

The influence of Culture on Goal Perception: Qatar versus Denmark

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Abstract

Expectations of control put forth by societal norms impose a constant influence on goal perception. To examine the influence of culture on perception of personal goals, 124 Middle Easterners and 128 Scandinavians rated their perceived locus of control, generated goals and evaluated goal characteristics. Findings show several cultural and gender differences, most notably in perceived locus of control, unhappiness despite goal achievement and adherence to cultural life script. Many differences were qualified by interactions, suggesting that Middle Eastern men deviate from Middle Eastern women and Scandinavians of both sexes. The Middle Eastern men demonstrated greater ambivalence regarding goal achievement and, contrary to previous findings from other cultural samples, they also showed a significant positive association between internal and external control. Furthermore, goals generated by Middle Easterners showed a greater overlap with their imagined future events and were largely represented by life script events. These findings are consistent with the view that especially Middle Eastern men experience a greater responsibility for the fulfilment of culturally defined goals.

Keywords: locus of control, cultural life script, gender, mental time travel, cognitive schema

Introduction

Projections of the self into past and future scenarios are referred to as *mental time travel* (Tulving, 2002). Traditionally research within this field has focused on memories of past events, but studies from the last decade show an increasing interest in imagined future events, also referred to as *episodic future thinking*. Episodic future thinking is often directed towards *personal goals* – i.e., internal representations of future states that the individual strives to attain or avoid (Austin & Vancouver, 1996; D'Argembeau & Mathy, 2011; Klinger & Cox, 2011; Newby-Clark & Ross, 2003). Simulations of different future scenarios help us assess the consequences of potential behaviours. We use these simulations on a daily basis for choosing which actions to take to achieve a certain goal (Atance & O'Neill, 2001; D'Argembeau & Mathy, 2011; Schacter, Addis, & Buckner, 2008; Suddendorf & Corballis, 2007). Accordingly, our ability to imagine future events is crucial in the cognitive process of planning steps that will most likely lead to goal achievement (Johannessen, Oettingen, & Mayer, 2012; Klinger, 1977). In the present study we integrate literature on goal perception, locus of control and cultural life scripts in order to investigate differences in cultural influences on personal goals and perceived control. Combining research from these three areas gives us the opportunity to more comprehensively explore cultural effects on cognition than prior researchers have done. This approach enabled us to examine future thoughts from three angles: perceived goal characteristics, perception of personal control and influence of culturally induced cognitive schemas. We compare a sample from the gender-segregated Middle East to a sample from the co-ed¹ Scandinavia.

Goal Perception and Perceived Control

In a theoretical framework on commitment and disengagement from incentives, Klinger (1975) introduced the concept of *current concerns*, which refers to the state of

¹ Any location that mixes males and females (originally referring to educational institutions)

commitment to a particular goal. It is a cognitive process that increases sensitization towards stimuli relevant to the goal. The process starts at the time of commitment to a goal and continues until the person attains the goal or gives up the pursuit. Current concerns increase attention to relevant cues in the surrounding environment. Furthermore, they enhance the accessibility of goal-related memories, which can be used in the planning of actions towards goal attainment (Austin & Vancouver, 1996; Johannessen & Berntsen, 2010; Klinger & Cox, 2011).

Current concerns can be operationalized through Cox and Klinger's (2000), *Personal Concern Inventory* (PCI). The PCI measures the respondents' perceptions of their personal goals emotionally, behaviourally and cognitively through self-ratings (Cox & Klinger, 2002). The rating scales provide a motivational profile of the respondents. This motivational structure (i.e., one's personal pattern of goal striving) is a determinant of personal well-being and the sense of leading a meaningful life. The Goal Theory of Current Concerns (Klinger, 1975) focuses on motivation and it is based on a decade of research using the PCI (Klinger & Cox, 2011).

As part of this motivational structure towards goal-related behaviour, Klinger and Cox (2011) stressed the importance of perceptions of goal control, referred to as *control beliefs*. Control beliefs refer to perceptions about the level of control one has over the attainment of one's goals. For instance, will increased commitment enhance control over goal achievement? Or is achievement perceived as controlled by external forces? These beliefs partly derive from personal episodic memories and knowledge passed on from others' past experiences (Ajzen, 1991). Inasmuch as control beliefs are likely to be just as important as actual control when predicting goal-related behaviour, they are essential in the measurement and consideration of goal-related attitudes.

Expectations of control put forth by societal norms impose a constant influence on

goal perception. Such expectations are referred to as one's perceived locus of control, and it is an attribution style that remains stable over time (Ajzen, 1991). *Locus of control* refers to the subjective appraisal of factors that people hold accountable for the outcome of the events they experience (Levenson, 1981; Rotter, 1966). *Internal control* is the belief that the outcome of events primarily depends on one's own behaviour, whereas *external control* is the belief that outcomes are more unpredictable and controlled by others (Rotter, 1966). Rotter's (1966) original scale for locus of control is one-dimensional on a continuum from highly internal to highly external locus of control. Challenging the assumption that internal and external control are mutually exclusive, Levenson (1972) proposed a multidimensional locus of control scale. In Levenson's scale, internal control is measured separately from external control and external control is divided into two independent dimensions: (1) Chance, measuring to which degree a person believes in an unordered and random nature of the world, and (2) Powerful Others, measuring to which degree a person believes in an ordered and predictable world in which societal systems or institutions are in control (Levenson, 1981).

Although some studies show no gender differences in any of Levenson's three dimensions (Clarke, 2004; Levenson, 1981; Watson, 2011), locus of control has often been found to vary across gender, with the Powerful Others scale showing the most consistent effect of gender, as men score significantly higher compared with women in their own culture (Christopher, Saliba, & Deadmarsh, 2009; Dyal, 1984; Levenson, 1981; Levenson, 1974; Misra & Tripathi, 1981; Walkey, 1979). For a review of this literature, see Sherman et. al. (1997).

Cross-cultural differences have also been found in locus of control (see Cheng, Cheung, Chio, & Chan, 2013 for meta-analysis). Individualistic societies emphasize internal control with the intention of enhancing personal autonomy (Santiago & Tarantino, 2002; Weisz, Rothbaum, & Blackburn, 1984), while collectivistic societies value interdependence

and tend to score significantly higher than individualistic societies on external control (Cheng et al., 2013; Lu, Kao, Cooper, & Spector, 2000; Rossier, Dahourou, & McCrae, 2005). The three dimensions on the Levenson's scale are independent of each other, so conceptually a person can have a high score on all dimensions. However, across cultures the scores tend to be significantly higher on the internal dimension compared with the two external dimensions (Levenson, 1981). That is, individuals generally perceive internal locus of control as a more prevalent state.

Cultural Influences on Personal Goals

To our knowledge, goal perception, as measured by Cox and Klinger's (2000) PCI, has not been explored across cultures, or in societies with strong gender-segregation. However, since general control beliefs affect goal perception, the cultural and gender differences found in locus of control might extend to goal perception.

