

Dysfunctional Expertise and its Relationship with Dynamic Risk Factors in Offenders

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Abstract

Predicting the risk an offender poses is vital for protecting the public and/or the offender themselves; thus reducing recidivism rates. Dynamic risk factors are useful for informing treatment programmes because of their changeability. However, the current conceptualisation of dynamic risk factors has recently been under scrutiny within the rehabilitation literature, because their categorical nature lacks description and cannot explain the underlying causal mechanisms of offending behaviours. Expertise is a new area within the rehabilitation literature that examines the decision-making processes involved across the offending episode (prior, during, and after a crime). It is one example of how looking more closely at the processes the offender employs across the offending episode might help to understand more clearly some of the mechanisms underlying dynamic risk factors. This article first discusses the literature and theoretical models that have been proposed with regard to risk prediction and offender expertise, before exploring the links between the two. Using a theoretical framework, which moves away from a deficit-based focus to one in which emphasis is placed on the offender's own personal agency, the authors describe how the competencies underpinning cognition can be used as a starting point for positive change. Implications for offender treatments are discussed.

Keywords: Dynamic risk factors; Expertise; Offending; Risk assessment; Treatment; Agency.

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Academics and practitioners in the area of forensic psychology, specifically the explanation, assessment and rehabilitation of offenders, frequently focus on the importance of predicting and measuring risk of offending. Differentiating high risk offenders from low risk offenders is important for not only protecting the public and the offenders themselves, but also for police, courts, and those working within correctional facilities (Andrews & Bonta, 2003). The risk that someone poses is important to measure as it allows for interventions to be tailored towards the offender's specific needs (e.g., in terms of risk level and type/cause of offending), which subsequently contributes to the prevention of future offences. However, predicting risk is a difficult task that still needs a great deal of attention, particularly with regard to those factors that can be changed (i.e., dynamic risk factors, such as substance abuse and unemployment) and the impact that such factors can have on treatment success and reoffending rates.

Currently, the prediction of risk of reoffending is based upon clusters of dynamic risk factors that correlate with recidivism (Heffernan & Ward, 2015). As a result, the underlying psychological mechanisms of these factors and how they explain or cause offending behaviours have been neglected. Additionally, the link between offender expertise (i.e., the necessary mechanisms, skills and knowledge that the offender acquires through practice to be able to fulfil their crime; Nee & Ward, 2015) and risk prediction has not been explored, yet an understanding of the mechanisms underpinning expertise could contribute to a better understanding of what dynamic risk factors are and how they should be conceptualised. If the conceptualisation of dynamic risk factors is re-examined then the interventions available for offenders should have a larger impact and ultimately recidivism rates should decrease. Therefore, in this article the aim is to explore how awareness of expertise and competency in offenders can contribute to a deeper understanding of dynamic risk factors. The article will first provide an overview of dynamic risk factors and the debate that currently exists within this

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area before describing the literature surrounding expertise in offenders. The article will then turn to a more detailed examination of expertise and how it interlinks with various domains of dynamic risk factors in acquisitive offenders (specifically burglars) and more briefly in child sexual offendersⁱ. These two types of offending have arguably the most developed accounts of expertise in correctional psychology. Finally, the implications for treatment will be discussed.

Overview of the Debate Surrounding Dynamic Risk Factors

Risk assessments are an essential part of clinical and/or forensic practice, and therefore researchers and practitioners have focused on identifying those factors that accurately measure and predict risk (referred to as risk factors). Risk factors can vary in changeability, with static factors being historical, unchangeable features, such as number of previous convictions or age at first conviction, and dynamic factors being changeable features, such as emotional state or poor coping strategies (Bonta, 1996). Dynamic risk factors can additionally vary in terms of duration: Stable (relatively enduring problems, e.g., alcoholism) versus acute (rapidly changing problems, e.g., emotional collapse; Hanson & Harris, 2000). Although static risk factors have strong predictive validity and are easy to measure, their lack of changeability means that they cannot be the focus of treatment programmes nor can they be altered to help reduce recidivism rates (Andrews & Bonta, 2006). Conversely, whilst dynamic risk factors are difficult to reliably measure and generally have poorer predictive validity than static risk factors (Craig, Browne & Beech, 2008), they can be modified and consequently are more useful for informing treatment programmes. As a result, it is the dynamic risk factors that, if dealt with appropriately in treatment, should help to reduce recidivism. Nevertheless, whilst there seems to be a clear distinction between static and dynamic factors in terms of risk prediction, there is not necessarily such a distinction between the two types of factors when it comes to understanding different types of crime. This is because static factors (e.g., criminal convictions) can be seen as outcomes of dynamic factors (e.g., anti-social attitudes; Beech & Craig, 2012; Beech & Ward, 2004).

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Additionally, although risk factors predict crime, it is important to note that protective factors can promote desistance; thus can also be predictive of recidivism (Thornton, 2013). Protective factors are those variables that mitigate or eliminate risk, such as school achievement, supportive family, or positive peer groups. By monitoring the presence or absence of protective factors, one can learn what factors were in place when the offender did not offend and what factors were not in place when the offender did offend (Rogers, 2000). Consequently, it is important to introduce and maintain protective factors in the offenders' life to help reduce the risk of reoffending. However, cause and effect cannot be established and so it is difficult to determine whether it is protective factors that cause the reduction in reoffending, or the result of other confounding factors, such as maturational effects.

The Risk-Need-Responsivity (RNR) model (Andrews & Bonta, 2003; Andrews, Bonta & Hoge, 1990) is undoubtedly the most influential risk-orientated model of offender rehabilitation. It has significantly contributed to the understanding and prediction of risk by emphasising the need to distinguish between static and dynamic risk factors. The RNR model is based on three principles that help to understand the prediction of risk and the classification of offenders for treatment: (1) *Risk*, which refers to matching the offenders level of intervention to their risk of reoffending; (2) *Need*, which refers to assessing the dynamic risk factors or criminogenic needs and targeting them in treatment; (3) *Responsivity*, which refers to how the treatment is provided, emphasising the need for the intervention to be tailored to the individual characteristics of each offender (e.g., learning style or level of motivation). Andrews and Bonta (1995) used the three principles of the RNR model to create an actuarial criminogenic risk/need assessment tool known as the Level of Service Inventory-Revised (LSI-R). The LSI-R is a 54-item measure that addresses ten domains (including both static and dynamic factors) associated with offending behaviours: Criminal history, education/employment, financial, family/marital, accommodation, leisure/recreation, companions, alcohol/drug problems, emotional/personal, and attitudes/orientation. Higher

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scores on this assessment indicate a higher propensity to commit further criminal acts, and it has been found to have good predictive validity (around 65%; Raynor, Kynch, Roberts & Merrington, 2000). Measures of risk, such as the LSI-R, are used to allocate individuals to treatment programmes and to determine the necessary intensity of the treatment. Despite the RNR model; (i) being theoretically based (e.g., the Psychology of Criminal Conduct (PCC), General Personality and Social Psychological Perspective on Criminal Conduct (GPSPP), and Personal Interpersonal Community-Reinforcement Perspective (PIC-R)); (ii) obtaining strong empirical support (e.g., Andrews & Bonta, 2006; Bonta & Andrews, 1993; Dowden & Andrews, 2003, 2004; Hanson, Bourgon, Helmus & Hodgson, 2009); and (iii) leading to a wide range of research in the area of offender assessment and treatment (e.g., Hefferman & Ward, 2015; Ward, Melser & Yates, 2007), it has been highly criticised with regard to its focus on dynamic risk factors, lack of scope, and lack of theoretical and practical implications (e.g., Ward & Brown, 2004; Ward & Beech, 2015).

Based on the initial research into risk prediction, it is apparent that dynamic risk factors are merely interpreted as a list of features or vague descriptions based on those variables that have been found to correlate with offending behaviours (e.g., substance misuse, lack of employment, and no stable accommodation; Brunton-Smith & Hopkins, 2013). This suggests that dynamic risk factors have been inadequately defined and that current conceptualisations overlook the highly varying nature of these variables, ignoring the need to consider their internal structure (Ward & Beech, 2015). That is, there is a lack of theoretical underpinnings within the conceptualisation of dynamic risk factors which means that such factors do not explain the causal psychological mechanisms, or maintenance, of offending behaviours (Mann, Hanson & Thornton, 2010). These issues with measuring and conceptualising dynamic risk factors have led to much debate within the offender rehabilitation literature. This has therefore resulted in many researchers and practitioners exploring ways in which dynamic risk factors can be better understood in order to; prevent the literature from purely focusing on prediction

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at the expense of explanation, improve risk assessments, and successfully treat individuals (Ward, 2014; Ward & Beech, 2015).

