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Harsh parenting and encouragement from parents during childhood: Long-term effects on well-being, mental health, and major illness

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Journal of Personality and Social Psychology

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**Harsh parenting and encouragement
from parents during childhood:
Long-term effects on well-being, mental health, and major
illness**

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A thesis submitted to the University of Plymouth in partial fulfilment of the
requirements for the degree of
Doctor of Philosophy
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Supervisor:
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Abstract

This thesis examines long-term, negative consequences of various behaviours characteristic of negative parenting styles, specifically verbal maltreatment (insulting children), physical maltreatment (beating or hitting children), and lack of encouragement. Psychological scales were employed to explore the relationship of each of these factors to mental and physical health in adults. As a part of this research, a new questionnaire, the Arabic Parenting Style Questionnaire (APSQ), was developed and compared with existing measures.

Seven separate studies were conducted with Saudi Arabian participants in order to investigate the questions put forth in this thesis. To explore the impact of harsh parenting and emotional discouragement, the relationships of these variables to mental and physical health were examined in both non-clinical and clinical samples including both men and women and a broad range of ages (19 to 60 years).

Findings indicate that parents' discouraging their children from expressing thoughts and feelings, and parents' being verbally and physically harsh towards their children, are both powerful risk factors for a broad array of long-term health outcomes in both clinical and non-clinical samples. Various aspects of the individuals' childhood relationships with their parents, as measured using the new APSQ, are significantly correlated with the following health- and wellness-related variables in adulthood: quality of life as assessed on the Global Quality of Life Scale (GQLS), health complaints as assessed using the Minor Health Complaints Questionnaire (MHCQ), well-being mood state, life satisfaction as assessed with the Life Satisfaction Scale (SLS), depression, Chronic Fatigue Syndrome, Borderline Personality Disorder, and specific physical diseases (asthma, cancer, heart disease).

Table of Contents

Chapter 1	21
Child abuse, abusive parenting, and their consequences for mental and physical health.....	21
1.1 Introduction.....	21
1.1.a Defining and identifying child abuse	25
1.2 Types of abuse	27
1.2.a Physical abuse	27
1.2.b Emotional abuse.....	27
1.2.c Neglect	28
1.3 Assessment of child abuse	29
1.3.a Medical and hospital records.....	29
1.3.b Government statistics.....	36
1.3.c Interviews and self-reports.....	37
1.4 Reports of abuse and the potential for false memories.....	38
1.5 Negative, harsh, or abusive parenting styles.....	43
1.6 The focus of the current research.....	45
Chapter 2	48
Child abuse and Saudi Arabia.....	48
2.1 Culture in Saudi Arabia.....	48
2.2 Prevalence of child abuse in Saudi Arabia.....	49
2.3 Attitudes towards child abuse and parenting practices in Saudi Arabia	58
2.4 Summary of abuse and its relationship to outcome in Arab countries.....	59
2.5 Conclusion	61

Chapter 3	63
Theories explaining the relationship between child abuse/abusive parenting and health outcomes.....	63
3.1 Explaining the impact of early experience on health.....	63
3.1.a The Barker hypothesis.....	63
3.1.b Infornet theory	64
3.1.c Cognition and psychological health	66
3.1.d Attachment theory.....	67
3.2 Long-term consequences of child abuse and maltreatment	67
3.2.a Effects on mental health.....	81
3.2.b Effects on physical health	83
3.2.c Effects on medically unexplained symptoms and functional diseases...	83
3.3 Explaining disease	84
Chapter 4	86
Overview of the thesis	86
Chapter 5	88
Study 1: Saudi Arabians' perspectives on the determinants of good and bad Behaviour.....	88
Abstract	88
5.1 Introduction.....	89
5.2 Methods.....	89
5.2.a Rationale	89
5.2.b Participants.....	90
5.2.c Recruitment	90
5.2.d Procedures	91
5.3 Qualitative analyses	92

5.3.a Religion	92
5.3.b Parent-Child Relationship.....	95
5.4 Discussion	97
Chapter 6	99
Study 2: Development and Psychometric Analysis of the Arabic	
Parenting Style Questionnaire (APSQ) for use in Saudi Arabia.....	99
Abstract	99
6.1 Introduction.....	100
6.2 Existing questionnaires	101
6.2.a Parent as respondent.....	102
6.2.b Child as respondent.....	102
6.3 Methods.....	105
6.3.a Participants	105
6.3.b Scale development	106
6.4 Methods.....	109
6.4.a Participants	109
6.5 Analyses	109
6.6 Scoring and use of the questionnaire	117
6.6.a Correlations of the APSQ's three subscales.....	118
6.6.b Reliability.....	119
6.7 Discussion	120
Chapter 7	121
Study 3: Comparison of the APSQ and PAQ as predictors of overall	
quality of life and personality	121
Abstract	121
7.1 Introduction.....	122

7.2 Methods.....	122
7.2.a Participants.....	122
7.2.b Recruitment.....	123
7.2.c Measures.....	123
7.2.d Translation of Scales.....	124
7.3 Results.....	125
7.3.a Sample characteristics.....	125
7.3.b Reliability.....	127
7.3.c Correlational Analyses.....	128
7.4 Discussion.....	130
Chapter 8	132
Study 4: The relationship between the APSQ and health outcomes in a normal Saudi Arabian sample	132
Abstract.....	132
8.1 Introduction.....	133
8.2 Methods.....	133
8.2.a Participants.....	133
8.2.b Recruitment.....	133
8.2.c Measures.....	134
8.2.d Scale Translation.....	135
8.3 Results.....	136
8.3.a Sample characteristics.....	136
8.3.b Reliability of the APSQ subscales.....	137
8.3.c Correlational Analyses.....	139
8.4 Determination of which version of the APSQ to use in future studies.....	142
8.5 Discussion.....	143

Chapter 9	144
Study 5: Does the child APSQ predict health outcomes in Saudi individuals with addictions?	144
Abstract	144
9.1 Introduction	145
9.2 Methods	146
9.2.a Participants	146
9.2.b Recruitment	146
9.2.c Measures	147
9.2.d Scale Translations	147
9.3 Results	147
9.3.a Sample characteristics	147
9.4 Examination of study 5 participants with addictions	149
9.5 Discussion	151
Chapter 10	155
Study 6: Relationship of harsh parenting practices and lack of expression to later mental health symptoms in Saudi Arabian individuals with addictions	155
Abstract	155
10.1 Introduction	157
10.2 Methods	159
10.2.a Participants	159
10.2.b Procedures	160
10.2.c Measures	160
10.2.d Modification of the child APSQ	160
10.2.e Scales Translation	162
10.3 Results	163
10.3.a Sample characteristics	163

10.4 Discussion	167
Chapter 11	169
Study 7: Childhood parent-child relationships as predictors of adult asthma, cancer, and heart disease	169
Abstract	169
11.1 Introduction	170
11.2 Methods	171
11.2.a Participants	171
11.2.b Recruitment	171
11.2.c Measures	172
11.2.d Scale Translations	172
11.3 Results	172
11.3.a Sample characteristics	172
11.3.b Internal consistency of the measures	174
11.3.c Comparison of the control group with patients with asthma, heart disease, and cancer	175
11.3.d Binary Logistic Regression	178
11.4 Discussion	181
Chapter 12	184
General discussion	184
12.1 Introduction	184
12.2 Development of the APSQ	185
12.3 Relationship between APSQ subscales and physical health, mental health, and well-being	189
12.4 Discussion	192
12.5 Limitations	194

12.6 Implications.....	197
12.7 Recommendations for future research	199
12.8 Conclusion	200
Appendices	201
References	228

List of Tables

Table 1.1 Child Maltreatment: Assessment Methodologies	31
Table 2.1 Research examining the level of child abuse and maltreatment in Arab countries.....	52
Table 3.1 Three Areas of Impact: Parenting Behaviour and Child Maltreatment in General Literature (Western).....	68
Table 5.1 Study 1 sample characteristics	90
Table 5.2 Interview guide questions for discussion of each positive life technique	92
Table 6.1 The 10 original items on the Arabic Parenting Style Questionnaire (APSQ).....	107
Table 6.2 Seven additional items added to the APSQ	108
Table 6.3 Did your parents keep something (e.g., a stick) for beating you?	110
Table 6.4 Factor analysis (PAF) of the child APSQ	112
Table 6.5 Factor analysis (PAF) of the adult APSQ.....	113
Table 6.6 Structure matrix resulting from factor analysis (PAF) of the 10-item child APSQ.....	115
Table 6.7 Structure matrix resulting from factor analysis (PAF) of the 10-item adult APSQ	116
Table 6.8 The APSQ final item set organized by factor	117
Table 6.9 Frequency of parental behaviour: Questionnaire response options	117
Table 6.10 Participants' Responses	118
Table 6.11 Correlations between the subscales of the child APSQ.....	119
Table 6.12 Correlations between the subscales of the adult APSQ.....	119
Table 6.13 Internal consistency of the child APSQ subscales.....	119
Table 6.14 Internal consistency of the adult APSQ subscales.....	119
Table 7.1 Rates of smoking and level of education in men and women	125

Table 7.2 Father's and Mother's Education in men and women	126
Table 7.3 Study 3: Comparison of study variables across men and women.....	127
Table 7.4 Internal consistency of the adult APSQ subscales and PAQ subscales	128
Table 7.5 Correlations between the APSQ subscales and the PAQ parenting styles	128
Table 7.6 Correlations between the APSQ subscales and the GQLS	129
Table 7.7 Correlations between the PAQ subscales and the GQLS	129
Table 7.8 Correlation of the APSQ subscales with the BFI personality traits....	130
Table 8.1 Sample characteristics.....	136
Table 8.2 Father's and mother's education in men and women.....	137
Table 8.3 Internal consistency of the child and adult APSQ subscales	138
Table 8.4 Study 4: Comparison of study variables across men and women.....	139
Table 8.5 Correlation of the APSQ subscales with the GQLS, SLS, and PANAS	140
Table 8.6 Correlation of the child APSQ with the MHCQ.....	141
Table 8.7 Correlation of the of inflammation to infection and the child APSQ subscales	141
Table 8.8 Correlation of corresponding subscales on the child and adult APSQ	142
Table 9.1 Sample characteristics of male addicts	147
Table 9.2 Differences in sample characteristics between non-addicts and addicts	148
Table 9.3 Non-addicts and Addicts: Comparison of APSQ and outcome variables	149
Table 9.4 Reliability statistics for the child APSQ	150
Table 9.5 Correlation of child APSQ subscales and MHCQ subscales among substance abuse addicts.....	150

Table 9.6 Correlation of the child APSQ with the SLS, the PANAS, and the GQLS	151
Table 9.7 Comparing APSQ responses between non-addicts and addicts.....	154
Table 10.1 Items included in the new Punishment Predictability subscale	161
Table 10.2 Sample characteristics: Marital status and smoking	163
Table 10.3 Sample characteristics and mental health variables.....	163
Table 10.4 The internal consistency of the child APSQ subscales.....	164
Table 10.5 Correlation of APSQ subscales with MHCQ infection and inflammatory symptoms	165
Table 10.6 Correlation of the child APSQ with later depression, Positive Affect and Negative Affect (PANAS), and physical and mental fatigue (CFS).....	165
Table 10.7 Multiple regression models predicting Negative and Positive Affect	166
Table 10.8 Correlation of the child APSQ subscales with scores on the BPDS.	166
Table 10.9 Multiple regression model predicting BDP from APSQ subscales ..	167
Table 11.1 Sample characteristics.....	173
Table 11.2 Father's and Mother's education in men and women	174
Table 11.3 Internal consistency of the child APSQ subscales.....	174
Table 11.4 Internal consistency of the PANAS	174
Table 11.5 Comparison of samples with regard to diagnoses, sex, smoking, and marital status	175
Table 11.6 Sample characteristics divided by diagnosis and educational level .	176
Table 11.7 Comparison of patient groups to healthy group.....	177
Table 11.8 Correlation of APSQ subscales and PANAS.....	177
Table 11.9 Logistic regression for predictors of individuals with asthma versus healthy group	179
Table 11.10 Logistic regression for predictors of individuals with cancer versus healthy group	180

Table 11.11 Logistic regression for predictors of individuals with cardiac health problems versus healthy group.....	181
Table 12.1 Summary of the aims of each study.....	184
Table 12.2 Samples and variables assessed in each study.....	186
Table 12.3 Internal consistency (Cronbach's alpha) of the child APSQ across all studies.....	187
Table 12.4 Final item set included in the APSQ.....	187
Table 12.5 Mean scores on APSQ subscales.....	189
Table 12.6 Summary of the correlation between the child APSQ subscales and other scales used in each study.....	190
Table 12.7 Multiple regression models using APSQ subscales to predict outcomes.....	195

List of Figures

Figure 3.1 Informent mechanism	65
Figure 6.1. Scree plot associated with factor analysis of the 16-item child APSQ	111
Figure 6.2 Scree plot associated with factor analysis of the 16-item adult APSQ	112
Figure 6.3 Scree plot of the factor analysis (PAF) of the 10-item child APSQ..	114
Figure 6.4 Scree plot of the factor analysis (PAF) of the 10-item adult APSQ..	116

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Finally, I dedicate not only this thesis to my parents, but I would like to present my life to them in vast appreciation of what have done for me; they have given me so much of their own lives. With all the obstacles and challenges on the road to earning my Ph.D., I am delighted to see my dream become real. Still, I think it is not the end of the journey, but rather a beginning step in making a real contribution for the new generation.

AUTHOR'S DECLARATION

This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

STATEMENT 1

This thesis is the result of my own independent work/investigation, except where otherwise stated. Other sources are acknowledged by footnotes giving explicit references. A bibliography is appended.

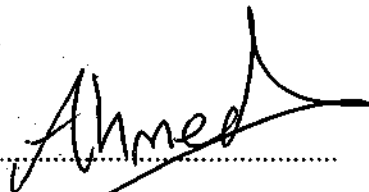
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Chapter 1

Child abuse, abusive parenting, and their consequences for mental and physical health

1.1 Introduction

Relationships and experiences during childhood are important to human development because those relationships and experiences lay the foundation for later growth and development (Kelly, Zuckerman, & Rosenblatt, 2008). According to one of John Bowlby's classic ideas (1960, 1991), positive early interactions between children and their primary caretakers promote favourable conditions for the healthy development of interpersonal relationships, cognitive abilities, and self-regulation of affect. The importance of caretaker-child (or parent-child) relationships has been emphasized by research finding that social behaviour, interpersonal expectations, and affect regulation abilities are all impacted by early relationships (e.g., Alink, Cicchetti, Kim, & Rogosch, 2009; Fonagy, Gergely, Jurist, & Target, 2002; Kelly et al., 2008). In addition to these particular skills, parent-child relationships have long-lasting consequences. Depending on the nature of the parent-child relationship, the consequences may be positive or negative. For example, the relationship may prevent or promote the development psychiatric symptoms, especially anxiety and depressive symptoms (e.g., Lima, Mello, & Mari, 2010). Maltreatment during childhood is a substantial risk factor for later psychological problems (e.g., Alink et al., 2009; Cicchetti & Toth, 2005).

Child abuse and maltreatment have occurred through-out recorded history (e.g., Al-Eissa, 1998) and continue to occur in all regions of the world (e.g., Johnson, 2000; Malley-Morrison, 2004), including United States (US; e.g., Johnson, 2000), the United Kingdom (UK; e.g., Glaser, 2005), Eastern Europe (e.g., Lewis et al., 2004), India (e.g., Sharma & Gupta, 2004), Africa (e.g., Lachman, 1996), Lebanon, and Saudi Arabia (e.g., Malley-Morrison, 2004). Several researchers (e.g., Doek, 1991; Finkelhor & Korbin, 1988) and international organizations (e.g., World Health Organization [WHO], UNICEF) now recognize child abuse and maltreatment as international issues. The short- and long-term negative consequences of child abuse and maltreatment impact not only individuals, but families and societies. In the short-term, child abuse and maltreatment are concerning because they cause physical harm (e.g., bruising and other injuries to the skin, Swerdlin, Berkowitz, & Craft, 2007; head injuries, Cheung, 1999;

broken bones, failure to thrive, Gothard, Runyan, & Hadler, 1985) and even death (e.g., Glaser, 2005; Johnson, 2000; Crume, DiGiuseppi, Byers, Sirotnak, & Garrett, 2002), and they may also be considered violations of children's rights (e.g., UNICEF, 2009).

Child abuse has a negative impact not only on the individual children who are abused, but for society in general (Sullivan & Knutson, 1998). Societies must also often carry the additional burden of financial expense for frequent hospital visits made by victims and former victims of abuse, who tend to seek medical attention more often than individuals without histories of abuse (Sharma & Gupta, 2004). Social implications including increased violence outside the family have been associated with child abuse and other forms of family violence (e.g., Aba-Alrgosh, Almaghloth, Albishr, Almokaid, & Alenezi, 2002). In particular, the cycle of violence and the continuing occurrence of domestic violence worldwide are noteworthy; the negative impact of domestic violence is unquestionable. Early exposure to abuse and violence are risk factors for continuing the cycle (e.g., Finkelhor & Dzuiba-Leatherman, 1994; Malinosky-Rummell & Hansen, 1993). Specifically, exposure to violence and aggression, including being the target of aggression and witnessing violent behaviour in the home, are associated with an increased likelihood that the child will be involved in domestic violence as an adult (Ronan, Canoy, & Burke, 2009). However, childhood abuse is a risk factor for, not a certain determinant of, individuals' becoming abusive parents. The majority of individuals who are abused as children do not go on to abuse their own children (Kaufman & Zigler, 1989).

Many countries (Sweden, e.g., Finkelhor & Dzuiba-Leatherman, 1994; Iceland, e.g., Malley-Morrison, 2004; the US and Canada, Melton, 2005) have identified at least some forms of the abuse and maltreatment of children as criminal acts. However, the answer to the question of what constitutes abuse and what constitutes normal and appropriate parenting practices is not clear. Culture (e.g., Finkelhor & Dzuiba-Leatherman, 1994; Malley-Morrison, 2004) and individual attitudes, experiences, and perspectives (e.g., Herzberger & Tennen, 1985a, 1985b) have an impact on whether an individual believes that a specific behaviour should be considered abuse. Some countries (e.g., Sweden) have made corporal punishment (e.g., spanking) illegal, whether at home, school, or elsewhere, identifying the prohibited forms of physical punishment as physical abuse (Finkelhor & Dzuiba-Leatherman, 1994). Other countries (e.g., Iceland) have made it illegal for schools and institutions to use corporal

punishment, but have not banned parents' use of such forms of punishment (e.g., Malley-Morrison, 2004). These different laws for parents and for other institutions (e.g., schools) indicate that the parent-child relationship is still viewed as unique.

For the study of child maltreatment, parenting, and the impact of early parent-child relationships, Saudi Arabia is of interest for several reasons. First, recent cultural changes in Saudi Arabia suggest greater attention is being granted to the issue of how children are treated. In a recent newspaper article, Dr. Mansour Alnezeha, director of Taibah University, stated that 45% of children in Saudi Arabia are subjected to domestic violence (Al-Nozha, 2011). In Saudi Arabia, family and parent-child relationships have been considered particularly private (e.g., Malley-Morrison, 2004), but this view may be changing. In the past decade, popular reports and media in Saudi Arabia have noted the Saudi medical and security communities' attention to the rate and social implications of various forms of domestic violence, including but not limited to child abuse (see Aba-Alrgosh et al., 2002). In addition, Dr. Hoda Kattan, a nationally known female paediatrician in Saudi Arabia, has gained attention from researchers and academics and has called for the establishment of guidelines to assist medical professionals in dealing with possible cases of child abuse (Kattan, 1994). As discussed in later chapters, various community and governmental programs have been developed with the goal of protecting and assisting children. Second, some parenting behaviours that might be considered abusive in other cultures are considered normal or even promoted in Saudi Arabia. For example, corporal punishment continues to be a standard parenting practice and is deemed acceptable in Saudi Arabia (e.g., Malley-Morrison, 2004). Parents often control their children's behaviour by yelling at or verbally abusing the children, exhibiting parenting behaviours that may be considered harsh or abusive to individuals from Western cultures. Third, relatively little is actually known about day-to-day parenting styles and behaviours in Saudi Arabia. Specifically, the prevalence of abusive parenting and the impact of behaviours considered abusive are unknown in Saudi Arabia (e.g., Al-Eissa, 1998; Kattan, 1994). Al-Eissa (1998) and Kattan (1994) have even noted that the perspectives of professionals (e.g., physicians) may make it difficult to gain an accurate count of the number of children who have suffered abuse, because some physicians believe that parents cannot maltreat their own children. Fourth, the simple number of children in Saudi Arabia makes their welfare a topic of interest. The vast majority – 70% in 2002 (Malley-Morrison, 2004) – of the population

of Saudi Arabia is under the age of 18 years, and so the vast majority of the country is children.

The purpose of this thesis is to investigate the long-term impact of Saudi Arabian individuals' childhood experiences with their parents on the individuals' well-being, mental health, and physical illness. The impact of parent-child relationships and negative or harsh parenting styles, not only the behaviours severe enough that they would be easily or universally acknowledge as abuse, are of interest. Although the behaviours considered to fall within the definition of "abuse" differ from culture to culture, child abuse generally carries a stigma which (as discussed below) may impact whether the abuse is reported. If abuse-related behaviours are decoupled from the label "child abuse," it may be easier for individuals to discuss or report the prevalence of abuse-related behaviours. Consider asking an individual, "So, how often did your parents abuse you as a child?" Contrast that question with, "How often did your parents yell at or criticize you?" or, "Did your parents often encourage you to express your thoughts and feelings?" Asking questions such as the two latter also casts a larger net. There are many variations of parenting styles, not only abusive and non-abusive. When questions such as these examples are used, participants can talk about their parents' negative and potentially detrimental behaviours without the participants' necessarily agreeing or labelling the behaviours as negative (and without the participants' needing to label their own parents as abusive).

In order to address the research questions posed in this thesis, a culturally appropriate measure of negative parenting styles was needed. As part of this thesis, the Arabic Parenting Style Questionnaire (APSQ) was developed to assess negative parenting styles and specifically for use in Saudi Arabia and other gulf countries. The development of the scale drew on measures and research from existing research literatures. In addition, a new, open-ended survey of Saudi Arabian individuals was used to gain insight into the issue from their perspectives (see chapter 6). The final APSQ includes items addressing the frequency with which children were treated harshly (e.g., verbally insulted, physically beaten) by their parents as well as encouragement of children's expressing their thoughts and feelings, all from the adult children's perspectives.

In subsequent studies presented in chapters 7 through 12, the APSQ was administered to samples that varied in terms of diagnosed psychological and physical health problems in order to address research questions regarding the long-term health impact of negative, abusive, and non-supportive parenting styles. Specifically, responses to the APSQ were examined among samples of the general public, Saudi Arabian students, individuals in Saudi Arabia diagnosed with substance abuse addictions, and individuals in Saudi Arabia undergoing treatment for medical conditions (e.g., cancer, heart disease, asthma).

1.1.a Defining and identifying child abuse

When initially considered, child abuse may seem simple to define, but what constitutes abuse is impacted by individual experiences and intimately tied to societal and cultural norms. For example, in a study designed to test the popular belief that child abuse is transmitted from generation to generation, Herzberger and Tennen (1985a) found that American college students who reported having experienced moderate and severe physical and emotional punishments (e.g., being spanked, hit with a belt, insulted, rejected) in their own childhoods rated those behaviours as less severe, more appropriate, and less abusive than did student who did not report having experiences such punishments. That is, individuals who had been punished in ways that might popularly be considered as “abuse” in American culture did not identify those punishment behaviours as abusive and may, indeed, have viewed the behaviours as appropriate. The individuals’ histories are likely to have impacted their own view of behaviours as abusive or not abusive.

Cultural and professional perspectives on what constitutes “abuse” and abusive parenting practices have also changed over time. Through the course of the 20th century, the stance of American paediatricians moved from considering corporal punishment as morally sanctioned, to viewing it as a means of controlling behaviour, to considering it to be physical abuse (Evans & Fargason, 1998). Similarly, in a review of the Dutch judicial child protection system’s records from 1960 to 1995, Komen (2003) found that physical punishments were met with considerably more condemnation in the 1980s and 1990s than in earlier records from the 1960s and 1970s.

What constitutes child abuse, maltreatment, and negative or abusive parenting? When is a parent's behaviour harsh, and when it is abusive? Is spanking a common and acceptable punishment for a small child, or is it physical abuse? When is yelling at a child typical parenting, and when is it abusive? What constitutes emotional abuse? When Kempe, Silverman, Steele, Droegemueller, and Silver (1962) drew attention to the issue of child abuse nearly 50 years ago, they described "battered child syndrome". The title alone suggests that the initial definition of abuse was focused on physical abuse, or battering. Over the course of the last 50 years, child abuse has become more broadly recognized, and child maltreatment – not just physical abuse – has garnered attention. The issues of child abuse and maltreatment are impacted by cultural norms, but that is not to say that child abuse is only culturally relative; absolute standards have been suggested (e.g., Finkelhor & Korbin, 1988).

Under the broad umbrella of "child abuse" are a tremendous variety of behaviours to which children fall victim. Chase (1975) categorized these behaviours as physical abuse, emotional abuse, and physical neglect. Today, there is general agreement in the research literature and across disciplines, including psychology and medicine, as to the categories of child abuse: physical abuse, sexual abuse, emotional abuse, and neglect (e.g., Finkelhor & Korbin, 1988; Glaser, 2005; Gothard et al., 1985; Lewis et al., 2004; McCoy & Keen, 2009). Despite the widespread use of these categories and terms, there are no broadly adopted definitions for each type of abuse. Different research studies have adopted different definitions of these terms and operationalised the terms differently, making comparison across studies difficult (Cicchetti & Manly, 2001). In addition, not all studies examine all the different types of abuse (e.g., some may focus on only emotional abuse or only physical abuse) or distinguish among the different types of abuse (e.g., studies may talk generally about abused children). Nevertheless, there is general agreement as to the types of behaviour or treatment that fall into each abuse category. For purpose of the current work, the types of abuse are defined as discussed below.

1.2 Types of abuse

1.2.a Physical abuse

Any deliberate physical injury inflicted upon a child by an adult is generally considered physical abuse; one primary criterion for determining if physical abuse has occurred is whether a physical injury has been inflicted. In a survey conducted in the US, Gil (1970) noted that children identified as the victims of abuse suffered bruises and welts, abrasions, lacerations, bone and skull fractures, burns, and other wounds. According to Kattan (1994), child physical abuse can be “in the form of hitting, cutting, bruising, imprisonment, attacks of a sexual nature, or strangling and so on” (p. 2). However, physical abuse may also occur without apparent physical injury, or without the physical injury being noted or identified. In Saudi Arabian culture, parenting behaviour and abuse are considered private matters.

Sexuality is a taboo subject that is not discussed in Arab cultures. The combination of the private nature of family life in Saudi Arabia and the fact that sexuality is a socially unacceptable topic for discussion makes the study of child sexual abuse particularly challenging. In addition, child sexual abuse is difficult to study because it is complex to define and is controversial even in those studies that have been published. There is no single, specific, practical definition for child abuse. Rather, the definition differs from culture to culture and country to country. In Saudi Arabia specifically, there is no research about sexual child abuse, and what might be considered abuse in Western countries might not be in Saudi Arabia.

1.2.b Emotional abuse

Emotional abuse, because it is not visible in physical, concrete indicators, may be more difficult to define and to identify. Emotional abuse includes behaviours that cause emotional and psychological harm and that are distinguishable from physical abuse and neglect, although emotional abuse often co-occurs with other types of abuse (e.g., Kent & Waller, 2000; Spertus, Yehud, Wong, Halligan, & Seremetis, 2003). Many of the behaviours that are considered emotionally abusive are verbal, including shaming, humiliating, ridiculing, blaming, and yelling (e.g., Kattan, 1994; Finkelhor & Korbin, 1988). Parents might, for example, tell children that they are worthless, that the parents wish the children were dead or wish they had never been born (e.g., Cawson, Wattam,

Brooker, & Kelly, 2000). Emotional abuse has also been defined to include exposing children to violence between parents (e.g., Trocmé, Fallon, MacLaurin, & Neves, 2005) and withholding of warmth, comfort, and love from the child (e.g., Perris et al., 1986). The long-term impact of emotional abuse may, in some cases, be more serious than the long-term consequences of physical abuse. Emotional abuse may lead to adjustment and emotional problems later in life (e.g., Emery, 1989; Grusec & Walters, 1991; Wolock & Horowitz, 1984).

Although there is some consensus in defining emotional abuse (and maltreatment), these types of abuse are multi-faceted and complex. According to Moeller and Bachmann's (1993) review of the literature, six distinct categories of abusive treatment have begun to emerge through research. The six categories are (1) chronic denigration of the child's qualities, capacities, desires, and emotional expressiveness; (2) isolation; (3) terrorizing (threats to kill or abandon the child); (4) subjecting a child to excessive age-inappropriate demands; (5) subjecting the child to viewing extreme inter-parental violence; and (6) denial of services to a seriously emotionally handicapped child. Of note is the fact that Moeller and Bachmann (1993) present one of very few analyses to identify belittling or denigrating children's expression of their own emotions as a form of abuse.

1.2.c Neglect

In addition to maltreating children by inflicting harm (e.g., hitting, criticizing), maltreatment may also take the form of neglect. Neglect is defined as failure to meet a child's basic needs, including food, housing, clothing, and medical care (e.g., Kattan, 1994; Leeb, Paulozzi, Melanson, Simon, & Arias, 2008). Neglect has been expanded to include neglect of children's emotional needs and emotional well-being (e.g., Glaser, 2005) and the children's educational needs (e.g., Kattan, 1994). Neglect can be intentional, or may occur due to parents' ignorance about their children's needs or because the parents are incapable of meeting the children's needs due to the parents' own mental health challenges or disabilities (Finkelhor & Korbin, 1988). Children may appear neglected if the parents lack the resources (e.g., money) to meet their children's needs, but Finkelhor and Korbin (1988) argue that these parents should not be considered neglectful because to label them as such is to re-victimize them (i.e., coupling low resources and socio-economic status with a label as neglectful).

1.3 Assessment of child abuse

Various studies of child abuse and maltreatment have adopted not only different definitions of abuse, but they have also used a wide variety of assessment methods. The variation in these methodologies makes the comparison across studies challenging. For example, it cannot be assumed that different measures tap into or assess each variable in the same way, even if the variables are labeled and described similarly across various assessment instruments. A challenge to comparing child abuse, neglect, and maltreatment reports is that information is rarely presented with enough detail that researchers can account for data collection issues and how those issues might impact the measurements (e.g., Fallon et al., 2010). In addition, as Fallon et al. (2010) and others note, many incidents of abuse and neglect are never admitted or reported.

Nonetheless, each of the different assessment methods has its own advantages and disadvantages, making each method an effective choice in certain circumstances. Three common sources of information about the type, frequency, and incidence of abuse that children experience are (1) medical and hospital records; (2) statistics collected by governmental agencies such as Child Protective Services; and (3) individual interviews and self-reports, either from children or from adults who may report retrospectively.

1.3.a Medical and hospital records

Medical and hospital records of child abuse are created when a child who has incurred abuse is seen by a medical professional who identifies physical or other signs of abuse, documents those indicators as signs of abuse, and who may diagnose the child as a victim of abuse. Potential strengths of this type of assessment include the potential for documentation (e.g., photographs) of signs of abuse, clinical examinations for additional indicators of abuse, the possibility of observing sequentially developing physical and emotional signs of abuse during routine exams, and physicians' capacity to identify indicators of abuse based on overall knowledge of biomedical and physiological systems (Lane & Dubowitz, 2009). Many paediatricians have been found to report discomfort with mandatory reporting and might shy away from reporting suspected abuse, but their comfort level with identifying and diagnosing abuse can be increased through specialized training (e.g., Lane & Dubowitz, 2009; Reece & Jenny, 2005).

There are many opportunities for victims of abuse to fall through the cracks of the medical system. First of all, children who have been abused may not be brought to the hospital or examined by a medical professional. If the children are brought in for treatment or examination, doctors and other medical professionals may fail to document signs of abuse for any number of reasons. Paediatricians in the US have reported being uncomfortable and having low levels of confidence in their ability to diagnose abuse, and fear of ramifications if a diagnosis is inaccurate (for discussion, see Lane & Dubowitz, 2009). In Saudi Arabia specifically, physicians might resist diagnosing child abuse or neglect because they do not think parents can maltreat their own children, they may have inadequate training to identify abuse, they may not feel they can be certain of the diagnosis and want to avoid undue stigma for the family, and they may face personal and legal risks if the diagnosis is inaccurate (e.g., Al-Eissa, 1998; Kattan, 1994). Cases of abuse might also go undiagnosed if doctors are not adequately trained in recognizing non-physical signs of abuse (e.g., behaviour).

Table 1.1. Child Maltreatment: Assessment Methodologies

Study	Research topic(s)	Location	Sample	N (male, female)	Avg. Age	Abuse or Maltreatment		Findings	Comments	
						Subtype	Assessment		Strengths	Weaknesses
Medical and hospital records										
Lane & Dubowitz (2009)	Paediatricians' perception of their own experience, comfort, and competence dealing with child maltreatment.	US	American Academy of Pediatrics members (doctors)	147 (46%, 54%)	44 years	physical abuse, sexual abuse, neglect	Self-report questionnaire	Physical abuse: 97 paediatricians reported at least one suspected case (78 had expert available; 50 referred to expert), 57.6% felt competent to evaluate; Sexual abuse: 83 reported at least one suspected case (74 had expert available; 54 referred to expert), 30.6% felt competent to evaluate; Neglect: 92 reported at least one suspected case (69 had expert available; referred 39% of cases), 50.4% felt competent to evaluate. Paediatricians expressed a need for additional training and expert consultants.	Takes into account the issue of paediatricians' training and approach to evaluating and reporting abuse.	Does not include information regarding accuracy in diagnosing abuse or the relationship between feelings of competence and actual competence
Government statistics										
English et al. (2005)	Children's exposure to adult-to-adult domestic violence in child maltreatment reports.	Washington (state), US	1-year cohort of all cases reported to Child Protective Services in the state of Washington	2,000 (sex not reported)	not reported	exposure to adult-to-adult domestic violence	CPS records and associated documentation (case activity, narrative interviews)	domestic violence was indicated as present in 20% of cases referred to CPS, 38% of cases investigated, and 47% of moderate to high risk cases.	Large sample size	Limited to individuals referred to CPS. The random sample of 2,000 CPS cases is not representative of the entire sample of individuals in the CPS because the 2,000 were selected based on severity of abuse.

Fallon et al.(2010)	Evaluation of approaches used to determine the extent of reported child maltreatment in Canada and the US	Canada, US	study compares national survey methodology	n/a	n/a	CIS-2003: Physical abuse (5 types), sexual abuse (8); emotional maltreatment (3), neglect (8), exposure to domestic violence; NIS-3: Physical abuse, sexual abuse (3), emotional abuse (4), neglect (3 types: physical, emotional, educational), other; NCANDS: Physical abuse, sexual abuse, neglect, medical neglect, psychological maltreatment, other	Canada: Canadian Incidence Study of Reported Child Abuse and Neglect 2003 (CIS-2003: survey coded by child abuse investigators), US: National Incidence Study 1993 (NIS-3: submitted by CPS workers and child welfare sentinel, recoded by evaluative coders), National Child Abuse and Neglect Data System. (NCANDS: from automated systems)	NIS can detect children not reported to a CPS because it includes reports from sentinels. NCANDS and CIS include a "suspected" level of verification for non-confirmed but concerning cases.	National data. Standardized survey results can be compared from survey to survey (within each system). Data can inform policy.	Data are not independently verified. Most data depend on child being reported to system.
Trocmé & Bala (2005)	summary of the characteristics associated with intentionally false reports of child abuse and neglect within the context of parental separation	Canada (51 child welfare service areas)	7,672 investigations of child abuse	not reported (cases, not individual children, are specified)	not reported	physical abuse, sexual abuse, neglect, emotional maltreatment	Canadian Incidence Study of Reported Child Abuse and Neglect 1998 (CIS-1998; first national study of investigated child abuse and neglect cases conducted in Canada)	135,574 child maltreatment investigations were conducted in Canada in 1998, a rate of 21.58/1,000 children. 43% substantiated; 23% suspected by not substantiated; >31% cases are unsubstantiated; 4% intentionally fabricated (typically neglect). Professionals and service providers reported >65% of cases; schools and police report most of remainder.	Large, national sample in a variety of socio-economic situations	Due to the structure of the CIS data, the data included for this study are standardized (no narratives)

Trocmé, Fallon, MacLaurin, & Neves (2005)	Investigating a doubling of abuse reports between 1993 and 1998	Ontario, Canada		44,800 investigations in 1993, 64,800 in 1998	not reported	OIS 1993: 17 forms in 4 categories (physical abuse, sexual abuse, neglect, emotional maltreatment); OIS 1998: Similar to OIS 1993 with 6 new forms.	Ontario Incidence Study from 1993, 1998	OIS-1993: 44,800 investigations (12,300 substantiated; 13,7000 suspected); OIS-1998: 64,800 investigations (24,400 substantiated; 14,300 suspected). Increase of 5.6 (OIS-1993) to 10.3 (OIS-1998) per 1,000 children.	Large sample, OISs allow for reporting 3 kinds of abuse per case/child.	Types of abuse and number of types of abuse that can be reported are limited by the instruments used in the OIS.
Zellman (1990)	Decision-making processes of individuals required to report suspected child maltreatment	15 states in the US	mandated reporters	1,196 reporters – e.g., social workers, childcare providers, doctors	not reported	physical abuse, sexual abuse, neglect	Questionnaire addressed reporting behaviour using hypothetical vignettes to address physical abuse, sexual abuse, neglect	Mandated reporters weigh potential efficacy in making decisions; reporters must balance potential to do harm.	Strives to examine the factors that impact reporting of abuse (crucial to understanding statistics overall)	Self-reports of likely behaviour may not be the same as actual behaviour

Interviews and self-reports

Edwards & Forman (1989)	children's use of anatomically correct dolls, drawings, or verbal descriptions in communicating abuse-related information	Dade County, Florida, US	girls assumed to have not been sexually abused based on lack of report, lack of treatment; 27 Caucasian, 14 African-American, 4 Latina	45 (100% female)	9-10 years	Report of educational information about sexual abuse	Participants shown a 12-minute video on sexual abuse, then asked to retell what they remembered	Individuals using dolls or drawings gave more information, but difference was not significant	Multiple racial groups	Included girls only (girls are more frequently reported as targets of sexual abuse); results may not generalize to boys. Assumption of lack of abuse. Vignettes that were included in the educational video were potentially traumatic.
Finkelhor, Hotaling, Lewis, & Smith (1990)	first national survey of adults regarding childhood sexual abuse	US (all 50 states)	Randomly selected (phone numbers randomly generated) US sample	2,626 (1,145 men, and 1,481 women)	range 18-60+	Sexual abuse	Los Angeles Times Poll, a retrospective phone interview of adults	27% of women, 16% of men reported having been sexually abused as children. Living in unhappy families was a risk factor for both men and women.	National sample of both men and women; demographically representative of the US.	24% refusal rate for the survey. Unknown if a pattern characterizes those who refused to take part. Screening questions regarding sexual abuse are not very detailed; sexual abuse may not be well-defined.

Moeller & Bachmann (1993)	Rates of childhood abuse; association of childhood abuse with adult physical and psychological health problems.	US (all 50 states)	gynecology clinic patients (668 of 1,108 patients who were sent surveys); predominantly Caucasian (92.5%), middle class, and college educated	668 women	mean 33.6 yrs; range 16-76 yrs	physical abuse (termed "physical contact"), sexual abuse ("sexual contact"), emotional abuse.	8-page, self-administered, mail-back questionnaire. Questions addressed family history, physical and psychological health, and childhood stressful events and abuse	53% reported childhood abuse; 28.9% reported 1 type of abuse; 18.7% 2 types; 5.4% all 3 types. Race, education, employment status, number of offspring, and sexual preference did not differ significantly between subject reporting abuse and not. Women abused as children reported significantly more hospitalizations for illnesses, more physical and psychological problems, lower overall health ratings. More childhood abuses were associated with worse health as an adult. Test-retest reliability (N=30) was high.	Large, non-clinical sample.	Sample limited to only middle class women seeking gynecological care only; results may not generalize to other samples.
Winegar & Lipschitz (1999)	Reliability and validity of adolescent psychiatric patients' reports of abuse	US	adolescents in an inpatient unit in a state psychiatric facility; 48% Latino, 42% African-American, 5% Caucasian, and 5% Asian or other	71 (34 males, 37 females)	14.7 +/- 1.6 yrs; range 11.1 to 18.3 years	physical abuse, sexual abuse, exposure to home violence	Traumatic Events Questionnaire-Adolescent Version (TEQ-A)	Psychiatrically hospitalized adolescents' self-reports of maltreatment concur with best-estimates. Rates of agreement varied -- sexual abuse: 88% (kappa = .75); physical abuse: 83% (kappa = .65); witnessing home violence: 75% (kappa = .49). Maltreatment disclosure was not significantly influenced by gender, age, educational level, or ethnicity	Responses compared with a "best-estimate" source consisting of data from child protective service and police reports, medical records, and clinician interviews.	Unknown if data would generalize to situations of more mild or unsubstantiated abuse, or generalize to other ethnicities (sample largely Latino).

Wood, Orsak, Murphy, & Cross (1996)	Child and interviewer behaviours within semi-structured interviews with children suspected of being victims of sexual abuse	US	28 (50.1%) preschoolers aged 2-5 yrs (9 boys; 19 girls); 27 (49.1%) school-aged 6-11 yrs (8 boys; 19 girls)	55 (17 boys (30.9%); 38 girls (69.1%))	Mean = 5.7 yrs (SD = 2.3)	Sexual abuse	Child Abuse Interview Interaction Coding System (CAIICS) – 55 videotaped interviews	No meaningful differences in between boys' and girls' behaviour. Assumption that a credible disclosure of abuse must include child displaying was not supported. Preschoolers and school-aged children showed behavioural differences. Girls and school-aged children judged as more credible. Leading behaviours from interviewer were not found to be related to ratings of credibility.	Real-world, ecologically valid study of actual interviews. Adequate inter-rater reliability of child and interviewer behaviours (e.g., anger, disclosing information).	Interviews considered credible vs. not credible, but interviews labeled as not credible include those in which the child gave no disclosure, denied sexual abuse, refused to cooperate, or gave insufficient information.
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1.3.b Government statistics

In some countries (e.g., the US, Melton, 2005; Canada, Fallon et al., 2010), reporting of suspected child abuse is legally mandated. In these and other countries, public and government programs for the protection of children keep records regarding the maltreatment of children. One advantage to systems such as these is that a variety of professionals who come in contact with children, including doctors, teachers, and other childcare workers, serve as points of contact with children and are required to report abuse. This means that children do not necessarily need to be taken to a doctor for medical treatment in order for physical signs of abuse to be observed and reported. In addition, non-physical signs of abuse, such as acting out or frequently missing school, might be noticed, reported, and investigated. Another advantage is that a very large number of individuals who are victims of abuse can be identified. In the five years between 1993 and the date of their report in 1998, Wang and Daro (1998) noted that the official number of child maltreatment cases reported to authorities in the US was approximately three million per year. The number of substantiated cases, the subset that were investigated and verified, was approximately one million per year, or one case per 70 children (Wang & Daro, 1998). More recently, in 2007 child protective services in the US found that approximately 794,000 children were victims of abuse or neglect (US Department of Health and Human Services, 2009).

Despite these strengths, one clear disadvantage of the use of protective service records to estimate the incidence of abuse and maltreatment and to gain information about maltreatment types is that between half and four-fifths of all victims of child maltreatment and abuse are thought to go unreported (e.g., Bolen & Scannapieco, 1999; Green, 1988; Sedlak & Broadhurst, 1996). Though well-intentioned, many of the world's child protective service agencies – including those in the US and Canada – are over-burdened (Melton, 2005). As a consequence of agencies' being over-burdened, not all cases of abuse reported to child protective services in the US and Canada are investigated, and so reported cases may be unsubstantiated (Sedlak & Broadhurst, 1996; Trocmé et al., 2005). In addition, the process of deciding whether or not to report an incident of suspected abuse is not infallible. Some individuals may be more prone to reporting than others (Zellman, 1990).

Failure to document multiple types of abuse that co-occur when one child is subjected to different types of abuse (e.g., physical abuse and neglect), in addition to failure to

report multiple targets of abuse (i.e., multiple children) within a family also mean that forms and incidence of maltreatment may be underestimated even among children whose abuse is reported (e.g., English et al., 2005; Fallon et al., 2010). Furthermore, a related challenge to using statistics from child abuse and neglect reports is that they are rarely presented with extensive detail regarding exact definitions of abuse, details of the events that occurred, or how the data were collected. This lack of detail means that maltreatment statistics may vary widely, but how they vary and if they vary systematically (e.g., across types of abuse) is impossible to determine (Fallon et al., 2010).

1.3.c Interviews and self-reports

Interviews regarding experience of child abuse and maltreatment may be conducted with children in a variety of settings (e.g., hospitals, mental health facilities, schools), with adults regarding their own childhoods (e.g., in mental health facilities), or with the parents of children suspected of being abused. Interviews remain a common method of gathering information regarding potential allegations of abuse, even sexual abuse (Wood, Orsak, Murphy, & Cross, 1996). In addition, self-report questionnaires in which respondents answer multiple-choice or open-ended questions may be used to gather information.

Interviews and questionnaires both afford the advantage of allowing examiners, medical practitioners, or researchers to ask about abuse that may not be associated with visible indicators (e.g., emotional abuse, verbal abuse, some forms of neglect). A research study utilizing the Traumatic Events Questionnaire-Adolescent Version (TEQ-A) in an inpatient psychiatric setting found that responses to the self-report questionnaire were consistent with other forms of data collection, such as medical reports, even when used with patients who exhibited serious emotional and behavioural difficulties (see Winegar & Lipschitz, 1999). Studies such as this one indicate that questionnaires may be an efficient way of gathering valid and reliable information, though the results may not generalise to other samples.