Individuals conceptualize environments they live in in a variety of different ways (Atran, Medin & Ross, 2005). Therefore, the content of personal goals will be idiosyncratic to some extent, but often it is affected by culturally scripted societal norms. For instance, in some cultures, the goal of getting married has to precede the goal of having children, while the specific order of these two events are not prioritized in other cultures (Berntsen & Rubin, 2002). Each society has age norms that structure expectations and regulate behaviour. These norms can be regarded as a prescribed timetable for the normative life (Neugarten, 1996). The goals a normative person is expected to set throughout life within a given culture can be operationalized through the cultural life script. A *cultural life script* is a culturally shared cognitive representation of the expected order and timing of important life events in a prototypical life, such as graduation, marriage and childbirth (Berntsen & Rubin, 2004). Because it is culturally transmitted rather than based on personal experience, it is stored in memory as semantic knowledge (Rubin & Berntsen, 2003). Numerous studies across different

cultures have replicated Berntsen and Rubin's (2004) finding that cultural life scripts guide retrieval of important autobiographical memories (e.g., Bohn & Berntsen, 2008; Bohn, 2010; Collins, Pillemer, Ivcevic, & Gooze, 2007; Ottsen & Berntsen, 2014; Rubin, Berntsen & Hutson, 2009).

One potentially fruitful means to investigate cultural influences on goal perception would be to look at cultural differences in the content of events that are expected to occur in the future. That is, imagined future events are both (1) often linked to one's current goals (Cole & Berntsen, 2016; D'Argembeau, 2016), and (2) shaped by cultural influences, such as in the form of cultural life scripts (Berntsen & Jacobsen, 2008; Bohn & Berntsen, 2011). Indeed cultural life scripts tend to play a stronger role in the construction of future events than the recall of past events (Rasmussen & Berntsen, 2013; Gryzman, Prabhakar, Anglin, & Hudson, 2013). A recent study by Ottsen and Berntsen (2015) supported this finding, and also showed that Middle Easterners adhere more to their cultural life script in both temporal directions compared with Scandinavians. Therefore, a cross-cultural comparison of imagined future events is likely to be highly informative regarding cultural influences on goal perception.

Gender Influences on Personal Goals

In a review of gender differences in orientation toward the future, including both Western and Non-Western samples, Greene and DeBacker (2004) found that, despite the fact that men and women are becoming more similar in terms of career goals, some gender differences still remain. Women are more likely to have personal goals across multiple domains (e.g., career, family, higher education, social relations, politics). Gender differences in interpersonal goals are evident in childhood, but might get slightly masked in adolescence (see Gryzman & Hudson, 2013, for a review). Adolescence is the period in life where interpersonal relations are of great importance to both sexes. Conflicting goals of maintaining connections and

developing autonomy is part of identity formation (Fivush, Habermas, Waters, & Zaman, 2011). Young adults are likely to challenge previously accepted cultural values, while at the same time feeling a pressure to conform in order to maintain acceptance (Ryan & Kuczowski, 1994). When entering adulthood, both girls and boys are faced with cultural expectations to commit to ascribed social roles (Fivush et al., 2011).

In gender-segregated societies the pressure to identify with a given gender role is especially strong (Charrad, 2011). Therefore it is not surprising that cross-cultural variation in gender differences relating to personal goals has been found between segregated and non-segregated societies. For instance, Seigner (1988) found that gender differences in goals and future time orientation were more evident among Israeli Arabs than Israeli Jews. The goals of the Israeli Arab women were especially concerned with higher education as a mean towards emancipation, when compared with Israeli Arab men and Israeli Jews of both genders. This is in accordance with Qatari women showing a greater focus on education when imagining a normative life than Qatari men (Ottsen & Berntsen, 2014). In general, the cultural life script of the gender-segregated country Qatar showed a gendered perspective on the normative life. Qatari men focused on life script events with content specific to Qatari-culture (e.g., religious and gender divided events), whereas the Qatari women generated more cross-cultural events (i.e., events shared with other cultures). These differences likely reflect gender-specific subcultures, which might likewise lead to gender differences in goal content and perceptions of personal goals in similar gender-segregated societies. Cultural differences like these inform our predictions in the present study, since no such gender differences were found in the Danish cultural life script (Berntsen & Rubin, 2004).

The Present Study

The majority of cross-cultural studies on both goals (Deci & Ryan, 2000; Du & King, 2013; Greene & Debacker, 2004) and mental time travel (Shao, Yao, Ceci, & Wang, 2010;

Wang, Hou, Tang, & Wiprovnick, 2011) have compared Asian samples to North American samples. In the present study, participants from the Middle East (predominantly Qatar) versus participants from Scandinavia (predominantly Denmark) were compared. These two cultures differ in a number of ways. For instance, Ottsen and Berntsen (2014) showed that, compared with a Danish sample, the cultural life script generated by a Qatari sample contained more religious content and evinced greater gender differences. Furthermore, and in line with cultural differences between interdependent and independent societies, Ottsen and Berntsen (2015) found that Middle Easterners were more inclined than Scandinavians to use mental time travel to guide others, teach and direct behaviour. Sharing personally experienced and expected social norms is consistent with the increased adherence to cultural scripts found in the more collectivistic societies of the Middle East (Ottsen & Berntsen, 2014).

Middle Eastern societies also score above average on Hofstede's (2001) *index of Masculinity*. Masculine countries on Hofstede's index are defined by strong gender differentiation in the socialization of children. In some Muslim countries, like Qatar and Saudi Arabia, the actual process of socialization is divided. Men and women are segregated in public space, making interaction between genders minimal outside of the immediate family (Bahry & Marr, 2005). In contrast, Scandinavian societies show low scores on the index of Masculinity, and are characterized as having a more feminine culture associated with weak gender differentiation (Hofstede, 2001). In the present study we therefore expected the effect of gender on goal perception and locus of control to be limited to the segregated Middle East.

We had several discrete predictions regarding the effects of culture and gender on, respectively, goal content, locus of control, and goal perception. First, concerning locus of control, we expected higher scores on internal control in Scandinavia than in the Middle East. Conversely, we predicted that the Middle Easterners would score significantly higher than the Scandinavians on the two external dimensions, Powerful Others and Chance.

Second, concerning goal perceptions, the lack of prior studies on cultural and gender differences in Cox and Klinger's (2000) goal perceptions prompted an exploratory approach, with few specific predictions. However, based on the societal constraints in the external control dimension Powerful Others, we expected cultural differences in locus of control to extend to goal perception on at least some dimensions of the PCI. For instance, we expected Goal Control measured by the PCI to follow internal control, measured by the multidimensional locus of control scale, with both showing higher scores in Scandinavia than in the Middle East.

Third, as alluded to above, we expected that any gender differences would be qualified by interactions with culture, such that any gender differences in goal perception would hold more strongly for the Middle Easterners, consistent with the greater gender segregation in this culture. As such, we predicted that in the Middle Eastern sample but not the Scandinavian sample, men would generate goals that extended further into the future and they would score significantly higher on perceived control by Powerful Others than the women.

Fourth, concerning goal content, we predicted that goals in the Middle Eastern sample would be more affected by cultural scripts, due to the increased adherence to social and cultural norms often found in collectivistic and/or religious cultures. Increased adherence to normative scripts has been found in mental time travel of Middle Easterners (Ottsen & Berntsen, in press). Specifically, we expected the content of goals in the Middle Eastern sample to be more religious and to show a greater correspondence with the Qatari life script compared with the correspondence between the Danish life script and goal content in the Scandinavian sample. Furthermore, we expected that the Middle Easterners' increased adherence to cultural and religious scripts would result in a greater overlap between personal goals and imagined future events, inasmuch as imagined future events tend to largely represent life script events (Rasmussen & Berntsen, 2013; Gryzman, Prabhakar, Anglin, &

Hudson, 2013; Ottsen & Berntsen, 2015).