Risk domains often form the basis of offender risk assessments (e.g., the LSI-R (Andrews & Bonta, 1995), Static-99 (Hanson & Thornton, 2000), or Violence Risk Appraisal Guide (VRAG; Quinsey, Harris, Rice & Cormier, 2006)), and research supports the notion that there are at least four major domains of risk: Cognition (cognitive skill deficits or offense-supportive beliefs), self-regulation (negative affect or poor self-management), interpersonal functioning (social skill and intimacy deficits), and sexual (sexual deviance and preoccupation; Hanson & Harris 2000; Thornton, 2002). However, it is important to note that these particular domains may differ slightly depending on the type of crime. For example, sexual offenders may have all four to varying degrees, but there may be no sexual domain for acquisitive or violent offending; instead, other domains may be more prominent (e.g., the cognition domain will probably be more prominent for acquisitive offenders and the self-regulation domain more prominent for violent offenders). Nevertheless, regardless of the exact crime type or risk domain categories, it is unclear how the risk domains function to cause specific offending behaviours.

Beech and Ward (2004) were the first to explore the possible conceptual and causal relationships between etiological theories and risk factors. They developed the Etiological Model of Risk, which outlines the offence process and considers; developmental variables (e.g., abuse), vulnerabilities (measured by static risk factors, e.g., psychosocial problems, and stable dynamic risk factors, e.g., self-regulation problems), triggering events or contextual risk factors (e.g., access to victims), and dynamic acute risk factors (e.g., arousal). Despite the important theoretical developments since this model was proposed, the significance of the link between risk and aetiology has been neglected, and so more is needed to create a conceptual bridge between risk assessment and etiological theory.

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The research by Beech and Ward (2004) challenges the static/dynamic distinction because Beech and Ward claim that static risk factors only have significant predictive validity because they act as markers of past actions of dynamic risk factors. Mann et al. (2010) also challenged the static/dynamic distinction. They developed a list of psychologically meaningful risk factors based on what factors had the highest predictability of reoffending. Mann et al. conceptualised dynamic risk factors as propensities to offend that are triggered in certain contexts, and so dynamic risk factors are vulnerabilities that may or may not lead to an offence. However, this conceptualisation is unclear because the causal mechanisms that mediate the relationship between the risk factors and offending have not been established.

Heffernan and Ward (2015) explored the nature and function of dynamic risk factors in their ability to explain sexual offending and guide treatment. They argued that when risk domains are labelled as deficits or risk factors that there is the tendency to undermine the offenders perceived agency (i.e., to remove responsibility for the actions away from the offender). Therefore, Heffernan and Ward (2015) referred to dynamic risk factors as composite constructs and developed a new etiological model: The Agency Model of Risk (AMR). The AMR proposes three levels of agency; (1) *personal level*, which refers to what the individual believes about themselves (e.g., personal values, priorities, norms); (2) *social level*, which refers to the self in relation to others (e.g., interpersonal interactions and reinforcement); and (3) *systems level*, which refers to the physical states that influence offending (e.g., biological needs). These three agency levels can influence one another and are each associated with a distinct set of goals (values that direct behaviour), plans and strategies (the actions or skills that need to be implemented in order to achieve the goals), action implementation (offending behaviours), and self-monitoring and reflection. It is believed that dynamic risk factors and protective factors are the psychological and social processes that refer to the components of agency (i.e., goals, plans, strategies, action implementation, self-reflection), and consequently they impair normal functioning within the individuals' social, cultural and physical

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environments. That is, dynamic risk factors are the mechanisms that influence someone's ability to act in a prosocial or goal-directed manner. Four risk domains are distributed across the components of the AMR: Intimacy deficits, general self-regulation problems, cognitive distortions, and sexual deviance. The AMR has contributed to the literature on predicting risk by attempting to explain offending behaviour rather than predict it. It highlights the complex nature present in the link between dynamic risk factors and offending, demonstrating the important roles of human agency and values that motivate behaviour. The AMR emphasises the need to be cautious when viewing risk factors as causal factors of offending.

To summarise, the reliance on measuring dynamic risk factors as correlates of recidivism has been found to be misleading. Therefore, much debate within the correctional literature has focused on exploring alternative ways of conceptualising dynamic risk factors. The need to stop viewing dynamic risk factors as causal entities of offending is clear (Ward & Beech, 2015), and several researchers are now proposing new conceptualisation systems of risk factors that no longer distinguish between static and dynamic, and that attempt to improve the explanatory power of dynamic risk factors (e.g., Heffernan & Ward, 2015). A better understanding of dynamic risk factors would help to improve the success of treatment programmes, and ultimately increase the predictive validity of dynamic risk factors; thus reducing reoffending rates. However, it is important to note that research into dynamic risk factors has focused on sexual offenders, and whilst it is likely that this research can also be applied to other types of offending, further research needs to be conducted with regard to the risk domains of other crime types before any firm conclusions can be made.

Expertise in Offenders

Recently, a number of researchers within the field of offending behaviours and rehabilitation have attempted to study the decision-making processes (*cognitive operations*) involved in committing a crime. However, the focus should not just be on the commission of the crime itself, but on the entire decision chain (i.e., the decisions made prior to the crime,

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during the crime, and after the crime; Nee & Ward, 2015). Within this area of decision-making is the notion of *expertise* and whether offenders are experts at making decisions related to their specific criminal acts (e.g., burglary, sexual offending, drug dealing, arson). Expertise can be defined as “the acquisition of cognitive processes and consequent behaviour that are demonstrably superior to those new to a given domain, in the sense that they are faster, more cognitively economical, are triggered automatically in relevant environments and are based on considerable experience and honing of skills over time” (Nee & Ward, 2015, pp. 2). Expertise or skill level can facilitate offending behaviours and therefore a better understanding of expertise and its cognitive, behavioural, and affective mechanisms would be useful for understanding the commission of an offence and how future offences can be prevented (Ward, 1999).

Each offence that an individual commits, results in that individual acquiring new knowledge that is processed in accordance with his existing implicit schema (Ward, 1999). Offence scripts (often thought to manifest themselves within dynamic risk factors, e.g., offence-supportive beliefs; Bourke, Ward & Rose, 2012) aid the decision-making process for committing an offence. Thus, any new knowledge obtained during the offence process will amend these scripts causing the individual to conduct their next offence in a different manner, depending on what the offender has previously learnt and experienced (Fortune, Bourke & Ward, 2015). Every offence committed can therefore be viewed as a learning curve that improves the individuals’ offence-related strategies, competencies and skills, enhancing their capabilities in that particular domain (crime). As the offender becomes more competent, the outcomes of his actions increase and the chance of him being apprehended reduces. Hence, increased competencies facilitate the ability for the offender to detect offence opportunities and navigate his way past any barriers that may be preventing him from committing an offence. Those offenders who avoid detection are thought to be experts who have refined their offending skills and offence-related strategies (Bourke et al., 2012; Ward, 1999).

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Expertise, as a general concept, lies on a continuum from novices to masters (Ericsson, 2006; Hoffman, Shadbolt, Burton & Klein, 1995), and it is believed that knowing the extent of the shift from where an offender currently lies on the expertise continuum compared to where they started prior to their offending career is indicative of their vulnerabilities (which are likely to be associated with dynamic risk factors; Beech & Ward, 2004). The task for most researchers is to understand why some offenders are more capable of their crimes than others. One possible way of understanding this is to consider the differences between how knowledge is organised and structured in experts compared to non-experts. Research has shown that experts compared to non-experts perceive the environment of their crimes differently (*perceptual skills*) and that this perception is directly related to superior offending knowledge and better skills for committing the offence (*procedural skills*; Nee & Meenaghan, 2006; Topalli, 2005). Consequently, experts develop, maintain and use their cognitive abilities to assess their targets in different ways to non-experts, becoming specialised in their offending behaviours. Four cognitive mechanisms have been put forward as crucial to becoming an expert in a particular domain; (1) *chunking in memory* (through practice/experience and trial and error, the expert (offender) stores cues and patterns (schemas) in his long term memory, which means he can respond to his environment more proficiently); (2) *automaticity* (offence process, including decision-making, occurs instantly and unconsciously); (3) *situational awareness and selective preconscious attention* (an expert pre-consciously scans the environment, increasing his ability to automatically attend to, and prioritise, meaningful cues; thus the offender can make useful inferences based on small amounts of information); (4) *multi-tasking* (the automatic nature of making decisions means that the expert has free space for more conscious deliberations needed for his working memory). The notion of a continuum of expertise and that expertise has underlying cognitive mechanisms has been supported in many studies including those investigating sexual offences (of children; Bourke, et al., 2012, and adults; O’Ciardha, 2015), and burglary (Nee, 2015).