When using questionnaires to assess incidence of abuse and maltreatment in a broader population, issues of self-report and questionnaire response rates must be taken into account. Finkelhor (1994) found variation in response rates from 48 percent to 99

percent. In retrospective studies using questionnaires and surveys, typically 25 percent or more of the individuals sampled fail to respond (Finkelhor, Hotaling, Lewis, & Smith, 1990; Haugaard & Emery, 1989). Unfortunately, it cannot be assumed that the sample of individuals who respond to a questionnaire is representative of the population as a whole if the participants self-select into the sample. Gorey and Leslie (1997) have found that people choose to take part in studies in which they identify with the problem or issue that is being studied, and so individuals who consider themselves to have been abused may choose to complete a questionnaire and individuals who have not may opt not to take part in the study.

Despite potential weaknesses, interviews and questionnaires continue to be particularly valuable in that they are, at times, the only possible method for collecting information, particularly if it is retrospective. Retrospective studies are considered a means of obtaining information on a broader range of persons (more than the small percentage who come into contact with authorities), but the validity of these results is dependent on the accuracy of early memories and reporting (Moeller & Bachmann, 1993). The process of recalling events and experiences is a complex one, and there are issues to take into consideration when asking an adult to recall childhood and when asking a child to recall and relate his or her experience. Individuals' memories are vulnerable to suggestion such that an individual may believe he or she recalls an experience that has been hinted at or otherwise discussed by a researcher, therapist, protective services officer, or any other individual. Children's memories may be particularly vulnerable to suggestion, but the relationship between age and suggestibility is not necessarily consistent or well understood (Ceci, Ross, & Toglia, 1987; Edwards & Forman, 1989; King & Yuille, 1987; Loftus & Davies, 1984) and therefore cannot be easily taken into account.

1.4 Reports of abuse and the potential for false memories

Effects of human memory must be considered when assessing child abuse through any means other than direct observation or inspection of physical wounds that are unambiguously the result of physical abuse. The reporting of abuse involves recalling and communicating memories, irrespective of whether an individual is explaining how he or she incurred an physical injury, sharing details of past abuse or maltreatment, completing a self-report questionnaire, or taking part in an interview. In psychology, there is a history dating back over 100 years (e.g., James, 1890; Münsterberg, 1908) of

studying not just the fact that memory is fallible, malleable, and suggestible, but the precise circumstances that impact memory (for discussion see Pope, 1996). Specifically, individuals' accounts of their observations and experiences have been found to be susceptible to (1) social influences (see de Rivera, 1997); (2) dissonance reduction and the desire to maintain a consistent self-concept (e.g., Aronson, 1995); (3) information gained after the event (e.g., Bird, 1927); (4) emotional significance such that memories that have emotional significance, such as John F. Kennedy's assassination in the US, are often erroneous or error-ridden (e.g., Winograd & Neisser, 1992); and (5) affect (e.g., negative affect, Joormann, Teachman, & Gotlib, 2009; depression, Yeh & Hua, 2009; stress, trait anxiety, and depression, Roberts, 2002).

In the context of child abuse, issues of memory are at the center of highly contentious issues. One controversy has centered on whether False Memory Syndrome exists. False Memory Syndrome has been defined as a condition in which a person strongly believes in a memory of a traumatic experience (e.g., child sexual abuse) that is objectively false. Often, the memories associated with False Memory Syndrome are recovered through work with a psychotherapist (de Rivera, 1997). Whether there is adequate evidence to claim scientific basis for False Memory Syndrome has been questioned by many researchers (e.g., Pope, 1996; de Rivera, 1997; Dallam, 2001; Kaplan & Manicavasagar, 2002), and claims about the ease with which extensive autobiographical memories may be implanted has caused great concern (e.g., Pope, 1996). Of direct, practical consequence is the concern that allegations of abuse may be false, because such allegations are devastating to individuals and their families (de Rivera, 1994, 1997). On one hand, research has demonstrated that children rarely confabulate stories of having been abused (e.g., Goodwin, Sahd, & Rada, 1978; Thoennes & Tjaden, 1990). On the other hand, memory is known to be fallible, there exist studies of individuals who claim to have recovered memories only later to retract their claimed memories (de Rivera, 1997), and child abuse offenders have convincingly argued that they are innocent (Dallam, 2001).

In the specific context of child abuse, how and how easily is memory influenced? In general, the evidence is mixed but researchers agree that the creation of entirely false memories does not happen easily (for a review, see Lindsay & Read, 1994). Inaccurate memories of childhood are more often characterized by the forgetting of negative experiences that did occur than by remembering negative experiences that never

actually happened (Brewin, Andrews, & Gottlib, 1995). Two main factors are believed to influence the likelihood of an individual's reporting a false memory: (1) the strength of suggestive influences and (2) the perceived "plausibility" of the suggested event (Lindsay, 1998). For example, a suggestion of childhood abuse is considered more likely to be true if made by someone who could have witnessed the event (e.g., a sibling) rather than by someone who could not have witnessed the event (e.g., a therapist, Pezdek, 1994). Other researchers (e.g., Olio, 1994; Berliner & Williams, 1994) point out that implanting memories of a single, isolated event does not prove that memories for a generally traumatic childhood can be created in patients who have no history of trauma, and that memories of childhood abuse are unlikely to be implanted in individuals' whose family lives were generally healthy (de Rivera, 1997). The potentially implanted memories may seem plausible because they are similar to actual memories for individuals whose childhoods were generally negative or traumatic, but are less likely to be adopted or accepted as true by individuals whose childhoods were generally positive.

Experimental research has attempted to identify the boundary conditions under which false memories can be created. Porter, Yuille, and Lehman (1999) reported success in getting 56 percent of research participants to report memories of at least some aspects of a false stressful event (e.g., dog attack) – 26 percent "recovered" a memory, and another 30 percent reported recalling some aspects of the experience. The researchers used extensive suggestive techniques (guided imagery, repeated questioning) and told participants that the situation had been witnessed and reported by a parent. Using similar techniques, Pezdek, Finger, and Hodge (1997) were successful in getting only three of 20 adult participants to "recall" false memories that they had been lost in shopping malls as children (a relatively common experience), but were unable to induce false memories of rectal enemas during childhood (less common, and more similar to sexual abuse).

The specific impact of maltreatment and abuse on memory is a developing research topic, and conclusions should be considered tentative (Goodman, Quas, & Ogle, 2010). However, Goodman et al. (2010) do point to trends in the research. Specifically, except in cases of severe abuse that causes damage to the brain, there is little evidence that maltreatment is associated with changes in basic memory processes. Nonetheless, just as the validity of self-reports and interviews should always be considered, validity in the

context of a retrospective report of childhood experience among individuals who may have experienced abuse must be considered.

For information regarding accuracy of reports of abuse, accounts of abuse that has also been documented in another way or reported by another individual have been examined. In longitudinal studies, individuals with legally and medically documented histories of abuse have reported no or sparse memories of the events, then later recovered accurate abuse-related memories without prompting (e.g., Duggal & Sroufe, 1998; Williams, 1995). In Duggal and Sroufe's (1998) article, the experiences of a woman called "Laura," who had participated in a prospective longitudinal large-scale study of children followed closely from birth to adulthood, were reported. The study was not focused on memory for trauma. During earlier phases of the study, when asked if she had been sexually abused at any point, Laura indicated she had not. At age 18, Laura had a conversation with her boyfriend in which they discussed their earliest memories; Laura reported feeling strangely during the conversation, then remembering having been abused by her father. Her memories were later corroborated by notes recorded taken by a therapist who had worked with Laura's family when she was a child and her parents were going through a tumultuous divorce.

A sample of 129 women who had medically documented histories of sexual abuse during childhood were interviewed with regards to their abuse histories and their memories of their abuse (Williams, 1995). Seventeen years after the emergency room examinations, 80 of the women recalled the abuse. Sixteen percent of women who recalled their abuse reported that at some time in the past they had forgotten about the abuse. The women who had recovered memories and those who had always remembered had the same number of discrepancies in their accounts of the abuse. These studies indicate that the forgetting of abuse and the recovery of abuse-related memories are not restricted to individuals who have mental health issues (but also in community samples), and that recovery of memories of abuse does not require a therapist's involvement (i.e., may occur spontaneously or in other settings).

In a study of 71 adolescents (34 males, 37 females) hospitalized for psychiatric illnesses, participants were assessed for history of sexual abuse, physical abuse, and witnessing home violence using a 46-item self-report questionnaire (TEQ-A; Winegar & Lipschitz, 1999). The self-report results were then compared to reports from child

protective services, the police, medical hospitals, and clinicians. Rates of agreement were 88 percent ($\kappa = .75$) for sexual abuse, 83 percent ($\kappa = .65$) for physical abuse, and 75 percent ($\kappa = .49$) for witnessing home violence. Adolescents' sex, age, education, and ethnicity were not found to be related to the accuracy of their reports. The researchers concluded that adolescents hospitalized for psychiatric reasons provided self-reports of maltreatment that concurred well with best-estimate sources. However, the prevalence of Hispanic individuals in the sample might limit the generalisability of the results to other, culturally disparate samples.

In a study of 70 adult women enrolled in an outpatient clinic to receive treatment for psychological problems, Meyer, Muenzenmaier, Cancienne, and Struening (1996) found evidence of test-retest reliability for physical abuse ($\kappa = .63$) and sexual abuse ($\kappa = .82$), and of validity when comparing women's reports to clinical assessments (physical abuse: 75 percent agreement, sexual abuse: 93 percent agreement). Although 75 percent agreement may be considered low given the impact and importance of child abuse, the researchers concluded that childhood histories of physical and sexual abuse can be assessed using standardized tests among women with mental illnesses.

As discussed above, there is no conclusive evidence that individuals who have been abused have differently functioning memories (i.e., information storage and retrieval processes) than individuals who have not been abused. However, the content of memories appears to be impacted by negative affect (e.g., depression, Yeh & Hua, 2009; stress, trait anxiety, and depression, Roberts, 2002) in general and specifically in individuals who experienced childhood maltreatment. Individuals who have been abused as children also tend to have more negative self-views and overly general memories (e.g., Valentino, Toth, & Cicchetti, 2009). In any population, and particularly in populations of individuals high in negative affect and who have been abused, retrospective accounts of past experiences do not correspond perfectly with historical reports (e.g., therapist's notes from the time of the event, medical records). Any single individual's reports of his or her experiences may also differ slightly from report to report. Nonetheless, the correlation between historical record and retrospective accounts remains robust. Although details of events may be impacted by mood, emotion, and by faults of the human memory, individuals' reports of abuse are valuable, meaningful, and relatively accurate sources of information about their experiences.

The process of implanting memories is not simple and not likely to occur as a result of a few probing questions from a psychologist, let alone from a questionnaire or other assessment (e.g., Pope, 1996). If a memory of a single event has been implanted, it is most likely that the event seems plausible to the person based on other, actual childhood memories because an abusive incident is consistent with those other memories (e.g., Pezdek, 1994), and that that individual's family life and overall childhood were not healthy (e.g., de Rivera, 1997). Furthermore, and more important for the current thesis, retrospective reports and self-reports, including those provided by clinical populations with documented histories of childhood abuse, have been demonstrated to show test-retest reliability (e.g., Meyer et al., 1996) and validity (e.g., Meyer et al., 1996; Winegar & Lipschitz, 1999).

1.5 Negative, harsh, or abusive parenting styles

Apart from specific acts of abuse, parents may also interact with their children in ways that are generally negative or adopt parenting styles that are detrimental to the children's well-being. The concept of a parenting style is complex and consists of caregiver's specific behaviours that impact the child individually but also in combination; the concept of parenting style is intended to encompass normal variations (i.e., not abuse) and focuses on control of children (Baumrind, 1991). However, as discussed above, because of cultural and individual differences, parenting behaviours that are considered child abuse in some contexts may be considered standard parenting practices in other cultures. There is no clear delineation between child abuse and negative parenting practices, and there has been minimal investigation into the long-term impact of negative parenting practices. Studying parenting style and parent-child relationships in Saudi Arabia may afford insight into the impact of mildly abusive, negative parenting practices that are not considered abuse within the Saudi culture.

Generally, parenting styles vary along at least two dimensions: responsiveness and demandingness (Maccoby & Martin, 1983). Responsiveness refers to parents' being attuned to their children's particular wants and needs and thereby fostering the children's individuality and, in particular, the children's self-regulation and self-expression. In contrast, demandingness refers to parents' pushing children to act as parts of the family and to behave in specific and mature ways, and also the parents' willingness to confront and correct children when they disobey (Baumrind, 1991). The

balance of these dimensions leads to four categories of parenting styles (Darling, 1999). Baumrind (1991) identified three styles – permissive, authoritarian, and authoritative – and Maccoby and Martin (1983) later added neglectful (or uninvolved). Permissive parents are highly responsive but not very demanding, authoritarian parents are not very responsive but are very demanding, and authoritative parents are both responsive and demanding (Darling & Steinberg, 1993). The fourth style of parenting, neglectful or uninvolved parenting, occurs when caregivers are neither responsive to their children's needs and wants nor demanding of specific behaviours from their children. These neglectful parents are not very engaged in their children's lives. Research (conducted primarily in the West) has indicated that the different parenting styles are associated with different outcomes among children. Specifically, the authoritative parenting style has been associated with positive outcomes across sex or gender, ethnicity, and socio-economic backgrounds (Davis et al., 2001).

What is the relationship between being subjected to abuse (physical abuse, emotional abuse, or neglect) during childhood and developing health problems later in life? Is less severe maltreatment, such as would be identified as negative or abusive parenting or non-supportive parenting, associated with the development of health problems as well? If so, what is the relationship between these negative early experiences and later health problems? Parent-child interactions do not occur in isolation; parents and children live within societies and are subjected to outside pressures (Jones & McCurdy, 1992). Child maltreatment tends to co-occur with other stressful circumstances (e.g., poverty). However, maltreatment itself has been identified as a risk factor for and has been found to be linked to a wide array of negative outcomes across a variety of domains, including overall well-being, mental health, and physical health. Determining the relationships between childhood experiences, parent-child relationships, and other factors is complex and requires methodological rigor. Noting associations or simple correlations between child abuse or negative parenting and poor health during adulthood is not enough to determine that abuse has caused a long-term consequence. A child might display low intelligence and become a victim of abuse as a result, or a child might suffer brain damage as the result of physical abuse, or lack of education as the result of neglect. Research utilizing statistical techniques (e.g., modelling, regression) to predict long-term health outcomes is needed to more fully understand the relationships between childhood experiences and adult health and well-being.

1.6 The focus of the current research

Prior to conducting the first study in this thesis, I did not have a specific topic in mind for my research, but I was interested in examining factors that determine well-being in Saudi Arabia. As will be discussed in chapter 5, interviews and discussions conducted with Saudi Arabian participants pointed to the parent-child relationship as a significant and important childhood experience. In particular, participants discussed the importance of positivity and negativity from parents and how these traits are passed on to and impact children's abilities to cope with their lives and the world in a healthy way. This discussion prompted an interest in parenting styles broadly speaking and a focus on parenting styles that encourage negative thinking and might be related to emotional challenges in particular. The topics covered in the current research were intentionally kept relatively narrow so that specific issues, which have never before been explored in Saudi Arabia, could be examined.

As discussed earlier in this chapter, child maltreatment can arguably be categorised into physical abuse, emotional abuse, and neglect, with sexual abuse often considered within the area of physical abuse. However, the focus of the current research is not on abuse, but parenting styles, and particularly harsh and negative parenting styles, which may be related to or a precursor to more severe abuse. Previous research has reported that 67.5% of a sample of female college students in Saudi Arabia reported having been physically punished, and 65.1% of the of the same sample of students considered the punishment to be justifiable (Achoui, 2003). If these attitudes generalise to the population in Saudi Arabia, then the majority of the population considers physical punishment to be justifiable and acceptable. Saudi Arabia also has a relatively conservative society compared to other Arab and Muslim societies, providing further reason to suspect that physical punishment would be accepted there. Societal acceptance of parenting behaviours including physical punishment might create a culture in which harsh parenting practices, such as yelling at children, and other negative parenting practices are seen as mild and are accepted. However, these harsh and negative parenting practices may lie on a continuum of negative parenting, which ranges from harsh parenting (i.e., verbal criticism) to clear-cut abuse (i.e., physical abuse as discussed earlier in this chapter). As pointed out earlier, the meaning of the term "abuse" differs between cultures.

Child sexual abuse and severe neglect were excluded as topics of study from the current research. In part, I was interested in harsh parenting styles that might be considered normal and acceptable within Saudi culture. In addition, parenting style, family life, and sexuality are extremely private matters in Saudi Arabian culture. As a consequence, child sexual abuse is an extremely sensitive topic and challenging to study. Individuals would be unlikely to openly or cooperatively disclose any experiences related to child sexual abuse if the topic were broached in the research context. Furthermore, bringing up the issue of child sexual abuse in the research context might also cause otherwise cooperative research participants to opt out of a study. For these reasons the topic of childhood sexual abuse was entirely excluded from the current study. Extreme neglect (i.e., beyond lack of encouragement and lack of emotional support) was also excluded from the current research. There is no current research in Saudi Arabia on the topic of neglect – research is limited to case reports of physical abuse in some hospitals, not the less visible child neglect.

This research focuses on several outcome measures that might be relevant to parenting style. First, this research examines positive and negative affect as these are primary determinants of mood, and there has been some theoretical prediction that negative mood should be particularly related to harsh parenting. The commonly used scale, the Positive and Negative Affect Scale (PANAS) was used for this purpose. Other measures of well-being, such as quality of life, are also relevant to mood, and several measures of well-being were included to show that any relationship with parenting style that was found was not scale-specific. However, the PANAS is theoretically of particular interest because of the suggestion in infornet theory that repeated early negative experiences should lead particularly to negative affect. Scales of well-being tap into a mixture of positive and negative affect, so do not provide a way of predicting these two, separable components of well-being.

Second, depression is a common dysphoric state that is known to be associated with adverse conditions. There are several measures that are available for depression, some of which require purchase and others are free. The PHQ-9 is one of the free measures, and given the large number of participants in this research, this was an important consideration. In addition, the PHQ-9 is well used, short, and is a commonly used measure of depression, particularly in recent research.

Third, as a mental health professional, I was interested in Borderline Personality Disorder, or BPD, as my experience working with addicts suggests that this could be a problem. The measure of Borderline Personality Disorder was used only in my sample of addicts. There is only one main scale used for this purpose, the Borderline Personality Disorder Scale (BPDS; First, Gibbon, Spitzer, Williams, & Benjamin, 1997) Because harsh parenting could lead to negative psychological consequences, it was of interest to see whether the relationship between harsh parenting and outcome occurred *within* a group that has clinical properties.

Finally, I was interested in the possibility that parenting style (how an individual was parented by his or her own parents) was associated with physical health. My selection of patient groups was guided largely by what was available, and I selected patients with asthma, cardiac health problems, and cancer. There are centres available for these patients, which makes the data collection practical, but these groups also span chronic and terminal diseases.

Chapter 2

Child abuse and Saudi Arabia

2.1 Culture in Saudi Arabia

As discussed in chapter 1, child abuse is neither simple to define nor easy to identify. Determining whether parenting practices are abusive is a challenge in part because parenting practices must be viewed in the context of the culture in which they occur. Although some practices (e.g., beating a child to death) are clearly abuse, others (e.g., spanking, slapping, yelling) are more questionable. Child abuse is partially a socially and culturally constructed concept, and so consideration of social factors and cultural characteristic is necessary when considering definitions and consequences of abuse.

Religion plays an enormous role in shaping Saudi Arabian culture and the culture of other countries in the Arab Peninsula. Saudi Arabia in particular is a nearly exclusively Islamic country (Achoui, 2003). Almost everyone in Saudi Arabia is identified as Muslim, and government legislation is based on Islamic religious law, or *Shari'ah* (Long, 2005). The Islamic religion and teachings shape Saudi Arabian culture and every aspect of life in Saudi Arabia, from public to private, from law regarding child-rearing to actual parenting practices and parent-child relationships. Abusive behaviour, including physical punishment of children, is disallowed under Islamic law (Al-Mahroos, Abdulla, Kamal, & Al-Ansari, 2005; Al-Moosa, Al-Shaiji, Al-Fadhli, Al-Bayed, & Adib, 2003). Despite the prevalence and importance of Islam in Saudi Arabia, Islamic law and Saudi Arabian culture can and do diverge, as is evidenced by the occurrence and prevalence of child abuse and abusive parenting practices in the country.

Families in the Arab Peninsula have been described as adhering to tradition, with paternal leadership and authority, and authoritarian rule (e.g., Soitman, 1986). Individual freedom and freedom of expression are discouraged. According to Soitman (1986), the raising and socialization of children typically involves strict discipline, including punishment, threats of punishment, and provoking feelings of guilt, to push children to conform to familial expectations. Al-Eissa (1998) argues that societal acceptance of corporal punishment, and use of such punishment in schools, creates an atmosphere in which parents also accept the use of such harsh discipline techniques. In

his 2006 book on issues of cultural sensitivity in counselling and psychotherapy, Marwan Dwairy also explored the issue of societal acceptance of potentially negative parenting practices within Arab cultures. For example, Dwairy discussed Achoui's (2003) study in which 67.5% of female college students in Saudi Arabia indicated that they had experienced physical punishment during their lives. Regarding attitudes towards physical punishment, 65.1% of students reported that physical punishment could be justifiable and acceptable (Achoui, 2003). As Dwairy (2006) discussed, if these trends among college students' perspectives are also true of perspectives in the general population, the general population can be expected to find physical punishment acceptable.

Dwairy (1997) has also argued that parenting practices that are considered harsh and that are expected to have negative consequences for the mental health of children in the West may be considered normal in Arab and Muslim regions. In the West, authoritarian parenting practices have been found to be moderately correlated with poor mental health outcomes for children and adolescents, but research has indicated that the relationship between authoritarian parenting and children's mental health in more authoritarian cultures (e.g., Saudi Arabia, Egypt) is much weaker (e.g., Dwairy, Achoui, Abouserie, & Farah, 2006a).

Other research conducted in Saudi Arabia suggests that the relationship between mental health outcomes and parent-child relationships needs to be further explored to be understood. For example, Al-Gelban (2007) found a strong relationship among depression, anxiety, and stress in a sample of 1,723 male students in Saudi Arabia and suggested that the students' relationships with their parents may be a predictor. In addition, research conducted in Iraq has suggested that positive, healthy behaviours are promoted by positive parenting styles (Al-Kubaisi, 1988).

2.2 Prevalence of child abuse in Saudi Arabia

There is little clarity regarding the prevalence of child abuse in the Arab Peninsula and in Saudi Arabia specifically. According to Al-Mahroos (2007), there is a popular assertion that the incidence of child abuse in the region is low but, as Al-Mahroos points out, the assertion is not evidence-based. In contrast, in a recent newspaper article the director of Taibah University estimated that just under half (45%) of all children in

Saudi Arabia are subjected to domestic violence (Al-Nozha, 2011). Historically, child abuse and issues surrounding parenting, such as use of discipline techniques, have received relatively little attention in Saudi Arabia and the rest of the Arab Peninsula. The prevalence of child abuse in Saudi Arabia, compared to most other countries around the world, is relatively undocumented and unknown (Gerner, 1985). The majority of cases of child abuse that occur in Saudi Arabia are believed to go unreported (Karthikeyan, Mohanty, & Fouzi, 2000). The cases of abuse reported to legal authorities, to medical professionals, and in the research literature are assumed to under-represent the actual incidence of abuse. Although the numbers are unlikely to represent the true frequency of abuse, in a review of medical literature reporting child abuse across seven countries in the Arab Peninsula between 1987 and 2005, Al-Mahroos (2007) concluded that all types of child abuse had been observed in the region. Insufficient data collection and under-representation of abuse should not be misconstrued as low incidence of child abuse. Currently, the question is not whether child abuse occurs in Saudi Arabia or other regions of the Arab Peninsula, but rather what patterns there are to the maltreatment (abuse and neglect) children in these cultures experience, what factors can be identified as predictors and risk factors for maltreatment, how maltreatment can be prevented, and what the long-term impact of childhood maltreatment may be (see Al-Mahroos, 2007).

Understanding the prevalence of child abuse and abusive parenting practices in Saudi Arabia is complicated by contradictory statements in the medical and research literature. In the medical literature, documentation of child abuse in Saudi Arabia has been noted to date back more than 130 years (Al-Ateeqi, Shabani, & Abdulmalik, 2002). Other sources claim that reports of child abuse began to be published, to a limited degree, in the medical literature of the Arab Peninsula in the late 1980s and early 1990s (e.g., Al-Eissa, 1998; Al-Mahroos et al., 2005). Recently, however, some cases of child abuse have been more visible (Al-Eissa, 1998) and published (Roy, Al Saleem, Al Ibrahim, & Al Hazmi, 1999), and the topic is garnering increased attention. The local, Saudi community and the international community are both increasingly sensitive to and concerned about the issues of child maltreatment and abuse, and so Saudi Arabia has recently begun to develop a plan for future studies of prevalence of child abuse in all regions of the Kingdom of Saudi Arabia (National Family Safety Program [NFSP], 2010).

Although statistics are inconsistent and the prevalence of child abuse is largely unknown, it has been suggested that the frequency of child abuse in Saudi Arabia is increasing (NFSP, 2010). The Centre for Crime Prevention (CCP; 2009) in Riyadh reported that 45 percent of Saudi children are subjected to at least one form of abuse in their daily lives, and that 60 percent of the entire population of Saudi Arabia has experienced abuse during childhood. A recent research study conducted with the King Abdulaziz Medical City for the National Guard supported the NFSP and CCP conclusions that child abuse in Saudi Arabia is on the rise. Examining three distinct time periods between 2000 and 2008 (2000-2004, 2005-2006, 2007-2008), specified to correspond with stages of development in the national child protection system, Al-Eissa and Almuneef (2010) examined a sample of 188 individuals at the King Abdulaziz Medical City for the National Guard. The findings indicate that the most common form of the child abuse was physical abuse, and that 11 children died as a result of intentional injuries from physical abuse.

Unfortunately, the lack of clear and formal statistics regarding the prevalence of child abuse and child maltreatment in Saudi Arabia make it difficult to identify health-related issues (e.g., children's mental health outcomes) that may be related to early experience of abuse. In recent research, researchers have begun to comb through hospital records to identify cases of child abuse. Based on these studies (see section 1 of Table 2.1), it appears that child abuse is more frequently recognized in the modern day than it was even five to 10 years ago, and that forms of abuse other than physical abuse (e.g., neglect) are garnering increased attention (see Al-Eissa & Almuneef, 2010).

Table 2.1. Research examining the level of child abuse and maltreatment in Arab countries

Study	Research topic(s)	Location	Sample	N (male, female)	Avg. Age	Notes	Parenting factors (Abuse, style)		Impact		Findings	Comments
							Maltreatment type(s)	Assessment of abuse or parenting style	Dependent variable	Assessment		
Medical Records												
Al-Ateeqi, Shabani, & Abdulmalik (2002)	Extent of child abuse in Kuwait.	Kuwait - Al-Amiri and Mubarak Al-Kabeer Hospitals	hospital medical records	16 cases of abuse (11 male, 5 female) of 60,640 medical records	mean = 2.7 yrs; 6 children < 1 yr, 7 1-5 yrs, 3 6-9 yrs	physical abuse symptoms: bruises (77%), burns (38%), intracranial hemorrhage (38%), fractures (23%), cuts (15%)	physical abuse (13 cases), sexual abuse (2), Munchausen syndrome by proxy (1)	retrospective analysis of the 60,640 medical records from 1991 to 1998	physical injury, follow-up	medical exams (no long-term impact assessed); patient follow-up	16 cases of abuse among 60,640 medical records; 7 children returned to biological parents, 7 unknown, 2 died	very few identified abuse cases (16/64,640)
Al-Ayed, Qureshi, Al Jarallah, & Al Saad (1998)	Hospital emergency room cases in 1-yr period.	Riyadh, Saudi Arabia - emergency room of King Khalid University Hospital		13 (5 male, 8 female)	5.8 years, plus 2 newborns; range: newborn to 10.5 years.		Non-accidental physical injury (4; 3 serious), sexual abuse (3), neglect (4; 1 death, 1 severe emaciation), suspected Munchausen syndrome by proxy (1), child labor with neglect (1)	emergency room medical exams	physical health (e.g., head injury and convulsions, death, skin lesions)	clinical examinations	article is a descriptive report of case studies; patients and families were often referred for counseling, social services	
Al-Eissa & Almuneef (2010)	Increased child abuse and neglect reporting, characteristics of the reports.	Riyadh, Saudi Arabia - hospital-based child protection center (King Abdulaziz Medical City)	55 of 188 referred cases had insufficient evidence to justify investigation	133 investigated cases of 188 referred to program (53.4% of 133 were male; 46.4% female)	5 yrs	Perpetrators of abuse were identified (48.9% were parents, 13.5% siblings, 9% household workers, 7.5% other)	physical abuse (48.9%), neglect (32.3%), sexual abuse (15%), emotional abuse (3.8%)	evaluation of medical records for children admitted to hospital program (2000 to 2008)	physical injuries (head injury, fractures), death (11)	medical exams; no long-term impact assessed	Referred cases increased from 6.4/yr in 2000-2004 to 61.5/yr in 2007-2008. Physical abuse was most common in 2000-2004 (61%) and 2005-2006 (76%), neglect was most common in 2007-2008 (41.6%).	Changes in policy and public education appear associated with increased treatment for abuse.

Al-Mahroos, Abdulla, Kamat, & Al-Ansari (2005)	Child abuse, its management, characteristics of the abused and abusers.	Bahrain - Salmaniya Medical Complex	150 (53% males, 47% females)	7 ± 4 years	diagnosed physical abuse only, sexual abuse only, and combination of both	Physical abuse only (50), sexual abuse only (87), both physical and sexual (10), neglect (3)	evaluation of Child Protection Committee records, Psychiatric Hospital records, Salmaniya Medical Complex computer database	physical injuries, death (7)	No assessment of long-term impact. Focus is prevalence and characteristics of abused, abusers.	Many patients (N = 128) were referred for psychiatric assessment but did not receive it (families refused). Most cases of abuse were referred by medical professionals, not police (3%) or schools (5%). No cases of diagnosed emotional abuse were found.
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Case Studies

Elkerdany et al. (1999)	Siblings who died from physical abuse (2 case studies).	Jubail, Saudi Arabia - Jubail General Hospital	2 (1,1)	1 6-day old boy, 1 18-month-old girl		physical abuse	hospital exam	death	medical exam	Case 1 (boy): probable "shaken baby syndrome", severe physical symptoms, repeated abuse; police stated that law never insists taking a child from parents in Saudi Arabia; Case 2 (girl): probable "shaken impact syndrome", died in emergency room from skull fracture and brain death	Deaths may have been prevented if professionals were allowed to take children from parents after repeated, unexplained injuries.
Kattan, Sakati, Abduljabbar, Al-Eisa, & Nou-Nou (1995)	Specific and rare symptom as a sign of child abuse (case study).	Saudi Arabia	2 (girls)	1 5-month-old girl, 1 18-month-old girl	Possible causes of physical symptoms were systematically eliminated.	physical abuse	diagnosis of subcutaneous fat necrosis by medical professional	health	medical exam	Mother admitted physically abusing daughters when emotionally distressed. The father was informed and took responsibility for daughters' care, promised another adult female would be with the children at all times until his wife had been treated. Children's condition improved.	Article recommends system for dealing with abuse in Saudi Arabia

Roy, Al Saleem, Al Ibrahim, & Al Hazmi (1999)	Child abuse with acute renal failure due to rhabdomyolysis (case study).	Saudi Arabia	1 (female)	5 yrs	Maternal grandmother claimed child's father had forcibly taken the girl from her grandmother 2 months earlier.	physical abuse	medical professional, physical exam	physical health (complex renal symptoms, renal failure)	medical exam	Stepmother admitted to abusing child with a broomstick to discipline her.	medical and technical report; not necessarily useful outside medical community
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Parenting Styles and Psychological Health

Dwairy, Achoui, Abouserie, & Farah (2006a)	Parenting style and adolescents' mental health, family connectedness	8 Arab societies - Saudi Arabia, Yemen, Egypt, Algeria, Jordan, Lebanon, the Palestinian occupied territories, Israel	1,217 rural, 1,676 urban adolescents	2,893 (1,181 males, 1,712 females)	16-17 yrs (mean not reported)	parenting style (inconsistent, controlling, flexible)	Parental Authority Questionnaire	mental health: psychological disorder symptoms (identity disorder, generalized anxiety, depression, conduct disorder), connectedness: feelings of connectedness between generations	mental health: Psychological State Scale (subset of items), connectedness: Multigenerational Interconnectedness Scale	Inconsistent parenting associated with lower connectedness ($F(2, 2825) = 88.20, p < .0001, \eta^2 = .071$), more mental disorders ($F(2, 2826) = 47.72, p < .0001, \eta^2 = .039$) than those raised according to the controlling or flexible-oriented parenting pattern. Authoritative parenting was associated with a higher level of connectedness ($r = .37, p < .0001$) and better mental health in adolescents.	Does not clearly present data for countries individually
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Alyahri & Goodman (2008)	Harsh corporal punishment in Yemen.	Mukalla (city), Yemen and Tuban (rural area), Yemen	203 rural, 993 urban	1,196 (603 male, 593 female)	8.4 yrs (range: 7-10)	Harsh corporal punishment = hitting with a stick, belt or any other object; tying, pinching; and biting.	harsh corporal punishment (potentially abuse)	parent reports - disciplinary practices assessed using prompt "Tell me how you deal with <child> when he/she behaves very badly." Also used Strengths and Difficulties Questionnaire, and a questionnaire about family background and family life.	school performance, psychopathology	student performance: routinely collected school data, teacher reports; psychopathology: teacher version of Strengths and Difficulties Questionnaire	>1/2 rural and 1/4 urban caregivers reported using harsh corporal punishments. Harsh corporal punishment was significantly associated with poor school performance (odds ratio = 1.37) and both behavioural (odds ratio = 3.08) and emotional difficulties (odds ratio = 1.94).	Random sample of school children.
Dwairy & Menshar (2006)	Parenting styles and adolescents' individuation and mental health	Egypt	50% rural, 50% urban	351 (212 male, 139 female)	16-17 yrs (mean not reported)		parenting style	Parental Authority Questionnaire	mental health psychological disorder symptoms (identity disorder, generalized anxiety, depression, conduct disorder), connectedness: feelings of connectedness between generations	Psychological State Scale, Multigenerational Interconnectedness Scale	Significant negative relationships of authoritative parenting style to identity disorder (Beta = -.14), conduct disorders (-.29), and general mental health (-.16)	Study uses adolescent's self-reports only, depends on their perceptions of how their parents treat them.

Dwairy (2008)	Development of scale to assess parental inconsistency vs. authoritarianism.	Northern Israel - 2 Arab schools	11th grade	178 (106 male, 72 female)	16-17 (mean not reported)	parenting style: authoritarian, authoritative, permissive	Dwairy's Parental Authoritarianism and Inconsistency Scale, Multigenerational Interconnectedness Scale, Buri's Authoritarian scale	psychological disorder symptoms	Psychological State Scale	Authoritarian parenting not associated adolescents' psychological disorders. Psychological disorder symptoms be predicted by father-mother inconsistency (Beta = .33, $p < .02$) and mother temporal inconsistency (Beta = .22, $p < .02$; $R = .397$ ($F(2, 168) = 13.56, p < .000$)).		
Dwairy (2010b)	Parental inconsistency (across parents and across time) and adolescent mental health.	9 countries - France, Poland, Argentina, Kuwait, Algeria, Saudi Arabia, Bedouins, Jordan, India	same sample as used in other studies in series	2,884 (sexes not reported)	not specified	inconsistency and unpredictability of parents is considered more detrimental than consistent rejection	parental inconsistency (temporal, situational, father-mother)	Dwairy's Parental Authoritarianism and Inconsistency Scale (administered to adolescents)	psychological disorder symptoms	Psychological State Scale (subset)	Father's (Beta = .12, $p < .0001$) and mother's temporal inconsistency (Beta = .06, $p < .001$) and father-mother inconsistency (Beta = .08, $p < .001$) associated with adolescent psychological disorder	3rd paper in a series (much of demographic data is only in introductory article). Article must be examined with others in series.
Dwairy, (2010a)	Rejection from parents and psychological maladjustment in adolescents, across cultures.	9 countries - France, Poland, Argentina, Kuwait, Algeria, Saudi Arabia, Bedouins, Jordan, India	same sample as used in other studies in series	2,884 (sexes not reported)	not specified	parenting style: parental acceptance/rejection	Parental Acceptance Rejection Questionnaire	psychological disorder symptoms	not specified in this article (Psychological State Scale (subset))	Parental acceptance-rejection differs across countries (not east to west). Parental rejection associated with adolescent psychological disorders (from n.s. to .60 ($p < .0001$)) in Bedouin fathers and kids). Parental rejection appears less harmful than inconsistency.	4th paper in a series (much of demographic data is only in introductory article). Article must be examined with others in series.	

Dwairy, Achoui, Filus, Rezvan nia, Casullo, & Vohra (2010)	Parental factors (control, inconsistency, rejection) and adolescents' psychological disorders across cultures.	9 countries - France, Poland, Argentina, Kuwait, Algeria, Saudi Arabia, Bedouins, Jordan, India	same sample as used in other studies in series	2,884 (sexes not reported)	not specified	parenting style: inconsistent, controlling, rejecting	Parental Authority Questionnaire (measure is not specified in this article)	psychological disorder symptoms (emotional disorders (anxiety, depression), conduct disorders, general psychological disorders (overall))	Psychological State Scale (subset)	Psychological disorders differed across countries [F(8,2880) = 32.68, p < .0001]. Bedouin, Algerian had highest rates; Jordanian had lowest. Parental factors accounted for large among of variance (R2 = .64) in Bedouin sample.	Article must be examined with others in series.
Dwairy & Achoui (2010)	Parental control and psychological disorders in West vs. East	9 countries - France, Poland, Argentina, Kuwait, Saudi Arabia, Bedouins, Jordan, India	same sample as used in other studies in series	2,884 (sexes not reported)	not specified	parenting style: Mother's control, Father's control	Dwairy's Parental Control and Inconsistency Scale; concerned with conflicts between parents and adolescents, parental control and temporal parental inconsistency regarding each conflict situation	psychological disorder symptoms (emotional disorders (anxiety, depression), conduct disorders, general psychological disorders (overall))	Psychological State Scale (subset)	Parental control was only sig. for fathers in 3 countries: France (r = .21; p < .01), Argentina (r = .24; p < .001), Jordan (r = .21; p < .001). Father's controlling behaviour was correlated with children's psychological disorders in West on average (r = .19; p < .0001), not sig in East, overall (r = .10; p < .0001).	Article must be examined with others in series

Verbal criticism, which might be considered verbal or emotional abuse in another country or culture, is common practice in Saudi Arabia (Dwairy, 2006). Saudi Arabia has a history of viewing violence against children as part of the normal, accepted process of disciplining and educating children (Achoui, 2003). What are the consequences of these parenting practices? How do these societal beliefs translate into daily behaviour from parents towards their children?

2.3 Attitudes towards child abuse and parenting practices in Saudi Arabia

Some psychologists believe that the permissive attitude about violence and the general acceptance of physical punishment to discipline and control children in Saudi Arabia has translated to rampant child abuse and maltreatment in the country (Achoui, 2003). Cross-cultural studies suggest that there may be some truth to these assertions. For example, children are less likely to be the victims of abuse in societies in which physical punishment is discouraged and non-violent discipline and conflict resolution are encouraged (e.g., Belsky, 1980; Levinson, 1989). In Saudi Arabia, the questions of whether and how societal views are related to the prevalence of child abuse are largely unanswerable, because the prevalence of child abuse is largely unknown.

Based on an extensive literature review, Al-Eissa and Almuneef (2010) concluded that knowledge of child abuse is becoming more widespread in Saudi Arabian society. Historically, child abuse and neglect of children in Saudi Arabia was a rarely recognized problem affecting the health of only a few children; when maltreatment was identified, it was by health practitioners. Al-Eissa and Almuneef (2010) identified only 11 articles on child abuse that were published in the decade between 1990 and 2000, and all 11 were case studies of individual children. In the year 2000, however, the government officially launched a Child Protection group and the abuse and neglect of children in Saudi Arabia was officially recognized.

To date, Al-Eissa and Almuneef's (2010) report is the largest of its kind in Saudi Arabia. However, the report has shortcomings. The largest limitation of the study is that its results cannot be assumed to represent national trends in Saudi Arabia, because the research presented in the report is based only on a review of child abuse cases in one health facility, the King Abdulaziz Medical City for the National Guard.

2.4 Summary of abuse and its relationship to outcome in Arab countries

The most noteworthy pattern in research on abuse in Arab countries thus far is that, although abuse has been measured and described, there are no studies examining the short- or long-term outcome and impact of abuse on the individual who has been the victim of the abuse. Along with this lack of focus on the impact of early childhood abuse, the existing research has not employed statistical techniques (e.g., regression, structural equation modelling) that could be useful in projecting and predicting long-term impact.

There are, however, studies examining the impact of authoritarian parenting styles and inconsistent parenting styles on children. Although the line of research may have originally sought to examine the relationship between well-being and authoritarian parenting, the focus has shifted to examination of inconsistency in parenting practices. Studies that looked at the impact of authoritarianism and authoritative parenting on well-being found that they generally had a weak but positive association with well-being (e.g., Dwairy et al., 2006). In contrast, inconsistency in parenting (e.g., Dwairy & Achoui, 2010) or a combination of acceptance and rejection (e.g., Dwairy, 2010a) were clearly associated with negative outcomes, including psychological disorders, in Arab cultures.

The majority of the studies examining the impact of parenting style on well-being utilize the Parental Authority Questionnaire, or PAQ. A limitation of these studies is the fact that only the PAQ is used to assess parenting, and the correlation of the PAQ with measures of well-being are then assessed. The PAQ may be correlated with other variables, such as wealth or socio-economic status, and so it is unclear whether parental authority or some other, unidentified variable is responsible for the correlation. As these studies do not use multiple regression, they overlook the possibility of overlap between parenting style and other factors. Research with the PAQ has been carried out with students and people under the age of 18 years, and my research is intended to include older people. Finally, the PAQ measures authoritarianism as one of its subscales, but does not measure harsh parenting. Harsh parenting may be correlated with authoritarianism, but the concepts are not identical. My interest in harsh parenting focused on the use of physical hitting or-beating and verbal criticism or insults, which are not explicitly mentioned in any of the items of the PAQ. However, it cannot be

assumed that my scale is better than the PAQ at predicting outcome, and whether or not this is the case is an empirical question. Therefore the PAQ was examined in the series of studies presented here (see Study 3) and compared to the newly developed questionnaire; as discussed in Study 3, the PAQ showed relatively low reliability. The low reliability shown by the PAQ may be due to its having been developed for use with a different group than the individuals studied here. Alternatively, the format of the questions I used, focusing on frequency rather than severity, may have led to better reliability.

Social, governmental, and research interest was drawn to the issue of child welfare in the Arab world relatively recently. As shown in Table 2.1, current research on child abuse and maltreatment in the Arab world (and particularly in Saudi Arabia) is new and sparse, particularly when compared with research in the Western world. Current research on child abuse and maltreatment in the Arab world (and particularly in Saudi Arabia) is focused on documentation of medical cases of abuse recognized by medical professionals, including examination of hospital records and detailed descriptions of case studies (sections 1 and 2 of Table 2.1), and the relationship between parenting styles and psychological health. There is limited research on parenting style and health outcomes, but no research on abuse and health outcomes comparable to that found in the West.

In particular, there are substantial and important gaps in knowledge about child-rearing practices and abuse in Saudi Arabia that were highlighted in the research summarized in Table 2.1. First, little is known regarding the prevalence of corporal punishment (including specific types of corporal punishment) and psychological experiences within the Arab family (e.g., Al-Mahroos, 2007; Al-Eissa & Almuneef, 2010). Second, some studies indicate that there is a correlation between parent-child relationship qualities and indicators of the children's mental health (e.g., Dwairy et al., 2010b), but there is a lack of clarity about the relationships between parent-child relationships and the children's mental health (e.g., Al-Eissa & Almuneef, 2010). Finally, there are few empirical studies of parent-child relationships and children's mental health in Arab countries to determine the prevalence and magnitude of the impact of parent-child relationships on the children.

2.5 Conclusion

Research on the long-term impact of parenting in Saudi Arabia and other Arab countries is at an earlier stage of development than in the West (see Table 2.1 in the present chapter. In the West, research is focusing on the long-term, negative health consequences of abuse. In Saudi Arabia, despite abuse's prevalence in society and apparent documentation in hospital records, research continues to describe, define, and document abuse.

A total of seven of the 15 studies included in Table 2.1 are hospital-based documentation of child abuse in the Arab world. Four of these studies focus on the examination of hospital records, with frequent attention to the King Faisal Specialist Hospital and Research Centre (also called KFSH & RC) in Riyadh, Saudi Arabia. Three additional studies document small-scale case studies with unusual circumstances (e.g., abuse within a single family, exceptional symptoms). Ten children (4 boys, 6 girls) under the age of five were identified as victims of abuse when seen in King Faisal Specialist Hospital and Research Centre between 1989 and 1992 (Kattan, 1994). Two of the children died as a result of their injuries, five were diagnosed with serious injuries, and three were found to have moderately severe injuries. Abuse was not suspected in one of the two fatality cases until four years after the child's death, when her sister was identified as a victim of child abuse. Six of the 10 children suffered varying degrees of physical neglect, physical abuse, and sexual abuse. The remaining four children were diagnosed with Munchausen syndrome by proxy. Kattan concluded that when a child presents a set of symptoms or a disease that is difficult to diagnose the possibility that the illness has been caused by the parents should be examined.

Of the remaining eight studies in Table 2.1, Dwairy is the lead author on seven, the exception being from Alyahri and Goodman (2008). These studies are very recent (some published in the past year) and focus on the important and highly relevant topic of parenting style and its impact on children's short- and long-term well-being. However, the fact that four of the seven studies are re-analyses of data collected from the same sample of adolescents across nine countries must be taken into consideration. Although it is a very large sample ($N > 2,800$) and thoroughly analysed, additional research using different tools, methods, and samples is necessary to support the generalisability and robustness of the results reported in these studies.