Method

Participants

The countries of Qatar and Denmark were chosen as representatives of Middle Eastern and Scandinavian societies, respectively. Although these two countries are different with regard to gender roles and religious views, they are similar in other ways. Both countries are geographically small and they are among the countries with the highest gross domestic product (GDP) in the world. Likewise, in both countries, education is high on the politically decided list of priorities, schooling is publicly funded and female students outnumber male students at the universities (Bahry & Marr, 2005; Johnstone, 2004; Kronfol, Ghuloum, & Weber, 2013; Qatar General Secretariat for Development Planning, 2011; Zieler, 2014).

The number of participants recruited for the present study was decided on the basis of previous work on related questions in these two cultures (Ottsen & Berntsen, 2014). Our Middle Eastern sample included 124 participants recruited from two universities in Qatar – 62 women and 62 men ($M_{\text{age}} = 22.7$, $SD = 6.2$), with an age range of 17-55 years. Our Scandinavian sample included 128 participants recruited from one university in Denmark – 73 women and 55 men ($M_{\text{age}} = 22.9$, $SD = 3.7$), with an age range of 18-42 years. The initial sample consisted of 159 Middle Eastern participants and 130 Scandinavians. Thirty-five participants were eliminated from the Middle Eastern sample because they left more than 10% of the questions unanswered or reported a non-Middle-Eastern nationality. In the final Middle Eastern sample, 61% of the participants were Qataris. Other nationalities represented were primarily Palestinians, Jordanians, Syrians and Yemenis². Two participants were eliminated from the Scandinavian sample because they were from Germany. The remaining 128

² To test the homogeneity in our Middle Eastern sample we ran a series of ANOVAs (gender x cultural back ground). The pattern of results was generally the same for the Qataris versus the other Middle Easterners

participants were predominantly from Denmark (125), but Sweden (2) and Norway (1) were also represented. All participants received cinema tickets for the approximate amount of 100 Danish kroner (equivalent to \$15) in appreciation for their cooperation.

Procedure

The first author collected all data, accompanied by local student assistants. The measures reported here were included as part of a larger survey regarding cultural knowledge, personal memories, expectations for the future, personal goals and perceived control (Ottsen & Berntsen, 2015). The Qatari questionnaire was translated from English into Arabic by a professional translator of Middle Eastern origin and into Danish by an English major from Aarhus University. After back-translations the questionnaires were checked and compared with the English version of the scales by two locals. In each sample, the questionnaires were initially distributed in class, and participants subsequently filled out the questionnaires at home, with no prior instructions apart from the guide in the test battery. They handed in the questionnaires the following week in class. After collecting the data, all responses were translated into English by a local student assistant. Another student back-translated the responses, with these back-translations then compared with the original responses by two additional local student assistants, who reached agreement on the final wording by discussion.

Design

We employed a 2 culture (Middle East versus Scandinavia) x 2 gender (men versus women) factorial design; see Figure 1 for illustration of the factors and dependent measures.

Materials

In the following we describe the dependent measures.

Personal goals. Participants were first asked to review a list of Life Areas (e.g., Employment and Finances; Partner, Family, and Relatives; Religion and spiritual matters) from the Personal Concerns Inventory. The procedure of asking participants to review these broad life

areas is a standard part of the PCI, and is meant to prime for a variety of personal goals (Cox & Klinger, 2000). Participants were then instructed to generate three personal goals, with the stipulation that these personal goals could reflect either a Life Area from the Personal Concerns Inventory, or another life area. For each individual goal, the participants answered the first eight questions from the Personal Concerns Inventory³ (see appendix). Cox and Klinger's question regarding Unhappiness Despite Achievement, Item 6, can be considered to measure ambivalence towards goals, similar to the ambivalence towards goals question on the Striving Assessment Scale (Emmons, 1986). Referring to their personal goal we asked, "How unhappy would I feel if things turn out the way I want?" The Striving assessment Scale asks, "How unhappy are you when you are successful in the striving?" Both items were rated on a likert scale. As such, unhappiness despite goal achievement has previously been used as a reliable and valid measure of ambivalence (Emmons, 1986; 1988; Klinger et al., 1980).

Locus of control. After reporting personal goals, each participant completed the Multidimensional Locus of Control Scale (Levenson, 1981). This scale addressed the participant's attribution style, e.g., their subjective appraisal of factors that account for the outcome of events in their life (Cheng et al., 2013). Levenson's scale has three independent dimensions of control: Chance, Powerful Others and Internal Control, each with eight items. All items were rated on a Likert scale (e.g., Item 1: "Whether or not I get to be a leader depends mostly on my ability" -3 = Disagree, 3 = Agree). The reliability for Internal Control was $\alpha = .51/.55$. The external dimensions were more consistent, $\alpha = .61/.81$ for Powerful Others and $\alpha = .60/.76$ for Chance; in all cases, the Scandinavians generated the lower scores. Internal consistency is only moderately high, but the coefficients of all three subscales corresponded to previous findings (see Levenson, 1981).

³ The last two questions, regarding influence of alcohol on the goals, were omitted since alcohol is prohibited in Qatar and of no relevance in the current study.

Future events. Prior to recording their goals, each participant had recorded three important future events for another part of the larger survey (see Ottsen & Berntsen, 2015). Here we examine the overlap between goals and imagined future events within each participant. The instructions, translated into English, were as follows: “Your task here is to imagine events that will occur in your personal future. Imagine that you are telling your future life story to a new friend, whom you have just met, and who, therefore, does not know anything about your past. It is a (fictitious) friend, whom you trust and with whom you can be completely honest. Give a detailed description of three important future events that you believe will happen to you. It can be in the near future or a long time from now.” The participants had four lines to write down a mini narrative and provide a keyword for each of the imagined future events.

Satisfaction with life. To test whether any associations between culture or gender on goal perceptions or the influence of culture on one’s goals were related to quality of life, the participant’s current feeling of satisfaction with life was obtained using Diener, Emmons, Larsen, and Griffin’s (1985) Satisfaction With Life Scale ($\alpha = .79/.79$).

Coding and Scoring of Event Content

All goals and future events were categorized according to the event categories from the cultural life script of Qatar (Ottsen & Berntsen, 2014) and of Denmark (Berntsen & Rubin, 2004) by two independent coders. Where events did not fit the cultural life script of the relevant country, new categories were created for all events mentioned by at least 4% of the sample, following the threshold used to generate life script events in life script studies (Berntsen & Rubin, 2004; Bohn, 2010; Erdoğan et al., 2008; Rubin et al., 2009). After the formation of new categories, the two research assistants independently assigned each event to the categories. The inter-rater agreement ranged from 81% to 91% for goals and future events in each culture. Discrepancies were resolved by discussion.

Statistical Analyses

To examine the effects of culture and gender on goal perception, Locus of Control and Satisfaction with Life, we conducted a series of 2 gender (male vs. female) x 2 culture (Scandinavia vs. Middle East) factorial ANOVAs with the dependent measures listed in Table 1, together with the means, standard deviations and effects. These ANOVAs reflect the conception and design of our study insofar as we did not have any firm hypotheses regarding the precise causal pathway from culture and/or gender on the one hand, to any effects on our dependent variables.

To control for the possibility of Type I error through the use of multiple analyses, we adopted a threshold for statistical significance of $p < .01$, rather than the conventional $p < .05$.⁴ We did not apply a full Bonferroni correction, however, as we were interested in the overall pattern of results relating to the effects of culture and/or gender across a range of related dependent variables, rather than focusing on a single significant result (for a similar rationale for not employing a Bonferroni correction, see for example Rubin, Dennis, & Beckham, 2011). We believe that this approach represents a reasonable attempt to balance the risks of both Type 1 and Type II error.

