



Cognitive, Emotional and Behavioural Consequences of Child Abuse in Saudi Arabia

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Declaration

I, AHMED ALHOMEDI, declare that the PhD (Clinical Psychology) thesis entitled ‘Cognitive, Emotional and Behavioural Consequences of Child Abuse in Saudi Arabia’ this thesis contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due references has been made in the text. I give consent to the final version of my thesis being made available worldwide when deposited in the University’s Digital Repository, subject to the provisions of the Copyright Act 1868.

AHMED ALI ALHOMIDI

30th of November 2017

Dedications

All expressions of appreciation in the world are not enough to express my gratitude to all the people who have inspired and encouraged me during my journey in these postgraduate studies. Firstly, I dedicate this thesis to my family, my parents Ali & Latefa, my wife Ibtesam and my children Ali, Lenah, Rend and Lana. I also dedicate this to my brothers and sisters who supported me in every possible way through my graduate studies. I thank them for their incredible sacrifices that helped me achieve my life's dream. I hope that they are now proud of my achievement. Secondly, I dedicate this thesis to all my friends in Saudi and Australia, especially, Caroline Carey & Greg Noonan, who provided me with great support, and because of whom Australia now feels like a second lovely and safe home for me. Finally, I dedicate this thesis to all children, adolescents and their parents who shared their experiences with me and I salute all the health and educational professionals who devote themselves to ensure a safe environment for all children in Saudi Arabia.

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Executive Summary

Executive Summary

A strong body of research shows that child abuse history is associated with poorer developmental outcomes such as executive dysfunction, lower levels of intelligence and psychological ill health. However, the vast majority of studies have been carried out in Western countries, and little is known about the impact of abuse on children in the Middle East. Thus, the current thesis examined the impact of abuse on cognitive functioning, cortisol levels, psychological health, social support, and parenting disciplinary styles on a cross-sectional sample of school-aged Saudi children and adolescents. The thesis contains ten studies that are divided into two groups (each group comprises five studies). The primary sample consists of 104 school-aged Saudi children and adolescents (54 males) aged 9–15 years. The main aims of both the first and second studies were to compare two groups— children with a history of abuse ($n = 69$) and controls who had no history of abuse ($n = 36$)—with regard to measurements of executive functioning, psychological health, social support and trauma symptoms. The findings indicated that the non-abused group had a significantly higher level of intelligence than the abused group. Moreover, the findings of the first study indicated that the abused group exhibited poorer executive functioning skills than the control group. Further, even after controlling for IQ, there were significant differences between the groups with regard to the five main outcomes of executive functioning: attention (cognitive flexibility), working memory (spatial planning and spatial span length), self-control (response inhibition) and risk-taking behaviour. The findings from the second study showed that the abused group reported higher levels of trauma symptoms and lower levels of self-regulation, resilience, and psychological security than the control group, and they reported inadequate levels of social support.

The findings of these two studies identified a pattern of global dysfunction in cognitive functioning, psychological health and social support in the abused group. Based on these results, the scalar effects of abuse were examined. Accordingly, studies six and seven were

developed to explore such differences in executive functioning and psychological health within the abused groups. To obtain more clinical data on abuse, parental discipline styles were also explored. The sample included 69 children and adolescents (36 males, 33 females) aged 9–15 years. They were classified into two groups: high behavioural problems (High-BP; $n = 37$) and low behavioural problems (Low-BP; $n = 32$). The initial findings indicated that the Low-BP group had significantly higher levels of intelligence than the High-BP group. Furthermore, the findings of study six indicated that the High-BP group performed more poorly than the Low-BP group with regard to most of the primary outcomes of executive functioning. However, when IQ was controlled for, only response inhibition remained a statistically significant discriminator between the two groups. The findings of study seven indicated that the High-BP group reported higher levels of trauma symptoms and lower levels of self-regulation, resilience, and psychological security than the Low-BP group, and received inadequate levels of social support as well as experienced higher levels of negative maternal and paternal discipline styles.