There are no existing studies that examine the long-term impact of early childhood maltreatment on physical and psychological health in Saudi Arabia. Given that existing research (e.g., Dwairy, 2004) indicates that authoritarian parenting does not have the same impact in the Arab world as in the Western world, it cannot be assumed that other findings, such as the long-term impact of maltreatment, generalise from culture to culture. Contrasting results regarding the impact of parenting style have been found in different groups of children and adolescents, even within the Arab world. Indeed, the most prominent researcher, Dwairy, has found contrasting results. In a 2004 study, Dwairy et al. examined adolescents in Arab countries to determine whether what Dwairy refers to as democratic parenting style is related to mental health. They found that this style of parenting, which is similar to authoritative parenting, is associated with anxiety, depression, behaviour disorders, and identity issues in typical Arabic adolescents. In the same study, authoritarian parenting style was not found to have any relationship with any of the mental health challenges examined. However, in another study published in the same year, Dwairy (2004) found that gifted or exceptional children in the Arab world do not show the same pattern of mental health associated with authoritarian parenting. For gifted children, authoritarian parenting was found to be associated with low self-esteem, increased anxiety, depression, conduct disorder, and identity issues.

A weakness of the literature, which makes studies difficult to compare to each other and difficult to compare to research conducted in other regions of the world, is the lack of standardization definitions of abuse and tools use to measure abuse. For example, Achoui (2003) focused research on a pattern of behaviour that he called corporal punishment. However, the behaviour includes punishment that would be identified as physical abuse in other cultures (e.g., beating children). Furthermore, there is no specific tool used to assess abuse, whether physical, sexual, verbal, or another type. Neglect has only recently, in the last two decades, begun to draw substantial attention in Arab countries. There is not a standard definition to apply, so studies' results are generally considered in isolation and it cannot be assumed that "physical abuse" (or any other sort of abuse) as discussed in one study is the same as discussed in another study. In order to better understand adult health and well-being in the rapidly developing culture of Saudi Arabia, further research is needed.

Chapter 3

Theories explaining the relationship between child abuse/abusive parenting and health outcomes

3.1 Explaining the impact of early experience on health

Both physical diseases (e.g., cancer, heart disease, asthma) and psychological disorders (e.g., depression) are predicted by a combination of biological factors (e.g., genetics) and environmental or experiential factors (e.g., stress). Research shows that events that occur in early childhood, such as the experience of child abuse (see chapters 1 and 2), can influence disease onset decades later. Over the course of the past decade, questions have shifted from focusing on whether childhood stressors might impact long-term wellness to examining how these effects occur. In the current research, harsh parenting is postulated to be a stressor that is likely to be ongoing or chronic for the child.

3.1.a The Barker hypothesis

More than two decades ago, Dr. David Barker found that individuals with low birth weights have a greater risk of developing coronary heart disease as adults than individuals with average to high birth weights (Barker, 1995; Barker, Osmond, Simmonds, & Wield, 1993). Barker was interested in differential prediction of health, and hypothesized that low birth weight predicts subsequent physiological health problems in adult life (Barker, Osmond, Winter, Margetts, & Simmonds, 1989). Empirical evidence has supported the hypothesis, finding that small-for-gestational-age infants are at risk for hypertension, type-2 diabetes, impaired glucose intolerance, and insulin resistance in adulthood. In 1995, the *British Medical Journal* named this the "Barker hypothesis."

Although controversy regarding the details remains, it is now widely accepted that foetal nutrition and very early infant health are important for long-term development (Barker, Gluckman, et al., 1993). In simple terms, the Barker hypothesis states that events very early in life shape health and well-being much later in life (i.e., in middle and old age; Barker, 1998). This process, called foetal programming, indicates that early

experiences shape an individual's physiology, consequently shaping how that individual's body will react to the environment and stressors through-out life and leading to later health or disease through a variety of mechanisms. The hypothesis suggests that health-related issues are determined or programmed very early on in life, but fails to identify what mechanisms may be programmed or how their programming impacts long-term, adult health.

3.1.b Infornet theory

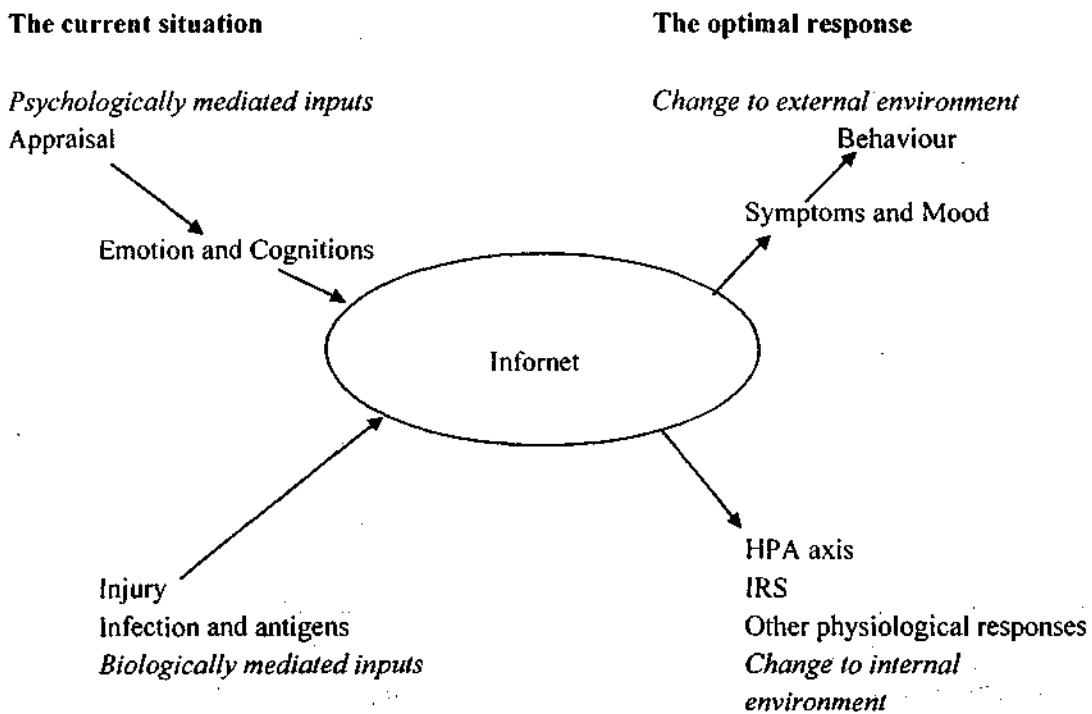
Infornet theory (Hyland, 2011), or psychoneuroimmunoendocrine information network theory, addresses the crucial gap between concept and outcome that is apparent in the Barker hypothesis. That is, infornet theory posits a mechanism by which early experiences, such as stressors, lead to later disease. Infornet theory emphasises the complex network of biological and psychological systems that form the basis of human experience, and suggests that an individual's internal systems, or infornet, can develop patterned responses to negative or challenging experiences and can become unbalanced as a consequence of lifestyle or experience. Young organisms are expected to be more malleable than adults, and so the impact of abuse during childhood, during sensitive and critical periods, may be even greater than the impact of experiences later in life.

In the current research, infornet theory is used to help explain how the childhood experience of verbally abusive, physically abusive, and non-supportive parenting may be associated with lack of well-being, with mental health disorders, and with physical disease in adulthood. The infornet is considered to have an alarm, a system that alerts the body of the need to defend against challenges and threats. The activation of the inflammatory response and of the hypothalamic-pituitary-adrenal (HPA) axis (i.e., glucocorticoid production) serves as the alarm bell. Activation of this alarm system, if frequent or chronic, can disrupt or cause problems in a body's biological functioning. Inflammation can be protective, but constant inflammation predisposes the body to specific diseases (e.g., Kemeny & Schedlowski, 2007). A suppressed immune response (associated with a chronically activated HPA axis) also predisposes a body to disease.

According to infornet theory, repeated or chronic negative experiences teach an individual's system that the world in general—not only the current threatening situations—poses a threat against which the body must protect itself. Chronic stress,

which may take the form of repeated acute stress or repeated incidents of abuse, or may appear as a constant barrage of mild insults and lack of support from parents, may lead to physiological system that anticipates constant threat and responds to the world as though the world were constantly negative and abusive. Activation of defence mechanisms becomes akin to a habit, and the individual's core system (or infor-net) becomes changed. The body could then be described as highly reactive and unstable. If this is the case, the individual experiences the symptoms of attempted defence chronically—inflammation and HPA axis activation, both of which are known to be associated with disease. Thus, infor-net theory predicts that both psychological and physical poor health will result from adverse early experiences, because these early experiences 'teach' the body to have psychological characteristics associated with poor mental health and physiological characteristics that predispose to disease. A schematic representation of the theory is shown in Figure 3.1.

Figure 3.1. Infor-net mechanism



From taken from Hyland (2011).

3.1.c Cognition and psychological health

In the 1950s, formal interest in the role of knowledge and cognition in psychological disorders began to develop. Cognition includes a variety of information storage and retrieval process, including attention, memory, thinking, perception, conception, learning, decision-making, and others (Dobson, Beck, & Beck, 2005). Aaron T. Beck took an interest in using cognitive-behavioral therapy (CBT) to change cognitions and thereby change the ensuing emotional, physical, and behavioural responses related to the cognition (Beck, 1991). Beck's writings on theory and psychological disorders, which spanned multiple decades, revolve around the notion that psychological health and disorder are related to cognition, or how information is processed (see Clark & Beck, 2010). Cognition is inherently biased and includes errors, but there may be different patterns to the bias and errors associated with psychological disorders. For example, individuals with psychological disorders may have automatically activated cognitive patterns (maladaptive schema) that they use to organize, simplify, or make sense of information about the world. If the cognitive schema are disordered or biased in an unhealthy, negative way (i.e., to assume that most stimuli are threatening), but the use of the schema is automatic, then the schema may perpetuate the disorder (e.g., anxiety). How the individual interprets information in his or her world prompts emotional, physical, and behavioural responses and may cause problems for the individual. CBT posits that it is possible to change the automatically activated responses and thus change the person's subsequent emotional and behavioural responses (Beck, 1991; Kendall, et al., 1995).

Early parent-child experiences may teach children, either through their parents' modeling or through their parents' treatment of the child in chronically stressful or harsh ways, to be fearful, suspicious, anxious, or to otherwise develop negative and maladaptive schema. A child who is often yelled at or criticized may learn to expect to be yelled at and criticized. A child who is never encouraged or socially supported may stop seeking encouragement and support in order to avoid being disappointed or hurt. If children develop schema early on based on their relationships with their parents, i.e., expecting to be treated negatively or harshly in all social interactions and relationships, they may develop psychological health issues later in life. Thus, cognitive theories suggest that poor psychological well-being is linked to adverse early experiences.

3.1d Attachment theory

Attachment theory (Bowlby, 1977; Bowlby, Ainsworth, & Bretherton, 1992) is related to the cognitive ideas put forward by Beck (e.g., Beck, 1991). According to Bowlby, the quality of relationship with the caregiver determines the child's well-being and later health. Bowlby focused on the way negative relationships and separation impact the child. Bowlby believed that children had an innate need to form a stable attachment with a single person, and if this attachment was disrupted before the age of five, then the child would suffer irreversible consequences, namely cognitive, social, and emotional difficulties. It seems plausible that the use of harsh parenting, particularly with young children, could therefore interrupt the development of the desired stable attachment that Bowlby proposed. However, attachment theory does not provide an account of the physiological mechanism that is suggested by infornet theory (Hyland, 2011).

In sum, there are several different theoretical approaches – the Barker hypothesis, infornet theory, cognitive theory, and attachment theory – all of which suggest that negative childhood experiences will lead to poorer well-being in later life. The cognitive theory and attachment theory link adverse circumstances only with poorer mental health. However, the other theories suggest that both poorer psychological and physical health result from adverse experiences. In particular, infornet theory provides a rationale for why there is a link between poor psychological and physical health (the two are invariably correlated), by suggesting that there is a common mechanism driving multiple forms of poor health (Hyland, 2011). Thus, there is rationale for looking at several different types of outcome variable, all of which are related one way or another to psychological and physical health.

3.2 Long-term consequences of child abuse and maltreatment

The observed consequences of childhood abuse and maltreatment can range from minor to devastating. Since at least the early 1960s (e.g., Kempe et al., 1962), clinicians have described the effects of child abuse and neglect on the physical, psychological, cognitive, and behavioural development of children in the US. The majority of the research on child abuse and on the consequences of child abuse has been conducted in the West, and so most of the negative outcomes discussed below are from samples of individuals living in the West. Given the argument that the impact of child abuse and maltreatment is at least partially dependent on how the individual who is abused views the treatment he or she receives, and given the variety of other societal and

environmental factors that might impact how a negative outcome is exhibited or diagnosed, it cannot be assumed that child abuse and maltreatment will be associated with the same negative outcomes in all cultures.

Three prominent categories of consequences, mental health, physical health, and medically unexplained or functional diseases, drawn largely from findings of research conducted in the West, are discussed briefly below. These categories are not entirely discrete (e.g., eating disorders may start out as psychological health problems but impact physical health) and any given individual may suffer consequences from multiple categories (e.g., depression and physical illness). A specific individual may suffer any variety of illnesses that have been found to be associated with early childhood experiences of abuse, neglect, and so on. The severity and broad nature of these consequences emphasizes the importance and impact of early childhood experiences on individuals' development. The following sections examine the research on abuse and later health outcomes, and a summary of the reviewed literature is presented in Table 3.1.

Table 3.1 Three Areas of Impact: Parenting Behaviour and Child Maltreatment in General Literature (Western)

Study	Research topic(s)	Location	Sample	N (male, female)	Age	Abuse or maltreatment		Impact				
						Notes	Abuse or parenting style	Assessment tool	Dependent variable	Assessment tool	Findings	Comments
Mental Health:												
Hahn, Lee, Ozonoff, & Van Wert (2010)	Child maltreatment and risk behaviours among women	US (national)	68.9% Caucasian; 16.7% African-American; 9.8% Latina; 4.6% Asian. 87.8% had at least high school education.	7,576 (100% female)	44.0% 18–21yrs; 56.0% 22-27yrs	Abuse coded as "none" or "1 or more times"; co-occurrence of abuses was examined	Physical abuse, neglect, sexual abuse	In-home interviews; National Longitudinal Study of Adolescent Health (Add Health)	depression, sexual risk behaviours, suicidality	Depression: modified Center for Epidemiologic Studies Depression Scale (CES-D); other topics explored through a limited number of questions	Approx. half of women reported some form of abuse. Abuse was significantly associated with outcomes in all categories (odds ratios 1.4-3). More abuse types put women at higher risks.	Fails to differentiate frequently abused and occasionally abused individuals.

Moran, Vuchinich, & Hall (2004)	Forms of abuse and risk for substance abuse in youth	rural Oregon, US (6 public high schools)	78% Caucasian, 8% Native American, 6% Hispanic, 2% African-American, 2% Asian-American, 4% other.	2,187 (54% male, 46% female)	10th-12th grade, details not reported	Responses coded in 3- and 4-point Likert scales	physical abuse, sexual abuse, emotional abuse	176-item, anonymous survey	Substance abuse: tobacco use, alcohol use, illicit drug use	76-item, anonymous survey	31.9% reported maltreatment. physical only: 10.6%; emotional only: 9.5%; sexual only: 5.5%; physical and sexual: 6.2%. Teens without abuse history were least likely to report high substance use. Teens reporting physical and sexual abuse had highest substance abuse. Sig. odds ratios ranged from 1.4 (emotional abuse, tobacco use) to 10.46 (sexual and physical abuse, illicit drugs).	Researchers collapsed past and present and may have lost information about whether abuse that has ended is different from on-going abuse.
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Roy & Janal (2006)	Childhood sexual abuse is explored as a predictor of suicidal behaviour in women, men	US (not specified)	abstinent, substance-dependent patients; 51% African-American; 47% Caucasian; 2% Latino; all lower SES	1,889	40.3 (s.d. 8 yrs)	examined maltreatment subtypes individually and cumulatively	Physical abuse, sexual abuse, emotional abuse, emotional and physical neglect	34-item version of Childhood Trauma Questionnaire (CTQ)	suicidality (a suicide attempt defined as a self-destructive act with intent to end one's life)	Semi-structured clinical interview by a psychiatrist, supplemented by other medical professionals	748 (165 women; 583 men) had attempted suicide at least once, attempters had higher scores on all CTQ scales; females had higher scores than men (all $p < .0001$) except the physical abuse ($p .017$) and physical neglect scale ($p < .002$ or $p < .0002?$). Women reported more sexual abuse than men, and women who attempted suicide reported significantly more sexual abuse than women who did not.	Study results include a typo regarding significance level for difference between men and women on physical neglect scale (both $p < .0002$ and $p < .002$ are included). Method of suicide attempt is not discussed, there may be a sex difference in lethality of methods, or willingness to disclose suicide attempt information.
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Salzinger, Feldman, Hammar, & Rosario (1993)	Childhood physical abuse and children's social interactions and relationships with peers	New York City	87 physically abused; 87 non-physically abused. Urban, confirmed abuse cases in the New York State Child Abuse and Maltreatment Register/	174	abused: 10.1 yrs; non-abused 10.3 yrs (range: 8-12 yrs)	abused children were recruited from a 4-year cohort of consecutive entries of New York City cases on the New York State Child Abuse and Maltreatment Register. Although there is no way of determining the differences in the characteristics of physically abusive families indicated for abuse on the Register and abusive families who have escaped detection, a number of factors support the general representativeness of such a sample. A control sample of 87 non-maltreated children, matched case by case for age and, as far as possible, ethnicity, was recruited from among the same-gender classmates of the abused children.	physical abuse, non-abused (controls)	Child Protective Services records -- confirmed New York City cases on the New York State Child Abuse and Maltreatment Register. Child maltreatment of any type is "indicated" (substantiated upon agency investigation) on the Register as physical abuse, sexual abuse, or neglect according to subcategories defined in the caseworkers' Manual; cases are frequently indicated in more than one subcategory. In our abuse sample, all cases were indicated for some form of physical abuse. Of the 76 cases for which sufficiently	social behaviour (peer ratings of social behaviour; social networks; general behavioral disturbance; shyness; leadership; fighting; sharing; meanness; attention getting); number of people in social networks; intellectual deficits	Peer nominations and peer ratings were collected in classrooms, social networks were assessed by child interview, family variables were assessed by interviewing mothers, and behavior problems were rated by parents and teachers.	Our results clearly show that physically abused schoolchildren are at greater risk for poor peer relationships than non-maltreated classmates: in the classroom, they are at increased risk for lower social status, especially peer rejection; they receive fewer positive and more negative choices and so have less positive reciprocity in their relationships with classmates; and they are perceived by their classmates as engaging in more negative and fewer positive social behaviors. In their social networks more generally, their choices of friends, even best friends, show more insularity from adults and more atypicality and negativity than do those of the controls. Abused children were more aggressive.	Did not directly address social support; many different outcome measures make overall results hard to interpret
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detailed agency records were available, 59 (78%) were indicated in the subcategory "excessive corporal punishment" and 44 (58%) had demonstrable physical injury (38 of these in the subcategory "lacerations, bruises, or welts"). Most physical injuries occurred in the context of punishment. Twelve (16%) of our physical abuse cases were also indicated for some form of neglect. There were no cases indicated for sexual abuse in our sample.

Sternberg et al. (1993)	effects of domestic violence on children's behaviour problems and depression	Israel	from lower-class families; identified through social service records.	110 (61 boys, 49 girls)	10.6 yrs (range: 8-12 years)	Severity and frequency of abuse were both addressed in recruitment of subjects.	witnessing spousal abuse, victims of domestic violence; both, non-abused (controls) (excluded sexual abuse)	Records made by social workers in the Department of Family Services in Jerusalem and Tel Aviv, Israel	fear, anxiety, depression, low self-esteem	children: Children's Depression Inventory, Youth Self-Report (to assess behaviour problems); parents: Child Behaviour Checklist	Low correlation between children's and parents' ratings ($r = .01$ to $r = .30$). Behaviour problems in children were predicted by children's and mother's ratings, not by fathers'.	Results suggest source of information must be taken into account.
Trickett, Aber, Carlson, & Cicchetti (1991)	SES and child abuse	Washington, D.C., US	physically abused children, controls	132 (Study 1 - 37 physically abused (62% boys, 38% girls), 53 controls (62% boys, 38% girls); Study 2 - 21 abused (67% boys; 33% girls); 21 controls (67% boys; 33% girls)	children: 4-8 yrs (Study 1 -- abused 5.84 yrs, controls 5.68 yrs; Study 2 - abused 6.2 yrs, control 6.13 yrs); children's mothers	two studies: HCMP and NIMH	Study 1: physical and sexual abuse, neglect, emotional maltreatment, inadequate child rearing, authoritarian parenting; Study 2: physical abuse (no sexual abuse), authoritarian parenting,	Common to both studies: Family Environment Scale, Child Reading Practices Q-Sort	fear, anxiety, depression, low self-esteem	Child: Peabody Picture Vocabulary Test--Revised (receptive language skills); mother: Child Behavior Checklist	Control group: no relationship between number of problems and SES; Abuse group problems and SES positively associated	cross-sectional data (no information about causality); results may not generalize to other populations (e.g., rural poor, middle to upper classes); data presented as correlations in graphs do not always indicate magnitude of correlation

Ystgaard, Hestetun, Loeb, & Mehlum (2004)	comparison of childhood physical and sexual abuse to other severe childhood adversity as predictors of suicide attempts and self-mutilation	Oslo, Norway	Patients who had attempted to overdose or injure themselves and were parasuicidal when admitted to hospital were included in study; 72% major depression; 55% anxiety disorder; 26% PTSD; 24% borderline personality disorder; 41% alcoholic.	74 (35% men, 65% women)	36 (range: 16-82)	Age at time of abuse, abuser, and whether abuse was repeated were recorded.	Sexual abuse, physical abuse, neglect, antipathy from parents, loss of parents, severe discord in family	Childhood Experience of Care and Abuse (CECA) interview schedule	suicidality, alcohol abuse	participants were interviewed at hospital intake; DSM-IV diagnoses (Norwegian Mini-International Neuropsychiatric Interview); The Alcohol Use Disorder Identification Test (AUDIT); Self-mutilation also recorded.	35% reported severe sexual abuse; 18% severe physical abuse, 27% neglect, 34% antipathy, 37% loss of caregiver; 31% exposure to family violence. Physical and sexual abuse were independently associated with repeated suicide attempts (controlling other childhood adversity; odds ratio 4.13 for physical, 7.07 for sexual abuse). No other childhood adversity was related to chronic suicidal behaviour.	Small sample size (limited analyses)
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Physical health

Fuller-Thomson & Brennenstuhl (2009)	childhood physical abuse and cancer, controlling for other risk factors (stress, health behaviours, SES)	Manitoba and Saskatchewan, Canada	regional response rate was 84% for survey	13,092 (5,751 male, 7,341 female) For analyses, ranged from N = 12,947 to N = 12,485 in the fully adjusted model	mean not reported; range: 12-80+	Individuals who responded "yes" to the question: "Were you ever physically abused by someone close to you?" were considered to have been abused	childhood physical abuse (controlling for childhood stressors (e.g. parental divorce), adult health behaviours, adult SES)	2005 Canadian Community Health Survey	cancer	2005 Canadian Community Health Survey	7.4% reported physical abuse, 5.7% had been diagnosed with cancer. RESULTS: Childhood physical abuse associated with 49% higher odds (95% CI, 1.10-2.01) of cancer adjusting for age, sex, race. Odds decreased to 47% higher odds (95% CI, 1.05-1.99) when controlling for childhood stress, adult health behaviours, and adult SES.	Extremely limited assessment of abuse.
Moeller & Bachmann (1993)	Rates of childhood abuse, association of childhood abuse with adult physical and psychological health problems.	US (all 50 states)	gynecology clinic patients (668 of 1,108 patients who were sent surveys); predominantly Caucasian (92.5%), middle class, and college educated	668 (100% women)	mean 33.6 yrs; range 16-76 yrs	physical abuse (termed "physical contact"), sexual abuse ("sexual contact"), emotional abuse	8-page, self-administered, mail-back questionnaire. Questions addressed family history, physical and psychological health, and childhood stressful events and abuse	physical and mental well-being -- Objective: number of hospitalizations for illnesses that did not involve surgery, and that did involve surgery; Subjective: self-assessment of overall health, physical condition, psychological health.	8-page, self-administered questionnaire to be mailed in (1,108 questionnaires mailed out; 671 returned; 668 sufficiently complete)	53% of sample reported physical, sexual, and/or emotional abuse; abuse was associated with subjective poor health, more hospital visits and surgeries; multiple abuses were associated with worse consequences	Used both objective and subjective outcome measures	

Medically unexplained symptoms

Drossman et al. (1999)	psychosocial factors and Inflammatory Bowel Syndrome (IBS)	US	206 (female)	not specified	Article only very briefly discusses a previous study of women with IBS and abuse histories.	sexual abuse, physical abuse	discussed only briefly in study introduction	gastrointestinal illness, health	clinical care	Functional IBS: 53% reported sexual or physical abuse, 31% reported rape; Organic IBS: 37% with organic disease reported abuse, 18% reported rape. Regardless of diagnosis, women with history of abuse reported more symptoms, more pain, and multiple somatic symptoms (7.1 vs 5.8, $p < .001$) and had more surgeries (2.7 vs. 2.0, $p < .01$)	Discussed introduction to article only.
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Heim et al. (2006)	early adverse experience and risk for chronic fatigue syndrome (CFS)	Wichita, Kansas, US	43 cases with CFS, 60 without, identified from a general population sample of 56,146 adults. Included only 7 non-Caucasian individuals.	103 (8.5% men, 81.5% women)	The mean age of the sample was 50.5 years.	case control study design	physical abuse, sexual abuse, emotional abuse, emotional neglect, physical neglect	Childhood Trauma Questionnaire (CTQ)	CFS, psychopathology (depression, anxiety, PTSD)	CFS medically diagnosed; Lifetime and current psychiatric disorders assessed using the Diagnostic Interview Schedule for DSM-IV ; Self-rating Depression Scale; State-Trait Anxiety Inventory; Davidson PTSD Scale	Exposure to childhood trauma was associated with a 3- to 8-fold increased risk for CFS across different trauma types. Subjects with CFS had significantly higher overall childhood trauma scores than controls (F5,97 = 4.099; P = .002). There were significant correlations between the overall CTQ scores and the symptom scores for depression, anxiety, and PTSD (all P < .001).	Clinically diagnosed CFS; community sample
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Heim et al. (2009)	replicate findings on the relationship between childhood trauma and risk for CFS and to evaluate the association between childhood trauma and neuroendocrine dysfunction in CFS	Georgia, US	113 persons with CFS and 124 well control subjects identified from a general population sample of 19,381 adults	44 years. Among the sample, 21.9% were male, 24.5% were nonwhite, and 3.8% were Hispanic	Severity of abuse was considered.	sexual, physical, and emotional abuse and emotional and physical neglect	Childhood Trauma Questionnaire (CTQ) (self-reported abuse and neglect)	CFS, psychopathology (depression, anxiety, and posttraumatic stress disorder), HPA-axis function	CFS status (diagnosed through clinical interview); Lifetime and current DSM-IV Axis I psychiatric disorders were assessed using the Diagnostic Interview Schedule for DSM-IV non-melanchoic major depression, anxiety disorders, and PTSD); Self-rating Depression Scale; State-Trait Anxiety Inventory; Davidson PTSD Scale; salivary cortisol responses to awakening on a regular workday within 3 days of clinic visit	Exposure to childhood trauma was associated with a 6-fold increased risk of CFS. Sexual abuse, emotional abuse, and emotional neglect were most effective in discriminating CFS cases from controls.	Categorized individuals based on interpretation of the severity of their abuse
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McCauley et al. (1997)	prevalence of and correlates to childhood physical or sexual abuse in adult women	Baltimore, Maryland, US	4 community-based, primary care internal medicine practices; patients were excluded if non-English speaking, ill, intellectually disabled, or if a companion refused to leave the patient alone to complete the survey.	1,931 (100% women; 204 abused as children; 470 abused as children and adults; 1,257 never abused)	mean not reported, 18+	Examined abuse during childhood and adulthood; 470 women who indicated they were abused as children and adults were excluded. Abuse diagnosis based on few items.	physical abuse, sexual abuse	Women's Health Questionnaire - included questions on childhood and adult abuse	CFS, physical symptoms, psychological symptoms, alcohol abuse, illicit drug use	Women's Health Questionnaire -- the CAGE questions for alcohol use, Symptom Checklist-22 (SCL-22) for psychological symptoms, other self-report questions	22% reported physical or sexual abuse before age 18; 8.5% reported both; 6.1% reported only physical abuse; 7.2% reported only sexual abuse. Women who reported abuse as children but not adults (N = 204) had more physical (P < .001) and psychological symptoms (p < .001), drug and alcohol use, and suicide attempts than those never abused.	Does not address severity of abuse. Uses few questions to diagnose abuse. Large sample. Women only; results unlikely to generalize.
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3.2.a Effects on mental health

Experience of abuse and maltreatment during childhood have been identified and extensively discussed as causes of developmental psychopathology (e.g., Cicchetti & Toth, 1995; Widom, 2000). Child abuse and maltreatment impact a variety of developmental areas and domains of psychological functioning. As children, the targets of abuse tend to be fearful, anxious, depressed, and low in self-esteem (Emery, 1989; Sternberg et al., 1993; Trickett et al., 1991). The mental health outcomes associated with child abuse may also be long-lasting, impacting individuals into adulthood, and may take the form of diagnosable disorders or sub-threshold problems (Ronan & Feather, 2009). A broad domain of psychological and mental health problems have been identified as associated with early abuse. Researchers have identified academic and cognitive challenges associated with childhood abuse, including intellectual deficits (e.g., Malinosky-Rummell & Hansen, 1993; Salzinger, Feldman, Hammer, & Rosario, 1993), general academic challenges (e.g., Battle et al., 2004; Bierer et al., 2003; Malinosky-Rummell & Hansen, 1993; Salzinger et al., 1993), and language delays (e.g., Bierer et al., 2003; Battle et al., 2004). Problems with social interaction and social relationships (e.g., Battle et al., 2004; Bierer et al., 2003; Malinosky-Rummell & Hansen, 1993; Salzinger et al., 1993) and self-esteem (e.g., Battle et al., 2004; Bierer et al., 2003; Emery, 1989; Sternberg et al., 1993; Trickett et al., 1991) have also been noted.

Affect regulation theory suggests that a consequence of child abuse is that the child is deprived of love, and the deprivation of love then leads to an over-active desire to gain satisfaction not only through love, but through a range of addictive behaviours (Carter, 1998; Reynaud, 2010). Thus, on the basis of affect regulation theory, children who experience harsh parenting should be more likely to show addictions. This is just one of several mechanisms that lead to an association between child abuse and addictive behaviour. Stressed organisms cope poorly with their environment in multiple ways, and the neuroendocrine effects of stress resulting from child abuse (Hyland, 2011) will lead to poorer coping and therefore a greater tendency to engage in maladaptive addictive practices. The affect regulation theory and stress theories are linked, however, in that there are neuroendocrine changes associated with deprivation of love. Thus, affect regulation theory is, from a biological point of view, similar to stress theory in that both suggest the same neuro-endocrine and immune changes associated with lack

of love/stress, namely enhanced hypothalamic-pituitary-adrenal axis activity and increases in the inflammatory response system.

Relationships between childhood abuse and personality disorders have been noted not only in clinical populations, but also in community samples of individuals with sub-clinical symptoms (Gibb, Chelminski, & Zimmerman, 2001; Grover et al., 2007; Johnson, Smailes, Cohen, Brown, & Bernstein, 2000). Depression has been noted as associated with early abuse and negative parent-child relationships in many studies (e.g., Emery 1989; Finkelhor & Dziuba-Leatherman, 1994; Malinosky-Rummell & Hansen, 1993; Pelcovitz et al., 2000; Sternberg et al., 1993; and Trickett et al., 1991). Pelcovitz et al. (2000) also noted that dysthymia, attention deficit hyperactivity disorder (ADHD), conduct disorder, and oppositional defiant disorder were associated with histories of abuse.

Individuals with a history of abuse during childhood have been found to be more likely to take sexual risks (Senn, Carey, & Vanable, 2008; Hahm, Lee, Ozonoff, & Van Wert, 2010), to engage in substance abuse (e.g., Finkelhor & Dziuba-Leatherman, 1994; Malinosky-Rummell & Hansen, 1993; Moran, Vuchinich, & Hall, 2004), to engage in violence in and out of the home (Finkelhor & Dziuba-Leatherman, 1994; Malinosky-Rummell & Hansen, 1993), and to engage in higher-than-average rates of criminal activity (Finkelhor & Dziuba-Leatherman, 1994; Malinosky-Rummell & Hansen, 1993). Other studies, in both the US and in Oslo, Norway, have found a history of abuse to be linked to suicidality in both adolescents and adults (Hahm et al., 2010; Roy & Janal, 2006; Ystgaard, Hestetun, Loeb, & Mehlum, 2004).

The research evidence indicates that individuals who experience abuse and maltreatment during childhood are more likely to experience mental health problems and psychological challenges, ranging from delayed language acquisition to depression and suicidality. However, because abuse and maltreatment are often assessed by retrospective reports, the accuracy of information regarding childhood experiences (particularly when reported by individuals with mental illnesses) has been questioned. Nevertheless, the relationship between abuse and mental health challenges is apparent.

3.2.b Effects on physical health

Some of the short-term physical health consequences of abuse during childhood are obvious. Children have been noted to have broken bones, minor and severe brain damage, and even to die as a result of physical injuries (Johnson, 2000). However, the health-related impact of childhood abuse and childhood experiences can also be long-term and far-reaching, impacting health into adulthood. Specifically, childhood abuse and trauma have been found to be associated with arthritis (Fuller-Thomson, Stefanyk, & Brennenstuhl, 2009), cancer (Fuller-Thomson & Brennenstuhl, 2009), and heart disease (Fuller-Thomson, Brennenstuhl, & Frank, 2010). Using both an objective assessment (number of hospital stays and surgeries) and a subjective assessment (self-reported overall physical health), Moeller and Bachmann (1993) examined the association between self-reported history of childhood abuse and adult physical health in a sample of 668 American, female gynecological patients who responded anonymously to a mail-in survey. Among the sample, individuals with a history of abuse were found to have significantly more hospital visits and surgeries, and lower subjective ratings of their own health.

Unlike mental and psychological health issues, for which there may be disagreement regarding diagnoses, many physical health issues (e.g., heart disease, cancer) can be objectively measured. Questions may remain regarding the accuracy of accounts of early abuse and early experiences, but the physical health outcome variables are quantifiable. The pattern found between early childhood abuse and adult physical health problems is parallel to that of abuse and mental health problems; individuals who experience childhood abuse are at higher risk for physical ailments.

3.2.c Effects on medically unexplained symptoms and functional diseases

Medically unexplained symptoms and diseases occur when an individual has symptoms of disease (e.g., pain) but no specific physiological abnormality or cause can be identified. Various functional diseases have been identified; functional diseases are defined by recognised clusters of symptoms that may co-occur relatively commonly but still have no identifiable physiological cause. In addition to mental health and physical health symptoms, researchers have identified medically unexplained symptoms and functional diseases that do not have apparent organic causes as being associated with childhood abuse and maltreatment (e.g., medically unexplained symptoms, Roelofs & Spinhoven, 2007). Researchers have suggested that, when attempting to determine the

etiology of illnesses that have prolonged symptoms and no apparent organic cause, physicians should obtain a patient history with attention given to previous trauma (Rimsza, Berg, & Locke, 1988). Childhood abuse has also been found to be associated with pseudo-seizures (epileptic fits that occur without the brain activity typical of epilepsy; Fleisher et al., 2002) and Chronic Fatigue Syndrome (CFS; Heim et al. 2006; Heim et al., 2009; McCauley et al., 1997). In summarizing the long-term impact of childhood sexual abuse, Berkowitz (2000) noted somatic symptoms (e.g., irritable bowel syndrome, chronic pelvic pain, eating disorders) and higher-than-average rates of use of health care resources during adulthood. In an examination of the relationship between sexual and physical abuse and gastrointestinal illness, Drossman et al. (1999) suggested that psychological distress may be the cause of bowel motility disorders and that individuals with a history of abuse may be more likely to experience or perceive gastrointestinal pain even after the cause of the pain has subsided.

In summary, just as with more easily categorized mental health and physical health problems, unexplained medical symptoms and functional disease have been found to be significantly and positively correlated with childhood abuse. These illnesses without apparent organic causes may be a particularly interesting and informative avenue of research for the long-term impact of early childhood experiences, because these non-organic illnesses may have their roots in human psychological experiences. How do early childhood experiences shape individuals' long-term interpretation of and experience of the world around them?

3.3 Explaining disease

A growing body of research evidence regarding the relationship of experience with disease is consistent with the infornet theory. For example, research has found that foetal stress is associated postnatal reactivity to stressors and later health problems (e.g., Wadhwa, 2005; Harding, 2001), including deficient brain development (e.g., Lou, Hansen, Nordentoft, et al., 1994). New studies, especially those of two exceptionally well-documented cohorts in Helsinki, strongly suggest that coronary heart disease and the disorders related to it develop through a series of interactions between the individual and his or her environment (e.g., Forsén, Eriksson, Tuomilehto, et al. 1997; Frankel, Elwood, Sweetnam, Yarnell, & Smith, 1996). The associations between slow foetal,

infant, and childhood growth and later coronary heart disease are strong and graded (Barker, 2002).

Saudi Arabian parenting practices often involve verbal abuse, physical punishment, and a lack of encouragement to express personal thoughts and feelings. Based on the Barker hypothesis, infornet theory, and related findings, it is predicted that verbal abuse and physical abuse (punishment) are more detrimental to individuals' health. Being targeted with abuse elicits a protective response, prompting the infornet alarm bell to ring and the physiological system to respond as though the general situation is negative and threatening.

Abuse is an atypical experience, but disease is common. Individuals diagnosed with diseases may report a history of abuse. However, it is important to note that, eventually, the majority of people develop diseases, and so nearly everyone who has been abused ends up with a disease. Previous research has not adequately determined whether individuals who have been abused are more likely to become diseased (or become diseased at younger ages, with specific types of diseases) than individuals who were not abused.

Chapter 4

Overview of the thesis

The work conducted in this thesis is presented in seven studies. Study 1, presented in chapter 5, used qualitative interviews to develop an understanding of Saudi Arabian individuals' perspective on the influence of their culture and society in shaping positive behaviour. These interviews were used to inform the development of the APSQ.

The Arabic Parenting Style Questionnaire (APSQ) was developed as a culturally appropriate scale for assessing parenting in Saudi Arabia. This thesis presents the development of the APSQ. The APSQ was used to test hypothesised relationships between childhood experiences (e.g., verbal insults and physical beating by parents) and adult physical health, mental health, and overall well-being. Expanding on existing research literature, the relationship of childhood parent-child relationships with health and well-being among typical individuals, individuals with diagnosed medical illnesses, and individuals with mental health challenges (substance abuse addictions) were all investigated.

In Study 2 (chapter 6) and Study 3 (chapter 7), the APSQ was developed and its relationships with existing assessment tools were explored. Chapter 6 focuses on the development and validation of the new scale, which has two versions. One version of the APSQ is called the "child APSQ" and instructs respondents to respond based on their experiences with their parents when the respondents were between six and 18 years of age; the other version, the "adult APSQ", asks about experiences when respondents were 18 years of age or older. Study 3 had two aims: to compare the new APSQ with a small number of existing scales that may measure related constructs, and to select which version (child or adult) of the APSQ to use in the next study. In Study 3, the APSQ's relationships with the GQLS, the Big Five Inventory (BFI), and the Parental Authority Questionnaire (PAQ) were explored.

In Study 4 (chapter 8), relationships between the APSQ and health- and wellness-related outcomes within a normal Saudi Arabian sample were identified and discussed. Specifically, chapter 8 addresses the correlation of the APSQ with the Minor Health Complaints Questionnaire (MHCQ), the Positive and Negative Affect Scale (PANAS),

the Satisfaction with Life Scale (SLS), and the GQLS among a sample of typical, Saudi Arabian participants.

Chapters 9 and 10 report studies examining the relationships between childhood experience and various health- and wellness-related outcome variables among samples of Saudi Arabian adults who were diagnosed as having multiple substance abuse addictions. Two samples of Saudi Arabian individuals with addictions were examined in these studies. One sample was examined in chapter 9, and a separate sample was examined in chapter 10. The aim of the study discussed in chapter 9 was to examine the correlation of the APSQ with wellness-related variables assessed using the MHCQ, PANAS, SLS, and GQLS among a sample of Saudi Arabian individuals with substance-abuse addictions. Chapter 10 addresses the question of whether experiencing harsh parenting practices during childhood and experiencing discouragement from expressing feelings during childhood are related to later depression, Chronic Fatigue Syndrome (CFS), minor health complaints (measured using the MHCQ), and Borderline Personality Disorder (BPD) in individuals with substance abuse addictions.

In chapter 11, parent-child relationships were used to predict differences between individuals with specific diseases compared with individuals who had not been diagnosed with diseases. The results of this study show that harsh parenting during childhood and discouragement from emotional expression during childhood were associated with an increased incidence of cancer, heart disease, and asthma in later life. However, when harsh parenting and encouragement were entered into a simultaneous multiple regression, only abuse predicted major disease.

Finally, in chapter 12 the studies presented in the previous chapters are examined and discussed collectively and the overarching questions presented in this thesis are addressed.

Chapter 5

Study 1: Saudi Arabians' perspectives on the determinants of good and bad behaviour

Abstract

Aim: The goal of the study presented in this chapter was to explore Saudi Arabians' perspectives on factors leading to positive (i.e., socially acceptable) behaviour from children.

Methods and Participants: The study utilizes a qualitative, interview-based design. Thirty male participants from Saudi Arabia ($M = 33.70$ years, $SD = 8.96$ years), divided into six focus groups with five participants per group, took part in the study. Participants were recruited such that they represented a range of ages, from 20 to 50 years, and had a variety of educational backgrounds.

Results: The participants reported that relationships between parents and children play a critical role in shaping children's personalities. Most of the participants identified the parent-child relationship as a predictor of children's positive behaviours, health, and future. They also suggested that they expect aspects of parent-child relationships to predict the development of positive or negative thinking (optimism or pessimism).

Discussion: Drawing on participant interviews, it is concluded that two primary, important issues are likely to influence behaviour, namely parent-child relationships and religion.

Key words: *Positive approaches, optimism, self-esteem, gratitude, achievement, forgiveness, religion, parent-child relationship.*

5.1 Introduction

Relatively little attention has been given to Arabs and Muslims in the mental health research literature, and attention to Saudi Arabia has been lacking (Dwairy, 2006). Due to this inattention, little is known to psychologists about the perceptions and experiences of Saudi Arabians. A qualitative, interview-based study was conducted to explore Saudi Arabians' subjective, phenomenological reports of factors impacting their health, well-being, and skills for coping with stress. The results of this qualitative study shaped the questions addressed in the remainder of the thesis. Specifically, the results of this study provoked interest in parenting styles and their roles in the parent-child relationship, with the parent-child relationship as a factor that might have long-term impact on individuals' health and well-being. The analyses presented below focus on this topic. The aim of this first study was not to address the issue of harsh parenting, but the results did suggest that harsh parenting was an important topic to explore.

As seen in chapter 2, research addressing the impact of parenting styles on children's well-being and development in the Arab world is also relatively meagre. Due to this inattention, little is known to psychologists about the perceptions and experiences of Saudi Arabians. In later stages of this research, the qualitative study presented in this chapter was considered important to the development of the APSQ because it informed the inclusion of topics in the questionnaire based on Saudi Arabians' perspectives. However, the aim of this study was not to develop a scale to measure harsh parenting – that aim emerged from the data only after the study was carried out.

5.2 Methods

5.2.a Rationale

The current study involves social interaction with and interviews of participants. Based on ethics and religion-based social custom in Saudi Arabia, it is not generally appropriate for men to interact with women who are not in their families. To facilitate the current study, conducted by a male researcher (the author), only male participants were included. In an attempt to select a sample that was as representative of the Saudi population as possible, men with varying levels of education and with ages between 20 and 50 years were recruited to participate.

A booklet of positive coping techniques was acquired and used for the current study. These techniques have been researched in the literature of positive psychology (e.g., Joesph & Linley, 2005; Seligman, Steen, Park, & Peterson, 2005; Seligman, Rashid, & Parks, 2006), and some have formed the basis for self-help techniques by other doctoral students in the research group to which I belonged (e.g., Geraghty, Wood, & Hyland, 2010a; Geraghty, Wood, & Hyland, 2010b; Wood, Froh, & Geraghty, 2010). The booklet was developed using existing material and includes discussion of optimism and gratitude as other useful techniques. One reason for using these positive psychology techniques is that they are consistent with Muslim beliefs. Thus, positive psychology as a concept is suitable for use with the Muslim population of Saudi Arabia.

5.2.b Participants

The author recruited a total of 30 participants who were evenly distributed into the six groups specified in Table 5.1. The groups were divided such that there were three age levels (i.e., 20-30 years, 31-40 years, and 41-50 years) with two education levels (i.e., educated, non-educated) for each age level. Individuals with a Bachelor's degree or education beyond a Bachelor's degree were considered "educated," and individuals who had not attained secondary school certification were considered "non-educated". All 30 participants were residents of Alhasa, Saudi Arabia.