Results

Goal Perception by Culture and Gender

Main effects of culture were found for Goal Control, Unhappiness Despite Achievement and Goal Distance. While the Scandinavians felt more in control of achieving their goal, the Middle Eastern participants expected that it would take longer to reach their goals and they

⁴ The variables “Powerful Others” and “Overlap between goals and future events” showed interactions between culture and gender, $p < .05$. Both findings supported the pattern of Middle Eastern men deviating from Middle Eastern women and Scandinavians of both sexes. “Unhappiness despite achievement” and “Goal commitment” showed main effects of gender $p < .05$.

estimated feeling more unhappy despite achieving them. One main effect of gender was found for Goal Distance. Men expected that it would take longer for them to reach their goals.

Unhappiness Despite Achievement and Goal Distance, were qualified by interactions between culture and gender. The Scandinavian sample showed no significant gender differences, and their scores were similar to the scores of the Middle Eastern women (all $ps > .25$).

Conversely, follow-up t -tests showed that, compared with Middle Eastern women, Middle Eastern men estimated that they would feel more unhappy despite achieving their goals $t(114) = 3.22, p = .01, d = .60$ ⁵, and that it would take longer to reach their goals $t(122) = 4.78, p = .001, d = .87$. Therefore, the Middle Eastern men deviated from the other groups of participants. Despite these effects of Unhappiness Despite Achievement, the analysis of expected Happiness Following Achievement showed no significant gender or cultural differences. This suggests increased ambivalence towards goals among Middle Eastern men, which is additionally supported by the fact that the Middle Eastern men showed a significant positive correlation between Unhappiness Despite Achievement and their Satisfaction With Life scores, $r(57) = .37, p = .004$, while the Middle Eastern women $r(59) = -.03$ and Scandinavian men $r(52) = -.04$ and women $r(71) = .08$ showed no association between these two variables ($ps > .51$).

Locus of Control by Culture and Gender

As predicted, the Middle Easterners scored significantly higher on both external dimensions, Powerful Others and Chance, while their scores were lower on the Internal scale compared with Scandinavians. Also as expected, a main effect of gender was found on the Powerful Other scale, with men scoring higher than women (Table 1). The main effect of Chance was qualified by an interaction between culture and gender. Follow-up t -tests showed that while no effects of gender was found in Scandinavia ($ps > .32$), Middle Eastern men scored

⁵ Degrees of freedom were depressed because equality of variance across both samples could not be assumed. This was likewise the case in other instances throughout the results section where the degrees of freedom in an analysis were smaller than would be expected from our n .

higher on the Chance scale than Middle Eastern women $t(117) = 2.78, p = .006, d = .51$. Taking into account the main effect of gender on the Powerful Other scale this indicated that Middle Eastern men perceive more external control in general.

Correlations between the internal and the external dimensions were conducted to explore whether there were differences across culture or gender in the association between the dimensions of locus of control. In support of the independent quality of Levenson's three dimensions (Levenson, 1981), women across cultures did not show significant correlations between the internal and either of the external dimensions ($p \geq .11$). Men, on the other hand, showed significant correlations but in opposite directions depending on culture: Scandinavian Men showed a negative association between their perception of internal and external control [Powerful Others $r(53) = -.33, p = .015$; Chance $r(53) = -.43, p = .001$], while Middle Eastern men showed a positive association [Powerful Others $r(53) = .29, p = .033$; Chance $r(57) = .30, p = .020$]. The correlations differed significantly for both Powerful Others, $p = .001$ and Chance, $p = .001$.

Cultural Differences in Goal Content

Overall, approximately half of the goals had content that reflected cultural norms as prescribed by the relevant cultural life script (Berntsen & Rubin, 2004; Ottsen & Berntsen, 2014). As expected, a greater proportion of goals represented cultural life script events in the Middle Eastern compared with the Scandinavian sample, and goal content matched significantly more future events in the Middle Eastern than in the Scandinavian sample (Table 1).

Table 2 gives an overview of the goals generated by the participants. All goals are divided by culture and gender and grouped by Cox and Klinger's (2000) categories of Life Areas (the categories participants reviewed before they filled out the Personal Concerns Inventory). Four cross-cultural life script categories (Ottsen & Berntsen, 2014) were mentioned as a goal: University, Job, Having Children, and Marriage. To examine potential cultural differences we

calculated the number of participants who had endorsed versus not endorsed a specific goal category. We then compared these frequencies in a 2 x 2 contingency table using Fisher's Exact tests⁶. Nineteen out of twenty-nine categories showed significant cultural difference, all p 's < .03 except: Job, university, high school, children, move, personal development, health, lose weight, friends and sports (Table 2). Middle Easterners mentioned goals with a relational focus more frequently, such as in the life area "Friends and Acquaintances", while goals in the life areas, "Education and Health", "Body and Life Style" were equally frequent across cultures. Different foci across cultures were revealed in the life area, "Partner, Family and Relatives". The goal, Marriage, was almost exclusively mentioned by Middle Easterners, whereas Scandinavians were more inclined to generate goals in the category Romantic Relationship (only three Scandinavians mentioned Marriage). Middle Easterners focused specifically on raising children while Scandinavian goals regarded family life as a whole, as illustrated by the different frequencies for these categories in Table 2. No cross-cultural difference was found in the goal of having children (Table 2). Not surprisingly, the most consistent cross-cultural differences in goal content were in the life area "Religion and Spiritual Matters". The Middle Easterners mentioned religious goals in three categories (Strengthen Religion, Hajj and Memorizing the Quran), whereas no Scandinavians mentioned any religious goals.

Gender Differences in Goal Content

We also conducted a series of chi square tests to examine potential gender differences in the goal categories. The Scandinavian data did not show any gender difference. In the Middle Eastern data five categories were primarily generated by one gender (significant gender differences are marked with ^a in Table 2). The goal, Marriage, was primarily mentioned by Middle Eastern men, $p = .001$; $\Phi = .32$. The Middle Eastern women focused more on life after

⁶ Fisher's exact test was used instead of chi-square because the expected cell count was less than five in approximately half of the analyses. Our core findings were identical across the two tests.

marriage: Raising Children, $p = .008$; $\Phi = .26$ and Good Spouse And Mother, $p = .006$; $\Phi = .26$. Middle Eastern women also had more interpersonal goals concerned with Strengthening Personal Relations, $p = .016$; $\Phi = .24$ and more religious goals concerned with Memorizing The Quran, $p = .032$; $\Phi = .22$. The latter effect probably reflects that it is mandatory for Muslim boys, but not for Muslim girls, to attend the Mosque weekly, in which Quran classes are often provided. Thus, Middle Eastern men are schooled to memorize the Quran early on in their childhood.

Discussion

Societal norms exert constant and powerful effects on locus of control and goal perception. Here we examined cultural influences on the perception of personal goals by having Middle Easterners and Scandinavians rate their perceived locus of control, generate goals and evaluate goal characteristics. Our integration of goal perception, locus of control and cultural life scripts represents a more comprehensive approach towards exploring effects of culture and gender on cognition than prior researchers have taken. We found main effects of both culture and gender, but the overarching finding was a pattern of interactions, all showing that Middle Eastern men deviated from Middle Eastern women and Scandinavians of both sexes.