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Typically, expertise implies someone being exceptionally talented at a socially-accepted domain, such as chess or medicine. However, as is clear from what has already been mentioned in the current review, this is not always the case. Someone can be an expert within any domain, including offending. Nee and Ward (2015) propose the model of *dysfunctional expertise* to help explain the decisions made by an offender in and around the crime scene. They suggest four stages of decision-making that an experienced offender undergoes: (1) Automatic, unintentional and pre-conscious appraisal of the environment that cannot be switched off; (2) Superior and automatic recognition of the environment and offence-related cues that are meaningfully related to the expertise domain; (3) Activation of complex cognitive schemas, built up through practice, which allows for instant access to a number of exemplars and heuristics; (4) Speedy responses to environmental cues that have worked in the past and helped form offence scripts that allow for automatic commission of the offence. Nee and Ward (2015) suggest that there is the possibility for the behaviour to become more conscious and controllable at stages three and four, but that this depends on the complexity of the task and the particular individual undertaking the task. This approach helps to explain the offence process and the cognitive mechanisms that underlie the offence decision chain, e.g., the automatic and unconscious ability to attend to cues within the environment over time. Additionally, the approach has been used to help explain a variety of crimes including; burglary (Nee, 2015), drug-related offending (Casey, 2015), sexual offending (O’Ciardha, 2015), identity theft (Vieraitis, Copes, Powell & Pike, 2015), firesetting (Butler & Gannon, 2015), intimate partner violence (Day & Bowen, 2015), homicide (Brookman, 2015), and carjacking (Topalli, Jacques & Wright, 2015).

Despite the advantageous development of cognitive processes within experts, such processes can have limitations. First, as a result of the automaticity and effortless nature of making a decision, errors can be made, especially in stressful situations (Klein, 2009), and consequently crimes can go wrong. Second, as a result of the repeated learning and habitual

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nature of the offence process, the ability to be flexible and to problem solve effectively when confronted with completely unexpected situations is blocked or hindered (Woollett & Maguire, 2010). Although these are negative consequences of an expert's cognitive processes, they are the processes that law enforcement should exploit if they are to increase the chances of apprehending expert criminals.

It is clear that understanding offender expertise has enabled researchers in the field to assess the psychological processes involved in the decision-making of an offence. However, there are many limitations within the expertise literature. First, offenders (regardless of type, e.g., violent versus sexual) are not a homogeneous group (Harris & Rice, 1997; Kemshall, 2001; Sample & Bray, 2006), and therefore there are likely to be some individual differences between offenders in terms of their offence process (or decision-making chain). Second, most of the work on offender expertise has been conducted with burglars (e.g., Nee, 2015) and sexual offenders (e.g., Bourke et al., 2012), and whilst (based on the theory in which expertise is grounded) no significant differences are expected for expertise based on the type of crime committed, more research is needed to explore expertise within other crime types. Third, knowledge and understanding of expertise for offenders has mostly been based on those offenders that have been detected, and more research is required on those offenders who have not been caught (e.g., Topalli, 2006 on violent street offenders, and Wright & Decker, 1994 on burglars). This information would be beneficial for enhancing the understanding of offender expertise amongst those who are likely to be the most skilled. Fourth, the information available on offender expertise is only based on consciously accessed knowledge from those offenders who are willing to talk. There may well be a considerable proportion of information that is not accessible, e.g., due to the unconscious nature of being an expert at a particular domain. Additionally, the literature assumes that the offender is recalling information truthfully: Offenders may deliver false information that does not actually reflect their offence process in order to deceive practitioners or researchers. Fifth, more research is needed to learn about the

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amount of experience and level of practice required to become an expert (Nee & Ward, 2015). Finally, whilst it is clear that understanding expertise within offenders contributes to understanding the ‘how’ of offending (i.e., the skills, schemas, heightened awareness of contexts, and automaticity that aid offending), it does not contribute to understanding the ‘why’ of offending (i.e., the states, traits, core beliefs, or self-regulation that has been found to be associated with offending).

To summarise, expertise can develop within any domain, including offender behaviours. By looking at differences in offender experience, knowledge and skill acquisition, cognitive mechanisms can be identified that aid the offence process. Thus, these mechanisms, at minimum, should be the focus of treatment programmes if recidivism rates are to decrease. However, due to the accumulated nature of expertise, expert offenders may be more difficult to treat, and therefore treatment for these offenders will need to be slower and more intricate, providing alternative ways of thinking so that the offenders replace their existing anti-social schemata with more pro-social schemata (Nee & Ward, 2015). As previously stated, the aim of this article is to examine the links between offender expertise and dynamic risk factors. The remaining sections of this review will consider this link as well as discussing treatment implications.

Dynamic Risk Factors, Dysfunctional Expertise, and Acquisitive Crime

In the quest to further elucidate the causal processes underlying offending behaviour, this review takes a more focussed look at how the components of dysfunctional expertise in offenders are linked to dynamic risk factors in particular types of offending behaviour. As previously stated, the focus will be on burglary and, to some extent, child sexual offending as these have obtained the most developed theoretical explanations in relation to offender expertise. The AMR (Heffernan & Ward, 2015) and the model of dysfunctional expertise (Nee & Ward, 2015) will be referred to as general frameworks for guiding the author’s explorations.

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This is because both of these models explored in a detailed way the underpinning psychological, biological and social mechanisms involved in offending behaviour.

What are the Dynamic Risk Factors that may be Associated with Acquisitive Offending?

To begin, a closer look at the ways in which dynamic risk factors may be associated with the ‘why’ of acquisitive offending, specifically for burglars, will be undertaken. Subsequently, the ‘how’ of offending, the cognitive and self-regulatory components (e.g., skills, knowledge, competencies, planning and time management) will be examined. The authors feel it is in the doing of the crime in which the most useful links between competencies and risk/protective factors will be found, which will improve the understanding of the topic more thoroughly and ultimately help to reduce offending behaviour more effectively. To do this, different parts of the decision-chain will be examined consecutively: Initial decisions, journey to crime, commission of the crime, and after the crime, as it is suspected that the nature of action and reflection might vary during these phases. In other words, offenders may prioritise one of the three levels of agency described by Heffernan and Ward (2015): Systems level, personal level, and social level at different points of the process.

What is meant by acquisitive offenders? Acquisitive offenders (a category which usually includes all types of theft, burglary, fraud and criminal damage) are very common. In the UK, for instance, they make up around 80% of all recorded incidents of victim-based crime (Office for National Statistics, 2014) and this is likely to be similar in other countries. Those convicted of burglary in any one year make up a sizable chunk of this population. It is also known that acquisitive offenders tend to carry out a mixture of the above crimes (Tarling, 1993), so experienced burglars are likely to have expertise in other acquisitive crimes and vice versa.

The why. As a ‘typical’ male offenderⁱⁱ, a burglar’s background is likely to strongly reflect the empirically-based risk factors underpinning traditional risk models of offending (e.g., Andrews & Bonta, 2010). However, in line with the underlying ethos of this article, how useful is it to list a number of broad categories associated with offending behaviour which are

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simply correlated with risk? It is perhaps of very little value for intervention and rehabilitation. As noted earlier, dynamic risk factors are merely descriptions, void of any explanatory value, that act as markers of deeper problems associated with the risk of reoffending. Underneath these risk factors lie individual stories, which are often infused with a range of obstacles and challenges that have made it difficult to develop prosocial agency and autonomy (Nee & Ioannou, forthcoming). These life stories may also, however, offer possibilities for developing resilience and reflection. For instance, plumbing down from the risk factor ‘lack of educational attainment’ it is likely that attachment problems in childhood as a result of a substance misusing, young, single parent, will be found. Competencies in intelligence not translating into achievement as a result of anger and rejection from school peers due to lack of social skills may also be found. The risk factor paradigm paints a very bleak picture for rehabilitation, with no emphasis at all on any positive features that can be nurtured, such as the ability to plan and appraise, which might eventually support a greater sense of prosocial agency and governance (Gannon & Ward, 2014). More useful might be to look at the competencies involved in the offender’s day-to-day life, and how dysfunctional expertise might be translated into something pro-social.

The how.

The initial decision to offend. It is well known from a variety of sources that many offenders lead comparatively chaotic lives (e.g., Maruna, 2001). However, when it comes to the commission of the act, very few burglars act indiscriminately or impulsively, nor do they heavily plan their crimes (Bennett & Wright, 1984; Nee, 2015; Nee & Meenaghan, 2006; Wright & Decker, 1994). Instead, they seem to act with the automaticity characteristic of someone experienced and practiced at what they do (Nee & Meenaghan, 2006). Their initial, relatively conscious decision to undertake a burglary is usually away from the scene of the eventual crime (Nee & Taylor, 2000) hours or even days before the crime occurs (Wright &

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Decker, 1994). This decision is likely to occur as a result of two processes: Internal needs and awareness of opportunities.