Table 5.1 Study 1 sample characteristics

Age Group	Education Level	
	Educated	Non-educated
20-30 years old	5 participants (Group 1)	5 participants (Group 2)
31-40 years old	5 participants (Group 3)	5 participants (Group 4)
41-50 years old	5 participants (Group 5)	5 participants (Group 6)

5.2.c Recruitment

The author approached the Civil Social Developmental Committee (CSDC) in Omran, Alhasa and asked them to advertise the study. Males who were between the ages of 20 and 50 years were asked to contact the author by email or telephone. During the initial contact, face-to-face meetings were arranged. During the face-to-face meetings, the author explained the purpose of the study by stating that the study would be exploring

the participants' perspectives on how to improve well-being, and they would be asked to evaluate different ways of improving well-being. Participants, all of whom were men, were invited to take part. Individuals who agreed to participate gave their written consent to take part in the study, and a convenient time when each group could meet was scheduled. An introduction, translated from English to Arabic, was presented to all participants at the group meeting. The meeting was in a room provided by CSDC in Omran. The study was limited to men because the researcher was male. In Saudi Arabia, it would not be permitted for a male researcher to interview females, except they were to be accompanied by a male member of their family. I felt that such a limitation would reduce the validity of the data collected from females, because their views would be interpreted by their male chaperones.

All participants gave informed consent and the studies were deemed ethical by University of Plymouth's Human Ethics Committee and were consistent with the Code of Ethics of the World Medical Association (Declaration of Helsinki) for experiments involving humans.

5.2.d Procedures

The groups were provided with booklets presenting various, general approaches to life (i.e., coping strategies) that are considered positive, including optimism, self-esteem, gratitude, achievement, and forgiveness techniques (see Appendix A). A 10-minute presentation on these techniques was also provided to the participants. The presentation and questions were in the Arabic language, which all participants spoke fluently. Audio from the entire session was recorded digitally. Following the meeting, the researcher transcribed the recording in Arabic; the transcripts were later translated from Arabic to English. The English translations were given to Arabic-English bilingual translators to backtranslate to Arabic. The backtranslated transcriptions were then compared to the original transcriptions to identify translation problems; no problems were found.

The interview passages were analysed, and the most frequently discussed topics were noted. The approaches that participants considered to be most important (as stated by the participants during interview) and the approaches that participants most frequently discussed were identified for further analyses (below).

Table 5.2 Interview guide questions for discussion of each positive life technique

The questions for each technique

1. What do you like about the technique?
 2. What do you dislike about the technique?
 3. Which is your favourite technique?
 4. Which of the techniques would you like to have if you were depressed?
-

5.3 Qualitative analyses

During the discussions with the participants, several themes that explained the participants' preference for one technique (e.g., optimism) over the other options emerged. The method of analysis was interpretative phenomenological analysis (IPA). The aim of IPA is to gain insight into the phenomenological world of the participant, bearing in mind that this understanding will be conditioned by the experimenter's own experience (Smith, Flowers, & Larkin, 2009). In this procedure I listened to the tapes of the interviews on several occasions each time trying to understand the categories of meaning that the participant was trying to express. My aim was to understand the world of the participant by forming categories of statements made by the different participants. I found that the themes each participant discussed could be classified as related to one of two broad issues, religion or the parent-child relationship. Thus, for this group of participants, their experience seemed to revolve around these two topics, at least in the answers they gave to the cues with which they were presented. In the following sections I describe the cues and examples of responses given by some participants.

For purpose of the following interview transcriptions and to protect the identities of the participants, each participant is provided with an identification number. The identification number lists first the individual's randomly assigned number within the group (i.e., P1 is participant 1, P2 is participant 2), and then the individual's group number (i.e., G1 is group 1, which consisted of 5 educated men between 20 and 30 years of age; G4 is group 4, which consisted of 5 non-educated men between 31 and 40 years of age; see Table 5.1 for group details).

5.3.a Religion

Several participants indicated that their choice of a preferred coping technique was affected by religious beliefs. There were 10 participants who reported this. The researcher asked the participants:

Which is your favourite technique?

The first participant, P1G1 said:

Of course, I believe that the most important technique is optimism because it is the hope of life and without this technique we would never have been able to mature. It is excellent and very applicable. I like it because our religion recommends that we be optimists, not pessimists. Moreover, it helps us to go through life without stressors. In addition, there is one factor remaining which is the rearing by parents. That is a very important factor.

In response to the same question, another participant, P2G5 said:

I think optimism is the most important technique and it appears to be where religion enters. Because humans are naturally inclined to nature and all that is sacred and supernatural. Also, optimism has a strong presence in the association of religion and God. Furthermore, I think using this technique requires recognition of culture and understanding of the situation so that the technique can be used. I believe that all techniques require a kind of awareness and it might be required to learn them from an early stage of our lives. For example, parents have a main role in cultivating all positive behaviours in their children.

P2G2 said:

I like the best technique which is gratitude because it is related to religion. But I think all the positive behaviours are dependent on the parents, how they deal with their children.

P2G4 said:

I think there is a strong correlation between optimism and self-esteem. If I can be confident, I think it is possible to be optimistic. And we can generate the optimism from the religion.

P1G5 said:

I think all these techniques are behaviours. All of them are very nice, but it is difficult for them to exist in a person automatically. We need to learn these behaviours from the beginning of our lives. Particularly, it is important to learn them during the childhood stage.

And P3G5 said:

I like all these techniques and I hope I can perceive all these techniques in myself. And self-esteem technique, the person must know and have the potential so that the technique can be used. In conclusion, that the interest is more than just gestures of self-esteem. Furthermore, all techniques require training and practice over our lives, particularly, by our parents.

As a follow-up to asking the participants which technique they each preferred, the researcher asked the participants:

What do you like about the technique?

P4G4, who discussed optimism as his favourite technique, said:

The religious and the parent-child relationship factors are crucially important. Also, I assess all techniques from the perspective of these factors. I imagine that this technique has considerable positive effect.

PIG2 also discussed optimism. In addition, **PIG2** said:

I never forgot any favour that had been done for me. Neither will I forget to thank God and learn to respond, including replying to others as I can do. In addition, I am grateful to my parents who assisted me to be positive.

A participant who identified forgiveness as his favourite technique, **PIG3**, said:

It is nice to live this life and not carry grudges against people and be tolerant of others in order to fulfil a happy and comfortable life. This is what our religion teaches us.

Another participant who also said forgiveness was his favourite technique, **P5G3** said:

I think it is difficult to cultivate a spirit of tolerance in each individual. As well, I believe that they interfere with the religious side too. When a person has a strong belief and faith, he or she is more likely to be able to forgive other people.

A participant who said optimism was his favourite technique, **P4G3**, said:

I think that there are many benefits for people in our society. The person is happy or tends to be positive or negative when he or she feels that life is beautiful and those experiences are influenced by parents during the child's development. As well, there were directives from Islam religion to do that.

The researcher also asked the participants:

Which of the techniques would you like to have if you were depressed?

In response, **P2G4** said:

Forgiveness is a very good technique because everyone should utilise this technique. Yet, it is a part of our religion.

And, **P3G5** said:

We should know who requires these techniques. Because this issue depends very much on the type of situation, such as tolerating abuse by a person or a financial issue or a religious contract. The second point is the amount of things. If we assess who requires this technique? I return to the rule of religious and parental

styles... As mentioned in the Holy Quran: 'And the (faithful) slaves of Most Gracious (Allah) are those who walk on the earth in humility and sedateness, and when the foolish address them (with negative words) they reply back with mild words of gentleness'. In short, a culture of forgiveness requires identifying and also requires introducing the concept of confrontation because I think it would be effective.

In summary, the participants indicated that religion is very important for learning positive coping techniques and approaches to life, and religion plays a significant role in shaping people's behaviour overall. The majority of the participants also shared the belief that commitment to religion is related to and dependent on parental guidance and the parent-child relationship.

5.3.b Parent-Child Relationship

Several participants indicated that their lives and behaviours were affected by their parents and discussed how parents teach their children to determine whether a particular behaviour is good or bad. Participants discussed these issues when responding to the researcher's questions about the various techniques. For example, the researcher asked:

Which is your favourite technique?

In response, very generally, **P2G3** said:

I think all techniques are taught techniques. But the important issue is that we should learn them in the childhood stage with our parents.

In response to the same question, **P3G2** discussed gratefulness. He said:

I think it is the best technique for me. Particularly, gratefulness... To perceive that there are people who changed the course of my life to be much better. I feel I must give those people with thanks and gratitude. Particularly, my parents have taught me to be grateful for others because the others are what really matters.

Many participants discussed optimism. For example, **P3G1**, said:

The optimism technique motivates the person to be much better and to have good future. Also, I believe that optimism is linked to the level of motivation of the person. But, I think it depends on how we learn it from our parents.

P4G3 said:

I remember my parents, when I was a child, they said, 'stay optimistic, not pessimistic.' I believe that positive thinking and positive action are preceded by always being optimistic.

Also discussing optimism, **P1G4** said:

Optimism technique is very excellent. Quite frankly I have experienced it before and I felt comfortable psychologically. So, I tend to be positive because my parents taught me to be positive.

Another participant, **P1G5**, discussed optimism as well and said:

I think our societies do not have a spirit of optimism. As well, I think it is excellent technique to develop the lives of the community or in families with their children.

Finally, **P1G6** discussed optimism and positive thinking. He said:

Years ago I was looking for a job, and I had been frustrated. I received words from my father. He informed me that, if you think well you will be in a good situation, but if you think negatively, then you will be in a negative mood and you perceive everything as black. After that, I always think positively; after a couple months I got a job.

To follow-up on discussion of participants' favourite techniques, the researcher asked:

What do you like about the technique?

Discussing optimism, **P2G2** said:

I think optimism technique is not related to the person but it is related with our family, and we can gain these techniques as long as the person experienced [the techniques] when he or she was a child. What did he or she learn from the parents? Therefore, all of us could be taught to be optimist or pessimist.

P1G2 had discussed forgiveness and he said:

Yes, forgiveness could remove a lot of problems and negative thinking. In addition, my parents always encouraged me to forgive other people.

The researcher also asked participants:

Which of the techniques would you like to have if you were depressed?

P3G4 said:

I think all the techniques; we could use them daily. I tried to use this technique in advance and I got many benefits. As well, this technique plants and develops

the enthusiasm, and makes you look forward. Moreover, everyone can have this technique if his or her parents assisted them to practise these techniques.

And P3G5 highlighted central issues, saying:

I think the most critical factors here are the religious factor and educational factor.

The majority of the participants stated that positive behaviours are associated with maintaining optimism, being forgiving, and being grateful, all of which can be learned from one's parents. Moreover, some participants mentioned that the self-esteem promoting technique supports and promotes other techniques (e.g., forgiveness) in that individuals who feel good about themselves are more able to use these techniques. In addition, most of the participants indicated that they thought their relationships with their parents had affected their later physical or mental health, and their tendency to be optimistic or pessimistic.

5.4 Discussion

According to the participants, there are two critical factors that contribute to and shape people's behaviour. The first factor is religion (universally Islam in the current sample) and the second is the parent-child relationship. The majority of the participants indicated that they believe that how parents raise their children and what parents teach their children are of vital importance in shaping the children's behaviour, their personalities, and the quality of their lives. In Saudi Arabia, the parent-child relationship is linked closely with the way children are punished and encouraged by their parents. Thus, any further examination of the parent-child relationship needs to take these factors into account.

Despite the new shift in emphasis for this thesis, there are several limitations of this study, which must be taken into consideration alongside the study's results. These limitations include the fact that the participant sample included only men and the fact that the participants were given a booklet to review and then discuss. Given that only men were included in the sample and that the Saudi Arabian culture treats men and women quite differently, it cannot be assumed that the results would generalise to women (who may or may not have very different relationships with their parents and with their children). The prompting of the participants to discuss coping techniques and skills by first providing the participants with a list of potentially useful and healthy

techniques is likely to have limited the number of responses (favourite techniques) the participants listed and also shaped the participants' discussion of how these techniques are learned. There may have been an increased focus on the parent-child relationship and particularly on religion because the booklet of techniques was selected based on its being culturally appropriate and consistent with Islam (i.e., promoting techniques also promoted by Islam).

Although religion was also an important determinant as reported by participants, religion is a sensitive topic in Saudi Arabia, and there is a good deal of mistrust between Sunni and Shia communities. The recent unrest in the middle East includes increased conflict between these communities, and there are political issues which have been simmering for a long time. I am a member of the minority Shia community, and any attempt to examine religion with the Sunni community would be considered very negatively by that community. So religion was not examined in future studies.

In summary, the interview participants indicated that the parent-child relationship was important in shaping children's futures – but how? What aspects of the parent-child relationship were important? In the next chapter, the concept of the parent-child relationship and how it has been measured and assessed in previous work will be discussed, and then a new assessment tool will be introduced.

Arab societies overall, and Saudi Arabian society specifically, have not garnered a large amount of research attention from psychologists. In order to understand and explain behaviour in Saudi Arabia scientifically and systematically, research is necessary. The Saudi context is also a rich context for conducting research examining human behaviour, particularly as related to religion, because Saudi Arabia has gone through many economic and social changes in recent decades and yet religion continues to play a central role in the culture.

Chapter 6

Study 2: Development and Psychometric Analysis of the Arabic Parenting Style Questionnaire (APSQ) for use in Saudi Arabia

Abstract

Aim: The aim of this study was to develop and provide initial validation of an Arabic Parenting Style Questionnaire (APSQ) for use in Saudi Arabia.

Participants: The sample of participants who took part in this study includes 548 Saudi students (442 male, 106 female) whose ages ranged from 19 to 40 years ($M = 23.53$ years, $SD = 4.47$ years; 80.7% male, 19.3% female) and who were living in the United Kingdom (UK).

Methods and Results: All the participants completed two sets of questionnaires. Factor analysis (Principal Axis Factoring, or PAF) using orthogonal rotation (varimax with Kaiser normalization) was conducted in order to identify the number of factors underlying participants' responses to the original questionnaires (17 items). On basis of the analyses, a 10-item form of the APSQ was developed.

Discussion: The 10-item APSQ was found to demonstrate adequate psychometric properties. The 10 items could be divided into three factors, which were descriptively labelled as harsh parenting, encouragement, and family preference.

Key words: *Parent-child relationship, psychometric analysis, developing, harsh parenting, encouragement, and family preference.*

6.1 Introduction

To many people – including lay people and researchers alike – parents play the central, principal role in shaping the development of children. Other individuals, such as extended family and other caregivers, may offer nurturance and social interaction, but the ultimate responsibility for young children usually belongs to their parents. Across cultures, societies, and history, the parent-child relationship has been emphasised (Barnard & Solchany, 2002).

Saudi Arabian parents' child-rearing practices have been scrutinized and widely criticized, and have gained increasing public attention (Achoui, 2003). A variety of sources have made recommendations for how to improve parenting. Psychologists, educators, and other authorities have contributed their perspectives (Dwairy, 2006). As discussed in previous chapters, public policy has mandated changes in how children are treated by creating laws related to the care and protection of children in Saudi Arabia as well as in other countries. All of these modifications in the way Saudis interact with their children and how Saudis perceive their roles as parents have not come about overnight, nor have changes been uniform.

The impact of parents and parenting style in one culture cannot be presumed to be identical to those in another culture. Parenting and child-rearing occur in the context of a broader environment, whether identified as the extended family, the town or city in which the family lives, or a broad society and culture. A particularly noteworthy and potentially important example is authoritarian parenting. In the West, authoritarian parenting styles have been found to be associated with negative mental health outcomes for children (e.g., Dwairy, 2004; Dwairy & Menshar, 2006). In Arab countries, a very weak relationship between authoritarian parenting and children's poor health has been found (Dwairy et al., 2006). Furthermore, children and youth in Arab countries have been found to not complain about authoritarian parenting (e.g., Hatab & Makki, 1978) or about abusive-aggressive behaviour from teachers (e.g., Dwairy, 1998). Researchers have suggested that, within Arab cultures, children consider punishment a normal duty of parents and teachers, and see punishment as justified (e.g., Achoui, 2003). Of course, overgeneralisations are to be avoided. Saudis do differ from one another in their child-rearing practices. Nonetheless, generally speaking and at a cultural level, punishment styles perceived as abusive in other cultures may be quite common in Saudi Arabia. In one study, 78.1% of a sample of teachers and parents in Saudi Arabia considered

corporal punishment an acceptable for controlling children's behaviour (Al-Dahash, 1996).

After the Gulf War and with the increase of social policy concerns, particularly advocacy for children's welfare and for education, issues in Saudi Arabia and specifically Muslim issues have become more prominent in the global view. When looking at parenting styles and child welfare, Saudi society is of particular interest because it is considered among the stricter societies compared to other Arab and Muslim societies. The current study focuses on the development of a parent-child relationship scale for use in Saudi Arabia. The objective was to construct and examine a parent-child relationship scale for individuals to use in describing their own experiences with their parents. The resulting scale can be used in empirical research to address questions regarding the impact of child-rearing practices on individuals' long-term well-being, mental health, and physical health.

The overall goal of developing a scale for assessing parent-child relationships in Saudi Arabia was achieved through several steps, discussed in this chapter. First, an initial Arabic Parenting Style Questionnaire (APSQ) was developed. Second, the initial APSQ was modified on the basis of qualitative feedback from a panel of Saudi Arabian individuals. Third, two parallel version of the APSQ (one to address parent-child relationships in childhood, and one to address parent-child relationships during adulthood) were examined to determine if their underlying factor structures were the same. The APSQ was further modified on basis of the factor analysis results so as to derive a clearer factor structure for each form of the scale. Finally, after items were removed from each questionnaire, the reliability of the new subscales and the inter-correlation of the subscales with each other were examined.

6.2 Existing questionnaires

There are several scales for use in assessing various aspects of parent-child relationships, but the majority of them only take into account the parents' perspective. Only a few scales look at the children's perspective on their relationships with their parents. Currently existing parent-child relationship assessment tools are listed and described below, then critically discussed.

6.2.a Parent as respondent

1. *The Child-Parent Relationship Scale*. This scale was developed by Robert C. Pianta (1992) and is used to assess the relationship between a parent and child from the parent's view. The scale consists of 15 items to which parents respond using a five-point Likert scale. The response options are "definitely does not apply," "not really," "neutral/not sure," "applies somewhat," and "definitely applies." Parents use these response options to indicate how accurately the description included in the corresponding item describes their relationships with their children.
2. *The Parent-Child Relationship Inventory (PCRI)*. This inventory, developed by Anthony B. Gerard (2005), consists of seven subscales, Parental Support, Satisfaction with Parenting, Involvement, Communication, Limit Setting, Autonomy, and Role Orientation. The PCRI was developed to investigate parents' views of the task of parenting and their encouragement of their children. This inventory was designed for use with mothers or fathers of children between the ages of three and 15 years. The results of the PCRI provide a clear, quantified description of the parent-child relationship, including identification of areas in which problems are more likely to occur.

6.2.b Child as respondent

3. *The Parental Authority Questionnaire (PAQ)*. This 30-item questionnaire was developed by Buri (1991). The PAQ was created to assess parental styles such as permissive, authoritarian, and authoritative parenting from the child's perspective, with no particular age limit or specification for the child/respondent. Individuals respond to the questionnaire, choosing answers that best characterise their parents' behaviour. Answers are provided using a five-point Likert scale, with response options of "strongly disagree," "disagree," "neither agree nor disagree," "agree," and "strongly agree."
4. *The Parenting Style Questionnaire (PSQ)*. The PSQ was developed by Smith et al. (1996) and consists of five subscales, namely warmth, punitiveness, overprotection, accurate monitoring, and neglect. An individual responds to the items using a three-point scale to indicate how accurately each item describes that individual's parent. That is, the questionnaire is designed to assess parenting

behaviour from the child's point of view. Example response options include, "a lot like my mum," "a bit like my mum," and "not at all like my mum."

5. *Invalidating Childhood Environment Scale (ICES)*. The ICES was developed by Mountford, Corstorphine, Tomlinson, and Waller (2007) and is a self-report measure designed to assess individuals' childhood environments (as reported in Haslam, Mountford, Meyer, & Waller, 2008). This scale consists of 14 items to which individuals respond using a five-point Likert scale with answers ranging from "never" to "all the time".
6. *The Childhood Trauma Questionnaire*. This 28-item questionnaire was developed by Bernstein and Fink (1998) to measure four components of abuse, Emotional Abuse, Physical Abuse, Sexual Abuse, and Physical Neglect. The Childhood Trauma Questionnaire is used with adolescents between 12 and 17 years of age (as reported in Spertus et al., 2003).
7. *Family Environment Scale (Children's Version)*. This scale was designed by Pino, Simons, and Slawinoski (1984) and is used to measure the child's subjective view of his or her family environment.
8. *The Child's Report of Parental Behavior Inventory (CRPBI)*. This questionnaire was designed by Lovejoy, Weis, O'Hare, and Rubin (1999) to assess child-rearing behaviours (see Stein, Epstein, Raynor, Kilanowski, & Paluch, 2005; Schaefer, 1965). The CRPBI includes 56 items.

All of the scales described above were developed in the West. These Western scales may not appropriate for use in Saudi Arabia because the research and theory on which the questionnaires were based does not necessarily generalise across cultures, particularly across cultures as disparate as the Western and Saudi Arabia (Patterson, 1978).

Several scales have been developed in Arabic countries, including Egypt, Qatar, Kuwait, and Saudi Arabia, to assess various aspects of parent-child relationships. However, for a number of reasons, these questionnaires cannot be assumed suitable for use in present-day Saudi Arabia. First, many of the existing questionnaires that were

developed in Arab countries are quite old. Finding copies of these questionnaires is quite difficult and pertinent psychometric information about them is sparse. Furthermore, the content of the questions included on the scales is potentially outdated. For example, the Parent-Child Relationship Scale was developed by Alnofa'ai in 1985 (see Barakat, 2000). Saudi conditions and culture have changed dramatically since 1985, and especially in the last 20 years, in part because of dramatic economic and education-related changes that have taken place in Saudi Arabia with the discovery of oil, oil revenue, and the business systems developed to support the oil business. As discussed in chapters 1 and 2, parenting and beliefs about appropriate parenting practices versus child abuse have also changed in the recent past. Given the changes to culture and social conditions, questionnaires that were developed long ago cannot be assumed to address the issues that are important today.

Second, research conducted in Arab cultures that has used scales brought in from the West has indicated that the existing Western scales may not be suitable for use in Arab countries. Psychological scales that are commonly used in Saudi Arabia and that are already available in Arabic were evaluated in research conducted by Kariri (2005) at King Saud University in Saudi Arabia. Kariri's findings showed that the majority of the scales that are often used in Saudi Arabia are not appropriate for the Saudi population because they were simply translated from the English language to the Arabic language without attention to cultural differences and norms and without standardization of the scales. For the majority of scales used in Saudi Arabia, there is a lack of attention to issues of reliability and validity. Other scales have been examined in single, restricted regions of Saudi Arabia, but it cannot necessarily be assumed that the scales would behave in the same way, with the same levels of reliability and validity, in very different regions of the country. The existing scales can be used in the Saudi Arabian context only with caution, because the suitability of the scales may not generalise from their region of origin to Saudi Arabia.

The scales described above are not suitable for us in the current research for multiple reasons. First, many of the scales assess how parents view the task of parenting and how they feel about their children, which are not the variables of interest in the current work. Indeed, none of the existing scales assess verbal insult or abuse, nor do they examine parents' encouragement or discouragement of their children. Bernstein and Fink's (1997) Childhood Trauma Questionnaire addresses the topic of emotional abuse, but

only in the context of relatively severe child abuse. Verbal insult and abuse, and discouragement of self-expression, are both central variables of interest in the current study, but the study aims to examine the impact of abusive parenting broadly, not to exclusively assess the impact of child abuse.

The second reason none of the questionnaires discussed above are suitable for the current research is that none of the existing scales contain items to assess factors that may be critical for understanding parent-child relationships within the Saudi culture. For example, the questionnaires do not include items that ask about insulting children, a behaviour that is quite common in Saudi Arabia. The existing scales also fail to address issues of parents' preferential treatment or favouritism of male versus female children, which may also be an important factor in Saudi Arabian culture.

Third, the majority of the existing questionnaires use Likert scales for responses, but the scales are very limited in range (e.g., 1-5). The restricted range of responses may not allow adequate discrimination between participants who report having been frequently and severely abused versus occasionally but mildly abused or occasionally but severely abused. Discrimination among different frequencies of abusive treatment is important in order to determine the impact of different levels of abuse (e.g., severe-but-rare versus mild-but-chronic). In my scale, I decided to focus on the frequency of harsh parenting and encouragement because focusing on these narrow topics provided a simple form of quantification (in terms of frequency of events) that cannot be obtained from a severity score, because a severity score will always involve some degree of judgement. However, by focussing on frequency, it is possible that I may have missed some important aspect of harsh parenting. Chapter 10 examines yet another aspect of harsh parenting – its predictability. However, the results suggested that frequency by itself does provide a useful measure of harsh parenting.

6.3 Methods

6.3.a Participants

Participants in this study were 548 Saudi students, including 442 (80.7%) males and 106 (19.3%) females, all of whom were studying in the UK at the time of data collection. The participants' ages ranged from 19 to 40 years, with a mean age of 23.5 years ($SD = 4.5$). All participants gave informed consent and the studies were deemed ethical by University of Plymouth's Human Ethics Committee and were consistent with the Code

of Ethics of the World Medical Association (Declaration of Helsinki) for experiments involving humans.

6.3.b Scale development

The typical method of scale development begins with the generation of a large pool of potentially questionnaire items, followed by administration of that pool of items to a suitable sample and then use of factor analysis to reduce the number of items on an empirical basis. The goal is to select a relatively small number of items to assess meaningful, statistically reliable factors. The use of factor analysis produces a construct valid scale, but not necessarily a content valid scale. A scale has content validity if it covers the domains of interest that an external observer believes to be important (Anastasi, 1971). The method used here was to start by developing a content valid scale and then reduce the items using factor analysis. Content validity was the focus of attention in the first instance as there was a theoretical rationale for selecting items with particular content.

Language

The participants in this study are Arabic speaking, so the author generated the original questionnaire items in Arabic. Each item in the questionnaire was translated by the author from Arabic to English. The translation was as literal as possible. Next, the Arabic translation of the questionnaire was presented to three bilingual English-Arabic speakers, all of whom speak Arabic natively, for back-translation into Arabic. Subsequently, the back-translated versions of the questionnaire were compared to the original, Arabic questionnaire by the other qualified professionals. Finally, a qualified native English speaker checked the back-translated items with regard to how similar they were in meaning to the original scale items.

Development of initial item set (10 items)

A list of 10 items was developed by the author for administration to participants who took part in this study. The items were selected to address three content areas or topics; all 10 items are presented in Table 6.1, below. The first topic area is harsh parenting and includes four items to investigate verbal and physical aspects of how parents may behave harshly towards their children. The second topic area, which includes three items, addresses the encouragement and how (or whether) parents encourage their children to express their perspectives and feelings. The third topic area is family

preference, or whether parents preferred the respondent to his or her siblings or vice versa, and includes three items. Instructions indicated that respondents were to complete the questionnaire by selecting the most appropriate response from a five-point Likert scale of potential responses, including “never,” “once a year,” “once a month,” “once a week,” and “at least once every day.” Responses indicated the frequency with which the parents of the individual completing the questionnaire engaged in the behaviour described in each item.

Table 6.1 The 10 original items on the Arabic Parenting Style Questionnaire (APSQ)

Topic Area: Harsh Parenting	
1.	Did your parents verbally insult you?
2.	Were you beaten by your parents?
3.	Did your parents verbally insult you in front of others?
4.	Were you beaten by your parents in front of others?
Topic Area: Encouragement	
5.	Did your parents discourage you from expressing your opinions freely? (R)
6.	Did your parents discourage you from speaking frankly when expressing your own opinions? (R)
7.	In general, were you encouraged to express your opinion by your parents?
Topic Area: Family Preference	
8.	Did your parents prefer you to your siblings?
9.	Did your parents prefer your siblings to you?
10.	Did you feel that your parents did not care about you?

Note: Items marked with an “(R)” are reverse-coded.

Extension of initial item set through qualitative study (16 items)

In order to evaluate the completeness of the 10-item questionnaire that was developed in the previous step, a focus group of Saudi Arabian students living in the UK was utilized. The researcher met 20 Saudi students (13 males, 7 females) in the Saudi Arabian Cultural Bureau in London. During this meeting, the 20 participants were given copies of the 10-item scale. The participants were asked to read the scale and provide their comments and feedback critiquing the items included on the scale.

The participants suggested seven additional items, which are presented in Table 6.2, below. The items were identified as addressing the topics of harsh parenting practices and encouraging the expression of thoughts and encouragement. When examined qualitatively in terms of content, some of the items might be considered to bridge the topics of harsh parenting and encouragement. For example, the items “Did your parents criticise you verbally because you expressed your own opinion on life around you?” and

“Did your parents beat you because you expressed your own opinion of life around you?” address the issue of whether children incurred verbal insults, criticism, or physical harm as a result of expressing their own thoughts or encouragement. The final item that was added, “Did your parents keep something (e.g., a stick) for beating you?” used a Yes/No response scale and so was not combined with other items in the questionnaire, but rather examined separately.

The new total item set included 16 items with seven items addressing harsh parenting, seven items addressing encouragement, and three items addressing family preference.

Table 6.2 Seven additional items added to the APSQ

1.	Did your parents encourage you to speak frankly when expressing your own opinions?
2.	Did your parents criticise you verbally because you expressed your own opinion on life around you?
3.	Did your parents beat you because you expressed your own opinion of life around you?
4.	How often did you lie to your parents for fear of punishment?
5.	Did your parents encourage you to be badly behaved? (R)
6.	Did your parents encourage you to be well behaved?
7.	Did your parents keep something (e.g., a stick) for beating you? (Yes / No)

Note: Items marked with an “(R)” are reverse-coded.

Participants also suggested that the response scale should be an eight-point scale (instead of a five-point scale), and that answer options should be “never,” “once in my life,” “once a year,” “once every 6 months,” “once a month,” “once a week,” “once every 2 or 3 days,” and “at least once every day.” Use of such an expanded scale allows respondents to distinguish in more detail between treatment they experienced rarely, with moderate frequency, or very often.

Finally, the participants suggested that the scale should be more age-specific, or ask about parental treatment during different periods of childhood. Parents’ interactions with and behaviour towards their children are expected to change as the children mature and progress through developmental stages. How parents treat their children is likely to differ when the children are young and dependent versus when the children are in college, are adults, or are married and have their own children. Therefore, two versions of the APSQ were created, the first one asking about experiences between ages six and 18 years, and the second asking about parents’ treatment of children aged 18 years and above.

Another reason for creating two versions of the questionnaire was to examine whether individuals who report current or ongoing negative treatment from their parents also report having been treated similarly as children. If someone experiences abusive behaviour as an adult, they are more likely to have experienced it as a child (e.g., Yates & Wekerle, 2009). If results from the scales at both ages (child APSQ and adult APSQ) were highly correlated, the strong relationship between the two measures would suggest the reports are accurate.

6.4 Methods

16-item APSQ: Completion and factor analysis

The Saudi Arabian Cultural Bureau in London was asked to permit the collection of data in the embassy in London and in Saudi clubs across the UK. Permission was granted, and then potential participants were informally approached at the embassy and Saudi clubs. The purpose of the study was explained in a personal meeting with each potential participant, and each individual was then invited to take part in the study by completing the Arabic form of the APSQ. Participants who were interested in participating were asked to review, complete, and sign an informed consent form. Participants were given a copy of the consent form, a participant information form, and, after completion of the questionnaire, a debriefing form.

6.4.a Participants

A total of 548 individuals (442, or 80.7%, male, and 106, or 19.3%, female) whose ages ranged from 19 to 40 years ($M = 23.53$ years, $SD = 4.47$ years) took part in this study. All participants were living in the UK when the study was conducted.

6.5 Analyses

To determine whether the items included in the APSQ appear to be related to each other as predicted, grouping into the harsh parenting, encouragement, and family preference categories the items were generated to assess, common factor analyses (Principal Axis Factoring, PAF) were used. Participants' responses to items 1 through 16 on both the child and adult form of the APSQ were analysed with the assumption that latent variables underlie participants' responses. However, before considering the factor analyses, participants' responses to the single binomial response (Yes / No) item in the APSQ were examined. These results may be considered to yield a general idea of the level of negative parenting practices experienced in the sample, if questionnaire

respondents whose families kept objects for beating them on hand also actually beat the respondents. The frequency of “Yes” and “No” responses to the item, “Did your parents keep something (e.g., a stick) for beating you?” are presented in Table 6.3. More participants (N = 118, or 21.5% of the sample of 548) indicated that their parents had an object for beating them on hand when they were children (between ages 6 and 18) than when they were adults (N = 20). There was not a significant difference between responses from men and from women for either age group (based on percentages indicating yes and no), though there were more men than women in the sample.

Table 6.3 Did your parents keep something (e.g., a stick) for beating you?

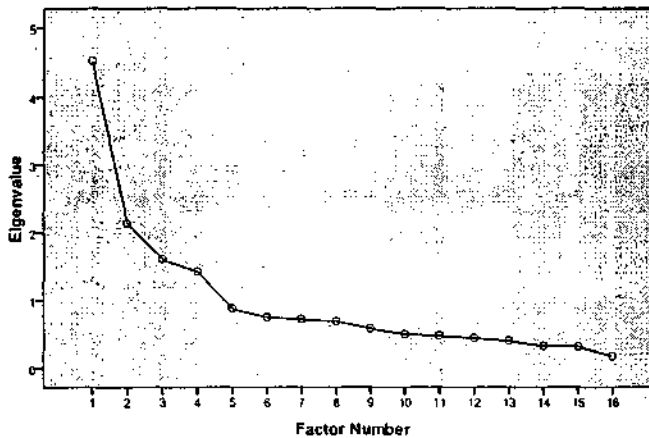
Sex	N (%)	“Yes”	“No”	T	Sig.
Child APSQ					
Combined	548 (100%)	118 (21.5%)	430 (78.5%)	n/a	n/a
Male	442 (80.7%)	94 (21.3%)	348 (78.7%)	0.31	0.76
Female	106 (19.3%)	24 (22.6%)	82 (77.4%)		0.76
Adult APSQ					
Combined	548 (100%)	20 (3.6%)	528 (96.4%)	n/a	n/a
Male	442 (80.7%)	14 (3.2%)	428 (96.8%)	1.23	0.22
Female	106 (19.3%)	6 (5.7%)	100 (94.3%)		0.10

Next, the 16-item APSQ forms were analysed using PAF to identify the smallest number of meaningful and useful factors that account for the common variance in the items that comprise the questionnaire. A large sample of participants is necessary for this type of analysis, to account for and minimize the impact of the random effects that tend to occur in samples (e.g., Tabachnick & Fidell, 2001). Various recommendations regarding adequate sample size have been made, including a general recommendation of 1,000 participants (Comrey, 1973), and ratios of five to 10 participants per item (Gorsuch, 1983). In the current study, there are 548 participants and 16 items to be included in the factor analysis, a ratio of more than 34 participants per item. Based on Gorsuch’s (1983) recommendation, the sample is considered adequately large for factor analysis. However, sample size is not the only issue to be considered when determining if data are adequate for factor analysis. The data from participants’ responses in this study are also suitable for PAF because they are complete (all participants responded to all questionnaire items) such that none of the data must be estimated or imputed, and the participants’ used the full range of potential responses (1 through 8 on the Likert scale).

Principal Axis Factoring (PAF) of the 16-item APSQ

For both scales, common factor analyses (Principal Axis Factoring, PAF) with orthogonal rotation (varimax with Kaiser normalization) were conducted to examine the component structure underlying the participants' responses to the 16 items (the Yes/No question was not included in the factor analyses) in the questionnaire. To determine the number of factors in each solution, the scree plots were visually inspected. The scree plots were slightly ambiguous but showed inflexions suggesting a three-component solution for both forms of the APSQ (see Figures 6.1 and 6.2).

Figure 6.1 Scree plot associated with factor analysis of the 16-item child APSQ



The loadings of the 16 items onto the factors that were retained in the three-factor model are included in Table 6.4. The text of each item appears in the first column, and each item's loading onto each factor appears under that factor number, in the right-hand columns. Items that load most strongly on factor 1 are listed first, on factor 2 second, and on factor 3 last. The items are listed in order of descending magnitude of loadings such that the first item listed on each factor is the item that loads most strongly on that factor. For each item, the item's strongest loading (or loadings in the case of crossloading) appears in boldface. Crossloadings are identified when the highest loading is not greater than .20 more than the second highest and/or second and third highest loadings.

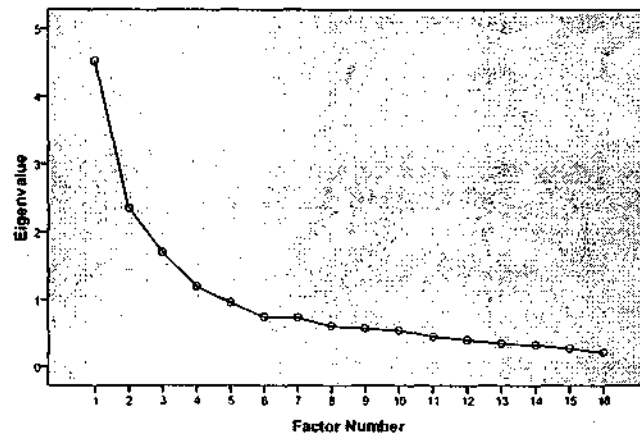
Table 6.4 Factor analysis (PAF) of the child APSQ

Item Text	Rotated Component Matrix		
	1	2	3
1. Did your parents verbally insult you?	.73	.18	-.04
2. Were you beaten by your parents?	.76	.12	-.03
3. Did your parents verbally insult you in front of others?	.72	.17	-.11
4. Were you beaten by your parents in front of others?	.71	-.01	-.22
13. How often did you lie to your parents for fear of punishment?	.51	.27	.08
12. Did your parents beat you because you expressed your own opinion on life around you?	.45	.26	.06
15. Did your parents prefer your siblings to you?	.25	.59	-.19
16. Did you feel that your parents did not care about you?	.15	.57	-.30
14. Did your parents prefer you to your siblings?	.001	.55	-.002
9. Did your parents discourage you from expressing your opinions? (R)	-.27	-.48	-.06
5. Did your parents discourage you from speaking frankly when expressing your own opinions? (R)	-.40	-.45	.14
11. Did your parents criticise you verbally because you expressed your own opinion of life around you?	.35	.39	.11
7. Did your parents encourage you to be badly behaved? (R)	-.06	-.29	-.11
6. In general, were you encouraged to express your opinion by your parents?	-.10	.04	.77
10. Did your parents encourage you to speak frankly when expressing your own opinions?	-.03	-.07	.74
8. Did your parents encourage you to be well behaved?	-.005	.001	.58

Note: Items marked with an "(R)" are reverse-coded and have corresponding negative loadings on their primary factor.

For the child APSQ, items 5, 9, 11, and 12 were identified as crossloading on multiple factors, as indicated by the bolded loading indices in the three columns on the right of the table. In addition, item 7 loaded particularly weakly (.29) on the factor on which it loaded most strongly, factor 2.

Figure 6.2 Scree plot associated with factor analysis of the 16-item adult APSQ



The factor analysis results are presented for the adult APSQ in the same format as for the child APSQ.

Table 6.5 Factor analysis (PAF) of the adult APSQ

Item Text	Rotated Component Matrix		
	1	2	3
4. Were you beaten by your parents in front of others?	.74	-.02	-.05
2. Were you beaten by your parents?	.71	.05	.07
12. Did your parents beat you because you expressed your own opinion on life around you?	.67	.00	-.05
1. Did your parents verbally insult you?	.63	-.09	.24
3. Did your parents verbally insult you in front of others?	.61	-.08	.31
5. Did your parents discourage you from speaking frankly when expressing your own opinions? (R)	-.52	.05	-.41
11. Did your parents criticise you verbally because you expressed your own opinion of life around you?	.49	.09	.41
9. Did your parents discourage you from expressing your opinions? (R)	-.43	-.07	-.39
7. Did your parents encourage you to be badly behaved? (R)	-.31	.10	-.24
6. In general, were you encouraged to express your opinion by your parents?	-.09	.83	-.05
10. Did your parents encourage you to speak frankly when expressing your own opinions?	.03	.83	-.09
8. Did your parents encourage you to be well behaved?	-.03	.72	.07
16. Did you feel that your parents did not care about you?	.05	-.21	.68
15. Did your parents prefer your siblings to you?	.08	-.01	.63
13. How often did you lie to your parents for fear of punishment?	.35	-.10	.37
14. Did your parents prefer you to your siblings?	.04	.09	.34

For the adult APSQ, items 5, 9, and 11 were again identified as crossloading, and items 7 and 13 were also identified as crossloading. As with the child form of the APSQ, item 7 was identified as having weak loadings across all three factors.

For both versions of the scale, a three-factor solution yielded three separate groups of items. However, as mentioned immediately above, there were some items that loaded on more than one factor, and item 7 loaded weakly on all three factors. Examination of the crossloading items indicated that they did not load clearly onto the factors statistically, and they were also ambiguous in terms of content or interpretation. For example, item 11 ("Did your parents criticise you verbally because you expressed your own opinion of life around you?") crossloaded onto multiple factors for both the child and adult forms of the APSQ, and it addresses both the children's expression of their thoughts and their parents' verbal insults or criticism.

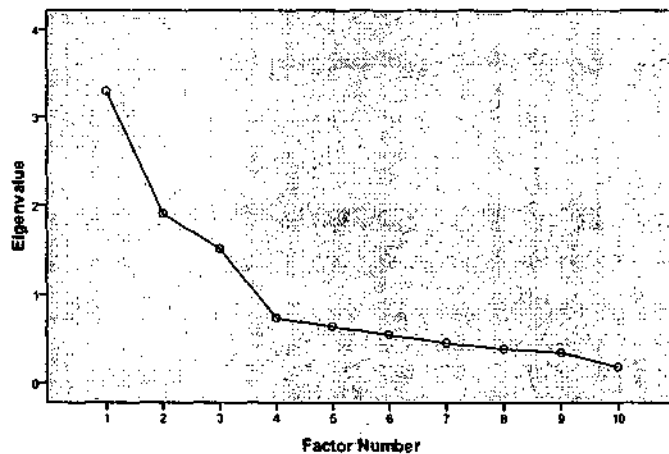
The items with crossloading on multiple factors were removed in order to retain only the univocal items, or those that loaded strongly on a single factor. The same items were removed from both the child and adult APSQ such that the scales were kept consistent, or included the same items. On this basis, items 5, 9, and 11 (which crossloaded on both the child and adult APSQ), item 12 (which crossloaded on the child APSQ), and 13 (which crossloaded on the adult APSQ) were removed. Item 7 was omitted because it failed to load clearly or strongly on any single factor in either the child or the adult APSQ.

Factor Analysis (PAF) of the 10-item APSQ

After the six items were removed, factor analyses specifying a three-factor solution and using an oblique (oblimin) rotation were conducted using participants' responses to the remaining 10 items. An oblique rotation was used because there was no theoretical basis for expecting the factors to be orthogonal. Results of these factor analyses (for both versions of the 10-item scale) are presented in Table 6.6 and Table 6.7. The child and adult APSQ were analysed separately, and their associated underlying factor structures are presented separately, below.

Visual inspection of the scree plot associated with the 10-item child APSQ clearly indicated retention of a three-factor solution, based on the appearance of an elbow in the curve after the eigenvalues associated with factor 3 on the scree plot (see Figure 6.3).

Figure 6.3 Scree plot of the factor analysis (PAF) of the 10-item child APSQ



The loadings of each item of the child APSQ onto each of the three factors, as per the oblimin rotated three-factor PAF, are presented in Table 6.6. The factor solutions are

presented with the items organized by their loadings on each respective factor. Items are ordered such that those loading most strongly on each factor are listed first. Each item's strongest associated loading is indicated in bold. The items are numbered as they appeared on the questionnaire form, so items 5, 7, 9, 11, 12, and 13 are missing.

For the child APSQ, all 10 items were found to clearly load onto a single factor, with no crossloading and no weak loadings. The first factor, which accounts for the greatest amount of variance in participants' responses to the questionnaire, includes items dealing with the harsh parenting of children, individually or on the front of others. The second factor includes items addressing encouraging children to openly express their views. The third factor consists of items focused on the parents preference of the children (i.e., compared to siblings).

Table 6.6 Structure matrix resulting from factor analysis (PAF) of the 10-item child APSQ

Item Text	Structure Matrix		
	1	2	3
2. Were you beaten by your parents?	.80	-.05	.27
1. Did your parents verbally insult you?	.75	-.07	.30
3. Did your parents verbally insult you in front of others?	.73	-.16	.26
4. Were you beaten by your parents in front of others?	.72	-.27	.12
10. Did your parents encourage you to speak frankly when expressing your own opinions?	-.12	.76	-.13
6. In general, were you encouraged to express your opinion by your parents?	-.19	.75	-.12
8. Did your parents encourage you to be well behaved?	-.09	.61	-.03
15. Did your parents prefer your siblings to you?	.39	-.15	.85
16. Did you feel that your parents did not care about you?	.29	-.26	.64
14. Did your parents prefer you to your siblings?	.09	.03	.54

Visual examination of the scree plot associated with the factor analysis of the adult APSQ did not provide a clear basis for selecting a factor solution. An elbow appears in the scree plot after the eigenvalue associated with the fourth factor. Other criteria – specifically interpretability of the factor solution and number of items per factor – were considered in order to determine the number of factors in this solution; the number of factors retained in the child APSQ was also considered. Organization of the items in

three factors, shown in Table 6.7, yielded the same clear and interpretable factors as identified in the child APSQ. If the four-factor solutions suggested by the scree plot were retained, the factors would necessarily include too few items, with at least two factors including no more than two items. The two-item factors were not considered useful or meaningful. The three-factor solution was thus adopted.