Main Effects of Culture and Gender

Regarding locus of control, we predicted a replication of previous findings showing a higher score on perceived external control in Eastern compared with Western samples (Cheng et al., 2013). The Middle Easterners' high score on both the Powerful Others and the Chance scale confirmed this prediction, and is in line with Middle Eastern expectation that power is distributed unequally (Hofstede, 2001). In the opposite direction, and likewise as we expected, Scandinavians scored higher on both perceived internal control, and Cox and Klinger's (2000) measure of Goal Control, suggesting that these two variables tap into largely the same construct.

Overall, this supports our hypothesis that cultural differences in locus of control extend to goal perception and thus resemble how general control beliefs affect goal perception (Ajzen, 1991).

Also consistent with our predictions, a main effect of culture was found in the overlap between goal content and cultural life scripts, as well as between goal content and the events participants imagined happening in the future. More specifically the Middle Easterners showed greater adherence to cultural norms by generating more goals that corresponded with the content of the life script of their culture than did the Scandinavians, and we attained the parallel result regarding the overlap between goals and future events. Many of these main effects were qualified by interactions between gender and culture. These interactions will be discussed in greater detail in the following.

A Pattern of Interactions Driven by Middle Eastern Men

All interactions reflected the same pattern, with the Middle Eastern men deviating from the other groups. First, the Middle Eastern men generated the largest scores on the two external locus of control dimensions, Powerful Others and Chance, as well as on the Goal variables, Goal Distance and Unhappiness Despite Achievement ($p < .006$). On each of these variables the Middle Eastern men had higher ratings than the Middle Eastern women, while there was no significant gender difference in the Scandinavian sample ($p > .10$). Thus, consistent with our predictions, we found gender differences in the Middle Eastern sample, but not in the Scandinavian sample.

Concerning the Middle Eastern men's high estimation of Unhappiness Despite Achievement, goals imposed by others or suggested by social pressure often result in less well-being than goals set by the individual self (Klinger & Cox, 2011). Therefore, the Middle Eastern adherence to cultural norms, in combination with Middle Eastern men's increased perception of external control, might account for their high estimation of Unhappiness Despite Achievement. Previous studies conducted on Western samples have shown an association between

ambivalence towards goals and psychological distress (Emmons & King, 1988; Thomsen, Olesen, Schnieber, & Tønnesvang, 2014). However, in the current study Middle Eastern men's estimation of Unhappiness Despite Achievement correlated positively with Satisfaction With Life, while we did not find such an association for any of the other groups of participants. This suggests that the association between ambivalence and distress might not be as strong among Middle Eastern men. The finding that the personal goals of the Middle Eastern men extended further into the future than Middle Eastern women replicate a general tendency for men to imagine events that extend further into the future (Greene & Debacker, 2004) although this pattern was not seen in the Scandinavian sample. The absence of these differences in the current Scandinavian sample is most easily accounted for by the more gender-neutral socialization in Scandinavian countries. The cultural pressure to achieve goals that increase status before being considered an eligible bachelor is likely to weigh less heavily on men in more egalitarian societies compared to men in societies, where men are perceived as breadwinners and women as caretakers (Hofstede, 2001). As such the goal of marriage might extend further into the future in masculine societies. This is reflected in our finding. The Middle Eastern men were most likely to mention Marriage as a personal goal (Table 2).

The overall pattern we attained of the Middle Eastern men deviating from the rest of the sample is in accordance with Ottsen and Berntsen's (2015) finding that Middle Eastern men value the generative function when sharing imagined future events, compared with the other groups. The Middle Eastern men's frequent use of the generative function to guide the decisions and the goals of others also indicate a preoccupation with cultural norms and a tradition for sharing knowledge of how things should be done.

Internal versus External Locus of Control and Satisfaction with Life

One noteworthy aspect of our data is that, despite the Middle Eastern men's ambivalence towards their goals and the apparent societal pressure they feel to conform to cultural norms,

they nonetheless rated themselves as committed to achieving their goals and they had similar ratings for Satisfaction With Life as the other groups. This latter finding goes against prior results indicating that goals suggested by societal pressure often leads to less well-being (Baumann, Kaschel, et al., 2005; Sheldon & Elliot, 1999). A variety of cultural factors might combine to protect Middle Eastern men from feeling the distress that may otherwise be expected from this combination of ambivalence and societal pressure, thus ensuring their satisfaction with life.

First, as to the Middle Eastern men's reasonably high Satisfaction With Life despite their goal ambivalence, cross-cultural studies have found that there is a greater tolerance for internal contradictions in the Eastern worldview (Wang, Gould, & Hou, 2015). Therefore, emotions such as Happiness Following Achievement and Unhappiness Despite Achievement are likely to coexist with less discomfort in interdependent compared with independent individuals. The current study supports the idea that, at least among men, contradictions are not as distressing in the Middle East compared with Scandinavia.

Second, in addition to the Middle Eastern men's tolerance of mixed emotions, tolerance for internal contradictions was reflected in the locus of control measures. While women across cultures did not show an association between internal and external control, the Middle Eastern men showed a positive association between the two measures. This is in contrast to previous findings (Bernt, 1999; Brosschot, 1993; Christofer, 2009; Clarke, 2004; Levenson, 1974; Miner 1997, Walkey, 1979; Wilkenson, 2007). As with the Scandinavians in the present study, all participants in these prior studies showed neutral to negative associations between Levenson's two external dimensions and the internal dimension. Notably, these were all Western samples. To our knowledge, Hall, Joesting and Woods (1977) show the only other cross-cultural difference in the correlations between an external dimension (in their case, Chance) and Internal Control. They found a significant difference between the correlations for Caucasians, $r = -.15$,

and for African-Americans, $r = .13$ (Lefcourt, 1982). In the present study, the difference between Scandinavian and Middle Eastern men is more evident. Moreover, our findings regarding the Middle Eastern men are unique in that this represents, to our knowledge, the first report of a clearly significant positive correlation between measures of external control and internal control. We attained this positive correlation when correlating Internal Control with both the Chance, $r = .30$ and the Powerful Others, $r = .29$ dimensions of External Locus of Control. These findings contrast the assumptions in the original one-dimensional locus of control scale (Rotter, 1966) by indicating that, in some cultures, internal control is not perceived as being in opposition to external control. This is in line with the meta-analysis by Cheng et al. (2013) showing that external locus of control is less associated with distress in collectivistic cultures compared with individualistic cultures. Furthermore, this partially explains why Middle Eastern men in the current study reported similar levels of life satisfaction as the other groups, despite their higher levels of perceived external control.

Goal Content

As we noted above, the Middle Easterners showed greater adherence to cultural norms by generating more goals that corresponded with the content of the life script of their culture than did the Scandinavians. Adherence to cultural norms was also reflected in the specific content of the goals generated by the Middle Easterners. For instance, the cultural norm of being a Muslim was reflected in the Middle Easterners' frequent citation of religious goals, while the Scandinavians did not report any goals with religious content. The value of interdependence and relatedness found in collectivistic societies (Markus & Kitayama, 1991) was reflected in the high frequency of Middle Eastern goals with relational focus. Goals within the life area Partner, Family and Relatives reflected different societal norms regarding the relationship between men and women (Table 2, events marked in bold).