Basic internal needs arise in the agent for ‘primary goods’ (Ward & Maruna, 2007). These could be emotional, biological, or cognitive and might include; a need to provide for the basic needs of self and family (food, clothing, accommodation) through the secondary goods of money (Nee & Taylor, 1988); a need to restore well-being, either in the self (servicing an addiction or through a sense of mastery); or with peers (via friendship, social interaction and recreation; Shover, 1973, 1996; Wright & Decker, 1994). Alongside this there is likely to be a heightened, semi-conscious awareness in working memory of recent environmental cues indicating attractive burglary targets (Nee, 2015; Nee & Meenaghan, 2006). It is well-established in the dual-processing paradigm that much of people’s decision-making and environmental awareness is below consciousness (Kahneman, 2011). Burglars, in line with anyone else who is experienced at what they do, will recognise cues in the environment linked to potential reward and positive affect in memory. These will increase motivation and allow goals to be activated unconsciously (Chartrand & Bargh, 2002). Preconscious scanning of the environment for cues related to reward and well-being (as well as threat) are automatic and cannot be turned off (see Nee & Ward, 2015 for a fuller description). Bargh (1994, pp. 5) refers to this as “eternal vigilance”. Thus, a mixture of internal and external needs, facilitated by particular contexts and environments result in goal-setting, motivation, and the initial decision to offend. The latter may comprise a relatively conscious moment in an otherwise semi-conscious and unconscious context, but as noted elsewhere (Bargh, 1994), practiced behaviour may begin with a deliberative initial decision to act, and very quickly become automatic (e.g., driving a car) by triggering schemas in memory about what to do in given situations (Shanteau, 1992).

The description above might suggest that the systems level (biological need) and personal level (‘offending is acceptable and I have the skills to do it’) of agency are salient in

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these processes. Goals are set, and with them come plans and strategies. Plans might involve when (and with whom) to undertake the crime and in which neighbourhood (Nee & Taylor, 2000). Strategies at this stage might involve activating schemas about how to navigate to a potential locale of the crime successfully without being noticed by residents and passers-by (Nee, 2015).

The aim of this article is to understand more clearly the underpinnings of dynamic risk factors. The internal needs described above, combined with relatively unconscious responses from long-term memory to external cues, comprise characteristics of the offender that clearly increase their likelihood of reoffending. Exploring the process of offending with experienced offenders in this way represents an example of how researchers can uncover the mechanisms underpinning risk factor categories, which is found in risk assessment tools. Findings can contextualise and make meaningful, how risk might increase and decrease in given contexts. This will give us clues as to how to approach intervention more effectively, with greater significance for the offender. This will be revisited in the implications section below.

The journey to crime (the implementation of strategies and plans). As noted above, the burglar's heightened situational awareness of environmental cues linked in memory with positive affect and reward will have allowed him to recognise opportunities for future criminal activity (such as, a neighbourhood that seems relatively unoccupied at particular times, and also signals a number of profitable outcomes). With these ideas driving his plans and intentions, the burglar begins his journey to the actual crime. En route the burglar will continue to appraise the environment, implementing his tried and tested strategies with ease and an implicit belief in his ability to carry out the crime. The social level of agency will play a role in his ability to perceive how others are judging him in potentially new environments, so as not to stand out. To support this, research shows that the routes taken within and around the burglary target are notably 'cleaner' and more systematic than by inexperienced control groups (Nee et al., 2015; Taylor & Nee, 1988). The environmental criminology literature also supports that the

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journeys to the locale of the crime are more careful and systematic too (Bernasco & Luykx, 2003; Rengert & Wasilchick, 2000). The accounts of experienced burglars on their journey to the crime site indicate versatility (likely to be a result of rich, interconnected schemas which allow instantaneous solutions when somewhat unexpected contexts arise). They may therefore become aware of a new locale that partially meets their needs, en route. Clare (2011) noted that increasing expertise in burglars allowed for a greater sense of self-efficacy and belief in their ability to make inferences from only partially familiar information. This locale may be revisited if the originally intended neighbourhood proves too risky on that occasion. This personal level of agency (Heffernan & Ward, 2015) that is driven by the beliefs, values and norms that the offender has accrued over time, will be increasingly supplemented by the systems level: Excitement, anxiety and imminent reward playing an increasingly strong and inextricable role in the drive to commit the crime as the target becomes closer. These internal emotional drivers (or ‘acute dynamic risk factors’ as described by Beech & Ward (2004) in one of the first attempts to deconstruct these features) and the extent to which they build as the crime becomes closer, are in desperate need of robust examination through research. These earlier phases of the offending cycle (i.e., before the offender arrives at the actual scene) may offer the best chances in terms of working with the offender to bring these processes to consciousness, so that the offender can reflect on his behaviour and re-evaluate the consequences.

Self-monitoring and evaluation, an important element of any model which emphasises agency and self-governance (Heffernan & Ward, 2015), are rarely explicitly discussed in the offender expertise literature. However, adoption of new strategies when faced with an interesting opportunity or an unexpected constellation of external cues, are surely done as a result of reflecting (even if automatically) on one’s analysis of internal and external cues. Unfortunately, for those trying to intervene (and for the offender motivated to change) it is very likely that these mechanisms are unconscious (Nee & Ward, 2015). Once in a vicinity

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recognised by the offender as the potential locale of the crime, it is likely that preconscious-scanning gives way to a more acute and evaluative appraisal (Nee, 2015), which is still nevertheless automatic.

Underlying processes in target selection and the commission of burglary. Previous research has shown that, once the burglar's attention is drawn to a potential target, he will instantaneously appraise a number of aspects with ease and speed in comparison to those without this expertise (Logie, Wright & Decker, 1992; Nee & Taylor, 2000; Wright, Logie & Decker, 1995). Burglars will assess relative gain, access, occupancy and security features within seconds (see Nee, 2015 for a more detailed account), and experimental work has indicated that fewer cues are needed to reach a decision with experience as the offender employs efficient, compensatory mental strategies (Garcia-Retamero & Dhimi, 2009; Homel, Macintyre & Wortley, 2014; Snook, Dhimi & Kavanagh, 2011). In terms of self-regulation, physiological arousal associated with optimal performance and reward are now likely to be at their peak and continue to be as the burglar enters and undertakes the crime. This has never been studied, but it is believed that alpha desynchronisation does not occur in the brains of experts when doing tasks related to their expertise, and that anxiety is reportedly lower in experienced burglars (Wright & Decker, 1994). Consequently, measures are expected to reflect this. Once inside, the burglar engages in a more or less automated sequence, especially if the layout and general interior of the property is as expected. He will take a practised route to maximise gain and limit risk, gathering high value items in a discriminate way (Nee & Meenaghan, 2006; Nee et al., 2015; Wright & Decker, 1994). As long as self-regulatory feedback, based on arousal and personal values about what is expected and what is the norm, is as anticipated, the burglary continues to its conclusion with the burglar exiting and leaving the scene, either on foot or in a vehicle. Very little is known about what happens next in the cognitive and emotional world of the burglar, other than that the offender will be keen to convert goods into cash or other 'secondary goods' (Ferrante & Clare, 2006; Wright & Decker,

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1994). There is some suggestion in early studies that a feeling of elation and relief ensues (Katz, 1988, Wright & Decker, 1994) and that the offender returns to his more chaotic lifestyle (Clare, 2011). However, whether the offender becomes more reflective at this stage (as has been noted in studies of child sexual offenders; Bourke et al., 2012; Fortune et al., 2015) has not been studied, and may play a strong role in intervention. In line with contemporary models of human agency (Bratman, 1999), reflection on performance, which is not necessarily deliberative or fully conscious, may result in a subtle revision of goals, plans and strategies for future actions (Heffernan & Ward, 2015; Ward 2015). More knowledge about this phase of the offending cycle could be recruited in future rehabilitation strategies.