Figure 6.4 Scree plot of the factor analysis (PAF) of the 10-item adult APSQ

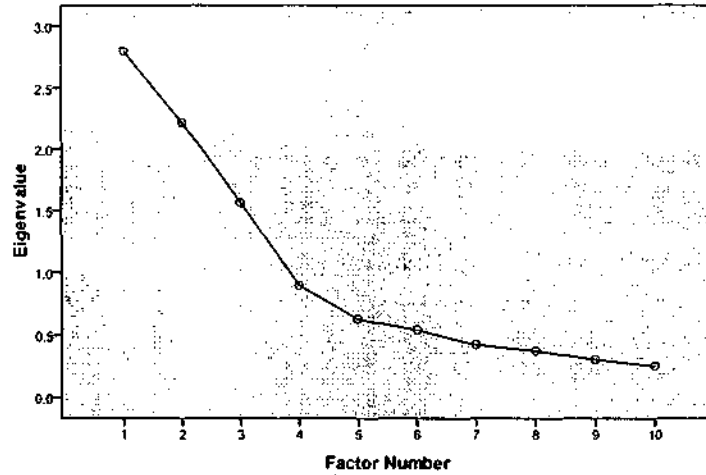


Table 6.7 Structure matrix resulting from factor analysis (PAF) of the 10-item adult APSQ

Item Text	Structure Matrix		
	1	2	3
1. Did your parents verbally insult you?	.76	-.12	-.21
3. Did your parents verbally insult you in front of others?	.72	-.12	.27
2. Were you beaten by your parents?	.71	.02	.13
4. Were you beaten by your parents in front of others?	.59	-.03	.10
10. Did your parents encourage you to speak frankly when expressing your own opinions?	-.02	.85	-.07
6. In general, were you encouraged to express your opinion by your parents?	-.15	.83	-.09
8. Did your parents encourage you to be well behaved?	-.03	.70	-.01
15. Did your parents prefer your siblings to you?	.22	-.05	.92
16. Did you feel that your parents did not care about you?	.17	-.25	.52
14. Did your parents prefer you to your siblings?	.11	.08	.48

The resulting APSQ forms

Following the analyses of the full and the 10-item forms of the APSQ, both the child APSQ (for retrospective report of experiences between ages 6 and 18) and the adult APSQ (for report from age 18 and up) included 10 items loading onto three factors.

Each factor is descriptively named, appearing in the left-hand column of Table 6.8. The items loading onto each factor are listed next to the factor names in the table. In the final questionnaire, the Harsh Parenting factor includes four items, the Encouragement factor includes three items, and the Family Preference factor includes three items.

Table 6.8 The APSQ final item set organized by factor

Subscale	Items
Harsh Parenting	
	1. Did your parents verbally insult you?
	2. Were you beaten by your parents?
	3. Did your parents verbally insult you in front of others?
	4. Were you beaten by your parents in front of others?
Encouragement	
	1. In general, were you encouraged to express your opinion by your parents?
	2. Did your parents encourage you to be well-behaved?
	3. Did your parents encourage you to speak frankly when expressing your own opinions?
Family Preference	
	1. Did your parents prefer you to your siblings?
	2. Did your parents prefer your siblings to you?
	3. Did you feel that your parents did not care about you?

6.6 Scoring and use of the questionnaire

The final, 10-item form of the APSQ is included in Appendix C. The final form uses an eight-point Likert scale with responses ranging in value from one to eight, and in meaning from “Never” to “At least once every day”. Subscale scores can range from one, indicating that the participant reported his or her parent to never display behaviours related to that subscale, to eight, indicating that the participant reported his or her parent to show the behaviours described in items on that subscale often (e.g., daily).

Table 6.9 Frequency of parental behaviour: Questionnaire response options

Score	Meaning of response
1	Never
2	Once in my life
3	Once a year
4	Once every 6 months
5	Once a month
6	Once a week
7	Once every 2 or 3 days
8	At least once every day

If an individual had a high score on the Harsh Parenting subscale, that individual's responses to the APSQ indicated he or she frequently experienced verbal insults or physical beatings from his or her parents. If an individual had a high score on the Encouragement subscale, that individual's responses to the APSQ indicated that he or she was often encouraged to express thoughts and feelings. If an individual has a high score on the Family Preference subscale, that individual's responses to APSQ items regarding parental preference for one sibling over another indicated that the parents did frequently show preferences, or treat the siblings differently.

Table 6.10 Participants' Responses

	Sex	N	Mean	Std. Deviation	T	Sig. (2-tailed)
Age of Participants	Male	442 (80.7%)	23.35	4.46	-1.91	0.06
	Female	106 (19.3%)	24.27	4.43		0.06
APSQ – Child Version (ages 6-18)						
Harsh Parenting	Male	442 (80.7%)	2.70	1.35	-1.85	0.02
	Female	106 (19.3%)	3.03	1.85		0.07
Encouragement	Male	442 (80.7%)	5.20	1.91	4.69	<0.01
	Female	106 (19.3%)	4.20	1.96		<0.01
Family Preference	Male	442 (80.7%)	2.40	1.50	-4.21	<0.01
	Female	106 (19.3%)	3.21	1.92		<0.01
APSQ – Adult Version (ages 18+)						
Harsh Parenting	Male	442 (80.7%)	1.50	1.35	-1.85	0.02
	Female	106 (19.3%)	1.94	1.85		0.07
Encouragement	Male	442 (80.7%)	5.10	2.20	3.30	0.001
	Female	106 (19.3%)	4.30	2.25		0.001
Family Preference	Male	442 (80.7%)	2.12	1.38	-4.03	<0.01
	Female	106 (19.3%)	2.75	1.57		<0.01

Note. The p-values associated with significant differences between men's and women's scores on the APSQ appear in boldface text.

6.6.a Correlations of the APSQ's three subscales

Once the three subscales and the items loading onto each subscale were determined, correlational analyses were conducted to determine the relationship between pairs of subscales on both the child and adult form of the APSQ (e.g., Encouragement, Family Preference). All three pairs of subscales on the child version of the APSQ were found to be significantly correlated (see Table 6.11), and all three subscales of the adult version were also found to be significantly correlated (see Table 6.12).

Table 6.11 Correlations between the subscales of the child APSQ

Factor	Harsh Parenting	Encouragement
Encouragement	0.14**	
Family Preference	-0.31**	0.15**

N = 548. **. Correlation is significant at $p \leq 0.01$ (2-tailed).

Table 6.12 Correlations between the subscales of the adult APSQ

Factor	Harsh Parenting	Encouragement
Encouragement	0.10*	
Family Preference	-0.23**	0.06

* Correlation is significant at $p \leq 0.05$ (2-tailed). N = 548.

** Correlation is significant at $p \leq 0.01$ (2-tailed). N = 548.

6.6.b Reliability

Cronbach's alpha was calculated for each of the three subscales of both versions of the questionnaire in order to determine each subscale's internal consistency, one aspect of its reliability (see Table 6.13). The three subscales of both the child APSQ (see Table 6.13) and the adult APSQ (see Table 6.14) have high internal consistency for assessments of individual differences and behaviour (e.g., John & Benet-Martinez, 2000).

Table 6.13 Internal consistency of the child APSQ subscales

Factor	Cronbach's alpha	Number of Items
Harsh Parenting	0.82	4
Encouragement	0.75	3
Family Preference	0.70	3

Table 6.14 Internal consistency of the adult APSQ subscales

Factor	Cronbach's Alpha	Number of Items
Harsh Parenting	0.75	4
Encouragement	0.84	3
Family Preference	0.64	3

6.7 Discussion

The 10 items that were retained could be understood in terms of three factors (or subscales), which were labelled as Harsh Parenting, Encouragement, and Family Preference. The current questionnaire took into account only the frequency of individuals' experiences in each of these domains. Future research could strengthen this questionnaire and explore the equally important issue of the severity of each type of parenting (i.e., how severe was preference for other siblings?). In addition, future research could examine the stability of the APSQ's factor structure by examining the structure using a new sample of participants and confirmatory factor analysis (CFA).

Following administration of the APSQ and analysis of the results, it became apparent that the interpretation of the Family Preference subscale can be confusing because it is not consistent with the other subscales of the APSQ. The subscale treats *not* being favoured as the functional equivalent of being favoured. That is, the subscale measures only the level of preference or favouritism shown within a family without regard for whether the person completing the questionnaire was the favoured child. Being treated as the favourite would likely be associated with different mental health outcomes than having one's sibling be favoured. However, because of the design of the subscale, in this study, it was not possible to determine whether being treated as the favourite child was associated with positive health outcomes. The design of the scale to test favouritism in general instead of whether the participant was the preferred child may also be the reason that the scale ultimately showed low internal consistency and was dropped from the study.

In studies presented in the next few chapters of this thesis, the newly developed APSQ must be compared to the Parental Authority Questionnaire (PAQ), an existing questionnaire that assesses parenting style. The PAQ is expected to be related and will serve as a criterion for the predictive validity of the APSQ. Furthermore, as hypothesized in Study 1 (presented in chapter 5), the parent-child relationship plays a critical role in affecting and shaping children's behaviour and their global quality of life. In the next chapter, a new study addressing the question of whether the APSQ and GQLS are correlated, and whether the APSQ shows any relationship to traits in the Big Five model of personality, will be discussed.

Chapter 7

Study 3: Comparison of the APSQ and PAQ as predictors of overall quality of life and personality

Abstract

Aim: The aim of this study was to determine the degree to which the APSQ is related to the Parental Authority Questionnaire (PAQ), to the Global Quality of Life Scale (GQLS), and to the personality traits posited in the Big Five model of personality.

Methods and Participants: Participants included 249 students (149 male, 100 female) in the Saudi Aramco Training Program in Saudi Arabia. The participants' ages ranged from 19 to 25 years ($M = 20.80$ years, $SD = 1.85$). All participants completed four questionnaires.

Results: The subscales of the APSQ were found to have higher internal consistency than the subscales of the PAQ. Compared with the PAQ, the APSQ was found to have a stronger correlation with the GQLS, suggesting that the APSQ may serve as a better predictor of global quality of life.

Key words: *Parent-child relationship, Extraversion, Agreeableness, Conscientiousness, Neuroticism, Openness to experience, Big Five personality factors, Global Quality of Life Scale, Parental Authority Questionnaire, permissive, authoritarian, and authoritative.*

7.1 Introduction

The research presented in this chapter examines the degree to which the APSQ is related to the Parental Authority Questionnaire (PAQ), to the GQLS, and to the personality traits posited in the Big Five model of personality. The APSQ and the PAQ both assess parenting style. How are the two related? Is the newly developed APSQ, which was developed specifically for use with the Saudi Arabian population, a better predictor of life satisfaction (measured using the GQLS) than the existing PAQ?

The relationship between subscales of the APSQ and the Big Five Inventory (BFI) of personality traits were examined in order to determine whether the APSQ appears to be systematically related to personality (i.e., is the APSQ assessing an aspect of personality, or a unique construct?). The reasoning behind using a personality assessment in the validation of the APSQ was to show divergent validity, or to show that the APSQ does not measure a personality construct. Although the APSQ might be expected to be weakly correlated with a personality construct on the basis of some form of mutual causality, there should not be a strong correlation between any APSQ subscales and BFI personality constructs. The BFI is one of several measures used to assess the five factors of personality and was selected because, unlike some of the others, it can be used without charge.

The purpose of the current study was to examine the newly developed questionnaire and assess its utility in predicting global life satisfaction. As reviewed in chapter 1, childhood experiences of emotional abuse and neglect have been found to be associated increased anxiety, depression, posttraumatic stress, and physical symptoms, as well as lifetime trauma exposure. Given the long-term impact of these early childhood experiences, it is important to be able to accurately and easily assess them.

7.2 Methods

7.2.a Participants

The participants in this study were 249 students, including 149 (59.8%) men and 100 (40.2%) women, in the Saudi Aramco Training Program in Saudi Arabia. The age of the participants ranged from 19 to 25 years ($M = 20.8$ years, $SD = 1.9$).

7.2.b Recruitment

The Saudi Aramco Training Program in Saudi Arabia was asked and consented to permitting the study to be conducted there. Students who have completed secondary school attend the Saudi Aramco Training Program and for two years of training related to the operation of oil refining plants with specialisation in a variety of areas (e.g., management, international company assignments). Students in the program were approached formally and asked whether they wished to take part in the study. The aim of the study was explained during a personal (one-on-one) meeting with each potential participant. Individuals who indicated interest in participating were given an informed consent form to review and, if comfortable, sign. Students were then given a participant information sheet regarding the study. Data were collected for the study by having students, in small groups of five to 10, independently complete the packet of four questionnaires. After the study, a debriefing form about the study was distributed to the participants. All participants gave informed consent and the studies were deemed ethical by University of Plymouth's Human Ethics Committee and were consistent with the Code of Ethics of the World Medical Association (Declaration of Helsinki) for experiments involving humans.

7.2.c Measures

All participants completed four questionnaires (described below) as part of the study. Smoking status, marital status, education, and parental education were all assessed because they are known to have significant influence on major health outcomes.

Arabic Parenting Style Questionnaire (APSQ). The development of the APSQ is presented in Study 2 (see chapter 6). There are two final versions of the scale, one addressing individuals' experiences with their parents during childhood (age 6-18 years) and one addressing experiences in adulthood (after age 18). The final versions of the scale include 10 items, which are the same on both scales and which fall into three factors, labelled as Harsh Parenting (4 items), Encouragement (3 items), and Family Preference (3 items). The APSQ uses an eight-point Likert response scale with potential responses of "never," "once in my life," "once a year," "once every 6 months," "once a month," "once a week," "once every 2 or 3 days," and "at least once every day" to indicate how often a parent displays the behaviour described in each item.

Big Five Inventory (BFI). The shortened version of the BFI includes 21 items covering the Big Five dimensions of personality, Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to experience (Rammstedt, & John, 2005). The questionnaire uses a five-point Likert response scale with response options of “strongly disagree,” “disagree,” “neither disagree nor agree,” “agree” and “strongly agree”, and respondents are instructed to select the option that best characterises how well the description presented in each item suits them. The Arabic version of the questionnaire includes only 20 items, because one item assessing artistic skills was removed; the item was deemed irrelevant and inappropriate for use in Saudi Arabia because artistic endeavours such as acting and playing music are uncommon in Saudi Arabia.

The internal consistency of the five subscales of the BFI have been shown to be relatively high with Agreeableness at $\alpha = 0.79$, Openness $\alpha = 0.81$, Conscientiousness $\alpha = 0.82$, Neuroticism $\alpha = 0.84$, and Extraversion $\alpha = 0.88$ (Benet-Martinez & John, 1998).

Parental Authority Questionnaire (PAQ). This scale consists of 30 items designed to measure parental authority, or disciplinary practices, from the point of view of the child of any age (Buri, 1991). The PAQ has three subscales, permissive, authoritarian, and authoritative (or flexible). Each subscale consists of 10 items. The questionnaire utilizes a five-point Likert response scale. A translated, Arabic version of the PAQ has been used with a sample of 2,893 Arab adolescents in eight countries, including Saudi Arabia (Dwairy et al., 2006). However, for the current study, instead of using the entire questionnaire, the author chose the five items that loaded most strongly on each subscale.

In previous research, the PAQ has been shown to have relatively high test-retest reliability and internal consistency. Buri (1991) found the test-retest validity of the questionnaire (with 2 weeks between administration and readministration) to range from $\alpha = 0.77$ to $\alpha = 0.92$. The internal consistency of the subscales has been shown to range from $\alpha = 0.74$ to $\alpha = 0.87$ by Buri (1991) and from 0.61 to 0.79 by Dwairy et al. (2006b). Dwairy et al. (2006b) found the Permissive subscale to have an internal consistency of $\alpha = 0.61$, the Authoritarian subscale 0.72, and the Authoritative subscale 0.79.

Global Quality of Life Scale (GQLS). This scale consists of one item that asks participants to rate their overall quality of life on a scale of zero to 100, with zero described as “No quality of life,” and 100 described as “Perfect quality of life” (Hyland & Sodergren, 1996). Various descriptors are included between zero and 100. The GQLS is a one-item scale and so does not have an internal consistency level.

7.2.d Translation of Scales

The APSQ was created in Arabic, then translated into English in Study 2 (see chapter 5). The BFI and PAQ (Dwairy et al., 2006) have already been translated to Arabic in previous research and are available in Arabic. Permission was obtained from the scale’s author prior to translating the GQLS from English into Arabic. The translation of the scale was as literal as possible to preserve the meaning of the original questionnaire. Once translated, the Arabic version of the GQLS was presented to three bilingual (English-Arabic) native speakers of Arabic for back-translation into English. Subsequently, the back-translation was compared to the original by the researcher conducting this study and his research supervisor.

7.3 Results

7.3.a Sample characteristics

Descriptive statistics are shown in Tables 7.1 and 7.2. Data were obtained on variables that are known to be associated with health, such as smoking and education. There are some differences between the sexes, including the fact that no women but 45 men reported that they smoke. In terms of education, it appears that more women than men, and a larger percentage of the women than of men, completed their Bachelor’s degrees.

Table 7.1 Rates of smoking and level of education in men and women

Sex	Smoking		Education			
	Yes	No	Intermediate	Secondary	BA	MA
Male	45 30.20%	104 69.80%	2 1.30%	127 85.20%	19 12.80%	1 0.70%
Female	0 0.00%	100 100%	0 0.00%	40 40%	60 60%	0 0.00%
Total	45 18.10%	204 81.90%	2 0.80%	167 67.10%	79 31.70%	1 0.40%

Table 7.2 Father's and Mother's Education in men and women

	Non- educated	Elementary	Intermediate	Secondary	BA	MA	PhD	Total
Father's education								
Male	17 6.8%	24 9.6%	28 11.2%	42 16.9%	25 10%	11 4.4%	2 .8%	149 59.8%
Female	12 4.8%	28 11.2%	24 9.6%	36 14.5%	0 .0%	0 .0%	0 .0%	100 40.2%
Total	29 11.6%	52 20.9%	52 20.9%	78 31.3%	25 10%	11 4.4%	2 .8%	249 100%
Mother's education								
Male	33 13.3%	36 14.5%	32 12.9%	23 9.2%	21 8.4%	2 .8%	2 .8%	149 59.8%
Female	8 3.2%	40 16.1%	40 16.1%	12 4.8%	0 .0%	0 .0%	0 .0%	100 40.2%
Total	41 16.5%	76 30.5%	72 28.9%	35 14.1%	21 8.4%	2 .8%	2 .8%	249 100%

There were statistically significant differences between men and women in terms of their ages, whether they smoked, their education levels, and their fathers' education levels, but not their mothers' education levels. Women had a higher average age ($M = 21.68$ years, $SD = 1.92$; $p < .01$) than men ($M = 20.21$, $SD = 1.55$). No women in the sample reported smoking, though 45 of the 104 men (30.20%) reported smoking, a difference that was significant both conceptually and statistically ($p < .01$). Women also had a higher average level of education than men ($p < .01$), though women reported their fathers ($p < .01$) and mothers ($p = .05$) had lower levels of education than mean reported their own fathers and mothers to have.

Comparing men and women on the variables examined in the study, including quality of life, the APSQ, personality, and the PAQ, only a few differences were significant. On average, men reported a significantly higher quality of life than women, with a mean GQLS score of 74.97 for men and 67.00 for women. The only difference between men and women on the APSQ was reported for experience during adulthood (over age 18). On the adult version of the APSQ, women reported experiencing more Harsh Parenting than men. There were no significant differences between men and women on the personality assessment. On the PAQ, men indicated having experienced more authoritative and authoritarian parenting styles than women reported.

Table 7.3 Study 3: Comparison of study variables across men and women

Variables	Sex	N	Mean	Std. Deviation	t	Sig. (2-tailed)
Child APSQ						
Harsh Parenting	Male	149 (59.8%)	2.70	1.57	0.01	0.99
	Female	100 (40.2%)	2.60	1.63		
Encouragement	Male	149 (59.8%)	5.84	1.84	0.31	0.75
	Female	100 (40.2%)	5.80	1.71		
Family Preference	Male	149 (59.8%)	2.60	1.65	-0.84	0.40
	Female	100 (40.2%)	2.80	1.60		
Adult APSQ						
Harsh Parenting	Male	149 (59.8%)	1.60	0.93	-3.57	<0.01
	Female	100 (40.2%)	2.20	1.44		
Encouragement	Male	149 (59.8%)	6.03	1.94	1.82	0.07
	Female	100 (40.2%)	5.60	2.13		
Family Preference	Male	149 (59.8%)	2.40	1.52	-1.68	0.09
	Female	100 (40.2%)	2.71	1.62		
Big Five						
Extraversion	Male	149 (59.8%)	3.25	0.76	1.50	0.13
	Female	100 (40.2%)	3.12	0.63		
Agreeableness	Male	149 (59.8%)	3.62	0.70	1.38	0.17
	Female	100 (40.2%)	3.49	0.79		
Conscientiousness	Male	149 (59.8%)	3.86	0.77	0.04	0.97
	Female	100 (40.2%)	3.86	0.88		
Neuroticism	Male	149 (59.8%)	3.21	1.12	0.16	0.87
	Female	100 (40.2%)	3.19	0.87		
Openness	Male	149 (59.8%)	3.49	0.63	0.41	0.68
	Female	100 (40.2%)	3.46	0.63		
PAQ						
Permissive	Male	149 (59.8%)	2.68	0.68	0.54	0.59
	Female	100 (40.2%)	2.73	0.66		
Authoritative	Male	149 (59.8%)	3.51	0.88	3.70	<0.01
	Female	100 (40.2%)	3.10	0.83		
Authoritarian	Male	149 (59.8%)	3.40	0.70	2.13	0.03
	Female	100 (40.2%)	3.18	0.75		
Global Quality of Life Scale	Male	149 (59.8%)	74.97	21.42	3.11	<0.01
	Female	100 (40.2%)	67.00	17.07		

7.3.b Reliability

Cronbach's alpha was calculated for each of the three subscales of the APSQ in order to re-examine the internal consistency of the three subscales and compare them to the internal consistency of the PAQ subscales. Two of the three subscales of the child APSQ were found to have high internal consistency as displayed in Table 7.4. In comparison, the three subscales of the PAQ were found to have rather low internal consistency.

Table 7.4 Internal consistency of the adult APSQ subscales and PAQ subscales

	Cronbach's Alpha	Number of Items
Child APSQ		
Harsh Parenting	0.86	4
Encouragement	0.76	3
Family Preference	0.62	3
Adult APSQ		
Harsh Parenting	0.84	4
Encouragement	0.85	3
Family Preference	0.65	3
PAQ		
Authoritarian	0.56	5
Authoritative	0.57	5
Permissive	0.49	5

7.3.c Correlational Analyses

Correlation between the subscales of the APSQ and parenting styles on the PAQ

The correlation of scores on the adult and the child APSQ subscales with the PAQ subscales are shown in Table 7.5. The Harsh Parenting subscale of the child APSQ was found to be significantly correlated with all subscales of the PAQ, the Encouragement subscale was significantly correlated with the Authoritative subscale, and the Family Preference subscale was significantly correlated with the Permissive and Authoritarian subscales. Although fewer (4 out of 9), significant correlations were also found between subscales of the adult APSQ and the parenting styles assessed using the PAQ. The pattern of correlations among the Encouragement and Family Preference subscales and the three subscales of the PAQ are identical across the child and adult APSQ.

Table 7.5 Correlations between the APSQ subscales and the PAQ parenting styles

PAQ subscale	Child APSQ			Adult APSQ		
	Harsh Parenting	Encouragement	Family Preference	Harsh Parenting	Encouragement	Family Preference
Permissive	-0.15*	-0.01	0.17**	-0.09	-0.06	0.14*
Authoritative	-0.26**	0.43**	-0.06	-0.33**	0.39**	-0.10
Authoritarian	0.25**	-0.07	0.31**	0.12	-0.03	0.30**

N = 249.

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Correlations between the subscales of the APSQ, PAQ, and GQLS

The relationships between each of the three subscales of the child APSQ and the adult APSQ and the broad GQLS were examined through correlations to determine the magnitude and directions of their relationships (see Table 7.6). All six correlations were found to be significant. The two versions of the APSQ were also found to show the same pattern of significant correlations with the GQLS (see Table 7.7). Specifically, the GQLS correlated positively and significantly with the Harsh Parenting subscale on both the child and adult APSQ.

Table 7.6 Correlations between the APSQ subscales and the GQLS

	Child APSQ			Adult APSQ		
	Harsh Parenting	Encouragement	Family Preference	Harsh Parenting	Encouragement	Family Preference
Global Quality of Life Scale	-0.37**	0.20**	-0.31**	-0.44**	0.19**	-0.38**

N = 249.

** Correlation is significant at the 0.01 level (2-tailed).

Table 7.7 Correlations between the PAQ subscales and the GQLS

	PAQ		
	Authoritarian	Permissive	Authoritative
Global Quality of Life Scale	0.16*	0.01	0.40**

N = 249.

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Correlations between the APSQ and BFI

Significant correlations between subscales of the child APSQ and the Big Five personality traits of Conscientiousness, Agreeableness, and Neuroticism were found, as presented in Table 7.8. The subscales of the adult APSQ showed some similar and some different correlations with personality traits assessed using the BFI (see Table 7.8).

Table 7.8 Correlation of the APSQ subscales with the BFI personality traits

	Child APSQ			Adult APSQ		
	Harsh Parenting	Encouragement	Family Preference	Harsh Parenting	Encouragement	Family Preference
Extraversion	0.10	0.11	-0.02	0.04	0.09	0.06
Agreeableness	-0.12	0.04	-0.30**	-0.25**	0.01	-0.21**
Conscientiousness	0.01	0.19**	-0.03	-0.09	-0.01	-0.03
Neuroticism	0.07	-0.04	0.28**	0.04	-0.00	0.16*
Openness	0.01	0.02	0.04	0.02	-0.20**	0.06

N = 249.

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

7.4 Discussion

The primary goals of the current study were (1) to determine the extent of the relationship between the APSQ and the PAQ, (2) to determine whether the APSQ or the PAQ served as a better predictor of quality of life, as assessed using the GQLS, and (3) to examine the relationship between the APSQ and the Big Five personality traits. As shown in Table 7.4, there are some significant relationships between the subscales of the APSQ and the PAQ, indicating that the two scales are tapping into similar or related constructs. However, the correlations are relatively small, indicating that the two scales are not equivalent – they overlap, but are distinctly different scales.

As shown in Tables 7.5 and 7.6, all subscales of the APSQ are significantly correlated with the GQLS, and only the authoritative and authoritarian subscales of the PAQ are significantly correlated with the GQLS. Based on both number of significant correlations and strength of these correlations, the APQS is more strongly associated with scores on the GQLS. Furthermore, individuals who reported lower rates of harsh or negative parenting practices (verbal insults, physical beatings) on the APSQ also reported higher levels of global life satisfaction on the GQLS and individuals who reported more authoritative and authoritarian parenting styles on the PAQ also reported higher quality of life (GQLS).

Addressing the third aim, the relationship between the APSQ and the BFI personality traits, few significant relationships between subscales of the APSQ in the current study and any of the personality traits were found. These findings are consistent with the

divergent validity for which the personality scale was used. However, an interesting pattern of small significant, positive correlations between Neuroticism and Family Preference was found across both the child and adult APSQ. As discussed in the previous chapter, the Family Preference subscale is challenging to interpret. High scores on this subscale indicate that one child was treated by the parents as a favourite compared to other children within the family. This does not necessarily mean that the participant was or was not the preferred child. Nonetheless, a significant, positive correlation exists between Neuroticism and Family Preference. This pattern might be explored in future research using a scale that assesses preferential treatment by parents and siblings within a family in more detail. Alternatively, it might be that the Family Preference scale simply measures general dissatisfaction, and is therefore not a valid scale.

Ultimately, the APSQ was determined to be more suitable for the current line of research than the PAQ for two reasons. First, the APSQ was demonstrated to have a stronger relationship with the GQLS than the PAQ showed. Second, the internal consistency of the APSQ scale is higher than that of the PAQ.

A limitation of this study was the failure to take into account demographic variables and these could potentially have altered the results. In particular, if the study was replicated with a different sample the results may have been different. However, in personality scale development, such demographic effects are normally discussed after the scale has been developed and validated across cultures – not all scales are valid across cultures\

The next chapter is concerned with the relationship between the APSQ and health- and wellness-related outcomes.

Chapter 8

Study 4: The relationship between the APSQ and health outcomes in a normal Saudi Arabian sample

Abstract

Aim: This study had two primary aims: (1) To examine the correlation of the Arabic Parenting Style Questionnaire (APSQ) with the Minor Health Complaints Questionnaire (MHCQ), with the Positive and Negative Affect Scale (PANAS), with the Satisfaction with Life Scale (SLS), and with the Global Quality of Life Scale (GQLS) among a sample of normal Saudi Arabian individuals, and (2) to replicate the earlier finding of a strong correlation between the child APSQ and adult APSQ.

Methods and Participants: The sample included 293 (185 male, 108 female) Saudi Arabian participants in Saudi Arabia. Participants ranged in age from 19 to 49 years of age ($M = 27.20$ years, $SD = 7.27$ years). All participants completed all five questionnaires used in this study.

Results: The child and adult APSQ's Harsh Parenting subscale was found to be a significant predictor of individuals' scores on the SLS, the Negative Affect subscale of the PANAS, and inflammation symptoms on the MHCQ. Both the child and adult APSQ Encouragement subscales were found to be significantly correlated with SLS, with the Positive Affect subscale of the PANAS, and with the GQLS.

Discussion: The APSQ was found to predict the results of various measures of well-being used in this study. The child APSQ was selected for use in subsequent studies because the child and adult APSQ show similar patterns of correlation with other scales and are strongly correlated with each other, but the child APSQ asks about experiences earlier in life, which are more theoretically relevant to the research questions to be addressed.

Key words: *Parent-child relationship, Minor Health Complaints Questionnaire (MHCQ), the Positive and Negative Affect Scale (PANAS), the Satisfaction with Life Scale (SLS), and Global Quality of Life Scale (GQLS).*

8.1 Introduction

In the current study, the question of whether results of the APSQ are significantly and meaningfully related to health outcomes in a community sample of individuals in Saudi Arabia was addressed. The focus of this study was the relationship of verbal insults and physical beatings to long-term health- and well-being-related consequences. Specifically, the correlations of the APSQ with the Minor Health Complaints Questionnaire (MHCQ), with the Positive and Negative Affect Scale (PANAS), with the Satisfaction with Life Scale (SLS), and with the Global Quality of Life Scale (GQLS) are examined among a sample of typical (non-clinical) Saudi Arabian individuals.

The validity of the self-reported experiences obtained through administration of the child version of the APSQ was evaluated by comparing reports of experiences during childhood (the child APSQ) to reports of experiences during adulthood (the adult APSQ). The decision of whether to use the child or adult APSQ form in future studies was informed by these results.

8.2 Methods

8.2.a Participants

A total of 293 Saudi Arabian participants, including 185 (63.15%) men and 108 (36.9%) women, who were living in Saudi Arabia were surveyed for this study. Participants ranged in age from 19 to 49 years of age ($M = 27.20$ years, $SD = 7.27$ years). All participants completed all five questionnaires used in this study.

8.2.b Recruitment

The Civil Social Developmental Committee (CSDC) in Saudi Arabia was asked to advertise the study and to permit the study to be conducted. The Ministry of Social Affairs established the CSDC for communities to encourage and support the growth of development programs based on the interaction between the government and citizens of Saudi Arabia. The potential participants were approached formally at the CSDC and invited to learn more about the study. The researcher met with the potential participants in small groups of five to 10. The purpose of this study was explained to the potential participants and they were asked if they would like to take part. The potential participants who were interested in participating were given an information sheet and an informed consent form to review and, if they chose to continue and participate in the

study, to sign. After informed consent had been obtained, the participants were given the five questionnaires to complete. Once the questionnaires were completed and returned, the participants were debriefed and given a copy of a debriefing form. All participants gave informed consent and the studies were deemed ethical by University of Plymouth's Human Ethics Committee and were consistent with the Code of Ethics of the World Medical Association (Declaration of Helsinki) for experiments involving humans.

8.2.c Measures

The following five questionnaires were used:

Arabic Parenting Style Questionnaire (APSQ). This scale was developed in Study 2 (chapter 6) and further discussed in Study 3 (see chapter 7).

Positive and Negative Affect Scale (PANAS). The PANAS is a 20-item self-report scale with two 10-item subscales, Positive Affect (PA) and Negative Affect (NA; Watson, Clark, & Tellegen, 1988). Previous research has shown the internal consistency of the PA subscale to be $\alpha = 0.92$ and the NA subscale to be $\alpha = 0.89$ (Harmon-Jones, Harmon-Jones, & Abramson, 2009). An Arabic scale based on the PANAS was constructed with permission of the authors. Participants were instructed to complete the PANAS with regards to their experiences during the few weeks prior.

Satisfaction with Life Scale (SLS). The SLS is a five-item instrument designed to measure individuals' global, cognitive evaluations of their lives. The scale takes approximately one minute to complete and is in the public domain (Pavot & Diener, 1993). The internal consistency of the scale has been shown to be $\alpha = 0.87$ (Diener, Emmons, Larsen, & Griffin, 1985).

Minor Health Complaints Questionnaire (MHCQ). This questionnaire contains 14 items to assess the frequency with which participants experience common health symptoms (see Hyland & Sodergren, 1998). The health complaints are divided into two categories: inflammatory and non-inflammatory (infection) symptoms. Inflammatory symptoms include gastrointestinal complaints (constipation, watery diarrhoea, and heartburn) and allergic symptoms (wheeze, sneeze, blocked nose, itchy eyes, itchy skin). The other category of symptoms are infections and includes non-inflammatory

symptoms such as those triggered by infections or other pathogens (e.g., regular colds or flu, sore throat, mouth ulcers, fungal infections of the scalp or groin, athletes' foot). Previous research has not examined the internal consistency of these scales.

In the current research, the ratio of inflammatory to non-inflammatory symptoms is used to explore the possible theoretical prediction, based on infornet theory (Hyland, 2011), that threat of physical assault should be more associated with a pattern of immune dysregulation that is characterised by activation of the inflammatory response system (and hence an over-active immune system) rather than activation of the HPA axis (and hence suppression of the immune system; Whalley, Jacobs, & Hyland, 2007). Inflammatory but not non-inflammatory symptoms are expected to be associated with symptoms such as fatigue and depression, and so it is expected that the ratio of inflammatory to non-inflammatory symptoms will be higher among individuals with mental health challenges than among their typical counter-parts (i.e., control groups). This analysis was an exploratory one to examine whether the ratio of inflammatory versus non-inflammatory symptoms provides an interesting and meaningful interpretation of data.

Global Quality of Life Scale (GQLS). The GQLS was described and used in Study 3 (see chapter 7).

8.2.d Scale Translation

The APSQ was translated from Arabic to English for Study 2 (see chapter 6). The GQLS was translated from English into Arabic for Study 3 (see chapter 7). The SLS is available in Arabic. An Arabic scale based on the PANAS was constructed with permission of the authors. Translation permission was also obtained in order to translate the MHCQ. Once permission was obtained, both scales were translated by the author from English into Arabic with the goal of transcribing the scales as literally as possible. The Arabic versions of the two scales were then presented to three bilingual (English-Arabic) native speakers of Arabic for back-translation into English. Subsequently, the back-translated versions of the scales were compared to the original by the author and his research supervisor. No problems were found.

8.3 Results

8.3.a Sample characteristics

Demographic information regarding whether participants smoked, were married, and what level of education they had attained was collected. This information is presented separately for men and women in Table 8.1.

Table 8.1 Sample characteristics

	Smoking		Marital Status			Education			
	Yes	No	Single	Married	Divorced	Intermediate	Secondary	BA	MA
Male	38	147	88	97	0	8	104	70	3
(185)	20.50%	79.50%	47.60%	52.40%	0.00%	4.30%	56.20%	37.80%	1.60%
Female	0	108	64	42	2	4	46	54	4
(108)	0.00%	100%	59.30%	38.90%	1.90%	3.70%	42.60%	50%	3.7%
Total	38	255	152	139	2	12	150	124	7
	13%	87%	51.90%	47.40%	0.70%	4.10%	42.30%	42.30%	2.40%

To determine if men and women in the sample differed significantly in terms of smoking, marital status, education, father's education level, or mother's education level, t-tests were used to compare the two groups. In particular, it was of interest whether the same differences observed in the sample of participants who took part in Study 3 (see chapter 7) recurred in the current sample. In Study 3, men and women were found to differ in terms of smoking/not smoking, their own education, father's education, and mother's education.

In the current sample (see Table 8.2), more men than women smoked ($p < .01$), women were generally more educated than men ($p = .02$), and men reported their fathers ($p < .01$) and their mothers ($p < .01$) as more educated than women reported their own parents to be. This pattern of differences is the same as found in the sample in Study 3.

Table 8.2 Father's and mother's education in men and women

	Non- educated	Elementary	Intermediate	Secondary	BA	MA	PhD	Total
Father's education								
Male	57	38	32	28	28	2	0	185
	19.5%	13%	10.9%	9.6%	9.6%	.7%	0	63.1%
Female	44	36	8	12	8	0	0	108
	15%	12.3%	2.7%	4.1%	2.7%	.0%	0	36.9%
Total	101	74	40	40	36	2	0	293
	34.5%	25.3%	13.7%	13.7%	12.3%	.7%	0	100%
Mother's education								
Male	66	71	20	14	12	0	2	185
	22.5%	24.2%	6.8%	4.8%	4.1%	0	.7%	63.1%
Female	54	40	8	2	4	0	0	108
	18.4%	13.7%	2.7%	.7%	1.4%	0	.0%	36.9%
Total	120	111	28	16	16	0	2	293
	41%	37.9%	9.6%	5.5%	5.5%	0	.7%	100%

8.3.b Reliability of the APSQ subscales

Cronbach's alpha was calculated for each of the three subscales of the child APSQ in order to re-examine the internal consistency of the subscales (see Table 8.3). The Harsh Parenting subscale and the Encouragement subscale were once again found to have high internal consistency. The reliability for the Harsh Parenting subscale is $\alpha = 0.75$, and the internal consistency of the Encouragement subscale is $\alpha = 0.78$. However, as was found in the previous study, the Family Preference subscale demonstrated low internal consistency ($\alpha = 0.61$). The conventional approaches for revising a subscale in order to increase its reliability (i.e., removing items that bring down the scale's internal consistency) were not appropriate in this case because the APSQ did not contain sufficient items to remove items while also maintaining a sufficient number of items and content validity of each subscale.

Table 8.3 Internal consistency of the child and adult APSQ subscales, SLS, MCHQ and PANAS

	Cronbach's Alpha	Number of Items
Child APSQ		
Harsh Parenting	0.75	4
Encouragement	0.78	3
Family Preference	0.61	3
Adult APSQ		
Harsh Parenting	0.74	4
Encouragement	0.92	3
Family Preference	0.59	3
SLS	0.71	5
MCHQ-INFECTION	0.45	6
MCHQ-INFLAMMATION	0.63	8
PA	0.74	10
NA	0.76	10

The reliability (Cronbach's alpha) was also calculated for each of the other scales used in this study. The reliability of the SLS was $\alpha = .71$, for MHCQ-Infection was $\alpha = .45$, for MHCQ-Inflammation was $\alpha = .63$, for PA was $\alpha = .74$, and for NA was $\alpha = .76$.

Comparing men and women on the variables examined in the study, including the GQLS, the APSQ (adult and child forms), the PANAS, the SLS, and the MHCQ, only a few differences were significant (see Table 8.4). Unlike in the previous study (Study 3, see Table 7.3), men and women did not differ in terms of GQLS. However, just as in the previous study, the only difference between men and women on the APSQ was reported for experience during adulthood (over age 18), on which women reported experiencing more Harsh Parenting (Adult APSQ – Abuse, in Tables 7.3 and 8.3) than men. Women also reported both more Negative Affect and more Positive Affect on the PANAS, and both more inflammation and infection symptoms on the MHCQ.

Table 8.4 Study 4: Comparison of study variables across men and women

Variables	Sex	N (%)	Mean	Std. Deviation	t	Sig. (2-tailed)
Child APSQ						
Harsh Parenting	Male	185 (63%)	2.76	1.26	1.59	0.11
	Female	108 (37%)	2.50	1.41		
Encouragement	Male	185 (63%)	4.44	1.83	-1.14	0.25
	Female	108 (37%)	4.72	2.17		
Family Preference	Male	185 (63%)	2.62	1.54	-1.52	0.13
	Female	108 (37%)	2.92	1.81		
Adult APSQ						
Harsh Parenting	Male	185 (63%)	1.50	0.73	-2.22	0.03
	Female	108 (37%)	1.80	1.27		
Encouragement	Male	185 (63%)	4.52	2.19	-1.01	0.31
	Female	108 (37%)	4.80	2.42		
Family Preference	Male	185 (63%)	2.33	1.36	-1.23	0.22
	Female	108 (37%)	2.57	1.71		
PANAS						
Negative Affect	Male	185 (63%)	2.44	0.60	-3.30	0.001
	Female	108 (37%)	2.68	0.62		
Positive Affect	Male	185 (63%)	3.29	0.51	-3.18	0.002
	Female	108 (37%)	3.49	0.53		
MHCQ						
Inflammation	Male	185 (63%)	1.66	0.47	-3.08	0.002
	Female	108 (37%)	1.86	0.58		
Infection	Male	185 (63%)	1.82	0.43	-4.80	<0.001
	Female	108 (37%)	2.13	0.57		
Global Quality of Life Scale	Male	185 (63%)	72.16	13.85	-.45	0.65
	Female	108 (37%)	73.06	17.76		
Satisfaction With Life Scale	Male	185 (63%)	4.09	1.01	-1.25	0.21
	Female	108 (37%)	4.28	1.38		

8.3.c Correlational Analyses

Correlation of the APSQ with the GQLS, SLS, and PANAS

Correlational analyses were conducted to determine which version of the APSQ is more strongly associated with, or a better predictor of, the well-being-related outcome variables assessed in this study (i.e., on the GQLS, SLS, and PANAS).

The two versions of the APSQ showed the same pattern of significant correlations with the other questionnaires used in this study; the Pearson's r and significance levels for each correlation are presented in Table 8.5. For both version of the APSQ, the Harsh Parenting subscale and the Family Preference subscale were both found to be significantly and positively correlated with the GQLS and the SLS, indicating that less

frequent harsh parental treatment and less frequent showing of preference within the family during childhood and adulthood were related to greater life satisfaction. The Harsh Parenting subscale and the Family Preference subscale of both the child and the adult APSQ were also found to be significantly negatively correlated with Negative Affect as measured by the PANAS. These correlations indicate that less frequent negative parenting practices (i.e., verbal insults, beatings) and less showing of preference within the family were related to higher levels of Negative Affect. The Encouragement subscales of both versions of the APSQ were found to be significantly and negatively correlated with the GQLS and the SLS, and also with Positive Affect as assessed on the PANAS, indicating that experiencing more frequent encouragement to express thoughts and feelings is associated with more life satisfaction and more Positive Affect.

Table 8.5 Correlation of the APSQ subscales with the GQLS, SLS, and PANAS

Child APSQ	GQLS	SLS	PANAS	
			Negative Affect	Positive Affect
Harsh Parenting	-0.23**	-0.31**	0.17**	-0.04
Encouragement	0.30**	0.27**	0.02	0.13*
Family Preference	-0.25**	-0.24**	0.16**	0.001
Adult APSQ				
Harsh Parenting	-0.22**	-0.28**	0.24**	-0.02
Encouragement	0.28**	0.22**	0.06	0.23**
Family Preference	-0.32**	-0.27**	0.12*	-0.003

N = 293.

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Relationship of parent-child relationship to health: Correlation of the APSQ with the MHCQ

Correlations were used to examine the relationship of the parent-child relationship, as assessed using the child APSQ, with minor health complaints (inflammation and infection), as assessed by the MHCQ (see Table 8.6).

Table 8.6 Correlation of the child APSQ with the MHCQ

Child APSQ	MHCQ	
	Inflammation	Infection
Harsh Parenting	0.19**	-0.01
Encouragement	0.02	0.09
Family Preference	0.22**	0.22**

N = 293.

** Correlation is significant at the 0.01 level (2-tailed).

The relationship of the ratio of symptoms to the APSQ subscales

This correlation indicates that the Harsh Parenting factor appears to be a predictor of later physical health (see Table 8.7). The Harsh Parenting factor was associated with a higher ratio, which rules out the explanation that depressed people complain about verbal insults and physical beatings and complain about all symptoms.

Table 8.7 Correlation of the of inflammation to infection and the child APSQ subscales

Child APSQ	Ratio of inflammation/infection
Harsh Parenting	0.22**
Encouragement	-0.09
Family Preference	0.04

N = 293.

** Correlation is significant at the 0.01 level (2-tailed).

Correlation of the child and adult versions of the APSQ

The relationship between the two versions of the APSQ was explored by examining the correlation of the subscale of each form with the corresponding subscale on the other form. Results were as predicted, with the corresponding subscales correlating positively and significantly (see Table 8.8).

Table 8.8 Correlation of corresponding subscales on the child and adult APSQ

	Adult APSQ		
	Harsh Parenting	Encouragement	Family Preference
Child APSQ			
Harsh Parenting	0.59**		
Encouragement		0.76**	
Family Preference			0.77**

N = 293.

**. Correlation is significant at the 0.01 level (2-tailed).

8.4 Determination of which version of the APSQ to use in future studies

The child version of the APSQ was selected for use in future studies for four reasons. First and foremost, the child version is more theoretically relevant. Addressing questions of the long-term impact of parent-child interactions on mental and physical health using a questionnaire that asks about parent-child relationships during childhood (i.e., ages 6-18 years) makes sense. Second, the two versions of the APSQ show the same pattern of correlation with other measures, such as the assessments of quality of life, satisfaction with life, and affect assessed in this study (see Table 8.5). This supports the idea that both forms of the APSQ are measuring the same thing or are very closely related. Third, the subscales of two forms of the questionnaire are significantly and positively correlated, further implying that they may be assessing the same things (see Table 8.8). Ultimately, given that the two questionnaires are very highly correlated and likely assess the same underlying constructs, but use of a single form is simpler and the child version is more appropriate for the current context, the child APSQ is used instead of both versions.

8.5 Discussion

The two primary goals of this study were (1) to examine the relationship of the adult and child APSQ with a health-related assessment (the MHCQ), the PANAS, and two assessments of satisfaction with life (the SLS and the GQLS), and (2) to replicate the earlier finding that the child version of the APSQ and the adult version of the APSQ are strongly correlated. With regard to the first aim, the Harsh Parenting factor of the APSQ was found to have a strong significant correlation with SLS, Negative Affect on the PANAS, and inflammation symptoms on the MHCQ. Harsh Parenting was related to Positive Affect. Significant correlations were also found between the Encouragement factor and SLS, and the Encouragement factor and Positive Affect. Encouragement was

not related to Negative Affect. This study examining the ratio of inflammatory to non-inflammatory symptoms for the MHCQ. However, the results did not indicate that this statistic provide a better account of the data than was obtained by examining the two subscales independently. Because ratios of the two scales increases the random error, this method of analysis was therefore dropped for future studies – this exploratory analysis did not appear to be useful.