The above findings were the basis for four more studies. First, the objective of both studies three and eight was to examine the explanatory power of psychological factors, such as abuse, trauma symptoms and social support, and cortisol levels on executive functioning. In study three, the whole sample of both abused and non-abused participants was included. The analysis resulted in four models of executive functioning. Abuse was a significant explanatory variable of executive functioning in all models, while psychological security was an explanatory variable of all executive functioning outcomes except risk-taking behaviours. Additionally, self-regulation was an explanatory variable for all executive functioning outcomes excluding response inhibition. Moreover, trauma symptoms were found to be an explanatory variable of spatial planning and response inhibition. Finally, resilience was found to be an explanatory variable of only spatial planning outcomes. Importantly, trauma symptoms explained the largest amount of variance in response inhibition, while abuse was the strongest

explanatory variable of risk taking. Interestingly, both abuse and trauma symptoms explained the largest amount of variance in spatial planning. Social support was not found to play a role in any of the models. Study eight included the abused group only. Only one model for spatial planning was produced. Importantly, negative maternal discipline styles replaced abuse as an explanatory variable in this analysis, along with resilience and self-regulation.

The objective of both studies four and nine was to examine the explanatory power of psychological factors such as abuse, trauma symptoms and social support, higher levels of cortisol and executive functioning for the outcome variables of resilience, self-regulation and psychological security. In study four, the whole sample, including both abused and non-abused participants, was included. The findings revealed that abuse and spatial planning were explained a significant amount of variance in all models of psychological outcomes. Response inhibition was an explanatory variable of both self-regulation and psychological security, whereas risk taking was an explanatory variable of both self-regulation and resilience. Additionally, trauma symptoms and social support were the explained most of the variance in psychological security, while abuse explained most of the variance in self-regulation and resilience. In study nine, including only the abused group, the findings indicated that abuse, trauma symptoms, both negative maternal and paternal discipline styles, spatial planning and response inhibition were explanatory variables of all psychological outcomes. Trauma symptoms, spatial planning and response inhibition were found to explain a significant amount of variance in psychological security. It was found that negative maternal discipline styles, social support and response inhibition were strong explanatory variables of self-regulation. Additionally, negative paternal discipline styles and spatial planning were the strongest explanatory variables of resilience.

Based on the outcomes of the previous studies, the explanatory power of all the variables were examined with reference to intellectual functioning (IQ). Thus, study five was conducted using the entire sample of abused and non-abused participants. The aim was to determine the predictive power of all psychological variables and cortisol as explanatory variables with regard to IQ. The analysis revealed three models for IQ. Overall, data in all the models indicated that abuse and trauma symptoms were associated with lower levels of IQ, while self-regulation, psychological security and social support were all related to higher levels of IQ. Moreover, the findings from all these studies led to the next study, in which the explanatory power of all the variables, including IQ, was examined as explanatory variables with regard to behavioural problems. Thus, study ten was carried using the abused group only. The analysis revealed five models of behavioural problems. Overall, data in all the models indicated that abuse, trauma symptoms, and both negative maternal and paternal discipline styles were all significant explanatory variables of higher levels of behavioural problems among children and adolescents with both higher levels of abuse and behavioural problems. Moreover, higher levels of IQ, better executive functioning, adequate social support, and higher levels of psychological wellbeing, as indicated by resilience, psychological security and self-regulation, explained a significant amount of variance in the expression of behavioural problems among children and adolescents. Most importantly, response inhibition was found to be a strong explanatory variable of behavioural problems. The overall findings are discussed in chapter five from the perspective of clinical implications and social sensitivities in the context of the Saudi culture and family system.

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Thesis Overview

Thesis Overview

Globally, child abuse has been identified as a major risk factor for the development of psychopathological conditions. Contemporary research has revealed that a history of childhood abuse is associated with many significant short- and long-term negative outcomes. For instance, childhood abuse has been associated with higher risks of delinquency and conduct problems (DePanfilis, 2006; Tarren-Sweeney & Hazell, 2006; Wolfe, Scott, Wekerle, & Pittman, 2001), low self-esteem, feelings of hopelessness and depression, self-harm behaviours and suicide (Arata, Langhinrichsen-Rohling, Bowers, & O'Brien, 2007; Bergen, Martin, Richardson, Allison, & Roeger, 2003; DePanfilis, 2006; Husain, 1990; Manly, Kim, Rogosch, & Cicchetti, 2001), irritability, agitation, eating problems, sleep difficulties, anxiety (Appleyard, Egeland, van Dulmen, & Sroufe, 2005; DePanfilis, 2006; McLeer et al., 1998), psychological trauma and posttraumatic stress disorder (Beers & De Bellis, 2002; Chu & DePrince, 2006; van der Kolk, 2003), lower levels of intelligence (Carrey, Butter, Persinger, & Bialik, 1995; De Bellis, Hooper, Spratt, & Woolley, 2009; Nolin & Ethier, 2007), and significant problems in many aspects of executive functioning such as working memory and self-control (Augusti & Melinder, 2013; Frechette, 2015; Nolin & Ethier, 2007).