Dysfunctional Expertise and Dynamic Risk Factors in Child Sexual Offenders

As previously mentioned in this article, alongside the cognitive and self-regulatory domains of risk characteristic of acquisitive offenders, additional vulnerabilities regarding intimacy and sexual deviance have been noted in child sexual offenders (Hanson & Harris, 2000; Mann et al., 2010; Thornton, 2013). Given the right contexts (which might arise through practiced planning), these vulnerabilities may result in criminal behaviour. Over the years (Bourke et al., 2012; Deslauriers-Varin & Beauregard, 2010; Fortune et al., 2015; Leclerc, Carpentier & Proulx, 2006; Ward, 1999; Ward & Hudson, 2000) a picture of the cognitive processes of the experienced sexual offender has emerged that, like those of acquisitive offenders, fit well with Nee and Ward's (2015) four stage model of dysfunctional expertise. Experienced child sexual offenders appear to have superior, automatic recognition of cues relating to vulnerable targets and contexts; and access to rich schemas in memory including a variety of exemplars and behavioural scripts that will play out with ease depending on the context. From an agency point of view (Heffernan & Ward, 2015), these competencies will include implicit plans, skills and strategies for befriending and developing what appear to be mutually rewarding relationships with children (for instance, through gift buying and sharing of feelings to strengthen emotional bonds). Importantly, the offender themselves may not be

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fully aware of when acceptable boundaries have been crossed. Moreover, strategies to prevent and avoid detection are more important to the sexual offender (than, for example, the burglar) due to the interpersonal nature of the crime. Reflection and honing of skills over time results in considerable knowledge about how to avoid detection in terms of planning the location, deceiving others close to the offender and the victim, maintaining a good level of outward self-regulation, intimidating the victim and leading a seemingly normal life (Fortune et al., 2015; Ward, 1999). Personal norms and values, developed through dysfunctional experiences in childhood and adolescence might include a sense of entitlement to sex and that sex with children is acceptable. On a systems level, sexual needs may be heightened, especially if substance misuse or alcohol are present.

A somewhat different array of competencies emerge for the child sexual offender in comparison to the burglar. Interpersonal skills in relation to grooming the child without arousing suspicion, planning (to avoid detection), and reflection post the offence to refine skills, point to a more contemplative offender (though in line with mainstream explanations of expertise, planning and reflection reduce once automatic schemas of how to undertake crimes build up; Bourke et al., 2012). One explanation for this is that this is an interpersonal crime (burglars, in contrast, prefer not to meet their victims; Coupe & Blake, 2006; Cromwell, Olson & Avary, 1991; Hearndon & Magill, 2004; Nee & Meenaghan, 2006; Wright & Decker, 1994) and is therefore inherently more risky, with increased chance of detection through disclosure by the victim.

All-in-all, these explanations of the often dysfunctional goals, strategies and behaviour of offenders, derived from analysis of the offender's description of what he does, assist in providing insight into the mechanisms underpinning what are traditionally called 'dynamic risk factors'. In approaching the reduction of crime, these explanations provide a greater depth of understanding and a more individualised account of the process of crime from start to finish,

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instead of simply badging an individual as a collection of deficits. Therefore, a greater depth of understanding should significantly help in rehabilitation.

Implications for Treatment

The vulnerabilities or ‘risks’ associated with expertise in offending are the result of hundreds of repetitions of the behaviour in question (in the case of the child sexual offender this may be through mental rehearsal as the actual offending rate is lower) and are particularly difficult to challenge as they are deeply entrenched, interconnected, automatic, and likely to be below consciousness (Nee & Ward, 2015). Ways of addressing this might be; (i) by working with the offender’s sense of personal agency and competence; (ii) by replacing dysfunctional automatic scripts with functional ones; or (iii) as a result of both of these processes, by fostering a more reflective outlook.

Agency and competence. The underlying principle of strength’s based models of offender rehabilitation, such as the Good Lives Model (Ward & Maruna, 2007) and the AMR (Heffernan & Ward, 2015), is that the offender should be engaged in, and eventually take control of, their journey to a crime free life. Rather than a didactic or instructive relationship between the correctional professional and the offender, the idea is to work in Socratic, shared-agency in order to motivate the offender towards a less destructive (and hopefully fulfilling) life of their own choosing and of their own volition. It is important to note that the underpinning goals which may have originally driven the offender’s behaviour (e.g., to look after one’s needs; to achieve self-esteem, mastery and intimacy) are often not negative in themselves and this can be used as a starting point (Ward & Stewart, 2003). Within this framework the idea would be to recruit the functional, positive aspects of competency and agency to reduce offending behaviour. In RNR terminology, the ability to accrue expertise and the sense of mastery, self-efficacy, and ‘normality’ persistent criminal activity might be seen as increasing the risk of reoffending, rather than being seen as competencies. However, an awareness of these aspects could be used in the motivated offender to foster a sense of

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prosocial possibility – ‘I have capacities and competencies’; ‘I can have the life I want without resorting to crime but I have to retrain these capacities and build a different sense of self-identity and self-governance’. Intervention, even with the motivated offender however, may be extensive and challenging, given that ‘successful’ offending is likely to represent the greatest sense of mastery and reward in the offender’s life until now. Learning to recognise patterns in behaviour and becoming more aware of the internal and external triggers at different points on the decision-chain would be a valuable early lesson (such as the ‘seemingly unimportant decisions’ of sexual offenders (Ward & Hudson, 2000) and the ‘pre-conscious scanning’ of the environment in burglars (Nee, 2015)). Much more research is needed on the different phases that make up the entire offending cycle (as outlined above for burglars) on different types of crime in order to support interventions. This should ideally use simulated criminogenic environments and neuro-phenomenological methods in order to reinstate the context of crime in an ethical way and to consequently understand the offender’s lived experience of undertaking the crime. What is already clear from the preliminary studies conducted on competencies in child sexual offenders and burglars is that the mechanisms underlying risk categories are more complex and composite than a standard risk assessment might suggest, and that they clearly vary from offence to offence (and from offender to offender).

Retraining automaticity. Several areas of psychological research and therapy have produced evidence that dysfunctional automatic responses to meaningful triggers can be replaced by functional ones. Three areas will briefly be referred to here; (1) interventions reducing prejudiced responses; (2) interventions for eating behaviour; and (3) interventions for depression and anxiety. Much research in the field of social psychology (Bargh, 1994; Blair & Banaji, 1996; Devine, 1989) has demonstrated that stereotypes are automatic, cognitive shortcuts that help us make sense of the world in a resource-efficient way. However, these can quickly develop into negative, instant prejudices in particular contexts. In experimental settings, these scholars have shown how stereotypes can be automatically and unconsciously

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activated through priming techniques. Devine (1989) demonstrated that once activated and some level of awareness is reached, one can be taught to automate a habit of *non-stereotyping* (e.g., a script of fairness) which becomes instantly activated immediately after the original stereotypical thought is invoked. This process is likely to happen naturally when some level of awareness and reflection are typically present in an individual's repertoire. However, these elements are less likely to be prioritised in the more automatic, reward-driven type of decision-making characteristic of offenders. This priming type of intervention, therefore, could be piloted with motivated offenders as it is characteristic of the following two interventions also.

Changing health-harming behaviours in the general public, such as over-eating and smoking, by raising awareness of risk are not notably successful, except in small numbers of highly motivated individuals (Marteau et al, 2010; Webb & Sheeran, 2010). Eating (and therefore over-eating), for instance, is strongly governed by automatic scripts triggered by environmental cues which are rarely over-ridden by more reflective processes. In order to do this, one needs the requisite resources such as energy, attention, motivation and awareness. More recent developments in this field (Marteau, Hollands & Fletcher, 2012), have advocated interventions that target automatic (rather than reflective) processes to activate, inhibit or create new associations through priming (e.g., learning to associate positive outcomes with healthier food), so that the agent behaves differently when presented with the cue (Papies, 2012; Roberto, Baik, Harris & Brownell, 2010). This approach also concurs with recent interventions for depression and anxiety known as cognitive bias modification (CBM). Large bodies of research indicate that those with depression tend to automatically process neutral external stimuli as negative (Holmes, Lang & Shah, 2009) while anxious individuals process neutral stimuli as threatening (Macleod & Mathews, 1988). CBM utilises computer based tasks and games involving hundreds of repetitions over 2-4 weeks. Participants are required to replace 'threatening' or 'negative' stimuli (such as faces or words) with neutral ones and are rewarded for doing so. Although, still in the early stages of evidence, participants over numerous and

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varied samples have shown reductions in self-reported and psychometric follow-up measures of depression and anxiety, with effect sizes comparable to those of traditional cognitive behaviour therapy (Beard, 2011; Watkins, Baeyens & Read, 2009). These interventions suggest the potential to retrain automaticity in offenders in line with mutually beneficial (prosocial) goals, or at least replace automatic early stages of the decision-chain (initial decisions and on journey to crime) with an automatically triggered re-evaluation of the consequences of crime.