Of particular interest was the finding that harsh parenting was associated with negative affect whereas encouragement was associated with positive affect. These findings are consistent with infornet theory, as outlined earlier. The correlations with the other scales are well-being are consistent with these scales tapping into both positive and negative affect, showing the benefit of measuring positive and negative affect separately.

Reports of experiences during adulthood were assumed to be accurate, as they were recent or on-going, and strong correlations between child and adult version of the APSQ were interpreted as evidence that the child APSQ results were valid. However, a limitation of this study is that it is not possible to be certain that the child version of the scale provides an accurate account of experiences during childhood. The child version of the APSQ was selected to use for the next study because it is theoretically more relevant. However, this study was conducted with a non-clinical sample, which is a limitation of this study. For a broader exploration of the APSQ's relationship to health and well-being, the next chapter is concerned with the relationship between APSQ and health outcomes with clinical sample.

Chapter 9

Study 5: Does the child APSQ predict health outcomes in Saudi individuals with addictions?

Abstract

Aim: The aim of the current study was to examine the correlation between the child version of the Arabic Parenting Style Questionnaire (APSQ) and Minor Health Complaints questionnaire (MHCQ), Positive and Negative Affect Scale (PANAS), the Satisfaction with Life Scale (SLS), and Global Quality of Life Scale (GQLS) among a sample of Saudi Arabian individuals with diagnosed addictions to multiple substances.

Methods and Participants: A sample of 264 Saudi Arabian men with diagnosed addictions to multiple substances who were at the Alamal Complex for Mental Health in Dammam, Saudi Arabia, took part in this study. The participants' ages ranged from 20 to 50 years ($M = 32.31$ years, $SD = 7.70$). All participants in this study completed five questionnaires to examine the correlation of the APSQ with the MHCQ, with the PANAS, with the SLS, and with the GQLS.

Results: There is a strong correlation of the APSQ's Harsh Parenting subscale with SLS, with Negative Affect (PANAS), and with inflammation and infection (MHCQ). There is also a significant correlation of the APSQ's Encouragement subscale with Negative Affect (PANAS), Positive Affect (PANAS), and inflammation symptoms (MHCQ).

Discussion: The Harsh Parenting subscale and the Encouragement subscale of the APSQ predict a variety of outcome variables.

Key words: *Parent-Child Relationship, Minor Health Complaints questionnaire (MHCQ), Positive and Negative Affect Scale (PANAS), Satisfaction with Life scale (SLS), Global Quality of Life Scale (GQLS), addiction.*

9.1 Introduction

Evidence from the previous chapter indicates that the APSQ predicts mental health issues in a non-clinical, community sample in Saudi Arabia. However, when considering the issue of predicting mental health outcomes, individuals who have large and life-changing psychological or mental health challenges must be taken into account. Especially strong relationships have been found between the abuse of alcohol and other drugs and having a history of being maltreated as a child (particularly neglect, Testa & Smith, 2009). In the current chapter, the predictive value of the APSQ is examined within a sample of Saudi Arabian individuals who have substance abuse problems. Individuals with substance abuse problems are of particular interest to the author because of his previous clinical experience with this group. In addition, it is interesting to see if the relationship between harsh parenting and poor mental health occurs also in a group of people who have clinical problems.

Substance abuse is a topic of particular interest because the drinking of alcohol was popular in Arabia before its prohibition by Islam 14 centuries ago. Since its prohibition, sporadic surreptitious drinking has continued despite both religious sanction and social disapproval. Historically, other types of drug use were virtually unknown (AbuMadini, Rahim, Al-Zahrani, & Al-Johi, 2006). However, the rapid socio-economic and cultural development associated with the discovery of oil in the Gulf States and the developing oil business lead to the adoption of novel attitudes, lifestyles, and recreational pursuits, including the use of illicit drugs in Saudi Arabia (e.g., Rahim, AbuMadini, Khalil, & Musa, 2005) and in other Gulf States (e.g., Abalkhail, 2001; Kuwaiti Ministry of Interior, 1985). In 1986, the Saudi authorities opened three regional hospitals specialized in treating substance abuse. One of these was Amal Hospital Dammam (AHD), which was renamed as the Alamal Complex for Mental Health in 2008. There are no treatment facilities of this kind for women though there is a plan to open a treatment centre for women in the future. Compared to men, in Saudi Arabia there is greater stigmatization of women who have addiction problems.

Previous research (reviewed in chapter 1, see also e.g., Conroy, Degenhardt, Mattick, & Nelson, 2009) has documented a relationship between history of child maltreatment and tendency to use illicit drugs. In Conroy et al.'s (2009) study, a control-group was compared to individuals with opioid addictions. Specifically, males with opioid addictions were found to have a history of greater prevalence of physical and emotional

abuse, and females with opioid addictions were found to have a history of greater prevalence and more severe sexual abuse. These findings occurred even controlling for the risk factors associated with child maltreatment (e.g., socio-economic status). Based on the relationship between child maltreatment and adult mental health issues, including substance abuse, child maltreatment may be an important risk factor to evaluate in order to gain a better understanding of substance abuse and addiction.

9.2 Methods

9.2.a Participants

A total of 264 men diagnosed with substance addictions and who were at in-patient treatment wards of the Alamal Complex for Mental Health in Dammam, Saudi Arabia, took part in this study. The participants' ages ranged from 20 to 50 years ($M = 32.3$ years, $SD = 7.7$). All participants in the sample met the DSM-IV criteria for multi-substance abuse. All participants were male because the facility treats only men. In the hospital where the men were recruited, they did not have access to the addictive substances.

9.2.b Recruitment

The researcher approached the Alamal Complex for Mental Health in Dammam, Saudi Arabia and asked whether they would permit the current study to be conducted there. Permission was granted, and the study was conducted in in-patient wards in Alamal Complex for Mental Health. The researcher approached the potential participants individually, explained the aims of the study, and invited them to take part in the study. If individuals were interested in participating, they were given a consent form to read and, if comfortable, to sign. They were also given a participant information sheet. Next, the author met with the participants individually in a clinic that was provided to allow the participants space and opportunity to complete the five scales included in this study. After the questionnaires were completed, the participants were given the debriefing form. All participants gave informed consent and the studies were deemed ethical by University of Plymouth's Human Ethics Committee and were consistent with the Code of Ethics of the World Medical Association (Declaration of Helsinki) for experiments involving humans.

9.2.c Measures

The measures used in this study were presented in Study 4 (see chapter 8). Specifically, the following five questionnaires were used: the child and adult versions of the Arabic Parenting Style Questionnaire (APSQ), the Positive and Negative Affect Scale (PANAS), the Satisfaction with Life Scale (SLS), the Minor Health Complaints Questionnaire (MHCQ), and the Global Quality of Life Scale (GQLS). Although the adult version of the APSQ was administered, it was later omitted from analyses because the child version was deemed more closely related to the topics that were the focus of study (parenting experiences during childhood).

9.2.d Scale Translations

The instruments used in this study were used and translated in the previous study. The translation procedures were discussed in Study 4 (chapter 8).

9.3 Results

9.3.a Sample characteristics

The sample was examined in terms of marital status, smoking, and the education level (see Table 9.1). Of the 264 men in the sample, 174 were single, 68 were married, and 22 were divorced. The majority of the sample ($N = 248$, or 93.90%) reported smoking. Most fell into the two middle categories of education ($N = 194$, or 73.5%) with either an intermediate level of education ($N = 72$, or 27.3%) or a secondary degree ($N = 122$, or 46.20%).

Table 9.1 Sample characteristics of male addicts

	Smoking		Education			
	Yes	No	Elementary	Intermediate	Secondary	BA
Marital Status						
Single	162	12	32	49	79	14
	93.10%	6.90%	18.40%	28.20%	45.40%	8%
Married	66	2	12	17	35	4
	97.10%	2.90%	17.60%	25%	51.50%	5.90%
Divorced	20	2	6	6	8	2
	90.90%	9.10%	27.30%	27.30%	36.40%	9.10%
Total	248	16	50	72	122	20
	93.90%	6.10%	18.90%	27.30%	46.20%	7.60%

Comparison of samples in studies 4 (non-addicts) and 5 (addicts)

In order to determine whether individuals with addictions (in the present study) differ significantly in terms of demographic information from individuals without addictions, the sample from the present study was compared to the sample from Study 4 (chapter 8). The samples were compared using t-tests, which indicated some significant differences. Specifically, individuals who had substance abuse addictions were significantly more likely to smoke ($t = -32.97; p < .01$), and had a lower level of education ($t = -15.47; p < .01$), including fewer Bachelor's degrees and no Master's degrees (see Table 9.2). Individuals with addictions in Study 5 were also significantly older than individuals without addictions in Study 4 (addicts $M = 32.31$ years, $s.d. = 7.70$; non-addicts $M = 27.20$ years, $s.d. = 7.27$; $t = 8.02; p < .01$). Comparing addicts and non-addicts, there were no significant differences between parents' levels of education or marital status.

Table 9.2 Differences in sample characteristics between non-addicts and addicts

Group	Smoking		Marital Status			Education				
	Yes	No	Single	Married	Divorced	Elementary	Intermediate	Secondary	BA	MA
Addict (study 5)	248	16	174	68	22	50	72	122	20	0
	93.90%	6.10%	65.90%	25.80%	8.30%	18.90%	27.30%	46.20%	7.60%	0.00%
Non-addict (study 4)	38	255	152	139	2	0	12	150	124	7
	13%	87%	51.90%	47.40%	0.70%	0.00%	4.10%	51.20%	42.30%	2.40%
Total	286	271	326	207	24	50	84	272	144	7
	51.30%	48.70%	58.50%	37.20%	4.30%	9%	15.10%	48.80%	25.90%	1.30%

Individuals with and without substance abuse addictions showed significant differences across a number of variables examined in this study (see Table 9.3). Specifically, individuals with addictions reported lower quality of life (GQLS). On the child version of the APSQ, they reported more of all behaviours examined – more harsh parenting practices, more encouragement, and the display of more preferential treatment of siblings within their families during their childhood. On the adult version of the APSQ, individuals with addictions reported more harsh parenting practices (verbal insults, physical beatings) and the display of more preferential treatment of siblings within their families during their adult interactions with their parents. The individuals with addictions may be reporting on experiences they have had with their parents since developing substance abuse problems, which may impact the parent-child relationship.

Individuals with addictions also reported marginally less satisfaction with life (SLS), more Negative Affect (PANAS), and more inflammation symptoms (MHCQ).

Table 9.3 Non-addicts and Addicts: Comparison of APSQ and outcome variables

	Diagnosis	N	Mean	Std. Deviation	t	Sig. (2-tailed)
Child APSQ						
Harsh Parenting	Addict	264 (47.4%)	3.30	1.93	4.43	<.01
	Non-addict	293 (52.6%)	2.67	1.32		
Encouragement	Addict	264 (47.4%)	4.93	2.20	2.20	0.03
	Non-addict	293 (52.6%)	4.54	1.97		
Family Preference	Addict	264 (47.4%)	3.97	1.86	2.33	0.02
	Non-addict	293 (52.6%)	3.73	1.65		
PANAS						
Negative Affect	Addict	264 (47.4%)	2.84	0.63	5.94	<.01
	Non-addict	293 (52.6%)	2.53	0.62		
Positive Affect	Addict	264 (47.4%)	3.31	0.60	-1.26	0.21
	Non-addict	293 (52.6%)	3.37	0.53		
MHCQ						
Inflammation	Addict	264 (47.4%)	1.87	0.66	2.76	<.01
	Non-addict	293 (52.6%)	1.73	0.52		
Infection	Addict	264 (47.4%)	1.88	0.61	-1.13	0.26
	Non-addict	293 (52.6%)	1.93	0.51		
Global Quality of Life Scale	Addict	264 (47.4%)	63.56	17.03	-6.50	<.01
	Non-addict	293 (52.6%)	72.49	15.38		
Satisfaction with Life Scale	Addict	264 (47.4%)	3.98	1.18	-1.81	0.07
	Non-addict	293 (52.6%)	4.16	1.16		

9.4 Examination of study 5 participants with addictions

Reliability of the child APSQ subscales among individuals with addictions

Cronbach's alpha was calculated for each of the three subscales again in order to examine the internal consistency of the APSQ subscales as used with the current sample of individuals with addictions (see Table 9.4). The internal consistencies of the Harsh Parenting and of the Encouragement subscale were found to be relatively high. However, the Family Preference subscale was found to have comparatively low internal consistency once again. Because of its consistently low internal consistency, the Family Preference subscale was dropped from the questionnaire.

Table 9.4 Reliability statistics for the child APSQ, SLS, MCHQ and PANAS

	Cronbach's Alpha	Number of Items
APSQ		
Harsh Parenting	0.86	4
Encouragement	0.81	3
Family Preference	0.58	3
SLS	0.71	5
MCHQ-INFECTION	0.45	6
MCHQ-INFLAMMATION	0.63	8
PA	0.74	10
NA	0.76	10

The correlation between the child APSQ and the MHCQ

The correlation of the child APSQ subscales and the MHCQ subscales were examined to determine if childhood parent-child relationships appear to be related to inflammatory and infection symptoms experienced by adult individuals with diagnosed substance abuse problems. As shown in Table 9.5, all four correlations were of similar magnitude, ranging from .12 to .15. Although the correlations are very similar, only three of the four correlations had a significance level of .05 or below.

Table 9.5 Correlation of child APSQ subscales and MHCQ subscales among substance abuse addicts

	MHCQ	
	Inflammation	Infection
Child APSQ		
Harsh Parenting	0.15*	0.13*
Encouragement	-0.15*	-0.12

N = 264.

*. Correlation is significant at the 0.05 level (2-tailed).

Correlation of child APSQ with other variables

Correlational relationships of the APSQ with the SLS, the PANAS, and the GQLS were examined (see Table 9.6). Similar to the results from Study 4, a significant correlation was found between the Harsh Parenting subscale and the SLS. Negative Affect was positively correlated with Harsh Parenting and negatively correlated with Encouragement. Positive Affect was positively and significantly correlated with

Encouragement. The correlation between Harsh Parenting and Positive Affect was very small in magnitude, so the correlation would not be likely to reach significance even with a larger sample. Reported quality of life on the GQLS was negatively and significantly correlated with Harsh Parenting and positively and significantly correlated with Encouragement.

Table 9.6 Correlation of the child APSQ with the SLS, the PANAS, and the GQLS

	Satisfaction with Life Scale	PANAS		Global Quality of Life Scale
		Negative Affect	Positive Affect	
Child APSQ				
Harsh Parenting	-0.23**	0.27**	-0.03	-0.19**
Encouragement	0.08	-0.12*	0.16**	0.21**

N = 264.

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

9.5 Discussion

The aims of Study 5 were (1) to examine the correlation between the child version of the APSQ and the MHCQ, PANAS, SLS, and GQLS among a sample of Saudi Arabian individuals diagnosed with multiple addictions, and (2) to compare those individuals with a sample of Saudi Arabian individuals without addictions. In addition, the refinement of the APSQ was further considered.

Study 5 utilized the same instruments – the APSQ, MHCQ, PANAS, SLS, and GQLS – that were utilized in Study 4. The parallel study designs allowed for the comparison of individuals with addictions (in Study 5) and without addictions (in Study 4). Both studies built on earlier studies, which informed the development of the APSQ and tested the APSQ among samples of studies (see Study 3).

Further item reduction of the scale

Both the Harsh Parenting subscale and the Encouragement subscale have high reliability. However, the Family Preference factor on the APSQ consistently showed low reliability. As a result, the Family Preference subscale was dropped from the questionnaire.

All correlations between subscales of the child APSQ and subscales of the MHCQ were of approximately the same magnitude, with absolute values ranging from .12 to .15. All but one of these four correlations were significant, with the correlation of -0.12 between the APSQ Encouragement subscale and infection symptoms on the MHCQ falling just below the cut-off for significance ($p = .05$). The Encouragement subscale on the child APSQ was thus negatively correlated with infection symptoms with marginal significance, and negatively significantly associated with inflammation symptoms on the MHCQ. Harsh Parenting on the child APSQ was positively and significantly associated with inflammation and infection symptoms on the MHCQ. Both subscales were significantly correlated with overall quality of life (on the GQLS) and Negative Affect (as assessed using the PANAS). The Harsh Parenting factor was also significantly correlated with satisfaction with life as assessed on the SLS. The Encouragement factor was significantly and positively correlated with Positive Affect.

Correlations with minor health complaints

This study also examined the relationship of the APSQ with minor health complaints (the MHCQ subscales) among individuals with substance abuse addictions. Relationships of similar magnitudes were found between the APSQ subscales (Encouragement and Harsh Parenting) and both of the MHCQ subscales (infection and inflammation), though one of these relationships was only marginally significant. Specifically, the Harsh Parenting subscale was found to be significantly and positively correlated with both infection and inflammation. The Encouragement subscale was found to be significantly and negatively correlated with inflammation as well as marginally significantly and negatively correlated with infection.

Comparisons of non-addicts with addicts

There were some meaningful similarities and differences between the APSQ scores of individuals without addictions (in Study 4) and with addictions (in Study 5). The pattern of relationships between the subscales of the APSQ and the global quality of life assessment (GQLS) was the same for both groups, with Harsh Parenting significantly and negatively associated with satisfaction, and Encouragement significantly and positively associated with satisfaction.

The other assessment of satisfaction, the SLS, showed different relationships. For non-addicts and addicts alike, Harsh Parenting was significantly negatively related to the SLS, as predicted. However, Encouragement was a significant (positive) predictor only among addicts.

With one exception, the APSQ also showed the same relationships with Positive and Negative Affect across the sample of addicts and non-addicts. As expected, Harsh Parenting was positively and significantly associated with Negative Affect for both samples, and Encouragement was negatively and significantly associated with Positive Affect for both samples. Encouragement was negatively and significantly related to Negative Affect for non-addicts only, indicating that individuals without addictions who experienced more encouragement in childhood reported less Negative Affect in adulthood (as expected).

Among non-addicts, minor health complaints (both inflammation and infection) were significantly associated with both Harsh Parenting and Encouragement. However, there were fewer significant relationships between these variables among individuals without addictions. The association between Harsh Parenting and inflammation symptoms is positive and significant among individuals without addictions, but no other correlations were substantial or near significance. The associations between Harsh Parenting and infection and between Encouragement and inflammation are particularly weak ($r = -.01$ and $r = .02$, respectively) and near zero.

Overall, these data support the hypothesis that the APSQ predicts long-term health outcomes, and also that the outcomes relate to physical symptoms (i.e., minor health complaints), though less so among individuals with addictions than among individuals without addictions. In the next chapter, the relationship of verbal insults, physical beatings, and encouragement during childhood to later depression, affect, and Chronic Fatigue Syndrome (CFS) will be evaluated, and the relationship of these childhood experiences to minor health complaints will be re-examined.

Table 9.7 Comparing APSQ responses between non-addicts and addicts

		Study 4: Non-addicts		Study 5: Addicts	
		Harsh		Harsh	
		Parenting	Encouragement	Parenting	Encouragement
GQLS	Pearson's <i>r</i>	-.19**	.21**	-.22**	.30**
	<i>p</i>	.002	.001	<.001	<.001
SLS	Pearson's <i>r</i>	-.23**	.08	-.31**	.27**
	<i>p</i>	<.001	.19	<.001	<.001
Negative Affect (PANAS)	Pearson's <i>r</i>	.27**	-.12*	.17**	.025
	<i>p</i>	<.001	.05	.003	.67
Positive Affect (PANAS)	Pearson's <i>r</i>	-.03	.16**	-.04	.13*
	<i>p</i>	.65	.01	.50	.02
Inflammation (MCHQ)	Pearson's <i>r</i>	.15*	-.15*	.19**	.02
	<i>p</i>	.013	.013	.001	.72
Infection (MHCQ)	Pearson's <i>r</i>	.13*	-.12	-.01	.09
	<i>p</i>	.03	.05	.86	.13

N (addict) = 264; N (Non-addict) = 293

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Chapter 10

Study 6: Relationship of harsh parenting practices and lack of expression to later mental health symptoms in Saudi Arabian individuals with addictions

Abstract

Aim: The aim of this study was to determine if the experience of harsh parenting practices during childhood and having a childhood during which expression of thoughts and feelings is discouraged is associated with depression, Chronic Fatigue Syndrome (CFS), positive or Negative Affect (on the Positive and Negative Affect Scale, PANAS), inflammatory symptoms (on the MHCQ), infection symptoms (on the MHCQ), or Borderline Personality Disorder (BPD) among a Saudi Arabian clinical sample of individuals with diagnosed addictions. In addition, three new items addressing predictability of punishment delivered by parents were added to the APSQ and the questionnaire's performance was evaluated.

Methods and Participants: A clinical sample of 259 men diagnosed with substance abuse addictions and receiving treatment at the Alamal Complex for Mental Health in Dammam, Saudi Arabia, participated in this study. The participants' ages ranged from 19 to 58 years ($M = 32.27$ years, $SD = 8.25$). The participants completed six self-report questionnaires, the child version of the Arabic Parenting Style Questionnaire (APSQ), the Minor Health Complaints Questionnaire (MHCQ), the Positive and Negative Affect Scale (PANAS), the nine-item Patient Health Questionnaire (PHQ-9), the Chronic Fatigue Syndrome (CFS) scale, and the Borderline Personality Disorder Scale (BPDS).

Results: There was a significant correlation of the Harsh Parenting subscale of the child APSQ with Negative Affect (PANAS), physical and mental fatigue (CFS), depression, and inflammation and infection (on the MHCQ). The Encouragement subscale of the child APSQ was also found to be significantly correlated with Positive Affect as assessed by the PANAS. Harsh Parenting on the child APSQ served as a significant predictor of BPD. A significant and strong positive correlation was found between the APSQ's Harsh Parenting subscale and the BPDS. The internal consistency of the new Punishment Prediction items on the APSQ was low, and for this reason the items were dropped.

Discussion: The APSQ's Harsh Parenting subscale and Encouragement subscale are strong predictors of later depression, chronic fatigue (CFS), Positive Affect and Negative Affect (PANAS), and inflammatory and infection symptoms (MHCQ). The Harsh Parenting factor is also a strong, significant predictor of BPD in a Saudi Arabian sample; whether this relationship is causal should be further investigated.

Key words: *the Arabic Parenting Style Questionnaire, Minor Health Complaints questionnaire, the Positive and Negative Affect Scale (PANAS), Patient Health Questionnaire, Chronic Fatigue Syndrome, Borderline Personality Disorder (BDP), addiction.*

10.1 Introduction

The current study builds on the previous investigation of Arabic Parenting Style Questionnaire (APSQ) in a clinical sample, but expands the area of investigation to look at whether verbal insults, physical beatings, and discouragement of emotional expression during childhood relate to specifically to mental health symptoms in Saudi Arabian individuals with diagnosed addictions. Specifically, depression, Chronic Fatigue Syndrome (CFS), Positive or Negative Affect (on the Positive and Negative Affect Scale, PANAS), inflammatory and infection symptoms, and Borderline Personality Disorder (BPD) were examined as potentially related to APSQ scores.

Stress has long been recognized to have negative consequences and be related to the development of pathology (e.g., Eitinger, 1972; Meehl, 1962), as was described in Chapter 3. Infornet theory (see chapter 3) goes further to suggest a pathway by which stress might negatively influence health (Hyland, 2011). What causes or prompts stress? Many psychological models of stress (e.g., Lazarus & Folkman, 1984) emphasize issues of control and predictability. A stressor may be seen as more controllable if an individual feels able to cope with and respond to the stressor. Regardless of the cause of stress, when people suffer stress that they perceive as uncontrollable, they tend to suffer emotionally, experience physiological disruptions, show increased levels of aggressive behaviour, and have difficulty with cognitive tasks (e.g., Roth, 1980; Wortman & Brehm, 1975). Indeed, the more uncontrollable and unpredictable a stressor is perceived to be, the greater the negative impact, including stress and feelings of hopelessness (e.g., Henry, 2005). Other studies have found that risk of psychopathology related to stressful events is associated with the level of perceived predictability, intensity, and chronic nature of the stressors (Folkman, Lazarus, Dunker-Schetter, DeLongis, & Gruen, 1986; McCubbin, Cauble, & Patterson, 1982).

Infornet theory (Hyland, 2011) provides a rationale as to why stress leads to negative health outcomes. According to this theory, repeated episodes of acute stress lead to associative learning changes in a psychoneuroimmunoendocrine information network, the infornet. Whereas a single episode of stress leads to the encoding of the information that there is currently a stressor present, repeated episodes of stress lead to this information becoming fixed such that the organism responds as though there were always a stressor, even though the current inputs to the infornet would indicate

otherwise. Thus, the chronic changes associated with stress can be explained in terms of a form of programming within the body. What are these changes? They consist of raised levels of pro-inflammatory cytokines and these pro-inflammatory cytokines create systemic inflammation. Pro-inflammatory cytokines protect against infection in the short term but in the long term have a very negative impact on the body. Diseases such as asthma, cancer, and heart disease as well as many neurological conditions have a specific inflammatory component whereby the likelihood of the disease is increased by raised pro-inflammatory cytokines. As a result, the incidence of all major diseases is increased with stress (e.g., the stress of daily life with low socioeconomic status, daily struggles). Thus, it is consistent with existing stress theory and its development in the form of infonet theory that the experience of early childhood stress leads to later disease. Infornt theory is a network theory and makes the further prediction that young networks are particularly plastic such that the experience of stress when young should be particularly damaging. Thus, in the context of this thesis, harsh parenting is a stressor, and when repeated that stressor leads to raised levels of pro-inflammatory cytokines, and the raised levels of pro-inflammatory cytokines (which become locked in because the young network is plastic) then lead to a range of different diseases. The theory therefore leads to the prediction that childhood stress leads to pathophysiology that drives both psychological and physical disease.

Living in a world that is unpredictable causes a chronically elevated stress level, and chronically elevated stress, in turn, has a negative impact on health. In studying youth, Grant, Behling, Gipson, and Ford (2005) examined the issue of stressful life experiences and experiencing an increased rate of negative experiences and found that, among adolescents, increases in stressors account for increases in psychological problems. Based on the research indicating that the predictability of stressors affects the degree to which the stressors impact people and the assumption that punishment causes stress for children, additional items were developed to assess the predictability of punishment. The items added to the APSQ to assess predictability of punishment during childhood were examined and evaluated in this study.

Thus, in this chapter stress is referred to specifically in relation to the issue of predictability. This idea occurred at this stage of the thesis rather than at the beginning. The idea of whether the unpredictability of punishment might be more important than the frequency of punishment seemed worthwhile and important to explore. As will be

found later in this chapter, this idea was not found to be a useful one. However, the failure to find useful data from the unpredictability items may stem from the fact that they were added late in the research process.

In the US, approximately two percent of the general population is estimated to have Borderline Personality Disorder (BPD), making it one of the most common personality disorder (PD) diagnoses (American Psychiatric Association [APA], 2000; Johnson et al., 2000; Klonsky, Oltmanns, Turkheimer, & Fiedler, 2000; Kraus & Reynolds, 2001). Recently, Carr and Francis (2009) argued that there may be a pathway from childhood maltreatment and/or a dysfunctional family environment to adult BPD, and that this pathway may be mediated by individuals' core beliefs and expectations about the world. Additional studies in non-clinical samples, clinical samples, and using longitudinal methodologies have been recommended to further explore this relationship (see Carr & Francis, 2009). Psychological health in Saudi Arabia has not yet garnered adequate research attention to provide comparable statistics, but BPD is recognized in Saudi Arabia. With respect to BPD, the aim of the current study is to determine whether being frequently physically struck, being verbally insulted, or experiencing a lack of encouragement during childhood are associated with later BPD in a Saudi Arabian sample of men with substance abuse addictions. This study adds a cross-cultural perspective and examines BPD symptoms in a clinical sample of Saudi Arabians with diagnosed substance abuse addictions.

10.2 Methods

10.2.a Participants

All 259 participants who took part in this study were men with diagnosed substance abuse addictions and had been admitted to the Alamal Complex for Mental Health in Dammam, Saudi Arabia. Although receiving treatment in the same facility as participants in the previous study (Chapter 9), the samples are separate and unique individuals. The ages of participants in this study (Study 6) ranged from 19 to 58 years ($M = 32.3$ years, $SD = 8.2$ years). All the participants were male because there are no female patients in the Alamal Complex for Mental Health.

10.2.b Procedures

The Alamal Complex for Mental Health was asked for and freely gave permission for this study to be conducted. With the complex's consent, the author commenced interviewing clients, asking them if they would like to take part in the current study. Next, the potential participants were given further information about the aim of the study, their right to withdraw from participation without penalty was explained to them, and they were informed that participation in the study would not impact their treatment in the Alamal Complex for Mental Health. Potential participants were given information forms describing the study and were given informed consent forms to review; if they agreed to participate in the study, they were asked to give informed consent by signing the form. Individual meetings were held for the participants to be given and to complete the five questionnaires, which took 20-25 minutes to complete. After the participants completed the five questionnaires, they were given a debriefing form. All participants gave informed consent and the studies were deemed ethical by University of Plymouth's Human Ethics Committee and were consistent with the Code of Ethics of the World Medical Association (Declaration of Helsinki) for experiments involving humans.

10.2.c Measures

Six scales were used to examine the correlation of the APSQ with inflammation and infection on the MHCQ, with Positive Affect and Negative Affect on the PANAS, with health information from the nine-item PHQ-9, with fatigue assessed on the CFS scale, and with BPD assessed on the BPDS. Each scale is discussed below. All participants completed all six questionnaires.

The Arabic Parenting Style Questionnaire (APSQ). This scale was described in Study 3 (see chapter 7). However, the third subscale of the original APSQ, Family Preference, was dropped because the subscale's internal consistency was low. In addition, a new subscale, the Punishment Predictability subscale, described below, was added.

10.2.d Modification of the child APSQ

A new set of items was generated to form an additional subscale on the child form of the APSQ, modifying it from the version used in previous studies. The new subscale, called the Punishment Predictability subscale, included three new items addressing the

predictability of punishment parents give. The Punishment Predictability subscale was added to test the hypothesis that there is a correlation between predictability of punishment during childhood and mental health during adulthood. Each item used a seven-point Likert response scale (see Table 10.1). The answer options for the first item ranged from “completely unpredictable” to “always knew when it would occur”. Answer options for the second question ranged from “unable to control” to “able to control”. Finally, answer options for the third question ranged from “unable to escape” to “could always escape”.

Table 10.1 Items included in the new Punishment Predictability subscale

-
1. Were you able to predict when the beating would occur?
 2. Were there things you could do to control the severity of beating?
 3. Were you able to escape from the person beating you?
-

Patient Health Questionnaire (PHQ-9). This scale consists of a nine-item self-report measure to assess the severity of depression. Responses are provided using a five-point Likert scale of severity/frequency, ranging from zero (“not at all”) to four (“nearly every day”; Kroenke, Spitzer, & Williams, 2001). The PHQ-9 is utilized because depression is a common indicator of poor health and the PHQ-9 is a commonly used, freely available tool for assessing depression. The internal consistency of the PHQ-9 has been reported to be $\alpha = 0.89$ (Kroenke, Spitzer & Williams, 2010).

Chalder Fatigue Scale (CFS). The CFS is self-report scale consisting of 14 items that can be divided into two factors, physical fatigue and mental fatigue, for assessing Chronic Fatigue Syndrome. Each item of the subscale is followed by a four-point response scale, including the responses “much worse than usual,” “worse than usual,” “no more than usual,” and “better than usual” (Chalder et al., 1993). The internal consistency of the entire scale has been examined, and Chalder et al. (1993) also examined the impact of removing each of the items included in the scale; the internal consistency ranged from $\alpha = 0.88$ to $\alpha = 0.90$.

Minor Health Complaints Questionnaire (MHCQ). This scale was described in Study 4 (see chapter 8).

Positive and Negative Affect Scale (PANAS). This scale was described in Study 4 (see chapter 8). An Arabic scale based on the PANAS was constructed with permission of the authors.

Borderline Personality Disorder Scale (BPDS). The BPDS (First et al., 1997) is a list of 15 questions derived from the semi-structured clinical interview for diagnosing DSM-IV Axis II Personality Disorders (SCID-II). The semi-structured interview includes a total of 119 questions to be completed by a psychologist and during a psychological interview. The 119 questions address a large number of personality disorders; only the subset of items related to BPD were retained for this study. For the 15-item questionnaire included in this study, participants respond to each item using a bimodal scale with answers options of “yes” and “no”. The lowest score possible on the questionnaire, if an individual responds with a “no” to every item, is 15; the highest score possible, if an individual responds with a “yes” to every item, is 30. Higher scores on the questionnaire are associated with a higher likelihood of being diagnosed with BPD (First et al., 1997).

The reliability of the interview for assessing BPD has been assessed in a number of studies with a variety of results, ranging from as low as $\alpha = 0.02$ (Weiss, Najavitz, Muenz, & Hufford, 1995) to as high as 0.95 (Lobbestael, Leurgans, & Arntz, 2011). Other reported reliability levels have included $\alpha = 0.48$ (First et al., 1995), 0.72 (Dreessen & Arntz, 1998), 0.79 (Arntz et al., 1992), 0.82 (Fogelson, Neuchterlein, Asarnow, Subotnik, & Talovic, 1991), 0.91 (Maffei et al., 1997), and 0.91, 0.93, and 0.95 (Lobbestael, Leurgans, & Arntz, 2011).

10.2.e Scale Translation

The child APSQ was translated from English into Arabic in Study 2 (see chapter 6). The newly added subscale was translated from English to Arabic, then backtranslated to English. Native English speakers compared the original and the backtranslated versions of the questionnaire. The PANAS and MHCQ were translated from English to create Arabic forms in Study 4 (see chapter 8). Permission to translate the PHQ-9, CFS, and BPDS from English to Arabic was obtained, and subsequently both scales were translated by the author from English into Arabic, keeping the translation as literal as possible. Then, the Arabic translation was presented to three bilingual (English-Arabic)

individuals for backtranslation into English. Subsequently, the backtranslated versions were compared to the original questionnaire forms by the author and his research supervisor.

10.3 Results

10.3.a Sample characteristics

Characteristics of the sample across all demographic variables that were measured are shown in Tables 10.2 and 10.3.

Table 10.2 Sample characteristics: Marital status and smoking

Marital Status	Smoking		Total
	Yes	No	
Single	130 93.50%	9 6.50%	139 100%
Married	83 89.20%	10 10.80%	93 100%
Divorced	25 96.20%	1 3.80%	26 100%
Widower	1 100%	0 0.00%	1 100%
Total	239 92.30%	20 7.70%	259 100%

Table 10.3 Sample characteristics and mental health variables

	N	Minimum	Maximum	Mean	SD
Age	259	19	58	32.27	8.25
Child APSQ					
Harsh Parenting	259	1	8	2.83	1.65
Encouragement	259	1	8	4.30	2.11
PANAS					
Positive Affect	259	1.20	5	3.30	.71
Negative Affect	259	1	5	2.90	.82
CFS					
Physical	259	1	4	2.76	.63
Mental	259	1	4	2.64	.75
PHQ-9	259	0	27	10.51	5.36
MHCQ					
Infection	259	1	3.83	1.88	.61
Inflammation	259	1	4	1.91	.64
Border Personality Disorder	259	1	2	1.56	.26

The internal consistency of the APSQ's subscales

Cronbach's alpha was calculated for each of the three child APSQ subscales, Harsh Parenting and Encouragement to re-examine their internal consistencies with the new sample, and Punishment Predictability to examine the internal consistency of the new subscale for the first time. The Harsh Parenting and the Encouragement subscales were found to have higher internal consistencies than in previous studies. The internal consistency of the Harsh Parenting factor was $\alpha = 0.86$, and of the Encouragement subscale was $\alpha = 0.80$ (see Table 10.4). The internal consistency of the new, three-item Punishment Predictability subscale was $\alpha = 0.50$, indicating relatively low internal consistency, particularly compared to the other two subscales of the APSQ. Based on this low internal consistency, the new subscale was dropped from future analyses and from the APSQ.

Table 10.4 The internal consistency of the child APSQ subscales

	Cronbach's alpha	Number of Items
Harsh Parenting	0.86	4
Encouragement	0.79	3
Punishment Prediction	0.50	3

Correlations between the child APSQ subscales with MHCQ infection and inflammation symptoms

The previous study examined the two subscales of the MHCQ as well as the ratio between inflammatory and non-inflammatory symptoms. The latter analysis was a speculative analysis to see if it produced a more interesting pattern of results than the subscales independently. This was not the case, so the ratio is not reported for this study (examination of the data shows that it is equally as uninteresting as in the previous study). As shown in Table 10.5, there are significant and positive correlations of the APSQ Harsh Parenting subscale with the MHCQ's infection symptoms. However, the APSQ Encouragement subscale was not found to be significantly correlated with infection and inflammatory symptoms on the MHCQ. Based on these correlations, it is suggested that the APSQ Harsh Parenting subscale may be a better predictor of later physical health.

Table 10.5 Correlation of APSQ subscales with MHCQ infection and inflammatory symptoms

	MHCQ	
	Infection	Inflammation
Child APSQ		
Harsh Parenting	0.24**	0.26**
Encouragement	0.08	0.02

N = 259.

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

The correlation of the child APSQ with assessments of adult health and well-being

The correlations of the child APSQ subscales with the assessments of depression, the PANAS, SLS, GQLS, and CFS were all examined. These correlational relationships were examined to determine if childhood experiences of harsh parenting and of discouragement to express thoughts and feelings were associated with decreased physical health, mental health, and overall well-being in adulthood (see Table 10.6).

The Harsh Parenting subscale was found to correlate positively and significantly with both physical and mental symptoms of CFS. This correlation shows that the individuals with addictions who reported experiencing less frequent harsh parenting during childhood reported more symptoms of physical and mental fatigue (CFS) in adulthood.

Table 10.6 Correlation of the child APSQ with later depression, Positive Affect and Negative Affect (PANAS), and physical and mental fatigue (CFS)

Child APSQ Subscale	PHQ-9	PANAS		CFS	
		Positive Affect	Negative Affect	Physical symptoms	Mental symptoms
Harsh Parenting	0.22**	0.03	0.37**	-0.17**	-0.21**
Encouragement	0.09	0.15*	0.03	0.07	0.07

N = 259.

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Multiple regression was used to determine the utility of the Encouragement and Harsh Parenting subscales in predicting Negative Affect and, separately, in predicting Positive Affect. Results are shown in Table 10.7. Harsh Parenting was identified as a significant

predictor of Negative Affect, although Encouragement was not. In contrast, Encouragement was identified as a significant predictor of Positive Affect, although Harsh Parenting was not.

Table 10.7 Multiple regression models predicting Negative and Positive Affect

Scales		Beta	Significance
Negative Affect – PANAS	Harsh Parenting (APSQ)	.37	>.001
	Encouragement (APSQ)	.04	.47
			Adjusted R ² = .13
Positive Affect – PANAS	Harsh Parenting (APSQ)	.01	.60
	Encouragement (APSQ)	.05	.01
			Adjusted R ² = .02

The internal consistency of the BPDS

The internal consistency of the BPDS, examined using Cronbach's alpha was $\alpha = 0.84$.

The correlation of child APSQ with adult BPD

To examine the relationship between the subscales of the APSQ and the measure of BPD in adulthood (the BPDS), correlations were examined. There were two primary questions of interest. First, is the experience of being beaten and insulted by a parent during childhood related to BPD in adulthood? Second, is the childhood experience of being discouraged to express thoughts and feelings related to BPD in adulthood?

A significant, positive correlation was found between the child APSQ subscale Harsh Parenting and individuals' self-ratings on the BPDS, $r(257) = .30$ ($p < .01$). This correlation shows that the addicts who report higher frequency of being beaten or insulted (Harsh Parenting) during childhood are more likely to have symptoms of BPD. The child APSQ Encouragement subscale was not found to significantly correlate with BPD (see Table 10.8).

Table 10.8 Correlation of the child APSQ subscales with scores on the BPDS

	BPDS
Child APSQ	
Harsh Parenting	0.30**
Encouragement	-0.02

N = 259.

** Correlation is significant at the 0.01 level (2-tailed).

Multiple regression was used to predict participants' scores on the evaluation of BPD as a function of their reported childhood experiences of being beaten, being insulted, and being encouraged. Encouragement was not found to be a significant predictor. However, Harsh Parenting was found to be a significant independent predictor at $p < .001$.

Table 10.9 Multiple regression model predicting BDP from APSQ subscales

Scale		Beta	Significance
Borderline Personality Disorder	Harsh Parenting (APSQ)	.30	<.001
	Encouragement (APSQ)	-.01	.85
			Adjusted R ² = .08

10.4 Discussion

The child APSQ Harsh Parenting subscale and Encouragement subscale were both found to have high internal consistency and were maintained in the questionnaire, whereas the internal consistency of the Punishment Prediction subscale piloted in this study was quite low. The Punishment Prediction subscale was consequently dropped from the study and analyses.

Further analysis of the Harsh Parenting subscale and the Encouragement subscale found both to be strong predictors of adult depression and physical health symptoms in the sample of addicts who took part in this study. According to analyses using multiple regression, it was determined that Positive Affect and Negative Affect have different predictors, with Positive Affect predicted by Encouragement but not Harsh Parenting, and Negative Affect predicted by Harsh Parenting but not Encouragement. This pattern of results is consistent with the findings from chapter 8, in which a typical sample of Saudi Arabian men and women was examined.

Based on these results, harsh parenting appears to be a strong determinant of adult well-being. Encouragement also shapes well-being in adulthood, but the effects of Encouragement appear limited to Positive Affect; Encouragement was not a significant predictor of Negative Affect or of minor health complaints. Furthermore, these results are consistent with the results found in the community sample of Saudi Arabian individuals without addictions (see Study 5, chapter 9), suggesting that these relationships may be due to general mechanisms irrespective of sample characteristics. The robustness and consistency of the relationships between of Positive Affect and

Negative Affect with the two APSQ parenting style factors (Harsh Parenting and Encouragement) suggest that they may operate through different mechanisms.

Harsh Parenting (not Encouragement) is also a significant predictor of BPD symptoms. These results are consistent with Carr and Francis' (2009) suggestion that dysfunctional childhood environments and families (i.e., including those characterised by abuse towards children) pave the paths for children to develop BPD in adulthood.

Chapter 11

Study 7: Childhood parent-child relationships as predictors of adult asthma, cancer, and heart disease

Abstract

Aim: The aim of this study was to determine if Saudi Arabian individuals who are the targets of beating and insults from their parents during childhood and who experience discouragement to express thoughts and feelings during childhood have an increased incidence of cancer, heart disease, and asthma during adulthood. Individuals diagnosed with asthma, cardiac health problems, or cancer who had experienced beatings, insults, or discouragement from expressing their thoughts and feelings as children were expected to report a decline in health, low Positive Affect, and high Negative Affect.

Methods and Participants: A total of 700 participants (350 male, 350 female) at five different Saudi Arabian health institutes took part in this study. The participants were further divided into four different groups: (a) 150 cardiac patients (75 males, 75 females), (b) 150 asthma patients (75 males, 75 females), (c) 150 cancer patients (75 males, 75 females), and (d) 250 hospital employees who composed the control sample (125 males, 125 females). Participants ranged in age from 40 to 60 years ($M = 49.70$ years, $SD = 6.10$ years). All participants provided demographic information and completed two questionnaires, the child Arabic Parenting Style Questionnaire (APSQ) and the Positive and Negative Affect Scale (PANAS).

Results: Results were examined using Binary Logistic Regression and showed a strong relationship between the predictor and outcome variables. Harsh Parenting is also a significant independent predictor in all cases. There is a marginal effect of smoking in the case of asthma (which might be predicted), and Positive Affect is also a significant independent predictor for cancer and asthma. However, these results are correlational and so it cannot be determined if Positive Affect is a trigger or a consequence.

Discussion: The results indicated that reports of childhood Harsh Parenting (beatings and insults from parents) were strongly linked to health problems in later adulthood.

Key words: *Parent-child relationship, Positive and Negative Affect Scale (PANAS), asthma, cancer, heart disease.*

11.1 Introduction

In the current study, the importance of childhood experiences of being beaten, verbally insulted, and encouraged in predicting physical illness was investigated. Specifically, this study looked at whether Saudi Arabian individuals who are the targets of beatings or verbal insults from their parents during childhood and who experience parental discouragement from expressing thoughts and feelings during childhood have an increased incidence of cancer, heart disease, and asthma during adulthood. These three diseases were selected for the current study because previous research by Fuller-Thomson and Brennenstuhl (2009) has found relationships between the diseases and childhood abuse. In addition, the selection of these disease categories was guided by pragmatic issues of participant recruitment. In all three cases there were specialist hospital units to which I had a good chance of access.

Individuals diagnosed with asthma, cardiac health problems, or cancer who had experienced beatings, verbal insults, or discouragement from expressing their thoughts and feelings as children were expected to report a decline in health, low Positive Affect, and high Negative Affect.

Research has shown that foetal and early stress leads to later disease. The mechanism for this effect is thought to be due to these early stressors “programming” the body in such a way that there are chronically raised pro-inflammatory cytokine levels. Most major diseases have an inflammatory factor, so raised pro-inflammatory cytokines may predispose individuals to disease. One reason early stress has this effect has been proposed in informent theory, which suggests that the body operates in part as a network or parallel processing system which exhibits associative learning (Hyland, 2011). The associative learning rule is used to describe activity in the brain and explain conditioning and other learning phenomena. An application of the associative learning rule suggests that repeated stressors lead the body to “learn” a stress response, even in the absence of a stressor. Network systems are particularly plastic at an early age, and so early childhood experiences have a particularly important and long-lasting role in terms of pro-inflammatory cytokine levels across the lifespan.

Parenting style might be expected to correlate with a variety of other life factors (e.g., socio-economic status, education level). Health status might also be affected not directly by parenting style, but by an intervening, correlated variable. Negative Affect

is expected to be related to poor health and to parenting style, though this relationship must be explored in order to be understood. Does a harsh and non-supportive parenting style lead to both Negative Affect and poor health, or might a child who tends to be high in negative affect provoke harsher parenting styles and lead to poor health? In order to address these questions and tease apart the relationships amongst these variables, affective variables and demographic information are examined in the current study.

