADOS-2 session or in response to specific activities.

2 = Marked anxiety throughout the ADOS-2 assessment (may be intermittent or continuous).

Examinees diagnostic report:

NAME OF CHILD demonstrated no obvious signs of anxiety throughout the assessment such as wariness, self-consciousness, distress, trembling or jumpiness.

Appendix 12.

Conversational Analysis Jeffersonian Transcription Symbols

(.)	Noticeable pause in speech of less than 0.2 seconds
(.7), (5.7)	Examples of silence measured in tenths of seconds
Speech [speech	Start of overlapping speech.
[Speech	
Speech speech]	End of overlapping speech
Speech speech]	
Spee-	Sharp cutoff in the middle of a word
Spee:ch	Prolongation of the preceding sound
(Speech)	Utterance that is difficult to understand but is likely as transcribed

<u>Speech</u>	Speech spoken with emphasis
SPEECH	Speech higher in volume than the surrounding talk
°Speech°	Speech that is lower volume than the surrounding talk
>Speech speech<	Faster speech than the surrounding talk
<Speech speech>	Slower speech than the surrounding talk
→	Analyst's signal of the significant line
((Action action))	Transcriber's comments for actions, gestures, environment
Spee↑ch	Upward shift in pitch
↓Speech	Downward shift in pitch
S#peech#h	Creaky voice
£Speech£	Smiley voice
wo(h)rd	Laugh particle inserted within a word
Speech<	Abruptly completed word
()	Inaudible
.hhh	Inhalation
hhh	Exhalation
Speech.	Falling intonation at the end of an utterance
Speech?	Questioning intonation at the end of an utterance
Speech,	Rising intonation at the end of an utterance
Speech=speech	“Rushed speech” which lacks the normal gap between utterances

Appendix 103.*Mondada Multimodal Transcription (2022)*

* *	Descriptions of embodied actions are delimited between
+ +	Two identical symbols (one symbol per participant and per type of action)
Δ Δ	That are synchronized with correspondent stretches of talk or time indications
*--->	The action described continues across subsequent lines
--->*	Until the same symbol is reached
>>	The action described begins before the excerpt's beginning
--->>	The action described continues after the excerpt's end
.....	Action's preparation
----	Action's apex is reached and maintained.
,,,,,	Action's retraction
ric	Participant doing the embodied action is identified in small caps in the margin
fig	The exact moment at which a screen shot has been taken

#

Is indicated with a sign (#) showing its
position within the turn/a time measure