Fostering a more reflective outlook. Impulsivity is one of the most stable characteristics of the general offender population, and promoting a more reflective outlook has been an aim of offender rehabilitation programmes since they began in earnest in the 1980s (McGuire, 1995). As a result of the often impoverished backgrounds from which many offenders come, many of the conditions necessary for the development of self-control (nutrition, rest, security, consistent parenting, a stimulating and loving environment; Tarullo, Obradovic & Gunnar, 2009) are absent and instead a survival mentality is fostered (Nee & Ioannou, forthcoming). Given that much of human behaviour is largely habit-driven and routine (Marteau et al., 2012; Strack & Deutch, 2004), coaching this population to prioritise reflection over reward-driven, automatic processes will be no easy task. Mindfulness techniques may assist, and retraining automaticity as described above, may paradoxically improve awareness through discussion of the intended outcomes of the intervention. Furthermore, an agency-based approach to intervention is more likely to foster a sense of self-governance, self-efficacy and reflection than traditional deficit-based approaches to rehabilitation, such as Reasoning and Rehabilitation (Ross & Fabiano, 1985), which developed as part of the RNR model. It has been noted, here, that different parts of the offending process appear more conducive to reflection (namely, the early phases before reward is very strongly influencing behaviour near the scene of the crime, and post-crime) though this is speculative at present in the absence of a robust body of research. The authors hope that in time the gaps in

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knowledge both here and in the proposed interventions above will be resolved and will assist in these aims.

Conclusion

To conclude, it is clear that the current conceptualisation of dynamic risk factors as merely a list of features that correlate with offending behaviours is minimalistic. Not only does it lack description and the inherent variation within these features, but it neglects the underlying psychological mechanisms that lead to and maintain offending behaviours. Therefore, other conceptualisation models, such as the AMR (Heffernan & Ward, 2015), are required to further the understanding of risk and ultimately reduce recidivism rates. Furthermore, the three phases of the offence chain (i.e., prior, during, and after a crime) need to be explored if researchers and practitioners are to accurately enhance their knowledge of the decisions that offenders make at each offence stage, as well as have awareness of expertise levels and the vulnerabilities that are present, which can increase the risk of the offence being committed again. To date, dynamic risk factors and their relationship with dysfunctional expertise, in offending populations, has never been examined. However, this review has shown that studying expertise in offenders is one example of how one can understand much more about the offending process and what underpins the various domains of dynamic risk factors, particularly in acquisitive and/or sexual offenders. Consequently, a more in-depth examination of these and other types of offending would contribute significantly to the offender rehabilitation literature and have significant implications for treatment. Further research is needed into the link between offender expertise, risk and rehabilitation, with more elaborate models being established to help explain the decision-chain of offending and the underlying mechanisms that cause individuals to commit crime.

References

- Andrews, D.A., & Bonta, J. (1995). *The Level of Service Inventory - Revised*. Toronto: Multi Health Systems.
- Andrews, D.A., & Bonta, J. (2003). *The psychology of criminal conduct* (3rd Ed.). Cincinnati, OH: Anderson.
- Andrews, D.A., & Bonta, J. (2006). *The psychology of criminal conduct* (4th Ed.). Newark, NJ: LexisNexis.
- Andrews, D.A., & Bonta, J. (2010) Rehabilitation through the lens of the Risk-Needs-Responsivity model. In F. McNeil, P. Raynor, & C. Trotter (Eds.) *Offender supervision: New directions in theory, research and practice*. Cullompton: Willan Publishing.
- Andrews, D.A., Bonta, J., & Hoge, R.D. (1990). Classification for effective rehabilitation: Rediscovering psychology. *Criminal Justice and Behavior*, *17*, 19-52. DOI: 10.1177/0093854890017001004.
- Bargh, J. (1994). The four horsemen of automaticity: Awareness, intention, efficiency, and control in social cognition. In R. Wyer, & T. Srull (Eds.), *Handbook of Social Cognition* (pp. 1-40). Hillsdale, New Jersey: Lawrence Erlbaum Associates, Inc.
- Beard, C. (2011). Cognitive bias modification for anxiety: current evidence and future directions. *Expert Review of Neurotherapeutics*, *11*, 299-311. DOI: 10.1586/ern.10.194.
- Beech, A.R., & Craig, L.A. (2012). The current status of static and dynamic factors in sexual offender risk assessment. *Journal of Aggression, Conflict and Peace Research*, *4*, 169-185. DOI: <http://dx.doi.org/10.1108/17596591211270671>.
- Beech, A.R., & Ward, T. (2004). The integration of etiology and risk in sexual offenders: A theoretical framework. *Aggression and Violent Behavior*, *10*, 31-63. DOI: 10.1016/j.avb.2003.08.002.

DYSFUNCTIONAL EXPERTISE AND DYNAMIC RISK FACTORS

Bennett, T. & Wright, R. (1984). *Burglars on burglary: Prevention and the offender*.

Aldershot: Gower.

Bernasco, W., & Luykx, F. (2003). Effects of attractiveness, opportunity and accessibility to burglars on residential burglary rates of urban neighborhoods. *Criminology*, 41, 3, 981-1002. DOI: 10.1111/j.1745-9125.2003.tb01011.x.

Blair, I., & Banaji, M. (1996). Automatic and controlled processes in stereotype priming. *Journal of Personality and Social Psychology*, 70, 1142-1163. DOI: 10.1037//0022-3514.70.6.1142.

Bonta, J. (1996). Risk-needs assessment and treatment. In A. T. Harland (Eds.), *Choosing correctional options that work: Defining the demand and evaluating the supply* (pp. 18-32). Thousand Oaks, CA: Sage.

Bonta, J., & Andrews, D.A. (1993). The Level of Supervision Inventory: An overview. *IARCA Journal*, 5, 6-8.

Bourke, P., Ward, T., & Rose, C. (2012). Expertise and sexual offending: A preliminary empirical model. *Journal of Interpersonal Violence*, 27, 2391-2414. DOI: 10.1177/0886260511433513.

Bratman, M.E. (1999). *Faces of intention: Selected essays on intention and agency*. New York: Cambridge University Press.

Brookman, F. (2015). Killer decisions: The role of cognition and affect in homicide. *Aggression and Violent Behavior*, 20, 42-52. DOI: 10.1016/j.avb.2014.12.007.

Brunton-Smith, I., & Hopkins, K. (2013). *The factors associated with proven re-offending following release from prison: Findings from Waves 1 to 3 of Surveying Prisoner Crime Reduction (SPCR)*. Ministry of Justice Analytical Series. Retrieved from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/261620/re-offending-release-waves-1-3-spcr-findings.pdf.

DYSFUNCTIONAL EXPERTISE AND DYNAMIC RISK FACTORS

- Butler, H. & Gannon, T. (2015). The scripts and expertise of firesetters: A preliminary conceptualization. *Aggression and Violent Behavior, 20*, 72-81. DOI: 10.1016/j.avb.2014.12.011.
- Casey, S. (2015). Drug-related offending: Expertise and decision making. *Aggression and Violent Behavior, 20*, 82-91. DOI: 10.1016/j.avb.2014.12.010.
- Chartrand, T.L., & Bargh, J.A. (2002). Nonconscious motivations: Their activation, operation, and consequences. In A. Tesser, D. Stapel, & J. Wood (Eds.), *Self and motivation: Emerging psychological perspectives* (pp. 13–41). Washington, DC: American Psychological Association.
- Clare, J. (2011). Examination of systematic variations in burglars' domain-specific perceptual and procedural skills. *Psychology, Crime & Law, 17*, 199-214. DOI: 10.1080/10683160903025810.
- Coupe, T., & Blake, L. (2006). Daylight and darkness targeting strategies and the risks of being seen at residential burglaries. *Criminology, 44*, 431-464. DOI: 10.1111/j.1745-9125.2006.00054.x
- Craig, L.A., Browne, K.D., & Beech, A.R. (2008). *Assessing risk in sex offenders: A practitioner's guide*. Chichester, UK: Wiley.
- Cromwell, P., Olson, J. & Avary, D. (1991). *Breaking and entering: An ethnographic analysis of burglary*. Newbury Park: Sage.
- Day, A., & Bowen, E. (2015). Offending competency and coercive control in intimate partner violence. *Aggression and Violent Behavior, 20*, 62-71. DOI: 10.1016/j.avb.2014.12.004.
- Deslauriers-Varin, N., & Beauregard, E. (2010). Victims' routine activities and sex offenders' target selection scripts: A latent class analysis. *Sexual Abuse: A Journal of Research and Treatment, 22*, 315–342. DOI: 10.1177/1079063210375975.

DYSFUNCTIONAL EXPERTISE AND DYNAMIC RISK FACTORS

Devine, P. (1989). Stereotypes and prejudice: Their automatic and controlled components.

Journal of Personality and Social Psychology, 56, 5-18. DOI: <http://dx.doi.org/10.1037/0022-3514.56.1.5>.

Dowden, C., & Andrews, D.A. (2003). Does family intervention work for delinquents?