11.2 Methods

11.2.a Participants

A total of 700 participants (350, or 50%, male, and 350, or 50%, female) at five different Saudi Arabian health institutes took part in this case-control study. As described below, the participants were divided into four groups: (a) 150 patients with cardiac health problems (75 males, 75 females), (b) 150 patients with asthma (75 males, 75 females), (c) 150 patients with cancer (75 males, 75 females), and (d) 250 hospital employees who composed the control sample (125 males, 125 females). All patients were out-patients visiting the clinics at the time at which the questionnaires were administered. Participants ranged in age from 40 to 60 years ($M = 49.70$ years, $SD = 6.10$ years).

11.2.b Recruitment

The author approached the ministry of health in Saudi Arabia in order to obtain the ethical approval to conduct the proposed research and to gain access to three health institutions to collect data from the samples of individuals with cardiac and asthmatic diagnoses, as well as a control sample. The hospitals were the Saud Al-Babtain Cardiac Centre, King Fahad Hospital in Hafouf, and Dammam Central Hospital. In addition, the author approached King Fahad Specialist Hospital in Dammam, to obtain the ethical approval to conduct the study for collecting data from individuals diagnosed with cancer. In each facility, potential participants were politely invited to a separate room and asked if he or she would like to take part in the study.

Data collection was conducted in three parts. In the first part, data were collected from the control sample and the individuals with asthma, both at the Dammam Central Hospital and King Fahad Hospital in Hafouf. Employees in both hospitals served as the study's control group (healthy individuals). Individuals with asthma were drawn from

the group of people receiving out-patient (i.e., not required to stay in the hospital) services at both hospitals. Data collection for both the healthy group and the individuals with asthma lasted for two months. In the second part of data collection, individuals who were cardiac patients were identified at the Saud Al-Babtain Cardiac Centre in Dammam. The cardiac patients were also out-patients. Data collection for this group spanned one month. The third part of data collection, collecting data from individual diagnosed with cancer, was conducted with out-patients receiving care through King Fahad Specialist Hospital in Dammam. Collection of data from individuals with cancer lasted one month.

11.2.c Measures

The Arabic Parenting Style Questionnaire (APSQ). For a description of this scale, please refer to Study 6 (chapter 10).

Positive and Negative Affect Scale (PANAS). For a description of the PANAS, please refer to Study 4 (chapter 8). An Arabic scale based on the PANAS was constructed with permission of the authors.

11.2.d Scale Translations

The questionnaires were translated from English into Arabic in studies 2 and 4 (see chapters 4 and 6).

11.3 Results

11.3.a Sample characteristics

Sample demographics, with particular attention to sex, smoking, marital status, and education are presented in Tables 11.1 and 11.2.

Table 11.1 Sample characteristics

	Smoking		Marital Status				Education						
	Yes	No	Single	Married	Divorced	Widower	Non-educated	Elementary	Intermediate	Secondary	BA	MA	PhD
Male	121	229	35	282	15	18	31	46	74	100	91	7	1
(350)	17.3%	32.7%	5.0%	40.3%	2.1%	2.6%	4.4%	6.6%	10.6%	14.3%	13.0%	1.0%	.1%
Female	19	331	81	228	15	26	27	49	55	109	107	2	1
(350)	2.7%	47.3%	11.6%	32.6%	2.1%	3.7%	3.9%	7.0%	7.9%	15.6%	15.3%	.3%	.1%
Total	140	560	116	510	30	44	58	95	129	209	198	9	2
(700)	20.0%	80.0%	16.6%	72.9%	4.3%	6.3%	8.3%	13.6%	18.4%	29.9%	28.3%	1.3%	.3%

Table 11.2 Father's and Mother's education in men and women

	Non- educated	Elementary	Intermediate	Secondary	BA	MA	PhD	Total
Father's education								
Male	159	76	60	44	11	0	0	350
	22.7%	10.9%	8.6%	6.3%	1.6%	.0%	.0%	50%
Female	140	68	63	53	21	4	1	350
	2%	9.7%	9%	7.6%	3.0%	.6%	.1%	50%
Total	299	144	123	97	32	4	1	700
	42.7%	20.6%	17.6%	13.9%	4.6%	.6%	.1%	100%
Mother's education								
Male	177	94	44	27	8	0	0	350
	25.3%	13.4%	6.3%	3.9%	1.1%	0	0	50%
Female	167	88	46	40	9	0	0	350
	23.9%	12.6%	6.6%	5.7%	1.3%	0	0	50%
Total	344	182	90	67	17	0	0	700
	49.1%	26%	12.9%	9.6%	2.4%	0	0	100%

11.3.b Internal consistency of the measures

The Cronbach's alpha associated with each of the two APSQ subscales was calculated to re-examine the subscales' internal consistency. The Harsh Parenting subscale and the Encouragement subscale were found to have relatively high internal consistency, $\alpha = 0.94$ and $\alpha = 0.87$, respectively (see Table 11.3).

Table 11.3 Internal consistency of the child APSQ subscales

Child APSQ Subscale	Cronbach's alpha	Number of Items
Harsh Parenting	0.94	4
Encouragement	0.87	3

The Cronbach's alphas associated with the subscales of the PANAS, PA and NA, were calculated for each sample subgroup.

Table 11.4 Internal consistency of the PANAS

Sample	Cronbach's Alpha	
	PA (10 items)	NA (10 items)
Cancer	0.89	0.70
Heart	0.89	0.75
Asthma	0.83	0.74
Healthy	0.80	0.74

11.3.c Comparison of the control group with patients with asthma, heart disease, and cancer

For the majority of the variables measured in this study, t-tests were conducted to examine whether the patients with asthma differed from the healthy control group, whether the patients with cancer differed from the healthy control group, and whether patients with heart disease differed from the healthy control group. The average age of individuals in the healthy control group ($M = 47.37$ years, $SD = 5.61$) was significantly less than the average age of individuals in any of the three patient groups ($p < .01$). The average age of the asthma group was 49.55 years ($SD = 6.06$), of the cancer group was 50.47 years ($SD = 6.06$), and of the heart disease group was 52.97 years ($SD = 5.32$).

Differences across all the variables are presented in Table 11.5 and Table 11.6. Patients differed from the healthy participants across almost all of the variables, and there are statistically significant differences between the paired groups across the majority of the variables. There is a lack of effect associated with smoking, which is notable in that it contradicts the expected association of smoking with ill health (see Table 11.5). The patient groups did significantly differ ($p < .01$) from the healthy control group in terms of marital status, with more single individuals in the healthy control group (see Table 11.5).

Table 11.5 Comparison of samples with regard to diagnoses, sex, smoking, and marital status

Group	N	Sex		Smoking		Marital Status			
		Male	Female	Yes	No	Single	Married	Divorced	Widower
Asthma	150 (21.4%)	75 (50%)	75 (50%)	28 (18.7%)	122 (81.3%)	28 (18.7%)	111 (74%)	3 (2%)	8 (5.3%)
Cancer	150 (21.4%)	75 (50%)	75 (50%)	31 (20.7%)	119 (79.3%)	11 (7.3%)	118 (78.7%)	9 (6%)	12 (8%)
Cardiac	150 (21.4%)	75 (50%)	75 (50%)	26 (17.3%)	124 (82.7%)	6 (4.0%)	106 (70.7%)	16 (10.7%)	22 (14.7%)
Healthy	250 (35.7%)	125 (50%)	125 (50%)	55 (22%)	195 (78%)	71 (28.4%)	175 (70%)	2 (0.8%)	2 (0.8%)
Total	700 (100%)	350 (50%)	350 (50%)	140 (20%)	560 (80%)	116 (16.6%)	510 (72.9%)	30 (4.3%)	44 (6.3%)

The three patient groups also significantly differed from the healthy control group in terms of their education levels. As shown in Table 11.6, the majority (54.40%) of the participants in the healthy control group had Bachelor's degrees.

Table 11.6 Sample characteristics divided by diagnosis and educational level

Group	Education							Total
	Non-educated	Elementary	Intermediate	Secondary	BA	MA	PhD	
Asthma	21 14%	19 12.70%	34 22.70%	40 26.70%	34 22.70%	1 0.70%	1 0.70%	150 100%
Cancer	7 4.70%	23 15.30%	43 28.70%	53 35.30%	23 15.30%	1 0.70%	0 0.00%	150 100%
Cardiac	28 18.70%	46 30.70%	38 25.30%	33 22.0%	5 3.30%	0 0.00%	0 0.00%	150 100%
Healthy	2 0.80%	7 2.80%	14 5.60%	83 33.20%	136 54.40%	7 2.80%	1 0.40%	250 100%
Total	58 8.30%	95 13.60%	129 18.40%	209 29.90%	198 28.30%	9 1.30%	2 0.30%	700 100%

Although the healthy sample was selected to of a similar age to the samples with disease (40 – 60 years old) they differed in terms of other demographic characteristics, namely education. Education is a marker of social class. Thus, it is important to distinguish the effects of harsh parenting on health compared to social class. All three patient groups differed significantly from the healthy control group across the subscales of the APSQ and of the PANAS (see Table 11.7). Patient groups reported more frequent physical beatings and verbal insults, but less frequent encouragement from their parents than the healthy control group reported. Patient groups also reported lower levels of Positive Affect and higher levels of Negative Affect on the PANAS than the healthy group reported.

Table 11.7 Comparison of patient groups to healthy group

Variables	Group	N (%)	Mean	Std. Deviation	t	Sig. (2-tailed)
APSQ						
Harsh Parenting	Asthma	150 (21.4%)	3.60	1.80	8.37	<0.01
	Cancer	150 (21.4%)	4.05	1.46	12.95	<0.01
	Heart disease	150 (21.4%)	4.23	2.45	9.64	<0.01
	Healthy	250 (35.7%)	2.11	1.44		
Encouragement	Asthma	150 (21.4%)	3.83	1.83	4.89	<0.01
	Cancer	150 (21.4%)	2.80	1.17	12.55	<0.01
	Heart disease	150 (21.4%)	3.85	2.14	4.52	<0.01
	Healthy	250 (35.7%)	4.84	2.09		
PANAS						
Positive Affect	Asthma	150 (21.4%)	2.87	0.70	-7.86	<0.01
	Cancer	150 (21.4%)	2.07	0.48	-23.45	<0.01
	Heart disease	150 (21.4%)	2.78	1.22	-5.94	<0.01
	Healthy	250 (35.7%)	3.43	0.68		
Negative Affect	Asthma	150 (21.4%)	2.64	0.62	3.50	<0.01
	Cancer	150 (21.4%)	2.66	0.48	4.51	<0.01
	Heart disease	150 (21.4%)	2.86	0.63	6.83	<0.01
	Healthy	250 (35.7%)	2.41	0.64		

Correlations between Positive Affect, Negative Affect, and the subscales of the child APSQ are presented separately and collapsed across the four groups in Table 11.8.

Table 11.8 Correlation of APSQ subscales and PANAS

N	Child APSQ		
	Harsh Parenting	Encouragement	
Asthma patients			
150	Positive Affect	-0.52**	0.56**
	Negative Affect	0.45**	-0.43**
Cancer patients			
150	Positive Affect	-0.37**	0.50**
	Negative Affect	0.15	-0.23**
Cardiac patients			
150	Positive Affect	-0.79**	0.80**
	Negative Affect	0.06	-0.13
Healthy participants			
250	Positive Affect	-0.23**	0.34**
	Negative Affect	0.36**	0.01
All groups (combined)			
700	Positive Affect	-0.62**	0.63**
	Negative Affect	0.33**	-0.20**

11.3.d Binary Logistic Regression

Three separate binary logistic regression analyses were conducted to investigate the strength of parent-child relationships and other potential predictor variables (e.g., demographics, affect) in predicting asthma, cancer, and heart disease (as opposed to good health). The independent variables used as predictors in the regression model were age, sex, smoking, marital status, education, father's education, mother's education, Encouragement as assessed on the child APSQ, Harsh Parenting as assessed on the child APSQ, Positive Affect from the PANAS, and Negative Affect from the PANAS.

The results (shown in Tables 11.9, 11.10, and 11.11) indicate that, for all patient subgroups, Harsh Parenting predicts disease status. Other variables that predict disease status are consistent with predictions. Harsh Parenting is a significant predictor of disease in all three regression models.

Binary logistic regression for patients with asthma versus healthy control sample

Estimation terminated at iteration number five because parameter estimates changed by less than .001. In the final model, 31 percent of the variance is explained by the dependent variables (Cox & Snell R Square = .31), showing that a considerable amount of variance is accounted for by the dependent variables.

A marginal effect of smoking is observed in the case of asthma, which might be predicted because asthma is a respiratory disease. In addition, Positive Affect appears to be a significant predictor of cancer and asthma; individuals with cancer and asthma had lower levels of Positive Affect than individuals in the control group (see Table 11.9 and 11.10).

Table 11.9 Logistic regression for predictors of individuals with asthma versus healthy group (note positive B values indicate the variable is associated with better health)

	B	S.E.	Wald	Sig.
Predictor variables				
Age	-0.01	0.02	0.28	0.59
Sex	0.67	0.31	4.66	0.03
Smoking	-0.73	0.35	4.40	0.04
Marital status	-0.29	0.24	1.40	0.24
Education	0.91	0.14	40.74	< 0.01
Father's education	-0.20	0.15	1.82	0.18
Mother's education	-0.20	0.16	1.66	0.20
Child APSQ				
Encouragement	-0.10	0.08	1.59	0.21
Harsh Parenting	-0.37	0.09	15.92	< 0.01
PANAS				
Positive Affect	0.79	0.21	13.67	< 0.01
Negative Affect	0.003	0.23	0.00	0.99
Regression Constant	-1.84	1.73	1.14	0.28

Note. Total N = 400. Control N = 250. Patient group N = 150.

Binary Logistic Regression for individuals with cancer versus healthy control group

In the final model, 57 percent of the variance is explained by the dependent variables (Cox & Snell R Square = .57), showing that a considerable amount of variance (in cancer diagnosis) is accounted for by the dependent variables.

Table 11.10 Logistic regression for predictors of individuals with cancer versus healthy group (note positive B values indicate the variable is associated with better health)

	B	S.E.	Wald	Sig.
Predictor variables				
Age	0.04	0.04	1.14	0.29
Sex	-1.44	0.50	8.36	0.004
Smoking	-0.67	0.49	1.86	0.17
Marital status	-0.92	0.43	4.61	0.03
Education	0.90	0.23	14.80	< 0.01
Father's education	-0.18	0.23	0.56	0.45
Mother's education	-0.10	0.24	0.18	0.67
Child APSQ				
Encouragement	0.13	0.13	1.08	0.30
Harsh Parenting	-0.29	0.14	4.34	0.04
PANAS				
Positive Affect	2.88	0.38	58.03	< 0.01
Negative Affect	-0.50	0.37	1.83	0.18
Regression Constant	-5.23	2.46	4.51	0.03

Note. Total N = 400. Control N = 250. Patient group N = 150.

Binary logistic regression for individuals with cardiac health problems versus healthy control sample

The dependent variables accounted for 57 percent – a considerable amount – of the variance in the outcome variable, cardiac health (Cox & Snell *R* Square = .57).

Table 11.11 Logistic regression for predictors of individuals with cardiac health problems versus healthy group (note positive B values indicate the variable is associated with better health)

	B	S.E.	Wald	Sig.
Predictor variables				
Age	-0.11	0.04	9.25	0.002
Sex	-2.21	0.59	13.88	<0.01
Smoking	0.08	0.55	0.02	0.88
Marital status	-1.77	0.41	18.86	<0.01
Education	1.73	0.25	46.85	<0.01
Father's education	-0.15	0.22	0.43	0.51
Mother's education	0.23	0.27	0.76	0.38
Child APSQ				
Encouragement	-0.19	0.11	2.70	0.10
Harsh Parenting	-0.55	0.11	23.46	<0.001
PANAS				
Positive Affect	-0.16	0.30	0.28	0.59
Negative Affect	-0.37	0.30	1.48	0.22
Regression Constant	10.35	2.91	12.59	<0.01

Note. Total N = 400. Control N = 250. Patient group N = 150.

11.4 Discussion

The primary goal of this study was to determine if Saudi Arabian individuals who experience beatings, verbal insults, and lack of encouragement have an increased incidence of cancer, heart disease, and asthma during adulthood. Using regression, demographic variables, Positive and Negative Affect, and the two subscales of the APSQ were used to predict disease status, separately comparing each patient group with the healthy group. Because affect and demographic variables were included in this regression, it was possible to account for the amount of variance due to these variables. Across all three patient groups (asthma, cancer, and cardiac patients), Harsh Parenting was a significant and independent predictor of disease, but Encouragement was not. For

cancer and asthma patients but not cardiac patients, Positive Affect but not Negative Affect was also a significant, independent predictor.

Previous research has examined the effects of abuse (e.g., Springer, Sheridan, Kuo, & Carnes, 2007) and major demographic variables (e.g., socio-economic status; Ahrens, 2004; Winkleby, Cubbin, Ahn, & Kraemer, 1999; van Loon, Goldbohm, & van den Brandt, 1995) on later major disease, but has not commonly controlled for possible confounds such as Negative Affect and Encouragement. The current study is unique in the thoroughness with which confounds were identified and controlled. In the current model, both Encouragement and Harsh Parenting were entered as predictor variables so that the unique variance of each subscale could be identified. Even in this model, with potentially confounding variables (including Positive Affect and Negative Affect) controlled for, Harsh Parenting but not Encouragement is a significant predictor of long-term, negative health outcomes. Harsh Parenting, such as beating and verbally insulting children, appears to be a unique and powerful predictor of the onset of disease and that is robust across contexts, controlling for confounds.

Relationships between the APSQ subscales (Harsh Parenting, Encouragement) and both Positive Affect and Negative Affect were examined through correlations (see Table 11.7). Within the sample healthy individuals, Harsh Parenting predicts Negative Affect and Encouragement predicts Positive Affect. Significant correlations between both APSQ subscales (Harsh Parenting, Encouragement) and Positive Affect were found in all samples. However, among individuals with diseases Harsh Parenting is significantly and positively correlated with Negative Affect among asthma patients, but not among cancer or cardiac patients. Encouragement is positively and significantly associated with Positive Affect across all three patient groups, showing the same pattern observed in the healthy group. Harsh Parenting in particular does not appear to have the same impact among individuals with diagnosed diseases, or at least more severe diseases (i.e., cardiac disorders and cancer as opposed to asthma).

The binary logistic regressions provide evidence that education is a major factor in disease. This effect – mediated via social class – is well known. Social class is usually the most important predictor of health outcome. Smoking was significant for the asthma sample. Smoking is a known risk factor for asthma. Smoking was not shown to be a risk factor for cancer or heart disease, though other research shows this to be the

case. It may be that there are many other factors contributing to cancer and heart disease, whereas asthma, as a respiratory disease, is more susceptible to the effects of smoking.

The most important finding of this research was that it is harsh parenting rather than encouragement that predicts disease. This finding is consistent with ideas developed in infection theory that inflammatory diseases are particularly associated with stress. Asthma, cancer and heart disease all have a non-specific inflammatory component, so the harsh parenting could be increasing pro-inflammatory cytokines thereby predisposing to disease.

Future research might examine the strength and persistence of the relationship between negative parenting styles and affect when individuals are faced by additional, stressful circumstances such as the chronic and life-threatening illnesses suffered by patients in this study.

In the next chapter, the results of the studies reported in this thesis will be synthesized and critically discussed.

Chapter 12

General discussion

12.1 Introduction

Early interactions between children and their primary caretakers are considered important because, according to classic ideas in psychology, these early experiences set the course for later growth and development (e.g., Bowlby, 1960; Kelly et al., 2008). John Bowlby's (1960) now classic work suggests that positive early interactions between children and their primary caretakers shape later development in a variety of areas, including social relationships, cognitive abilities, and self-regulation of affect. More recent research has supported the long-lasting impact of child-caretaker relationships, showing that social behaviour, interpersonal expectations, and self-regulation of affect can be predicted based on characteristics of the child-caretaker relationships (e.g., Alink et al., 2009; Fonagy et al., 2002; Kelly et al., 2008). Maltreatment within the child-caretaker relationship has been specifically identified as predictive of later psychological problems (e.g., Alink et al., 2009; Cicchetti & Toth, 2005).

In this thesis, the long-term impact of Saudi Arabian individuals' childhood experiences with their parents on the individuals' well-being, mental health, and physical illness was investigated through a series of studies. The goal of the current chapter is to review the aims (presented in Table 12.1) and findings of the studies conducted and presented in this thesis. The development of the new tool for assessing parenting style in Saudi Arabia, the Arabic Parenting Style Questionnaire (APSQ), will also be briefly reviewed. The studies' implications for the effects of beatings, insults, and discouragement during childhood on mental health, physical health, and general well-being in adulthood will be discussed with respect to the broader context of Saudi Arabian culture.

Table 12.1 Summary of the aims of each study

Study	Aims
1	<ul style="list-style-type: none"> Examine the Saudi Arabian perspective on the factors leading to good and bad behaviour.
2	<ul style="list-style-type: none"> Develop a tool to assess aspects of parent-child relationships in Saudi Arabia.
3	<ul style="list-style-type: none"> Determine if there is a relationship between the newly developed Arabic Parenting Style Questionnaire (APSQ) with global quality of life as assessed on the Global Quality of Life Scale (GQLS) and the traits of the Big Five model of personality as assessed by the Big Five Inventory (BFI). Compare the newly developed APSQ with the Parental Authority Questionnaire (PAQ).
4	<ul style="list-style-type: none"> Examine the relationship of the APSQ with the Minor Health Complaints Questionnaire (MHCQ), Positive Affect and Negative Affect as measured by the Positive and Negative Affect Scale (PANAS), life satisfaction as measured by the Satisfaction with Life Scale (SLS), and global quality of life as assessed by the GQLS among a sample of typical/health Saudi Arabians. Select the version of the APSQ (adult or child) to be used in future studies.
5	<ul style="list-style-type: none"> Examine the correlation between the child APSQ and the MHCQ, Positive Affect and Negative Affect as measured by the PANAS, life satisfaction as measured by the SLS, and global quality of life as assessed on the GQLS among a Saudi Arabian sample of individuals with diagnosed multi-substance abuse addictions.
6	<ul style="list-style-type: none"> Determine if experiencing beatings, verbal insults, and discouragement from expressing thoughts and feelings during childhood are associated with depression, Chronic Fatigue Syndrome (CFS), inflammation and infection (MHCQ) and later Borderline Personality Disorder (BPD) among Saudi Arabian adults with diagnosed multi-substance addictions.
7	<ul style="list-style-type: none"> Determine if experiencing beatings, verbal insults, and discouragement from expressing thoughts and feelings during childhood are associated with increased incidence of cancer, cardiac health problems, and asthma in later adulthood.

12.2 Development of the APSQ

Based in part on the qualitative interviews and feedback from Study 1 and in part on previous studies, the initial, 10-item draft of the APSQ (presented in Study 2, see Table 6.1) was created. The original version assessed parenting behaviours related to the categories labelled as Harsh Parenting, Encouragement, and Family Preference. Following a qualitative study, seven items, including one item asking participants if their parents kept an object with which to beat them ("yes" or "no"), were added. Furthermore, two forms of the APSQ, one asking about parenting behaviours when the child was six to 18 years of age and one asking about parenting behaviours when the child was over the age of 18 years, were created.

Table 12.2 Samples and variables assessed in each study

Study	N	Age (yrs)		Sex		Smoking		Marital Status			Scale(s) used	
		Mean	SD	Male	Female	Yes	No	Single	Married	Divorced		Widower
1	30	33.70	8.96	30 (100%)	0	-	-	-	-	-	-	Not applicable -- Qualitative study
2	548	23.53	4.47	442 (80.7%)	106 (19.3%)	-	-	-	-	-	-	Arabic Parenting Style Questionnaire
3	249	20.80	1.85	149 (59.8%)	100 (40.2%)	45	204	-	-	-	-	Arabic Parenting Style Questionnaire (Child & Adult) Global Quality of Life Scale Big Five Inventory Parental Authority Questionnaire
4	293	27.20	7.27	185 (63.1%)	108 (36.9%)	38	255	152	139	2	0	Arabic Parenting Style Questionnaire (Child & Adult) Global Quality of Life Scale Positive and Negative Affect Scale Minor Health Complaints Questionnaire Satisfaction with Life Scale
5	264 (substance abuse addictions)	32.31	7.70	264 (100%)	0	248	16	174	68	22	0	Arabic Parenting Style Questionnaire (Child) Global Quality of Life Scale Positive and Negative Affect Scale Minor Health Complaints Questionnaire Satisfaction with Life Scale
6	259 (substance abuse addictions)	32.27	8.25	259 (100%)	0	239	20	139	93	26	1	Arabic Parenting Style Questionnaire (Child) Positive and Negative Affect Scale Minor Health Complaints Questionnaire Patient Health Questionnaire Chronic Fatigue Syndrome Borderline Personality Disorder
7	700 (asthma: 150; cardiac: 150; cancer: 150; healthy: 250)	49.70	6.10	350 (50%)	350 (50%)	140	560	116	510	30	44	Arabic Parenting Style Questionnaire (Child) Positive and Negative Affect Scale
Total	2,343			1,787 (76.3%)	556 (23.7%)	710 (30.30%)	1,055 (45.03%)	581 (24.80%)	810 (34.60%)	80 (3.41%)	45 (1.92%)	

Note. "-" indicates that the pertinent data were not collected.

The 17-item APSQ was analysed and seven items, including the yes/no item, were removed. The yes/no item was removed because it did not fit the formatting of the scale and appeared to have limited utility. The other six items that were removed were cut due to their loading weakly onto the factors in the three-factor model for the scale. The resulting APSQ is presented in chapter 6, Table 6.8. This 10-item form was used in Study 3 (chapter 7), Study 4 (chapter 8), and Study 5 (chapter 4). However, based on low internal consistency, the Family Preference subscale was dropped in Study 5 (see chapter 9, Table 9.5). The internal consistency of the Harsh Parenting subscale and the Encouragement subscale, across all studies, appear in Table 12.3. The mean internal consistency of the Harsh Parenting scale is .84, and the mean internal consistency of the Encouragement subscale is .80.

Table 12.3 Internal consistency (Cronbach's alpha) of the child APSQ across all studies

Study	Child APSQ	
	Harsh Parenting	Encouragement
2	0.82	0.75
3	0.86	0.76
4	0.75	0.78
5	0.86	0.81
6	0.86	0.80
7	0.94	0.87
Mean	0.84	0.80

Note. Study 6 and Study 7 examine the same sample.

In Study 6 (chapter 10), three new items addressing the predictability of punishment during childhood were included in the APSQ (see Table 10.1). The new subscale (Punishment Predictability) had low internal consistency (see Table 10.4), and so it was not included in further analyses.

The items included in the final form of the APSQ are shown in Table 12.4.

Table 12.4 Final item set included in APSQ

Scale	Items
Harsh Parenting	1. Did your parents verbally insult you?
	2. Were you beaten by your parents?
	3. Did your parents verbally insult you in front of others?
	4. Were you beaten by your parents in front of others?
Encouragement	1. In general, were you encouraged to express your opinion by your parents?
	2. Did your parents encourage you to be well-behaved?
	3. Did your parents encourage you to speak frankly when expressing your own opinions?

The final version of the APSQ constitutes a unique contribution to the field of research examining parent-child relationships for multiple reasons. The questionnaire was developed based on input from Arab individuals in a qualitative interview and the questionnaire was refined through multiple stages of administration with independent study samples. This affords at least two specific benefits. First, issues raised by Arab participants in Study 1 of this thesis, such as the influence of Islam and using verbal insults to control children, might not be discussed by non-Arab individuals or by individuals from the West. The APSQ's strengths include the fact that it addresses issues that might be specific to Arab parenting practices. Therefore, the questionnaire that resulted is more likely to be culturally appropriate and sensitive to issues in the Arab peninsula than a questionnaire developed in and imported from the West. Second, various issues, including the items explored on the Harsh Parenting, Encouragement, Family Preference, and Punishment Predictability subscales were administered to various samples, scrutinized, and revised or dropped as suggested by the evidence in each study. Ultimately, the Harsh Parenting and Encouragement subscales showed high enough internal consistency and utility to be maintained in the final form of the questionnaire, as shown above in Table 12.4.

Examining average scores on the Harsh Parenting subscale and the Encouragement subscale of the APSQ across all six samples presented in Table 12.5, a few scores stand out. First, the highest average scores on the Harsh Parenting subscales are from individuals with diagnosed physical diseases, including men with cardiac health problems ($M = 6.20$) and men with cancer ($M = 4.70$). The lowest Harsh Parenting scores are reported by healthy women ($M = 1.95$). The Encouragement scores are not as clearly distributed. The highest Encouragement scores are reported by female asthma patients ($M = 5.88$), male students in Study 3 ($M = 5.84$), and female students in Study 3 ($M = 5.80$).

Table 12.5 Mean scores on APSQ subscales

Study	N	Sample	Sex	Harsh Parenting		Encouragement		
				Mean	SD	Mean	SD	
2	548	Students	Male	442 (80.7%)	2.70	1.35	5.20	1.91
			Female	106 (19.3%)	3.03	1.85	4.20	1.96
3	249	Students	Male	149 (59.8%)	2.70	1.57	5.84	1.84
			Female	100 (40.2%)	2.60	1.63	5.80	1.71
4	293	Public	Male	185 (63.1%)	2.76	1.26	4.44	1.83
			Female	108 (36.9%)	2.50	1.41	4.72	2.17
5	264	Addicts	Male	264 (100%)	3.30	1.93	4.93	2.20
6	259	Addicts	Male	259 (100%)	2.83	1.65	4.30	2.11
7	700	Asthma (150)	Male	75 (10.7%)	3.03	1.77	4.54	1.80
			Female	75 (10.7%)	4.09	1.66	5.88	1.60
		Cancer (150)	Male	75 (10.7%)	4.70	1.01	2.54	0.74
			Female	75 (10.7%)	3.42	1.57	3.03	1.45
		Cardiac (150)	Male	75 (10.7%)	6.20	1.31	2.30	1.01
			Female	75 (10.7%)	2.30	1.65	5.43	1.78
		Healthy (250)	Male	125 (17.9%)	2.30	1.47	4.26	1.82
			Female	125 (17.9%)	1.95	1.40	5.41	2.20

12.3 Relationship between APSQ subscales and physical health, mental health, and well-being

Maltreatment has wide ranging effects on psychological and physical well-being. In the studies presented in this thesis, the Harsh Parenting factor of the APSQ was found to be a significant predictor of global quality of life (GQLS; see correlation in Table 12.6, and Study 3, presented in chapter 7) and life satisfaction (SLS; see Study 4, presented in chapter 8) among a sample of Saudi Arabians who were not selected based on any diagnosed disorders (i.e., typical Saudi Arabians). Among these samples, individuals who reported more frequent beatings and verbal insults also reported lower overall quality of life and life satisfaction.

Among a sample of typical Saudi Arabian individuals, the Harsh Parenting subscale was found to be significantly and positively correlated with reports of inflammation symptoms (MHCQ, Study 4). In a sample of individuals with multiple diagnosed substance abuse addictions (see Study 5, chapter 9), the Harsh Parenting subscale was found to be a significantly and positively correlated with both the inflammation and the infection subscale of the MHCQ. Among individuals in Study 4, the APSQ Harsh Parenting subscale was also found to be positively correlated with Negative Affect (PANAS) such that individuals reporting more abuse reported experiencing more Negative Affect. Among the individuals with diagnosed addictions who took part in Study 6, the APSQ Harsh Parenting subscale was found to be positively and significantly correlated with depression and CFS. Negative Affect is predicted by Harsh

Parenting among these individuals, although Positive Affect is not. In Study 7 (chapter 11), Harsh Parenting was identified as a significant predictor of symptoms of Borderline Personality Disorder (BPD) among individuals with addictions, and in Study 7, Harsh Parenting was identified as a significant differential predictor of physical illness (asthma, cancer, cardiac disease) versus health.

Table 12.6 Summary of the correlation between the child APSQ subscales and others

Scales	Child APSQ		Study	N
	Harsh Parenting	Encouragement		
Global Quality of Life Scale	-0.37**	0.20**	3	249
Global Quality of Life Scale	-0.23**	0.30**	4	293
Global Quality of Life Scale	-0.19**	0.21**	5	264
BFI-Extraversion	0.10	0.11	3	249
BFI-Agreeableness	-0.12	0.04	3	249
BFI-Conscientiousness	0.01	0.19**	3	249
BFI-Neuroticism	0.07	-0.04	3	249
BFI-Openness	0.01	0.02	3	249
PAQ-Permissive	-0.15*	-0.01	3	249
PAQ-Authoritative	-0.26**	0.43**	3	249
PAQ-Authoritarian	0.25**	-0.07	3	249
PANAS-Positive Affect	-0.04	0.13*	4	293
PANAS-Positive Affect	-0.03	0.16**	5	264
PANAS-Positive Affect	0.03	0.15*	6	259
PANAS-Positive Affect	-0.62**	0.63**	7	700
PANAS-Negative Affect	0.17**	0.02	4	293
PANAS-Negative Affect	0.27**	-0.12*	5	264
PANAS-Negative Affect	0.37**	0.03	6	259
PANAS-Negative Affect	0.33**	-0.20**	7	700
MHCQ-Inflammation	0.19**	0.02	4	293
MHCQ-Inflammation	0.15*	-0.15*	5	264
MHCQ-Inflammation	-0.26**	-0.02	6	259
MHCQ-Infection	-0.01	0.09	4	293
MHCQ-Infection	0.13*	-0.12	5	264
MHCQ-Infection	-0.24**	-0.08	6	259
Satisfaction with Life Scale	-0.31**	0.27**	4	293
Satisfaction with Life Scale	-0.23**	0.08	5	264
Patient Health Questionnaire	0.22**	0.09	6	259
CFS-Physical	-0.17**	0.07	6	259
CFS-Mental	-0.21**	0.07	6	259
Borderline Personality Disorder	-0.30**	-0.02	6	259

Among a sample of typical Saudi Arabian individuals, the Harsh Parenting subscale was found to be significantly and positively correlated with reports of inflammation symptoms (MHCQ, Study 4). In a sample of individuals with multiple diagnosed substance abuse addictions (see Study 5, chapter 9), the Harsh Parenting subscale was found to be a significantly and positively correlated with both the inflammation and the infection subscale of the MHCQ. Among individuals in Study 4, the APSQ Harsh Parenting subscale was also found to be positively correlated with Negative Affect

(PANAS) such that individuals reporting more abuse reported experiencing more Negative Affect. Among the individuals with diagnosed addictions who took part in Study 6, the APSQ Harsh Parenting subscale was found to be positively and significantly correlated with depression and CFS. Negative Affect is predicted by Harsh Parenting among these individuals, although Positive Affect is not. In Study 7 (chapter 11), Harsh Parenting was identified as a significant predictor of symptoms of Borderline Personality Disorder (BPD) among individuals with addictions, and in Study 7, Harsh Parenting was identified as a significant differential predictor of physical illness (asthma, cancer, cardiac disease) versus health.

When these results are considered in combination, the relationship between physical beatings and verbal insults (the Harsh Parenting subscale of the APSQ) during childhood and symptoms of decreased well-being (e.g., Negative Affect, lower quality of life), increased mental illness symptoms (e.g., BPD, depression), increased physical illness (e.g., inflammation, infection, cancer, asthma, cardiac disease), and an increase in non-organic illness (e.g., CFS) appears impressively robust and consistent. The pattern is consistent across symptom type, across samples of individuals (whether healthy, diagnosed with an addiction, or diagnosed with a disease), and across all of the studies. Even controlling for potentially confounding variables, physical beatings and verbal insults have a clear, detrimental impact on long-term health and well-being.

Encouragement (the second subscale of the APSQ) and its converse, lack of encouragement, also have effects, but these effects seem primarily related to the experience of Positive Affect. In studies 4, 5, and 6 (presented in chapters 8, 9, and 10, respectively), the Encouragement subscale of the APSQ was found to have a significant, positive correlation with Positive Affect on the PANAS. Perhaps related to these correlations, in Study 4 Encouragement was also found to be positively related to SLS, and in Study 5 Encouragement was negatively correlated with inflammation on the MHCQ. In Study 6, multiple regression was utilized to tease apart the relationship of Encouragement and Harsh Parenting with affect. According to analyses using multiple regression, it was determined that Positive Affect and Negative Affect have different predictors, with Positive Affect predicted by Encouragement but not Harsh Parenting, and Negative Affect predicted by Harsh Parenting but not by Encouragement.

12.4 Discussion

The effects of abuse, maltreatment, and various demographic variables (especially socio-economic status) have been explored in past research, but past studies have not always thoroughly controlled for confounds such as Negative Affect and Encouragement. In the current research, it was considered important to examine the effect of parenting practices independent of common potential confounds, and the thoroughness and rigor with which potential confounds were identified, measured, and controlled for is a strength of the studies presented in this thesis. Even controlling for potentially confounding variables such as education, smoking status, and affect, Harsh Parenting but not Encouragement was found to be a significant predictor of long-term, negative health outcomes across a variety of samples. Based on these findings, Harsh Parenting appears to be a robust, unique, and powerful predictor of disease.

The effects associated with Harsh Parenting and those associated with Encouragement are independent. Through the studies reviewed, there is some evidence to suggest that the former is associated with an increase in Negative Affect and the latter is associated with an increase in Positive Affect. This suggests that there are multiple mechanisms that impact long-term health and well-being and that harsh parenting behaviours and encouragement tap into different mechanisms. The correlations between the subscales of the APSQ and Positive and Negative Affect are theoretically interesting in that, based on their appearing to act independently, it is possible that Positive and Negative Affect are influenced by different aspects of parenting style. This finding might eventually be understood through reinforcement sensitivity theory or a related theory. Reinforcement sensitivity theory (Corr, 2008) suggests that repeated punishment leads to increased sensitivity to punishment, and repeated reward to increased sensitivity to reward. Based on a recent development of this theory (Hyland, 2011), repeated punishment should also lead to more Negative Affect and repeated reward to more Positive Affect. Harsh Parenting might include more punishment of the child, leading to a greater level of Negative Affect for the child. In contrast, Encouragement might include more rewards or rewarding experiences, leading to a greater level of Positive Affect. The finding of a differential relationship between the two subscales of the APSQ and Positive and Negative Affect is consistent with theoretical prediction, providing unintended additional support for the validity of the APSQ.

The findings of this thesis support previous research showing that childhood abuse leads to a variety of health complications (e.g., Kempe et al., 1962), from self-esteem and anxiety to major psychological and physical disease (e.g., Emery, 1989; Sternberg et al., 1993; Trickett et al., 1991), in later life. For example, in previous research, relationships between childhood abuse and personality disorders have been observed in both clinical populations and in community samples (Johnson et al., 1999; Gibb et al., 2001; Johnson et al., 2006; Grover et al., 2007). In Study 7 of the current thesis, the Harsh Parenting scale of the child APSQ was found to be a significant predictor of BPD among a sample of individuals with addictions. Specifically, a significant and strong positive correlation ($r = .30; p < .01$) was found between the APSQ's Harsh Parenting subscale and the assessment of bipolar personality symptoms, the BPDS. Furthermore, childhood abuse and trauma have also been observed to be predictive of cancer (Fuller-Thomson & Brennenstuhl, 2009) and heart disease (Fuller-Thomson et al., 2010). In Study 7 of the current thesis, the Harsh Parenting scale of the APSQ was found to be significantly predictive of disease status in binary regression models predicting asthma, cancer, and cardiac diseases.

The fact that the Harsh Parenting subscale of the APSQ serves as a significant predictor of psychological and physical health problems in adulthood brings into question whether child maltreatment must be severe (i.e., likely to be identified as abuse) in order to cause long-term, negative health consequences. Even within the Saudi Arabian culture, where corporal punishment is acceptable or normal and criticizing children is a common practice to provoke good behaviour (e.g., Al-Eissa, 1998), the harsh parenting practices assessed in the APSQ (physically beating and verbally insulting) were predictive of negative health outcomes. This association between harsh parenting practices and a variety of long-term, negative health outcomes within Saudi Arabia contradict the findings predicted by Dwairy et al. (2006a), who claim that the relationship between authoritarian parenting practices and children's mental health in such authoritarian culture are weak or non-existent. Instead, the association between harsh parenting and negative health outcomes found in the current thesis suggest that, although culture may play a role in how people interpret and respond to behaviour, harsh parenting has universal, negative effects. That is, culture may impact the degree to which harsh parenting practices are harmful, but the harsh parenting practices appear to be universally harmful across cultures.

12.5 Limitations

Limitations of the current research include its restricted methodology (primarily self-report questionnaires) and characteristics of the newly developed APSQ itself. However, it is also of note that some of the limitations are paired with strengths in this particular set of studies. For example, the final form of the APSQ is a very short (seven-item) questionnaire. As such, the questionnaire is necessarily limited in the number of topics (or specific harsh parenting behaviours and encouragement) it addresses. The brevity of the questionnaire also makes it quick and easy to administer, however, so that it could be easily added to a battery of other questionnaires or to a study without significantly increasing burden on the participants.

As mentioned, the questionnaire necessarily covers a small number of topics or scenarios, because it is very brief. Based on the large number of strong, significant correlations between the questionnaire and other measures, discussed above, the utility of the questionnaire does not appear to be compromised. In the current series of studies, items related to both preferential treatment within a family and predictability of punishment were examined and removed. Future studies might examine whether there are other topics or other aspects of parenting style in Saudi Arabia or other Arab countries that should be added to the APSQ in order to increase its content validity.

The final form of APSQ examines parenting related to physical beatings, verbal insults, and encouragement. However, the review of research on child maltreatment and abuse also identifies other types of maltreatment, including sexual abuse, neglect, and emotional abuse, and the parenting style literature examines authoritative, authoritarian, permissive, and inconsistent parenting (see chapter 1). The current research explored the relationship of the APSQ to the PAQ, which assesses authoritative, authoritarian, and permissive parenting styles, finding that the two questionnaires were related but unique. The relationship of the two existing scales of the APSQ to recognized types of abuse and parenting styles might be explored further, and the question of whether to add additional scales to assess different types of maltreatment or severe parenting behaviours might also be considered.

The two final subscales of the APSQ predict health and well-being as assessed on the outcome variables used in this study (see Table 12.7 for a summary). However,

additional studies are needed to corroborate, extend, and further understand the relationships among these variables.

Table 12.7 Multiple regression models using APSQ subscales to predict outcomes

Study	Sample	Outcome variable	APSQ subscale	Beta	Significance		
3	Students (N = 249)	Global Quality of Life Scale	Harsh Parenting	-.34	< .001		
			Encouragement	.13	.03		
Adjusted R ² = .15							
4	Public (N = 293)	Global Quality of Life Scale	Harsh Parenting	-.17	.003		
			Encouragement	.27	< .001		
		Adjusted R ² = .11					
		Satisfaction with Life Scale	Harsh Parenting	-.27	< .001		
			Encouragement	.22	< .001		
		Adjusted R ² = .14					
		PANAS - Negative Affect	Harsh Parenting	.19	.002		
			Encouragement	.06	.30		
		Adjusted R ² = .03					
		PANAS - Positive Affect	Harsh Parenting	-.01	.81		
			Encouragement	.13	.03		
		Adjusted R ² = .01					
MHCQ-infection	Harsh Parenting	.007	.91				
	Encouragement	.09	.13				
Adjusted R ² = .001							
MHCQ-inflammation	Harsh Parenting	.21	.001				
	Encouragement	.06	.30				
Adjusted R ² = .03							
5	Substance abuse addicts (N = 264)	Global Quality of Life Scale	Harsh Parenting	-.19	.002		
			Encouragement	.20	.001		
		Adjusted R ² = .07					
		Satisfaction with Life Scale	Harsh Parenting	-.23	.001		
			Encouragement	.07	.22		
		Adjusted R ² = .05					
		PANAS - Negative Affect	Harsh Parenting	.27	< .001		
			Encouragement	.11	.05		
		Adjusted R ² = .08					
		PANAS - Positive Affect	Harsh Parenting	-.02	.71		
			Encouragement	.16	.008		
		Adjusted R ² = .02					
MHCQ-infection	Harsh Parenting	.31	.03				
	Encouragement	-.11	.06				
Adjusted R ² = .02							
MHCQ-inflammation	Harsh Parenting	.15	.02				
	Encouragement	-.15	.02				
Adjusted R ² = .04							
6	Substance abuse addicts (N = 259)	PANAS - Negative Affect	Harsh Parenting	.37	< .001		
			Encouragement	.04	.47		
		Adjusted R ² = .13					
		PANAS - Positive Affect	Harsh Parenting	.03	.60		
			Encouragement	.15	.01		
		Adjusted R ² = .17					
		Patient Health Questionnaire (Depression)	Harsh Parenting	.29	< .001		
			Encouragement	.09	.14		
		Adjusted R ² = .05					
		Chronic Fatigue Syndrome Physical	Harsh Parenting	-.17	.006		
Encouragement	.06		.30				

	Chronic Fatigue Syndrome – Mental	–Harsh Parenting Encouragement	-.21 .06	.001 .31	Adjusted R ² = .03
	Minor Health Complaints Questionnaire – Infection	Harsh Parenting Encouragement	.24 .09	< .001 .15	Adjusted R ² = .04
	Minor Health Complaints Questionnaire – Inflammation	Harsh Parenting Encouragement	.27 .03	< .001 .63	Adjusted R ² = .06
	Borderline Personality Disorder	Harsh Parenting Encouragement	-.30 .01	< .001 .85	Adjusted R ² = .06
7	Asthma patients (N = 150)	PANAS - Negative Affect Harsh Parenting Encouragement	.32 -.28	< .001 < .001	Adjusted R ² = .08
		PANAS - Positive Affect Harsh Parenting Encouragement	-.34 .40	< .001 < .001	Adjusted R ² = .26
	Cancer patients (N = 150)	PANAS - Negative Affect Harsh Parenting Encouragement	.05 -.20	.58 .03	Adjusted R ² = .39
		PANAS - Positive Affect Harsh Parenting Encouragement	-.17 .42	.04 < .001	Adjusted R ² = .04
	Cardiac patients (N = 150)	PANAS - Negative Affect Harsh Parenting Encouragement	-.06 .17	.61 .14	Adjusted R ² = .005
		PANAS - Positive Affect Harsh Parenting Encouragement	-.46 .47	< .001 < .001	Adjusted R ² = .26
	Healthy participants (N = 250)	PANAS - Negative Affect Harsh Parenting Encouragement	.37 .06	< .001 .34	Adjusted R ² = .74
		PANAS - Positive Affect Harsh Parenting Encouragement	-.19 .31	.002 < .001	Adjusted R ² = .12
					Adjusted R ² = .14

Further research, using structural equation modelling (SEM) might provide further insight into the relationship between the different variables.