Contrary to the research mentioned in the previous paragraph, other research has shown that some children and adolescents with a history of abuse do not exhibit negative outcomes as a function of childhood abuse. For instance, McGloin & Widom (2001) indicated that 22% of young adults showed acceptable levels of well-being, as indicated by their resilience, despite their history of childhood abuse. Moreover, Spilsbury et al. (2008) reported that only 18% of children with a history of abuse exhibited externalising problems, and that 11% demonstrated both externalising and internalising problems. In this context, several researchers suggest that protective factors such as intelligence, positive relationships with caregivers, secure attachment and self-regulation skills may facilitate resilience after abuse incidents (Atwool, 2006; Masten

& Reed, 2002; McGloin & Widom, 2001; Salzinger, Feldman, Rosario, & Ng-Mak, 2011; Sapienza & Masten, 2011). For example, Sapienza & Masten (2011) emphasised that internal factors such as intellectual functioning, self-regulation, and positive self-perception are associated with better developmental outcomes among children who have experienced adversities and disadvantages. Similarly, Masten & Reed (2002) pointed out that child intelligence, emotion regulation, parenting style, safe neighbourhoods and good schools are all associated with more positive outcomes for children who live in high-risk environments. Other researchers have stressed the role of attachment security for positive outcomes. For instance, Atwool (2006) refers to attachment theory to explain resilient functioning in children who have faced adversities such as abuse and trauma. She argues that attachment relationships provide the context for the development of later parent-child relationships, cognitive development and the capacity for self-regulation skills. She claims that these individual capacities are based on the quality of an individual's attachment experience. Therefore, according to Atwool (2006), the quality of attachment is crucial for the four primary domains correlated with resilience, personal characteristics, family support, and positive relationships with adults or agencies in the context, and culture. She insists that such personal characteristics may not develop in a child in the absence of a good supportive relationship with at least one adult in a way that they feel loveable and worthy (Atwool, 2006).

Undoubtedly, the realisation that the impact of child abuse can be mitigated by psychosocial factors is a critical argument for research on the outcomes of child abuse that can increase our understanding of key factors that may facilitate good developmental outcomes. Literature in the field of psychology indicate that secure attachment (Cook et al., 2005; Howe & Parke, 2001), effective self-regulation (Bradley, Jarrett, & Ollendick, 1994; Sapienza & Masten, 2011), psychological wellbeing as indicated by resilience (Cicchetti & Rogosch, 1997; Luther & Cicchetti, 2000) and adequate social support (Bradley et al., 1994; Walsh, 2007) are

associated with beneficial outcomes such as better executive functioning, high or average levels of intelligence, and lower levels of behavioural and emotional problems in children with a history of abuse. However, the majority of studies on the impact of abuse on child development have been conducted within a Western context, and very few studies have been conducted in the Middle Eastern context. This is a significant gap in the literature, as child-rearing practices vary greatly between countries. Almuneef & Al-Eissa (2011) report that the issues of child abuse and neglect are now coming under the limelight in the Kingdom of Saudi Arabia. In their study, they stated that it is very important to initiate abuse prevention programs in Saudi rather than to respond to incidents of abuse after they have occurred. They claimed that Saudis' views and attitudes concerning child abuse need to be changed from the roots (Almuneef & Al-Eissa, 2011). One approach to tackle this issue is to spread awareness about the implications/consequences of child abuse. With this background, the aim of the current thesis was to address a significant cultural gap in the research and social knowledge available on the impact of abuse on the developing child by conducting a study of the outcomes of child abuse in Saudi Arabia. This thesis includes ten studies that aim to explore the cognitive, social and psychological outcomes of child abuse. A deeper, culturally appropriate understanding of the impact of child abuse on Saudi children will increase awareness and knowledge among parents and educators about the importance of children's rights. This will help enhance people's consciousness about the importance of child abuse prevention, which in turn will influence child welfare.