Results of a meta-analysis. *Canadian Journal of Criminology and Criminal Justice*, 45, 327-342. DOI: <http://dx.doi.org/10.3138/cjccj.45.3.327>.

Dowden, C., & Andrews, D.A. (2004). The importance of staff practices in delivering effective correctional treatment: A meta-analysis of core correctional practices.

International Journal of Offender Therapy and Comparative Criminology, 48, 203-214. DOI: 10.1177/0306624X03257765.

Ericsson, K.A. (2006). An introduction to the Cambridge handbook of expertise and expert

performance: its development, organisation and content. In K. Ericsson, N. Charness, P. Feltovich & R. Hoffman (Eds.), *The Cambridge handbook of expertise and expert performance* (pp. 3-20). Cambridge: Cambridge University Press.

Ferrante, A., & Clare, J. (2006). *'Known' burglars and the stolen goods market in western*

Australia (Research Report). Perth: Office of Crime Prevention, Western Australian Department of Premier and Cabinet.

Fortune, C., Bourke, P., & Ward, T. (2015). Expertise and child sex offenders. *Aggression and*

Violent Behavior, 20, 33-41. DOI: 10.1016/j.avb.2014.12.005.

Gannon, T., & Ward, T. (2014). Where has all the psychology gone? A critical review of

evidence-based psychological practice in correctional settings. *Aggression and Violent Behavior*, 19, 435-446. DOI: 10.1016/j.avb.2014.06.006.

Garcia-Retamero, R., & Dhimi, M.K. (2009). Take-the-best in expert-novice decision

strategies for residential burglary. *Psychonomic Bulletin & Review*, 16, 163-169. DOI: 10.3758/PBR.16.1.163.

DYSFUNCTIONAL EXPERTISE AND DYNAMIC RISK FACTORS

- Hanson, R.K., Bourgon, G., Helmus, L., & Hodgson, S. (2009). The principles of effective correctional treatment also apply to sexual offenders: A meta-analysis. *Criminal Justice and Behavior, 36*, 865-891. DOI: 10.1177/0093854809338545.
- Hanson, R.K., & Harris, A.J.R. (2000). Where should we intervene? Dynamic predictors of sexual offense recidivism. *Criminal Justice and Behavior, 27*, 6-35. DOI: 10.1177/0093854800027001002.
- Hanson, R.K., & Thornton, D. (2000). Improving risk assessments for sex offenders: A comparison of three actuarial scales. *Law and Human Behavior, 24*, 119-136. DOI: <http://dx.doi.org/10.1023/A:1005482921333>.
- Harris, G.T., & Rice, M.E. (1997). Mentally disordered offenders: What research says about effective service. In C. D. Webster, & M. A. Jackson (Eds.), *Impulsivity: Theory, assessment, and treatment* (pp. 361 – 393). New York: The Guilford Press.
- Hearndon, I., & Magill, C. (2004). *Decision-making by house burglars: Offenders' perspectives*. Home Office Research Findings No. 249. London: Home Office.
- Heffernan, R., & Ward, T. (2015). The conceptualization of dynamic risk factors in child sex offenders: An agency model. *Aggression and Violent Behavior, 24*, 250-260. DOI: 10.1016/j.avb.2015.07.001.
- Hoffman, R., Shadbolt, N., Burton, A., & Klein, G. (1995). Eliciting knowledge from experts: A methodological analysis. *Organizational Behavior and Human Decision Processes, 62*, 129-158. DOI: 10.1006/obhd.1995.1039.
- Holmes, E.A., Lang, T.J., & Shah, D.M. (2009). Developing interpretation bias modification as a "cognitive vaccine" for depressed mood: Imagining positive events makes you feel better than thinking about them verbally. *Journal of Abnormal Psychology, 118*, 76-88. DOI: <http://dx.doi.org/10.1037/a0012590>.

DYSFUNCTIONAL EXPERTISE AND DYNAMIC RISK FACTORS

Homel, R., Macintyre, S., & Wortley, R. (2014). How burglars decide on targets: A computer based scenario approach. In B. LeClerc & R. Wortley (Eds.), *Cognition and crime: Offender decision making and script analyses*. Oxford: Routledge.

Kahneman, D. (2011). *Thinking, fast and slow*. New York: Farrar, Strauss, Giroux.

Katz, J. (1988). *Seductions of crime: Moral and sensual attractions in doing evil* (5th Eds.). New York: Basic Books.

Kemshall, H. (2001). *Risk assessment and management of known sexual and violent offenders: A review of current issues* (Home Office Police Research Series Paper 140). London, England: Home Office.

Klein, G. (2009). *Streetlights and shadows: Searching for the keys to adaptive decision making*. Cambridge, MA: MIT Press.

Leclerc, B., Carpentier, J., & Proulx, J. (2006). Strategies adopted by sexual offenders to involve children in sexual activity. In R. Wortley & S. Smallbone (Eds.), *Situational prevention of child sexual abuse, Crime Prevention Studies* (Vol. 19, pp. 251-270). Monsey, NY: Criminal Justice Press.

Logie, R.H., Wright, R.T., & Decker, S.H. (1992). Recognition memory performance and residential burglary. *Applied Cognitive Psychology*, 6, 109-123.
DOI: 10.1002/acp.2350060203

Macleod, C., & Mathews, A. (1988). Anxiety and the allocation of attention to threat. *The Quarterly Journal of Experimental Psychology Section A: Human Experimental Psychology*, 40, 653-670. DOI: 10.1080/14640748808402292.

Mann, R.E., Hanson, R.K., & Thornton, D. (2010). Assessing risk for sexual recidivism: Some proposals on the nature of psychologically meaningful risk factors. *Sexual Abuse: A Journal of Research and Treatment*, 22, 191-217. DOI: 10.1177/1079063210366039.

DYSFUNCTIONAL EXPERTISE AND DYNAMIC RISK FACTORS

- Marteau, T.M., French, D.P., Griffin, S.J., Prevost, A.T., Sutton, S., Watkinson, C, Attwood, S., & Hollands, G.J. (2010). Effects of communicating DNA-based disease risk estimates on risk-reducing behaviours. *The Cochrane Database of Systematic Reviews* (10): CD007275. DOI: 10.1002/14651858.CD007275.pub2.
- Marteau, T.M., Hollands, G.J., & Fletcher, P.C. (2012). Changing human behaviour to prevent disease: The importance of targeting automatic processes. *Science*, 337, 1492-1495. DOI: 10.1126/science.1226918.
- Maruna, S. (2001). *Making good: How ex-convicts reform and rebuild their lives*. Washington, DC: American Psychological Association.
- McGuire, J. (1995). *What works: reducing reoffending. Guidelines from research and practice* (Eds.). Chichester: John Wiley and Sons.
- Mullins, C.W., & Wright, R. (2003). Gender, social networks, and residential burglary. *Criminology*, 41, 813-840. DOI: 10.1111/j.1745-9125.2003.tb01005.x
- Nee, C. (2015). Understanding expertise in burglars: from pre-conscious scanning to action and beyond. *Aggression and Violent Behavior*, 20, 53-61. DOI: 10.1016/j.avb.2014.12.006
- Nee, C., & Ioannou, S. (forthcoming). What have neuroscientific approaches to research taught us about acquisitive offenders?
- Nee, C., & Meenaghan, A. (2006). Expert decision-making in burglars. *British Journal of Criminology*, 46, 935-949. DOI: 10.1093/bjc/azl013.
- Nee, C. & Taylor, M. (1988). Residential burglary in the Republic of Ireland: A situational perspective. *Howard Journal*, 27, 105-116. DOI: 10.1111/j.1468-2311.1988.tb00609.x.
- Nee, C., & Taylor, M. (2000). Examining burglars' target selection: Interview, experiment, or ethnomethodology? *Psychology, Crime & Law*, 6, 45–60. DOI: 10.1080/10683160008410831.