The analysis of goal content provided additional indication that the Middle Eastern men, in particular, identify the most with cultural norms and are most prone to internalize societal goals. For instance, similar to our findings regarding locus of control and goal perceptions, gender differences were only found in the personal goals of the Middle Easterners. Almost half of the Middle Eastern men (44%) mentioned Marriage as a personal goal. This was the case for only 15% of the Middle Eastern women, who were more focused on life after marriage, as seen in such goals as Raising Children and being a Good Spouse and Mother. In general, the Middle Eastern women's goals seemed to reflect a greater focus on interpersonal relations than the Middle Eastern men's goals – such as their citation of Strengthen Personal Relations as a goal. These gender differences in our Middle Eastern sample are consistent with studies showing that women have more interpersonal goals than men (Greene & Debacker, 2004, Sansone & Smith, 2000).

Limitations

The present study has several limitations. We chose university students as participants, partly because the Qatari society is a relatively closed society and access to participants is therefore difficult, and partly because it made the present studies comparable with previous studies (Greene & Debacker, 2004; Thomsen, Olesen, Schnieber, & Tønnesvang, 2014; Ottsen & Berntsen, 2014; Wang, Gould, & Hou, 2015). While this choice was well-motivated for the sake of cross-cultural comparison, the ensuing limited diversity of the sample with regard to age, wealth and educational level makes these samples less representative of each culture's general population. For the current study, a younger sample seemed ideal to draw out cultural differences in perception of goals. Young people potentially have a longer and more diverse future ahead of them, which provides more room to draw in different influences on imagining the future. Furthermore, the fact that we used a university sample means that our results probably understate the true differences across the two cultures we employed, since

university students tend to be more similar across cultures than general populations (Henrich, Heine & Norenzayan, 2010). Our samples differed across cultures in that the Scandinavian sample was primarily Danish, while only 61% of the Middle Eastern sample was Qatari. However, the majority of the Middle Eastern participants had been living in Qatar for most of their lives and they all shared a religious background through Islam. Therefore, we believe both samples can be taken as having a shared cultural background.

Conclusion and Future Directions

To sum up, we found a number of differences between the Middle Eastern and Scandinavian samples regarding their perception of goals, locus of control and adherence to cultural life scripts in the content of the goals. Gender differences on these dimensions were largely limited to the Middle Eastern sample. In general, Middle Eastern men deviated from Middle Eastern women and Scandinavians of both sexes with regard to their goal perception and perceived control. This was evident in a number of findings. For instance, Middle Eastern men were unique in demonstrating a positive association between internal and external locus of control, and they showed greater ambivalence regarding goal achievement than the other groups, but not reduced ratings of happiness following goal achievement, or reduced life satisfaction. Additionally, compared with the other groups, Middle Easterners showed greater overlap between personal goals and their generated future events. Goals were largely represented by life script events suggesting greater identification with cultural norms, and thus internalization of societal goals especially among Middle Eastern men.

Little is known about differences in goal perception between Western versus Middle Eastern cultures. The present findings help to fill this gap in the literature. At a more practical level, the current findings may inform research addressing the greater difficulty in integrating Middle Eastern men into Scandinavian societies compared with Middle Eastern women (Darvishpour, 2002; Khosravi, 2009; Asadulah, 2010).

References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Asadulah, N. (2010). Iranian diaspora: With focus on Iranian immigrants in Sweden. *Asian Social Science*, 6(11)
- Atance, C., & O'Neill, D. K. (2001). Episodic future thinking. *Trends in Cognitive Sciences*, 5(12), 533-539.
- Atran, Scott, Douglas L. Medin, and Norbert O. Ross (2005). "The cultural mind: environmental decision making and cultural modeling within and across populations." *Psychological review*, 112.4:744.
- Austin, J. T., & Vancouver, J. B. (1996). Goal constructs in psychology: Structure, process, and content. *Psychological Bulletin*, 120(3), 338-375.
- Bahry, L., & Marr, P. (2005). Qatari women: A new generation of leaders? *Middle East Policy*, 12(2), 104-119.
- Baumann, N., Kaschel, R., & Kuhl, J. (2005). Striving for unwanted goals: Stress-dependent discrepancies between explicit and implicit achievement motives reduce subjective well-being and increase psychosomatic symptoms. *Journal of Personality and Social Psychology*, 89(5), 781-799.
- Berntsen, D., & Jacobsen, A. S. (2008). Involuntary (spontaneous) mental time travel into the past and future. *Consciousness and Cognition*, 17(4), 1093-1104.
- Berntsen, D., & Rubin, D. C. (2002). Emotionally charged autobiographical memories across the life span: The recall of happy, sad, traumatic and involuntary memories. *Psychology and Aging*, 17(4), 636-652.
- Berntsen, D., & Rubin, D. C. (2004). Cultural life scripts structure recall from autobiographical memory. *Memory & Cognition*, 32(3), 427-442.

- Bertelsen, P. (2015). Danish preventive measures and deradicalization strategies: The Aarhus model. *Panorama*, 2015(1), 241-253.
- Bohn, A. (2010). Generational differences in cultural life scripts and life story memories of younger and older adults. *Applied Cognitive Psychology*, 24(9), 1324-1345.
- Bohn, A., & Berntsen, D. (2008). Life story development in childhood: The development of life story abilities and the acquisition of cultural life scripts from late middle childhood to adolescence. *Developmental Psychology*, 44(4), 1135-1147.
- Bohn, A., & Berntsen, D. (2011). The reminiscence bump reconsidered: Children's prospective life stories show a bump in young adulthood. *Psychological Science*, 22(2), 197-202.
- Charrad, M. M. (2011). Gender in the Middle East: Islam, state, agency. *Annual Review of Sociology*, 37, 417-437.
- Cheng, C., Cheung, S., Chio, J. H., & Chan, M. S. (2013). Cultural meaning of perceived control: A meta-analysis of locus of control and psychological symptoms across 18 cultural regions. *Psychological Bulletin*, 139(1), 152-188.
- Christopher, A. N., Saliba, L., & Deadmarsh, E. J. (2009). Materialism and well-being: The mediating effect of locus of control. *Personality and Individual Differences*, 46(7), 682-686.
- Clarke, D. (2004). Neuroticism: Moderator or mediator in the relation between locus of control and depression? *Personality and Individual Differences*, 37(2), 245-258.
- Cole, S. N., & Berntsen, D. B. (2016). Do future thoughts reflect personal goals? Current concerns and mental time travel into the past and future. *The Quarterly Journal of Experimental Psychology*, 69 (2), 273-284.
- Collins, K. A., Pillemer, D. B., Ivcevic, Z., & Gooze, R. A. (2007). Cultural scripts guide recall of intensely positive life events. *Memory & Cognition*, 35(4), 651-659.

- Cox, W. M., & Klinger, E. (2000). Personal concerns inventory (available from W. miles cox, school of psychology, university of wales, bangor, adeilad brigantia, penrallt road, gwynedd, LL57 2AS, UK).
- Cox, W. M., & Klinger, E. (2002). Motivational structure: Relationships with substance use and processes of change. *Addictive Behaviors*, 27(6), 925-940.
- D'Argembeau, A. (2016). The role of personal goals in future-oriented mental time travel. In K. Michaelian, S. B. Klein, & K. K. Szupnar (Eds.), *Seeing the future: Theoretical perspectives on future-oriented mental time travel* (pp. 199-214). New York, NY, US: Oxford University Press.
- D'Argembeau, A., & Mathy, A. (2011). Tracking the construction of episodic future thoughts. *Journal of Experimental Psychology: General*, 140(2), 258-271.
- Darvishpour, M. (2002). Immigrant women challenge the role of men: How the changing power relationship within Iranian families in sweden intensifies family conflicts after immigration. *Journal of Comparative Family Studies*, 33(2), 270-296.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227-268.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71-75.
- Du, H., & King, R. B. (2013). Placing hope in self and others: Exploring the relationships among self-construals, locus of hope, and adjustment. *Personality and Individual Differences*, 54(3), 332-337.
- Dyal, J. A. (1984). Cross-cultural research with the locus of control construct. In H. M. Lefcourt (Ed.), *Research with the locus of control construct* (pp. 209)
- Emmons, R. A. (1986). Personal strivings: An approach to personality and subjective well-being. *Journal of Personality and Social Psychology*. 51, 1058-1068.