An additional limitation of the present research is that participants' own and their parents' religious perspectives and allegiance were not assessed. Although Saudi Arabia is an Islamic country, there are several diverse and separate Islamic doctrines within Saudi Arabia. Individuals who identify with religious minority groups may feel that they cannot be open and honest about their perspective or religious allegiance because they fear being discriminated against based on their beliefs. Issues such as this fear of discrimination make religion a very sensitive issue to discuss in Saudi Arabia, and particularly difficult to discuss through a questionnaire or scientific study. From a

cultural perspective and based on discussion from participants in Study 1, it is apparent that religion is very important in Saudi Arabian culture. However, the relationships among religious beliefs, parenting behaviour, and children's well-being could not be directly addressed in this thesis. Therefore, this thesis does not shed light on the relationship of religious allegiance to child-rearing practice.

A final limitation of this study was that the samples were predominantly male. Where females were studied, the evidence suggested that females reported higher frequencies of harsh parenting behaviours. The inclusion of females in the last two studies might have increased variability of harsh parenting, particularly towards the severe end, and therefore increased the strength of relationships. However, one cannot conclude that the relationships observed in the male samples generalise to female samples, even though there is a good theoretical reason for assuming that harsh parenting should have negative consequences for both males and females. Nevertheless, the experience of harsh parenting by males and females cannot be assumed to be identical. That is, although a male and female may give the same response to a questionnaire item, it cannot be assumed that their experience is identical.

12.6 Implications

For nearly four decades, Saudi Arabia has been going through dramatic economic and social changes, and the changes continue today. Saudi Arabian society, like much of the world, is rapidly coming into contact with new ideas and world cultures. At the same time, the country is becoming more urban as people move towards cities and technology-based work. With these changes come new and complex social challenges that contrast the relatively simple, traditional Arab society. For example, traditional Arab societies relied heavily on direct relationships, clans, and familial lineage as organizing structures. However, new educational opportunities and ideas bring in modern ideas that conflict with traditional upbringing (e.g., education through the family and mosque). Young people may be faced with contradicting ideas from their families and from educational institutions or other sources.

Saudi Arabia continues to value privacy based on religion and tradition. In the age of the internet and as science informs virtually all areas of life (e.g., psychological research informs relationships, medical research informs diet and health care), Saudi Arabia is

faced with the challenge of maintaining traditional and religious values but incorporating new information so as to benefit stay engaged with the world. Parent-child relationships and child-rearing practices are no exception. There is a need within Saudi Arabia to examine parent-child relationships through the lens of current knowledge and science, to improve practices and support the well-being and development of individuals and families within Saudi Arabia. The family continues to play a central role in the process of socialization of children and within Saudi society; the family is important as a social unit or building block within the culture, and also because of the impact that parents have on their children's eventual participation in Saudi society. The parents play a significant role in shaping their children's mental health and psychological well-being, thereby indirectly impacting society.

Although Saudi society is going through rapid change, the likelihood that parenting practices will systematically change as the result of research is slim. Changes to how people think and to their beliefs about parenting practices and the impact of parenting on children must change before their behaviour will change. More affluent and educated parents, who might also have more opportunity for exposure to diverse ideas and cultures, might be more likely to change their practices first. The less affluent and poor individuals in society might be more likely to continue parenting practices that are consistent with tradition, either because they are reluctant to change or because they have not been exposed to new ideas. In the research on health and well-being overall, the importance of child-rearing as it impacts incidence of disease later in life tends to be neglected in favour of attention to other, more clearly health-related behaviours (e.g., diet, exercise). However, well-being is important and has long-term impacts on individuals, and those effects on individuals will, in turn, have consequences for society as a whole.

The implications of the current research for child-rearing practices in Saudi Arabia are that society would be better off if parents used less verbally and physically abusive practices, and maybe if they provided more encouragement for their children. The long-term results, based on the current research, would likely include lower rates of disease, more happiness and life satisfaction, and other benefits that go hand-in-hand with increased well-being. There are multiple ways that these improvements might be achieved within Saudi society. First, the establishment of research centres within Saudi Arabia and the support university researchers studying parenting and psychology within

Saudi Arabia would draw attention to the issues and allow for the development of research-based knowledge regarding health and well-being in Saudi Arabia. Second, family development centres could be established to provide public courses, workshops, support, and advice to Saudi Arabian families and parents facing child-rearing or family problems. Third, the media within Saudi Arabia could be used to develop and broadcast short films or informative pieces on best practices in child-rearing; the long-term, negative impact of harsh parenting; and the long-term, positive impact of encouragement. Families with information about the importance of child-rearing and the long-term impact of early experiences on children's well-being might be motivated to improve parenting practices.

12.7 Recommendations for future research

Based on the results of studies in this thesis, and particularly on results of Study 6, Positive Affect and Negative Affect appear to have different predictors, with Positive Affect predicted by Encouragement but not Harsh Parenting, and Negative Affect predicted by Harsh Parenting but not Encouragement. In order to better understand the relationship of harsh parenting behaviours and encouragement to long-term well-being, research should examine the relationship of abusive treatment to Negative Affect, and encouragement to Positive Affect. As a second step, research should further examine the potentially causal relationships of Positive Affect and Negative Affect to well-being to determine whether an increase in Negative Affect might actually lead to, or cause, illness, or high levels of Positive Affect might protect against illness.

Future research might also examine the impact of different levels of abusive parenting. Is there a threshold or a minimum amount of negative treatment that a child must experience in order for that treatment to have a long-term, negative impact on his or her well-being? Does being yelled at or hit occasionally, or less than once or twice (ever), have an impact? There is a history of discussing minor, moderate, and severe abuse. However, those categories are typically assigned by an external examiner (e.g., a social worker). Are those categories meaningfully related to the long-term impact of abuse? In the current research, abusive parenting – not necessarily behaviour that would be termed moderate or severe abuse, particularly within the context of the Saudi culture – was found to have significant relationships with various wellness-related variables. Future research should examine whether the bar (for identifying abuse versus non-abuse) is set

too low, and whether abusive or negative parenting styles have an impact on well-being comparable to more severe child abuse. As discussed in chapter 1, examining the impact of child abuse and maltreatment on long-term health is partially complicated by the challenge of defining and identifying abuse. Potentially detrimental treatment of children ranges from negative parenting styles to severe abuse and is graded; abuse is not equivalent to abusive parenting. Nonetheless, abuse is often discussed and defined in terms of binary categories: Abused or not abused, with abuse defined in terms of culturally accepted criterion including but not limited to physical injury. Abusive parenting involves a gradation in parenting style that varies from abuse to non-abuse and therefore includes varying types and degrees of abusive behaviour.

12.8 Conclusion

Abusive parenting behaviours, including both verbal and physical maltreatment, are important predictors of both well-being and major illness in Saudi Arabian society. As Saudi Arabia transitions to a society in which child abuse is a topic demanding attention and child neglect is recognized as a form of maltreatment (e.g., Kattan, 1994), there is hope for improvement in the country. As people recognize that abuse and maltreatment include more than only the most severe of cases, and that abuse and maltreatment warrant the attention they receive, parenting practices may reflect the changes in societal attitudes.

Appendices

Appendix A

Booklet of Description of Positive techniques



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School of Psychology
2008**

Please, consider the following questions when you read the description of the techniques:

- What do you like about the techniques?
- What do you dislike about the techniques?
- Which are your favourite techniques?
- Which would you like to have if you are depressed?

Description of the techniques:

- 1- **Optimism:** is like an attitude adjustment but focused on reframing responses as an optimist. As well, optimism involves cultivating a sense of the optimism. An optimist is who sees the glass that's always half full.

Example:

Can you spend 10 minutes to imagine and write about, your best possible self in last 10 years. Please do the following:

- (a) Write down a list of 10 different ways during the last 10 years which show you are good person.
- (b) Choose the five most important.
- (c) Write those five down and put them somewhere you will see them regularly.
- (d) Think of ways in which you can make your best possible self in your every day life.

How do you feel about this after having a list of your best possible self. Do you know that psychologists have long known that optimism is a good buffer against unhappiness, as well as being associated with good physical health. On the other hand, by knowing we have automatic negative thoughts about the future expectations (some people more than others) we have already made a step toward the positive. Instead of simply accepting the negative expectations, try to catch yourself when this happens, and practice the above process. Eventually your optimistic thoughts can become as automatic as your pessimistic thoughts.

NB: you can do this any way that suits your lifestyle. The important thing is to do the exercise every single day (once a day for two weeks).

- 2- **Self-Esteem:** involves cultivating a sense of the self esteem. Self esteem is your opinion of yourself. High self esteem is a good opinion of yourself and low self esteem is a bad opinion of yourself. So, the self esteem is the enhancement of the self esteem about our own self. This self perception of how we view ourselves, our perception of how others see us, and the thoughts and beliefs we have about ourselves, our world, and our future.

Example:

You can change your state instantly by purposefully using your body in ways that allow you to feel good about yourself. For the most part, people usually use their bodies in "reaction" to the way how they feel.

For example, when someone is depressed their head will stay down and their shoulders are slouched over.

When you are happy your shoulders are upright, your face is lit up and your head is held up high.

Now, instead of waiting to feel good about yourself 'in reaction' before you start moving your body in positive ways, start using your body in positive ways now to purposefully make yourself feel good!

- (a) Stand up!
- (b) Purposefully put a huge smile on your face.

(c) As your smiling start doing some positive thinking.

(d) Do all three of these things simultaneously

Now as you keep doing these positive things with your body 'try' to feel bad about yourself as you keep smiling and keep doing the positive thinking.

You will find it's almost impossible to feel bad because so many positive things are happening all at once, you cant help but feel good about yourself as you move your body in positive ways.

So start 'purposefully' using your body in ways that allow you to feel good about yourself, no matter how silly it may seem, you will begin to gain positive habits that serve you in your life in ways that allow you to feel good about yourself anytime you want to boost yourself esteem.

If you ever catch yourself using your body language in a negative way, immediately start using your body differently to change your state.

When you do this exercise over and over in consistent periods of time, you will begin to notice your quality of life, opinions and ideas about yourself changing as you become a more happier person. The only other thing I want to say about it is that you should continue it until you realize something positive about yourself. Now you are not perfect, not anymore than anyone else is.

NB: you can do this any way that suits your lifestyle. The important thing is to do the exercise every single day (once a day for two weeks).

3- Gratitude: involves cultivating a sense of gratitude; is broadening your attention to all that is good in your life, allowing you have a more balanced perspective on the current difficulties you may face.

Example:

There are many things in our lives, both large and small, that we might be grateful for. I would like you to think back over your life, be it the past month or years ago and write down up to 6 things you are grateful for and spend 10 minutes experiencing gratitude for the things that have happened today. Your list often includes the simple things in my life - a warm shower, clean clothes, a safe home.

When you have finished your list, take the first item and concentrate on feeling grateful about that item for about half a minute. Then move on to the next item and feel 'being grateful' for the second item. Do this for each of the items in turn. With each item, try to reconnect with the positive emotions you experience when feeling grateful. You should spend about five minutes on this task. Five minutes may not seem like a long time, but setting aside specific time to focus on what you are grateful on a regular basis will make it easier for you to think in this way when you encounter situations throughout your day that may lead you to worry.

NB: you can do this any way that suits your lifestyle. The important thing is to do the exercise every single day (once a day for two weeks).

4- Achievement: involves cultivating a sense of achievement. Also, draw your attention to something that you succeed in doing by your own efforts during your life.

Example:

There are many things we already achieved in our lives, both large and small. For instance, in 2000, one in five adults aged 15+ was illiterate (There were about 860 million illiterate adults in the world); 75 million children remain excluded from the

educational system. So you are much better than them completely. Therefore it is really massive achievement during your own life. What do you think about the other sides of your life. Think about that, always there are much things in our lives very positive points but with overload of problems let us to see just the negative side.

I would like you to think back over your life, be it the past month or years ago and spend 10 minutes for the things that have achieved in your life; write down up to 5 things you were achieved.

When you have finished your list, take the first item and concentrate on feeling how you achieve that item for about one minute. Then move on to the next item and proud 'being achieved' for the second item. Do this for each of the items in turn. With each item, try to reconnect with the positive emotions you experience when feeling very proud. You should spend about five minutes on this task. Five minutes may not seem like a long time, but setting aside specific time to focus on what you are proud on a regular basis will make it easier for you to think in this way when you encounter situations throughout your day that may lead you to worry, stress or depression.

NB: you can do this any way that suits your lifestyle. The important thing is to do the exercise every single day (once a day for two weeks).

- 5- **Forgiveness:** is the healing of wrongs. Forgiveness involves cultivating a sense of forgiving, in order to continue the life much better.

Example:

Think of someone who has harmed you in some way and concentrate on the experience of forgiving that person. Think of it this way; Although someone else may have precipitated your misery, whether you stay miserable is entirely up to you.

Can you do the individual exercise:

- 1- Write down with pen and paper someone who has harmed you in some way. It is imperative that you write.
- 2- Read the name with concentrating.
- 3- Now say "I did the best that I could with the knowledge that I had at the time to deal with him. I now forgive him.
- 4- Destroy the paper.
- 5- Repeat the exercise for each of the other people who have hurt you.
- 6- Now begin anew to live your life without the burden of unforgiving pain - it is unnecessary suffering.

NB: you can do this any way that suits your lifestyle. The important thing is to do the exercise every single day (once a day for two weeks).

- What do you like about the **technique**?
- What do you dislike about the **technique**?
- Which is your favourite **technique**?
- Which would you like to have if you depressed?

شرح مختصر لبعض تقنيات علم النفس الأيجابي



جامعة بليموث

إنجلترا – بريطانيا

أخي المشارك في هذا البحث أرجو منك قراءة الأسئلة التالية وأخذها بعين الاعتبار لأنها هي التي ستكون محور النقاش حول التقنيات المعروضة في البحث :

- 1 - ما الذي أحبيته في هذه التقنية؟
- 2 - ما الذي لم تحبه في هذه التقنية؟
- 3 - أي نوع من التقنيات تفضل؟
- 4 - أي نوع من التقنيات تود ممارسته لو كنت مكتنبا مثلا؟

وصف تقنيات علم النفس الإيجابي:

- 1 - التفاؤل: أي تعديل موقف نحو حدث معين أو إعادة تشكيل ردة فعل معينة اتجاه موقف أو حدث معين. تركيز هذه التقنية على زرع إحساس التفاؤل في نفس الإنسان. أي أن المتفائل دائما يرى النصف الممتلئ لل كأس. مثال تدريبي: المطلوب منك هنا أن تبذل عشر دقائق لكي تتفكر متخيلا في أفضل الاحتمالات التي كنت تتوقع الحصول عليها وتمنيت حدوثها لك في خلال العشر سنوات الماضية. حاول أن تطبق الخطوات التالية:
(أ) اكتب قائمة بأفضل عشر توقعات تمنيت على الحصول عليها وحصلت عليها فعلا خلال العشر سنوات الماضية.
(ب) حاول أن تختار أهم خمس احتمالات كتبتها وضعها في مكان بحيث من الممكن أن تراها بشكل منتظم.
(ت) فكر في طرق مختلفة بشكل يومي لكي تتوقع أفضل الأمور خلال أيام حياتك القادمة.
كيف تشعر الآن بعد كتبت بعض الأهداف التي تمنيت تحقيقها خلال السنوات الماضية وحققتها فعلا. هل تعلم بأن العلماء النفسيين ومنذ مدة طويلة عرفوا بأن التفاؤل هو أفضل حاجز ومانع للحزن. بالإضافة إلى أنه يرتبط ارتباطا وثيقا بالصحة النفسية والجسدية. ومن الناحية الأخرى معرفتنا بمقدار الأفكار السلبية (التشاؤم) التي لدينا تعتبر خطوة نحو الإيجابية (التفاؤل) أيضا. وبدلا من قبول التوقعات السلبية (التشاؤم) ببساطة نحاول كبح وإيقاف مثل هذه التوقعات السلبية (التشاؤم) وذلك بمزاولة التدريب المذكور أعلاه أو ما هو مشابه له. وخالصة التدريب هنا هو أن الأفكار الإيجابية (التفاؤل) من الممكن أن تحل محل الأفكار الآلية السلبية (التشاؤم).
- ملاحظة: من الممكن أن تعمل هذا التدريب بأي أسلوب يناسب حياتك. إن الشيء المهم هو أن يعمل هذا التدريب يوميا لمدة أسبوعين.

- 2 - توكيد الذات: يتضمن زرع الإحساس والشعور بالثقة بالنفس. توكيد الذات هو رأيك عن نفسك. أي أن توكيد الذات العالي يعني أن لديك وجهة نظر إيجابية عن نفسك، وتوكيد الذات المنخفض يعني أن لديك وجهة نظر سلبية عن نفسك. لذا هذه التقنية تركز على تحسين ورفع مستوى توكيد الذات حول أنفسنا. وإدراكنا لكيفية رؤيتنا لأنفسنا وكيفية رؤية الآخرين لنا والأفكار والمعتقدات حول أنفسنا وحول عالمنا ومستقبلنا.

مثال تدريبي: من الممكن أن تغير من حالتك النفسية عن نفسك باستخدام بعض الوضعيات الجسمية. يستعمل الناس أجسامهم عادة في ردة الفعل لوصف مشاعرهم. على سبيل المثال لو كان شخصا مكتنبا سيبقى رأسه منخفضا وأكتافه متراخية تماما. وعندما يكون شخصا ما سعيدا أكتافه منتصبه ووجهه مضيء ورأسه يميل إلى الأعلى.

الآن بدلا من أن تنتظر تغيير شعورك عن نفسك إلى الأحسن في ردة فعلك. ابدأ بتحريك جسمك بالشكل الذي يتناسب مع الحالة الإيجابية.

- 1 - انهض!
- 2 - جاول أن ترسم ابتسامة عريضة على وجهك!
- 3 - مع بداية الابتسامة حاول أن تفكر تفكير إيجابيا.
- 4 - حاول أن تعمل الأمور السابقة بشكل منتظم

بتطبيقك لهذا التدريب ستلاحظ التغيير تدريجيا عن نفسك و حالتك وشعورك. حاول أن تعمل هذا التدريب مع ثقتك بأنك من الممكن أن تتغير مهما اعتبرت هذا التدريب يبدو سخيلا. في الواقع ستبدأ تكسب عادات إيجابية التي تخدمك في حياتك والتي بموجبها ستشعر أنك مرتاح نفسيا وأن مستوى توكيد الذات لديك أصبح أعلى مستوى من ذي قبل وتتنظر إلى نفسك إيجابيا أكثر من السابق.

وإذا رأيت أو لاحظت أنك بدأت من جديد تستخدم جسمك بالمظهر السلبي ابدأ فورا بتغيير النمط السلبي إلى النمط الإيجابي. وعندما تعاد عمل هذا التمرين مرارا وتكرار لفترات متواصلة ستبدأ تلاحظ أن نوعية الحياة والآراء والأفكار حول نفسك بدأت تتغير تدريجيا إيجابيا لكي تصبح أسعد من ذي قبل. خلاصة القول هي أنه ينبغي أن تستمر على هذا التمرين إلى أن تبدأ ندرك الإيجابية حول نفسك.

ملاحظة: من الممكن أن تعمل هذا التدريب بأي أسلوب يناسب حياتك. إن الشيء المهم هو أن يعمل هذا التدريب يوميا لمدة أسبوعين.

3 - الامتنان: هو زرع إحساس الامتنان على كل النعم التي وهبت إياها. هذه التقنية توسع وتركز انتباهك على الأشياء الجيدة في حياتك، مما يتيح لك الفرصة بأن تنظر نظرة متوازنة وتجعلك تتغلب على الصعوبات الحالية التي قد تواجهها في حياتك.

مثال تدريبي: يوجد الكثير في حياتنا من النعم الكبيرة أو الصغيرة في حياتنا نحن في الحقيقة ممتنين من أجلها. المطلوب منك هو أن تكتب قائمة مكونة من 6 نعم حصلت عليها خلال الشهر الماضي أو خلال السنة الماضية وبعد ذلك تقضي عشر دقائق متفكرا بأنك ممتن لحصولك على تلك النعم. القائمة تشمل الأشياء البسيطة في حياتك كحمام دافئ أو ملابس نظيفة أو بيت آمن أو وجبة لذيذة... الخ.

عندما تنتهي من كتابة القائمة. اقرأ تلك القائمة بهدوء بحيث تركز على كل نعمة ذكرتها في القائمة لمدة نصف دقيقة ويكون تركيزك خلال تلك النصف دقيقة على أنك ممتن جدا لحصولك على تلك النعمة. ثم تنتقل إلى النقطة التالية وهكذا. بحيث تحاول أن تربط العواطف الإيجابية نحو كل نعمة مذكورة في القائمة. حيث يجب أن تقضي ما مقداره خمس دقائق في إنجاز هذا التدريب العملي. قد تكون هذه الفترة الزمنية ليست بالطويلة ولكن من المستحسن أن تكرر هذا التدريب أيضا في أي وقت خلال اليوم عندما تواجه أي قلق خلال أحداث حياتك اليومية. ملاحظة: من الممكن أن تعمل هذا التدريب بأي أسلوب يناسب حياتك. إن الشيء المهم هو أن يعمل هذا التدريب يوميا لمدة أسبوعين.

4 - الإنجاز: هو زرع الإحساس أو الشعور بالإنجاز. هذه التقنية تجلب انتباهك إلى كل ما نجحت في إنجازها صغيرا كان أو كبيرا بمجهودك خلال حياتك الماضية.

مثال تدريبي: هناك الأشياء العديدة سواء كانت صغيرة أم كبيرة التي تم إنجازها بمجهودنا خلال حياتنا الماضية. على سبيل المثال توجد إحصائية في عام 2000م بوجود شخص واحد من كل خمسة بالغين بعمر (15+) في العالم لا يعرفون القراءة والكتابة. أيضا يوجد 75 مليون طفل في العالم لم يشملهم نظام التعليم. بالإضافة إلى وجود حوالي 860 مليون بالغ في العالم لا يعرف القراءة والكتابة. ولكن وأنت تقرأ في هذه الورقة ستعلم بأنك أفضل حالا منهم بشكل كامل. حيث يعتبر هذا الشيء إنجاز جيد خلال حياتك الماضية. تمنع جيدا في هذا الأمر لأنه توجد هناك أشياء كثيرة إيجابية في حياتنا ولكن الحمل الزائد من المشاكل التي نواجهها في حياتنا تجعلنا نغفل عن رؤية الجانب الإيجابي، بل تجعلنا لا نرى إلا النقاط السلبية فقط.

المطلوب منك في هذا التدريب هو أن تكتب قائمة مكونة من خمسة إنجازات حققتها خلال الشهر الماضي أو السنة الماضية أو خلال حياتك الماضية. بعد ذلك تقضي عشر دقائق في إعادة التمعن في تلك القائمة التي كتبتها. عندما تنتهي من كتابة تلك القائمة حاول أن تقضي دقيقة واحدة على الأقل في التفكير في كل إنجاز كتبته في تلك القائمة وتركز على كيفية إنجازك لذلك الأمر، وحاول أن تربط شعورك بالفخر بإنجازك لذلك الأمر. وهكذا في بقية الإنجازات المذكورة في القائمة حاول أن تربط العواطف الإيجابية بكل إنجاز قمت به. حيث سياتخذ منك هذا الأمر بحدود خمس دقائق وهذه قد لا تبدو وقت طويل، ولكن مع تكرار هذا التدريب بالذات في بعض الأوقات التي تواجه فيها ضغوط في خلال حياتك اليومية.

5 - التسامح: أي التفاضل عن الأخطاء، وهذه التقنية تزرع شعور التسامح لديك عن الآخرين لكي تستطيع أن تكمل حياتك بشكل أفضل.

مثال تدريبي: فكر بشخص ما سبب لك أذية، وحاول أن تركز في السماح عنه. لربما ذلك الشخص فعلا تسبب لك بأذية كبيرة وجعلك تشعر باليأس أو إحساس الغضب. المطلوب منك هو الآتي:

- 1 - خذ قلما وورقة وكتب اسم ذلك الشخص الذي تسبب بأذيتك.
- 2 - اقرأ ذلك الاسم بتركيز.
- 3 - الآن أرى باني تعاملت معه بأفضل ما أستطيع أن أعمله في ذلك الوقت. أنا الآن أسامحه.
- 4 - حاول أن تمزق تلك الورقة أو تتخلص منها.
- 5 - حاول أن تكرر هذا التمرين مع بقية الأشخاص الذي تسببوا لك بأذية في حياتك.
- 6 - الآن حاول أن تعيش حياتك بدون عبء الألم لأنها في الحقيقة تعتبر معاناة غير ضرورية.

ملاحظة: من الممكن أن تعمل هذا التدريب بأي أسلوب يناسب حياتك. إن الشيء المهم هو أن يعمل هذا التدريب يوميا لمدة أسبوعين.

Appendix C

Parent-Child Relationship Scale (PCRS)

Please reflect on the answer to which each of the following statements currently applies to your relationship with your parents between the ages of 6 and 18. Using the scale below, please tick the appropriate answer for each item.

N	Statements	At least once every day	Once every 2 or 3 days	Once a week	Once a month	Once every 6 months	Once a year	Once in my life	Never
1	Did your parents verbally insult you?								
2	Were you beaten by your parents?								
3	Did your parents verbally insult you in front of others?								
4	Were you beaten by your parents in front of others?								
5	In general, were you encouraged to express your opinion by your parents?								
6	Did your parents encourage you to be well-behaved?								
7	Did your parents encourage you to speak frankly when expressing your own opinions?								
8	Did your parents prefer you to your siblings?								
9	Did your parents prefer your siblings to you?								
10	Did you feel that your parents did not care about you?								

Appendix D

مقياس العلاقة بين الوالدين والأبناء
Parent-Child Relationship Scale (PCRS)

هذا المقياس يهدف إلى استكشاف طبيعة العلاقة بين الوالدين والأبناء من خلال وجهة نظر الأبناء. وأحيثك علما أن كل المعلومات التي ستدلي بها في غاية السرية والتي لن تستخدم إلا لأغراض العملية فقط. وإن يتم الإفصاح عما يشير إلى هويتك بأي شكل من الأشكال، وفقا لعلاقتك السابقة. يوالديك أو أحدهما (في خلال المرحلة العمرية 6 - 18 سنة من حياتك السابقة) أرجو أن تجيب على الأسئلة التالية بوضع إشارة (X) تحت الإجابة المناسبة:

م	البيود	مرة واحدة كل يوم	مرة واحدة كل يومين إلى ثلاثة أيام	مرة واحدة كل أسبوع	مرة واحدة كل شهر	مرة واحدة كل 6 أشهر	مرة واحدة كل سنة	مرة واحدة في حياتي	ولا مرة نهائيا	م
1	تلقيت إساءة لفظية من والديك أو أحدهما	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
2	تلقيت إساءة جسدية (بالضرب) من والديك أو أحدهما	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
3	تلقيت إساءة لفظية من والديك أو أحدهما أمام الآخرين	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3
4	تلقيت إساءة جسدية (بالضرب) من والديك أو أحدهما أمام الآخرين	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4
5	شجك والديك أو أحدهما عن التعبير عن رأيك بحرية	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5
6	شجك والديك أو أحدهما على عمل سلوك صحيح	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6
7	شجك والديك أو أحدهما على الكلام والتعبير عن رأيك	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7
8	بصراحة عن موقف عام في الحياة	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8
9	هل سبق أن فضلك والديك أو أحدهما على إخوتك	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9
10	هل أحسنت أو شعرت أن والديك أو أحدهما غير مهتمين بك	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10

Appendix E

Demographic variables

Age: Gender: Male Female Smoke: Yes No

	Non	Elementary	Intermediate	High School	Bachelor	Master	PhD
Your Education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Father Education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mother Education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix F

المتغيرات الديموغرافية

العمر: سنة الجنس: ذكر أنثى هل تدخن؟ نعم لا

الحالة الاجتماعية	أعزب <input type="checkbox"/>	متزوج <input type="checkbox"/>	مطلق <input type="checkbox"/>	أرمل <input type="checkbox"/>
-------------------	-------------------------------	--------------------------------	-------------------------------	-------------------------------

حدد آخر مؤهل علمي لك ولوالديك في الفقرة التالية:

غير متعلم	ابتدائي	متوسط	الثانوية	بكالوريوس	ماجستير	دكتوراه	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	مؤهلك العلمي
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	المؤهل العلمي لأب
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	المؤهل العلمي للأم

Appendix G

Punishments prediction sub-scale

Think of the worst type of punishment that you had when you were between 6 and 18. Read each item and then mark in the appropriate answer in the rating scale.

Q1. Were you able to predict when the punishment would occur?

Completely unpredictable	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○	Always knew when it would occur
--------------------------	--------	--------	--------	--------	--------	--------	--------	---------------------------------

Q2. Were there things you could do to control the severity of punishment?

Unable to control	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○	Able to control
-------------------	--------	--------	--------	--------	--------	--------	--------	-----------------

Q3. Were you able to escape from the person punishing you?

Unable to escape	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○	Able to escape
------------------	--------	--------	--------	--------	--------	--------	--------	----------------

Punishments prediction sub-scale

فكر في أسوء نوع من أنواع المعاملة التي تلقيتها من والديك أو أحدهما مر عليك خلال المرحلة العمرية 6-18 سنة، وأجب على الأسئلة التالية:

1 - هل كنت قادرا على التنبؤ من حصول ذلك النوع من أنواع سوء المعاملة من والديك أو أحدهما؟

لا يمكن التنبؤ تماما	1	2	3	4	5	6	7	يمكن التنبؤ دائما
	0	0	0	0	0	0	0	

2 - هل كان لديك أشياء تقطعها من أجل أن تسيطر على شدة سوء المعاملة التي حصلت من والديك أو أحدهما؟

غير قادر على السيطرة	1	2	3	4	5	6	7	قادر على السيطرة
	0	0	0	0	0	0	0	

3 - هل كنت قادر على الهروب من والديك أو أحدهما عندما كانوا يسيئون معاملتك حينها؟

غير قادر على الهروب	1	2	3	4	5	6	7	قادر على الهروب دائما
	0	0	0	0	0	0	0	

Appendix I

Global Quality of Life Scale

100	Perfect quality of life
95	Nearly perfect quality of life
90	
85	Very good quality of life
80	
75	
70	Good quality of life
65	
60	
	Moderately good quality of life
55	
50	
45	
40	Somewhat bad quality of life
35	
30	
	Bad quality of life
25	
20	
15	Very bad quality of life
10	
5	Extremely bad quality of life
0	No quality of life

Write any number between 0 and 100 that describes your quality of life: _____

Appendix K

مقياس جودة نوعية الحياة الكلي

Global Quality of Life Scale (GQLS)

100	حياة ذات جودة نوعية تامة
95	جودة نوعية الحياة أشبه ما تكون تامة الجودة
90	
85	جودة نوعية الحياة جيدة جدا
80	
75	
70	جودة نوعية الحياة جيدة
65	
	جودة نوعية الحياة متوسطة
50	
45	
40	جودة نوعية الحياة سيئة نوعا ما
35	
	جودة نوعية الحياة سيئة
20	
15	جودة نوعية الحياة سيئة جدا
10	
5	جودة نوعية الحياة سيئة جدا للغاية
0	جودة نوعية الحياة معدومة تماما

أرجو منك كتابة رقم ما بين (0-100) حسب ما هو مشار إليه في المقياس لكي يصف مدى (النسبة) جودة نوعية حياتك بشكل كلي: _____

Appendix L

Positive & negative affect schedule (PANAS)

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you have felt this way during the past few weeks. Use the following scale to record your answers:

Use the following scale to record your answers:

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
very slightly or not at all	a little	moderately	quite a bit	extremely

interested		hostile		inspired	
distressed		enthusiastic		nervous	
excited		proud		determined	
upset		irritable		attentive	
strong		alert		jittery	
guilty		ashamed		active	
scared		afraid			

Positive and Negative Affect Schedule (PANAS)

هذا المقياس يحتوي على عدد من الكلمات المختلفة التي تصف المشاعر والعواطف التي يمر بها الإنسان. أرجو منك أن تقرأ قائمة الكلمات وأن تضع التقييم المناسب أما كل كلمة وفقا لما يتناسب معك على حسب مدى تقديرك لوجود هذه الصفة في شخصيتك (سلوكك) في خلال الأسابيع القليلة الماضية.

أرجو أن تستخدم الرقم المناسب لكي تشير إلى التقدير المناسب والملائم لوجود هذه الصفة لديك وفقا للتقييم التالي:

5	4	3	2	1
للاغاية	لا بأس	متوسط	قليل	قليل جدا أو نهائيا

.....	ملهم	.....	عدائي	.....	مُهتَم
.....	عصبي	.....	مُتحمس	.....	أعاني
.....	مُصمم	.....	فخور	.....	مُثار
.....	مُتيقظ	.....	سريع الغضب	.....	زِعول
.....	مُتوتر	.....	مُنتبه	.....	قوي
.....	نشيط	.....	سهل الإحراج	.....	مُذنب
.....		.....	خائف	.....	مذعور

Appendix N

Minor Health Complaints questionnaire (MHCQ)

a) How many times have you had each of the following health complaints in the last year ?

Please tick a box for each complaint

	Never	1	2 or 3	4 or 5	6 or 7
1) Colds or Flu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2) Athletes foot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) Wheeze	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4) Mouth ulcers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5) Sore throats	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6) Fungal infection of groin or scalp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

b) On how many days in the last month have you had each of the following problems?

Please tick a box for each problem

	Never	Once	2 or 3	4-6	7 +
7) Headaches or migraines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8) Constipation (hard pellety stools)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9) Watery diarrhoea (loose stools running out like water)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10) Heartburn (indigestion pain)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11) Itchy eyes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

c) Please answer these questions

Please tick a box for each question

	No	A little	Yes
12) Do you have patches of dry itchy skin (eczema)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13) Do you sneeze a lot even when you do not have a cold?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14) Do you have a blocked nose even when you do not have a cold?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix O

مقياس الشكاوى الصحية البسيطة
Minor Health Complaints questionnaire

(أ) كم مرة كان لديك كل من الشكاوى الصحية التالية في السنة الماضية؟

7-6	5-4	3-2	1	ولا مرة	الشكاوى الصحية من...
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 نزلات البرد (الزكام) أو الأنفلونزا
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2 تقرحات في القدمين (فطريات)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3 صفير أثناء التنفس
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4 تقرحات الفم
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5 ألم اللوزتين
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6 التهاب فطري في فروة الرأس أو العانة

(ب) كم مرة عانيت من المشاكل الصحية التالية خلال الشهر الماضي:

7-6	5-4	3-2	1	ولا مرة	المشكلة الصحية
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 الصداع أو الصداع النصفي
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2 إمساك (صعوبة شديدة في التبرز)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3 إسهال (خروج متكرر للبراز بشكل سائل)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4 حموضة (حرقان) معوية (ألم بسبب عسر الهضم)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5 حكة في العينين

(ج) أرجو منك الإجابة على هذه الأسئلة التالية:

نعم	قليل	لا	السؤال
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 هل تعاني من حساسية مع حكة أو احمرار في الجلد (مرض يصيب الجلد (أكزيما))
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2 هل تعطس بكثرة حتى لو لم تكن تعاني من نزلة برد (الزكام) أو أنفلونزا
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3 هل يوجد لديك احتقان (انسداد) في الأنف حتى لو لم تكن تعاني من نزلة برد (زكام) أو أنفلونزا

Appendix P

Satisfaction with Life Scale

Below are five statements that you may agree or disagree with. Using the 1 - 7 scale below indicates your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

- 7 - Strongly agree
- 6 - Agree
- 5 - Slightly agree
- 4 - Neither agree nor disagree
- 3 - Slightly disagree
- 2 - Disagree
- 1 - Strongly disagree

- _____ In most ways my life is close to my ideal.
- _____ The conditions of my life are excellent.
- _____ I am satisfied with my life.
- _____ So far I have gotten the important things I want in life.
- _____ If I could live my life over, I would change almost nothing.

Appendix Q

مقياس الرضا عن الحياة

Satisfaction with Life Scale

التعليمات: يوجد في الأسفل خمس جمل تعبر عن الرضا عن الحياة بشكل عام، ربما تتفق معها أو تختلف معها. باستخدام الجدول التدريجي أدناه أرجو أن تشير أمام كل عبارة بما يتناسب ويتلاءم مع انطباق العبارة عليك أو عدم انطباقها. أرجو منك أن تشير إلى الدرجة المناسبة لك بكل صدق وصراحة حسب الجدول التالي:

7	6	5	4	3	2	1
تطبيق كلياً	تطبيق	تنطبق جزئياً	وسط	لا تنطبق جزئياً	لا تنطبق	لا تنطبق كلياً

التقييم	العبارة
	1 في معظم الأحوال تقترب حياتي من المثالية.
	2 ظروف حياتي ممتازة.
	3 أنا راض عن حياتي.
	4 حصلت حتى الآن على الأشياء المهمة في حياتي.
	5 لو قدر لي أن أعيش من جديد لن أغير شيئاً من حياتي.

Appendix R

Patient Health Questionnaire (PHQ-9)

Over the last 2 weeks, how often have you been bothered by any of the following problems? (use "x" to indicate your answer).

	Statements	Not at all	Sever al days	More than half the days	Nearly every day
1	Little interest or pleasure in doing things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Feeling down, depressed, or hopeless	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Trouble falling or staying asleep, or sleeping too much	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Feeling tired or having little energy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Poor appetite or overeating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Feeling bad about yourself—or that you are a failure or have let yourself or your family down	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Trouble concentrating on things, such as reading the newspaper or watching television	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Moving or speaking so slowly that other people could have noticed. Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Thoughts that you would be better off dead, or of hurting yourself in some way	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all	Somewhat difficult	Very difficult	Extremely difficult
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix S

استبانة صحة المريض
Patient Health Questionnaire (PHQ-9)

التعليمات: خلال الأسبوعين الماضيين كم مرة واجهتك المشاكل التالية؟ أمام كل بند أربع خيارات، ضع إشارة (X) تحت الإجابة المناسبة لك..

المشكلة	ولا مرة نهائيا	أغلب الأيام	أكثر من نصف الأيام	تقريبا كل يوم
1 قليل من المتعة أو الاهتمام بالأشياء التي أعملها أو أقوم بها	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 شعور بالإحباط والكآبة واليأس	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 النعاس أو البقاء نائما أو النوم كثيرا	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 الشعور بالتعب أو الشعور بقليل من الإجهاد	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 شهية ضعيفة للأكل أو تناول الطعام بكثرة	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 الشعور بالذنب حول نفسك أو بأنك فاشل أو خذلت نفسك أو عائلتك	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 مشكلة في التركيز، مثل قراءة جريدة أو متابعة التلفاز	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8 الكلام أو الحركة البطيئة الملاحظة من قبل الآخرين. أو يبدو علي التملل أو القلق والحركة الكثيرة أكثر من المعتاد.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9 فكرة بأنك من الأفضل لو كنت ميتا، أو أدت نفسك بطريقة ما	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

لو أشرت إلى أي مشكلة من المشاكل السابقة، ما هو مقدار الصعوبة التي سببتها هذه المشاكل بالنسبة لك في أداء عملك أو في عنايتك ببعض الأشياء في المنزل، أو في انسجامك مع الآخرين؟

لا يوجد أي صعوبة مطلقا	صعوبة بعض الشيء	صعب جدا	صعب للغاية
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix T

Chronic Fatigue Syndrome (CFS) Scale

Instructions: This questionnaire consists of 14-items of statements. Please read each item carefully, and then pick out the one statement in each item that best describes the way you have been feeling during the past two weeks, including today. Four options were used 'better than usual', 'no more than usual', 'worse than usual', 'much worse than usual'. Please tic the box under the statement you have picked.

	Statement	much worse than usual	worse than usual	no more than usual	better than usual
1	Do you have problems with tiredness?				
2	Do you need to rest more?				
3	Do you feel sleepy or drowsy?				
4	Do you have problems starting things?				
5	Do you start things without difficulty but get weak as you go on?				
6	Are you lacking in energy?				
7	Do you have less strength in your muscles?				
8	Do you feel weak?				
9	Do you have difficulty concentrating?				
10	Do you have problems thinking clearly?				
11	Do you make slips of the tongue when speaking?				
12	Do you find it more difficult to find the correct word?				
13	How is your memory?				
14	Have you lost interest in the things you used to do?				

Appendix U

مقياس متلازمة الإجهاد المزمن
Chronic Fatigue Syndrome (CFS) Scale

التعليمات: يوجد أمام كل بند أربعة خيارات، ضع إشارة (X) تحت الإجابة المناسبة لك.

السؤال	أسوأ بكثير من المعتاد	أسوأ من المعتاد	كالمعتاد	أفضل من المعتاد
1 هل لديك مشاكل مع الإجهاد (الإرهاق)؟				
2 هل أنت بحاجة إلى المزيد من الراحة؟				
3 هل تشعر بالدوخة؟				
4 هل لديك مشاكل في أن تبدأ أي عمل؟				
5 هل تبدأ أعمالك بدون صعوبات لكنك تشعر بالضعف خلال ذلك؟				
6 هل تفتقر إلى الطاقة (القوة)؟				
7 هل لديك طاقة (قوة) قليلة في عضلاتك؟				
8 هل تشعر بالضعف؟				
9 هل لديك صعوبة في التركيز؟				
10 هل لديك مشاكل في التفكير بوضوح؟				
11 هل تحدث لك زلات لسان عند الكلام؟				
12 هل تجد صعوبة في أحيان كثيرة أن تجد الكلمة الصحيحة (المناسبة)؟				
13 كيف تقيّم ذاكرتك؟				
14 هل فقدت الاهتمام في الأمور التي كنت تفعلها؟				

Appendix V

SCID-II Questionnaire
Borderline Personality Disorder BPD

INSTRUCTIONS:

These questions are about the kind of person you *generally* are, that is, how you have *usually* felt or behaved over the past several years. Circle "YES" or "NO" if the question completely or mostly applies to you. If you do not understand a question, leave it blank.

	Statements		
1	Have you often become frantic when you thought that someone you really cared about was going to leave you?	No	Yes
2	Do your relationships with people you really care about have lots of extreme ups and downs?	No	Yes
3	Have you all of the sudden changed your sense of who you are and where you are headed?	No	Yes
4	Does your sense of who you are often change dramatically?	No	Yes
5	Are you different with different people or in different situations so that you sometimes don't know who you really are?	No	Yes
6	Have there been lots of sudden changes in your goals, career plans, religious beliefs, and so on?	No	Yes
7	Have you often done things impulsively?	No	Yes
8	Have you tried to hurt or kill yourself or threatened to do so?	No	Yes
9	Have you ever cut, burned, or scratched yourself on purpose?	No	Yes
10	Do you have a lot of sudden mood changes?	No	Yes
11	Do you often feel empty inside?	No	Yes
12	Do you often have temper outbursts or get so angry that you lose control?	No	Yes
13	Do you hit people or throw things when you get angry?	No	Yes
14	Do even little things get you very angry?	No	Yes
15	When you are under a lot of stress, do you get suspicious of other people or feel especially spaced out?	No	Yes

**SCID-II Questionnaire
Borderline Personality Disorder BPD**

التعليمات: أجب على الأسئلة التالية بما يتناسب مع سلوكك خلال السنوات الماضية من حياتك إلى الوقت الحاضر. إذا كان ينطبق عليك السؤال أو معظمه ضع دائرة حول الإجابة (نعم)، و إذا كان لا ينطبق عليك ضع دائرة حول الإجابة (لا).

السؤال		
1	هل تصبح منز عجا (مهموما) عادة عندما تفكر بأن شخص ما كان يهتم بك جدا على وشك أن يتركك أو يهجرك (ينفصل عنك)؟	لا نعم
2	هل علاقاتك الحميمة مع الناس تتسم بالتغير الشديد وعدم الثبات؟	لا نعم
3	هل لديك تغير مفاجئ في إحساسك حول من أنت و في أي وضع؟	لا نعم
4	هل إحساسك حول من أنت يتغير عادة بشكل كبير (متذبذب)؟	لا نعم
5	هل تعتبر نفسك مختلف مع الناس المختلفين، أو في مواقف مختلفة بحيث أنك لا تعرف من أنت حقا؟	لا نعم
6	هل كان هناك الكثير من التغيرات المفاجئة في أهدافك، مخطتك الوظيفي (المهني) أو معتقداتك الدينية؟	لا نعم
7	هل كنت عادة تفعل الأشياء بشكل اندفاعي؟	لا نعم
8	هل حاولت مسبقا أن تؤذي نفسك أو تقتل نفسك بأي شكل من الأشكال أو تحدث نفسك بالأذى؟	لا نعم
9	هل حدث مسبقا أن أحرقت أو جرحت أو خدشت نفسك متعمدا؟	لا نعم
10	هل لديك الكثير من التغيرات المزاجية المفاجئة (تقلب المزاج)؟	لا نعم
11	هل تشعر بالفراغ والضجر في كثير من الأحيان؟	لا نعم
12	هل تصبح غاضبا وتفقد السيطرة على نفسك غالبا؟	لا نعم
13	هل تضرب الناس أو ترميهم بالأشياء عندما تغضب؟	لا نعم
14	هل فعل بعض الأشياء الصغيرة تؤدي بك بالغضب؟	لا نعم
15	عندما تكون تحت الكثير من الضغوط، هل تصبح شكاكيا في الآخرين أو تشعر بأنك منفصل عنهم (متولد)؟	لا نعم

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