DYSFUNCTIONAL EXPERTISE AND DYNAMIC RISK FACTORS

- Nee, C., & Ward, T. (2015). Review of expertise and its general implications for correctional psychology and criminology. *Aggression and Violent Behavior, 20*, 1-9. DOI: 10.1016/j.avb.2014.12.002.
- Nee, C., White, M., Woolford, K., Pascu, T., Barker, L., & Wainwright, L. (2015). New methods for examining expertise in burglars in natural and simulated environments: Preliminary findings. *Psychology Crime and Law, 21*, 507-513. DOI: 10.1080/1068316X.2014.989849.
- O'Ciardha, C. (2015). Experts in rape: Evaluating the evidence for a novice-to-expert continuum in the offense behavior and cognition of sexual offenders. *Aggression and Violent Behavior, 20*, 26-32. DOI: 10.1016/j.avb.2014.12.003.
- Office for National Statistics. (2014). Crime in England and Wales, Year ending December 2013. Statistical Bulletin. Retrieved from: http://www.ons.gov.uk/ons/dcp171778_360216.pdf.
- Papies, E.K. (2012). Goal priming in dieters: Recent insights and applications. *Current Obesity Reports, 1*, 99-105. DOI: 10.1007/s13679-012-0009-8.
- Quinsey, V.L., Harris, G.T., Rice, M.E., & Cormier, C.A. (2006). *Violent offenders: Appraising and managing risk* (2nd Eds.). Washington, DC: American Psychological Association.
- Raynor, P., Kynch, J., Roberts, R., & Merrington, S. (2000). *Risk and need assessment in probation services: An evaluation* (Home Office Research Study 211). London, England: Home Office.
- Rengert, G.F., & Wasilchick, J. (2000). *Suburban burglary: A tale of two suburbs*. Chicago: Thomas.
- Roberto, C.A., Baik, J., Harris, J.L., & Brownell, K.D. (2010). Influence of licensed characters on children's taste and snack preferences. *Pediatrics, 126*, 88-93. DOI: 10.1542/peds.2009-3433.

DYSFUNCTIONAL EXPERTISE AND DYNAMIC RISK FACTORS

- Rogers, R. (2000). The uncritical acceptance of risk assessment in forensic practice. *Law and Human Behavior, 24*, 595-605. DOI: 10.1023/A:1005575113507.
- Ross, R.R., & Fabiano, E.A. (1985). *Time to think: A cognitive model of delinquency prevention and rehabilitation*. Johnson City, TN: Institute of Social Sciences and Arts.
- Sample, L.L., & Bray, T.M. (2006). Are sex offenders different? An examination of rearrest patterns. *Criminal Justice Policy Review, 17*, 83-102.
DOI: 10.1177/0887403405282916.
- Shanteau, J. (1992). How much information does an expert use? Is it relevant? *Acta Psychologica, 81*, 75-86. DOI: 10.1016/0001-6918(92)90012-3.
- Shover, N. (1973). The social organization of burglary. *Social Problems, 4*, 499-514. DOI: <http://dx.doi.org/10.2307/799711>.
- Shover, N. (1996). *Great pretenders: Pursuits and careers of persistent thieves*. Colorado: Westview Press.
- Snook, B., Dhimi, M.K., & Kavanagh, J. (2011). Simply criminal: Predicting burglars' occupancy decisions with a simple heuristic. *Law and Human Behavior, 35*, 316-326.
DOI: 10.1007/s10979-010-9238-0.
- Strack, F., & Deutsch, R. (2004). Reflective and impulsive determinants of social behaviour. *Personality and Social Psychology Review, 8*, 220-247. DOI: 10.1207/s15327957pspr0803_1.
- Tarling, R. (1993). *Analysing offending: Data, models and interpretations*. London: HMSO.
- Tarullo, A.R., Obradovic, J., & Gunnar, M.R. (2009). Self-control and the developing brain. *Zero to Three, 29*, 31-37. Retrieved from: [http://web.stanford.edu/group/sparklab/pdf/Tarullo,%20Obradovic,%20Gunnar%20\(2009,%200-3\)%20Self-Control%20and%20the%20Developing%20Brain.pdf](http://web.stanford.edu/group/sparklab/pdf/Tarullo,%20Obradovic,%20Gunnar%20(2009,%200-3)%20Self-Control%20and%20the%20Developing%20Brain.pdf).

DYSFUNCTIONAL EXPERTISE AND DYNAMIC RISK FACTORS

- Taylor, M. & Nee, C. (1988). The role of cues in simulated residential burglary: A preliminary investigation. *British Journal of Criminology*, 28, 396-401. Retrieved from: <http://bjc.oxfordjournals.org/content/28/3/396.full.pdf>.
- Thornton, D. (2002). Constructing and testing a framework for dynamic risk assessment. *Sexual Abuse: A Journal of Research and Treatment*, 14, 137-151. DOI: 10.1177/107906320201400205.
- Thornton, D. (2013). Implications of our developing understanding of risk and protective factors in the treatment of adult male sexual offenders. *International Journal of Behavioral Consultation and Therapy*, 8, 62-65. Retrieved from: http://www.baojournal.com/IJBCT/IJBCT-8_3-4/A12.pdf.
- Topalli, V. (2005). Criminal expertise and offender decision-making: An experimental analysis of how offenders and non-offenders differentially perceive social stimuli. *British Journal of Criminology*, 45, 269-295. DOI: 10.1093/bjc/azh086.
- Topalli, V. (2006). The seductive nature of autotelic crime: How neutralization theory serves as a boundary condition for understanding street crime. *Sociological Inquiry*, 76, 475-501. DOI: 10.1111/j.1475-682X.2006.00167.x.
- Topalli, V., Jacques, S., & Wright, R. (2015). "It takes skills to take a car": Perceptual and procedural expertise in carjacking. *Aggression and Violent Behavior*, 20, 19-25. DOI: 10.1016/j.avb.2014.12.001.
- Vieraitis, L., Copes, H., Powell, Z., & Pike, A. (2015). A little information goes a long way: Expertise and identity theft. *Aggression and Violent Behavior*, 20, 10-18. DOI: 10.1016/j.avb.2014.12.008.
- Ward, T. (1999). Competency and deficit models in the understanding and treatment of sexual offenders. *Journal of Sex Research*, 36, 298-305. DOI: 10.1080/00224499909552000.

DYSFUNCTIONAL EXPERTISE AND DYNAMIC RISK FACTORS

- Ward, T. (2014). The explanation of sexual offending: From single factor theories to integrative pluralism. *Journal of Sexual Aggression, 20*, 130-141. DOI: 10.1080/13552600.2013.870242.
- Ward, T. (2015). Detection of dynamic risk factors and correctional practice. *Criminology & Public Policy, 14*, 105-111. DOI:10.1111/1745-9133.12115.
- Ward, T., & Beech, A.R. (2015). Dynamic risk factors: A theoretical dead-end? *Psychology, Crime & Law, 21*, 100-113. DOI: 10.1080/1068316X.2014.917854.
- Ward, T., & Brown, M. (2004). The good lives model and conceptual issues in offender rehabilitation. *Psychology, Crime, and Law, 10*, 243-257. DOI: 10.1080/10683160410001662744.
- Ward, T., & Hudson, S.M. (2000). Sexual offenders' implicit planning: A conceptual model. *Sexual Abuse: A Journal of Research and Treatment, 12*, 189-202. DOI: 10.1023/A:1009534109157.
- Ward, T., & Maruna, S. (2007). *Rehabilitation: Beyond the risk assessment paradigm*. London, UK: Routledge.
- Ward, T., Mesler, J., & Yates, P. (2007). Reconstructing the Risk-Need-Responsivity model: A theoretical elaboration and evaluation. *Aggression and Violent Behavior, 12*, 208-228. DOI: 10.1016/j.avb.2006.07.001.
- Ward, T., & Stewart, C.A. (2003). The treatment of sex offenders: Risk management and good lives. *Professional Psychology: Research and Practice, 34*, 353-360. DOI: 10.1037/0735-7028.34.4.353.
- Watkins, E.R., Baeyens, C.B., & Read, R. (2009). Concreteness training reduces dysphoria: Proof-of-principle for repeated cognitive bias modification in depression. *Journal of Abnormal Psychology, 118*, 55-64. DOI: <http://dx.doi.org/10.1037/a0013642>.

DYSFUNCTIONAL EXPERTISE AND DYNAMIC RISK FACTORS

Webb, T.L., & Sheeran, P. (2010). A viable, integrative framework for contemporary research in health psychology: Commentary on Hall and Fong's Temporal Self-regulation Theory. *Health Psychology Review, 4*, 79-82. DOI: 10.1080/17437191003717497.

Woollett, K., & Maguire, E. (2010). The effect of navigational expertise on wayfinding in new environments. *Journal of Environmental Psychology, 30*, 565-573. DOI: 10.1016/j.jenvp.2010.03.003.

Wright, R.T., & Decker, S.H. (1994). *Burglars on the job: Streetlife and residential break-ins*. Boston: Northeastern University Press.

Wright, R.T., Logie, R.H., & Decker, S.H. (1995). Criminal expertise and offender decision making: An experimental study of the target selection process in residential burglary. *Journal of Research in Crime and Delinquency, 32*, 39-53. DOI: 10.1177/0022427895032001002.

ⁱ Links between child sexual offending and dynamic risk factors will be covered in more depth in other articles within this special issue.

ⁱⁱ Burglary is an overwhelmingly male crime, hence why this review refers to the offender being male in the examples. However, for an unusual insight into the role of women in the undertaking of the crime, see Mullins and Wright (2003).