- Emmons, R. A., & King, L. A. (1988). Conflict among personal strivings: Immediate and long-term implications for psychological and physical well-being. *Journal of Personality and Social Psychology*, 54(6), 1040-1048.
- Emmons, R. A. (1999). *The psychology of ultimate concerns: Motivation and spirituality in personality*. New York, NY, US: Guilford Press, New York, NY.
- Erdoğan, A., Baran, B., Avlar, B., Taş, A. Ç, & Tekcan, A. İ. (2008). On the persistence of positive events in life scripts. *Applied Cognitive Psychology*, 22(1), 95-111.
- Fivush, R., Habermas, T., Waters, T., & Zaman, W. (2011). The making of autobiographical memory: Intersections of culture, narratives and identity. *International Journal of Psychology*, 46(5), 321-345.
- Greene, B. A., & Debacker, T. K. (2004). Gender and orientations toward the future: Links to motivation. *Educational Psychology Review*, 16(2), 91-120.
- Gryzman, A., & Hudson, J. A. (2013). Gender differences in autobiographical memory: Developmental and methodological considerations. *Developmental Review*, 33(3), 239-272.
- Gryzman, A., Prabhakar, J., Anglin, S. M., & Hudson, J. A. (2013). The time travelling self: Comparing self and other in narratives of past and future events. *Consciousness and Cognition: An International Journal*, 22(3), 742-755.
- Janssen, S. M. J., & Rubin, D. C. (2011). Age effects in cultural life scripts. *Applied Cognitive Psychology*, 25(2), 291-298.
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences*, 33(2-3), 61-135.
- Hofstede, G. H. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations* (2nd ed. ed.). United Kingdom: Sage Publications Inc.
- Johannessen, K. B., Oettingen, G., & Mayer, D. (2012). Mental contrasting of a dieting wish improves self-reported health behaviour. *Psychology & Health*, 27(Suppl 2), 43-58.

- Johannessen, K. B., & Berntsen, D. (2010). Current concerns in involuntary and voluntary autobiographical memories. *Consciousness and Cognition: An International Journal*, 19(4), 847-860.
- Johnstone, D. B. (2004). The economics and politics of cost sharing in higher education: Comparative perspectives. *Economics of Education Review*, 23, 403-410.
- Khosravi, S. (2009). Displaced masculinity: Gender and ethnicity among Iranian men in sweden. *Iranian Studies*, 42(4), 591-609.
- Klinger, E. (1975). Consequences of commitment to and disengagement from incentives. *Psychological Review*, 82(1), 1-25.
- Klinger, E. (1977). *Meaning & void: Inner experience and the incentives in people's lives*. Minneapolis, MN, US: University of Minnesota Press, Minneapolis, MN.
- Klinger, E., Barta, S. G., & Maxeiner, M. E. (1980). Motivational correlates of thought content frequency and commitment. *Journal of Personality and Social Psychology*, 39, 1222-1237.
- Klinger, E., & Cox, W. M. (2011). *Motivation and the goal theory of current concerns* Wiley-Blackwell.
- Kronfol, Z., Ghuloum, S., & Weber, A. (2013). Country in focus: Qatar. *Asian Journal of Psychiatry*, 6(3), 275-277.
- Levenson, H. (1981). Differentiating among internality, powerful others, and chance. In H. M. Lefcourt (Ed.), *Research with the locus of control construct*. (1st ed., pp. 15-63). New York: Academic Press.
- Levenson, H. (1972). Distinctions within the concept of internal-external control: Development of a new scale. *Proceedings of the Annual Convention of the American Psychological Association*, 7(Pt. 1), 261-262.
- Levenson, H. (1974). Activism and powerful others: Distinctions within the concept of internal-external control. *Journal of Personality Assessment*, 38(4), 377-383.

- Lu, L., Kao, S., Cooper, C. L., & Spector, P. E. (2000). Managerial stress, locus of control, and job strain in Taiwan and UK: A comparative study. *International Journal of Stress Management*, 7(3), 209-226.
- Markus, H. R., & Kitayama, S. (1994). The cultural construction of self and emotion: Implications for social behavior. In S. Kitayama, & H. R. Markus (Eds.), (pp. 89-130). Washington, DC, US: American Psychological Association.
- Misra, G., & Tripathi, N. K. (1981). Need for approval and locus of control. *Journal of Psychological Researches*, 25(1), 21-23.
- Neugarten, B. L. (1996). *The meanings of age: Selected papers of bernice L. neugarten*. Chicago, IL, US: University of Chicago Press, Chicago, IL.
- Newby-Clark, I. R., & Ross, M. (2003). Conceiving the past and future. *Personality and Social Psychology Bulletin*, 29(7), 807-818.
- Ottsen, C. L., & Berntsen, D. (2014). The cultural life script of Qatar and across cultures: Effects of gender and religion. *Memory*, 22(4), 390-407.
- Ottsen, C. L., & Berntsen, D. (2015). Prescribed journeys through life: Cultural differences in mental time travel between Middle Easterners and Scandinavians. *Consciousness and Cognition*, 37, 180-193.
- Qatar General Secretariat for Development Planning. (2011). *Qatar national development strategy 2011-2016*. Doha, Qatar: Gulf Publishing & Printing Company.
- Rasmussen, A. S., & Berntsen, D. (2013). The reality of the past versus the ideality of the future: Emotional valence and functional differences between past and future mental time travel. *Memory & Cognition*, 41(2), 187-200.
- Rossier, J., Dahourou, D., & McCrae, R. R. (2005). Structural and mean-level analyses of the five-factor model and locus of control: Further evidence from Africa. *Journal of Cross-Cultural Psychology*, 36(2), 227-246.

- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied*, 80(1), 1-28.
- Rubin, D. C., & Berntsen, D. (2003). Life scripts help to maintain autobiographical memories of highly positive, but not highly negative, events. *Memory & Cognition*, 31(1), 1-14.
- Rubin, D. C., Berntsen, D., & Hutson, M. (2009). The normative and the personal life: Individual differences in life scripts and life story events among USA and Danish undergraduates. *Memory*, 17(1), 54-68.
- Rubin, D. C., Dennis, M. F., & Beckham, J. C. (2011). Autobiographical memory for stressful events: The role of autobiographical memory in posttraumatic stress disorder. *Consciousness and Cognition*, 20(3), 840-856.
- Ryan, R. M., & Kuczowski, R. (1994). The imaginary audience, self-consciousness, and public individuation in adolescence. *Journal of Personality*, 62(2), 219-238.
- Sansone, C., & Smith, J. L. (2000). The "how" of goal pursuit: Interest and self-regulation. *Psychological Inquiry*, 11(4), 306-309.
- Santiago, J. H., & Tarantino, S. J. (2002). Individualism and collectivism: Cultural orientation in locus of control and moral attribution under conditions of social change. *Psychological Reports*, 91(3,Pt2), 1155-1168.
- Schacter, D. L., Addis, D. R., & Buckner, R. L. (2008). Episodic simulation of future events: Concepts, data, and applications. *The year in cognitive neuroscience 2008* (pp. 39-60). Malden: Blackwell Publishing, Malden.
- Seginer, R. (1988). Adolescents' orientation toward the future: Sex role differentiation in a sociocultural context. *Sex Roles*, 18(11), 739.
- Shao, Y., Yao, X., Ceci, S. J., & Wang, Q. (2010). Does the self drive mental time travel? *Memory*, 18(8), 855-862.

- Sheldon, K. M., & Elliot, A. J. (1999). Goal striving, need satisfaction, and longitudinal well-being: The self-concordance model. *Journal of Personality and Social Psychology*, 76(3), 482-497.
- Sherman, A. C., Higgs, G. E., & Williams, R. L. (1997). Gender differences in the locus of control construct. *Psychology & Health*, 12(2), 239-248.
- Suddendorf, T., & Corballis, M. C. (2007). The evolution of foresight: What is mental time travel, and is it unique to humans? *Behavioral and Brain Sciences*, 30(3), 299-313; discussion 313-51.
- Thomsen, D. K., Olesen, M. H., Schnieber, A., & Tønnesvang, J. (2014). The emotional content of life stories: Positivity bias and relation to personality. *Cognition and Emotion*, 28(2), 260-277.
- Tulving, E. (2002). Episodic memory: From mind to brain. *Annual Review of Psychology*, 53(1), 1-25.
- Walkey, F. H. (1979). Internal control, powerful others, and chance: A confirmation of levenson's factor structure. *Journal of Personality Assessment*, 43(5), 532-535.
- Wang, Q., Gould, T., & Hou, Y. (2015). Is the future always brighter than the past? Anticipation of changes in the personal future after recall of past experiences. *Memory*, 23(2), 178-186.
- Wang, Q., Hou, Y., Tang, H., & Wiprovnick, A. (2011). Travelling backwards and forwards in time: Culture and gender in the episodic specificity of past and future events. *Memory*, 19(1), 103-109.
- Watson, D. C. (2011). Gossip and the self. *Journal of Applied Social Psychology*, 41(7), 1818-1833.
- Weisz, J. R., Rothbaum, F. M., & Blackburn, T. C. (1984). Standing out and standing in: The psychology of control in America and Japan. *American Psychologist*, 39(9), 955-969.
- Zieler, C. (2014). *KU er et kvindeuniversitet. UNI avisen, Københavns Universitet*. Retrieved

December 2014, from <http://universitetsavisen.dk/uddannelse/ku-er-et-kvindeuniversitet>

Table 1

Self-rated Measures and Content Measures by Culture and Gender

	Scandinavia				Middle East				Main Effects				Interaction	
	Females		Males		Females		Males		Culture		Gender		F	η^2_p
	M	SD	M	SD	M	SD	M	SD	F	η^2_p	F	η^2_p		
Goal Perception														
Goal importance	8.51	1.02	8.39	0.98	8.22	1.67	8.36	1.71	0.89	.00	0.00	.00	0.54	.00
Goal probability	7.42	1.24	7.41	1.20	6.90	1.84	7.17	1.84	3.74	.01	0.42	.00	0.49	.00
Goal control	8.03	1.29	7.92	1.36	7.18	1.50	7.72	1.81	7.56 **	.03	1.29	.01	3.02	.01
Knowing what to do	7.79	1.44	7.62	1.21	7.66	1.44	8.13	1.56	1.20	.00	0.68	.00	3.18	.01
Happiness following achievement	8.20	1.21	7.92	1.27	8.21	1.90	7.70	2.23	0.26	.00	3.42	.01	0.27	.00
Unhappiness despite achievement	2.82	1.82	2.37	1.63	3.00	2.42	4.63	3.19	16.67 ***	.06	3.97	.02	12.21 **	.05
Goal commitment	7.08	1.73	7.33	1.62	6.46	1.98	7.33	1.66	1.97	.01	6.37	.03	1.97	.01
Goal distance	5.43	1.58	5.37	1.75	5.40	1.62	6.80	1.65	11.33 **	.04	10.35 **	.04	12.24 **	.05
Locus of Control														
Internal	34.61	5.69	36.29	4.54	32.37	6.39	32.85	7.36	13.31 ***	.05	1.93	.01	0.59	.00
Powerful Others	18.74	7.64	19.98	5.81	20.21	10.49	26.44	10.41	12.17 **	.05	10.79 **	.04	4.79	.02
Chance	18.68	6.37	17.73	6.84	22.83	8.62	27.62	10.11	46.30 ***	.16	3.45	.01	7.75 **	.03
Overlap between:														
Goals and future events	0.27	0.24	0.21	0.21	0.33	0.29	0.39	0.30	12.92 ***	.05	0.01	.00	3.92	.02
Goals and life script events	0.49	0.24	0.45	0.25	0.56	0.29	0.60	0.30	10.03 **	.04	0.02	.01	1.25	.01
Satisfaction with Life														
SWLS	25.53	5.26	24.44	5.00	24.18	5.92	23.12	5.86	3.57	.01	2.33	.01	0.00	.00

Note. *df* range (1,236-248), ** $p < .01$, *** $p < .00$ (to avoid type 1 errors we have adapted a threshold of $p < 0.01$ for valid significance)

Table 2

Goal categories organized by Cox and Klinger's (2000) Life Areas and listed by % of participants in each group that mentioned the same goal

Life Area	Goal Category	Scandinavia (n=128)		Middle East (n=124)	
		Women	Men	Women	Men
Employment and Finances	Job	47	44	32	34
	^a Long trip (work/study abroad)	8	6	0	0
	^a Improve finances	11	9	0	0
	^a First house	0	0	0	8
Education and training	University and Graduation	58	60	58	68
	High school graduation	6	2	0	0
Partner, Family and Relatives	^a Marriage	4	0	15 ^b	44 ^b
	^a Romantic relationship	22	35	0	0
	Having children	16	6	10	5
	^a Raising children	0	0	16 ^b	2 ^b
	^a Family Life	12	6	0	0
	^a Good spouse and mother	0	0	13 ^b	0 ^b
	Move in with partner	4	4	0	0
	^a Stability in life	0	0	7	2
	^a Please parents	0	0	3	11
Religion and Spiritual Matters	^a Strengthen religion	0	0	19	16
	^a HAJJ - pilgrim fair	0	0	2	7
	^a Memorizing the Quran	0	0	13 ^b	2 ^b
Health, Body, and Life Style	Personal development	22	16	16	8
	Healthy lifestyle	16	15	11	10
	Lose weight	8	6	8	0
	^a Build better body	0	0	3	7
	^a Exercise	16	22	0	0
Friends and Acquaintances	^a Strengthen personal relations	0	0	18 ^b	3 ^b
	^a Influence society	0	0	11	10
	Friends	6	11	5	8
Hobbies, Pastimes, and Recreation	^a Travel	0	0	10	5
	Sports	8	7	2	10
	^a Long distance running	6	4	0	0
Other	Idiosyncratic goals	23	36	23	27

Note. Goal categories with significant cultural difference are marked ^a, p 's < .03; all Phi > .15

Goal categories with significant gender difference within culture are marked ^b, p 's < .03; all Phi > .22

Figure 1

Design of the study

