

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

**Multiplicity of perceptions on the sequelae of  
childhood sexual abuse: Development of an  
empirical framework**

**A dissertation presented in partial fulfilment of the  
requirements for the degree of**

**Doctor of Philosophy**

**in**

**Psychology**

**at Massey University, Palmerston North,**

**New Zealand**

**Pia Pechtel**

**2008**



For my parents,  
Marlies and Hans Pechtel  
*In love and gratitude.*



## ABSTRACT

---

After over 30 years of research, our knowledge of the consequences of childhood sexual abuse (CSA) is still marked by considerable disarray. A research programme of three studies was designed to improve our understanding of functioning in adulthood after CSA by considering perceptions of sexual abuse from three different viewpoints: Clients with a history of CSA, lay, non-abused adults, and sexual abuse practitioners. In the first study, Multidimensional scaling was employed to develop a reporting device summarising the wide range effects and coping efforts likely to following sexual abuse (RESA – *Reporting Effects of Sexual Abuse*). A two-fold mapping and profiling approach was then used to highlight *consistency* and *specificity* of sexual abuse sequelae by comparing effect-coping patterns of 113 adults with a history of CSA to profiles describing the functioning of non-traumatised adults. The second study then enquired about the *stability* of perceptions of CSA consequences carried by 149 lay, non-abused adults. An analogue priming study explored how the impact of emotional arousal and cognitive re-structuring intervention adjust participants' understanding of CSA outcomes. As lay, non-abused adults were found to carry an oversimplified perception of CSA sequelae, Study Three therefore investigated if practitioners were exempt from such underlying biases. Signal detection analysis was used in the final third study to independently assess 85 practitioners' judgment *accuracy* and *bias* when asked to identify sexual abuse effects among a set of supposedly unrelated behaviour, and to discriminate direct effects from secondary ways of coping with CSA. While practitioners were successful in detecting relevant CSA sequelae, they nonetheless demonstrated a highly overinclusive perception compared to the empirical reports by sexually abused clients and societal perceptions. Findings of the three studies were integrated to build an empirical framework on the multiplicity of perceptions on the sequelae of CSA. Overall, this research showed that all individuals, regardless of their association with CSA, carry perceptions about the consequences of CSA. These perceptions appeared to be universal, independent of emotional arousal or attempted cognitive restructuring. While CSA clients reported an array of effects and coping efforts, society only seemed to reflect basic elements of these as related to CSA. Professionals, on the other hand, indicated overinclusive perceptions in which most characteristics were

identified as CSA sequelae, in particular as a mean of coping. Finally, no specific pathway was found to follow CSA. While there appeared to be an increased intensity of effects and a greater need for coping among adults with a history of CSA, the general pattern or type of sequelae was also reported by non-traumatised adults. Understanding the functional processes underlying these patterns of common sequelae can help to tailor treatment to the individual needs of clients who experienced CSA. Further implications of this empirical model for practice and research in the area of sexual abuse in Aotearoa/New Zealand are discussed.

## ACKNOWLEDGMENTS

---

A thesis is never written in isolation so I would like to express my thanks to many who accompanied me along this journey. First, my heartfelt thanks go to my supervisors Prof. Ian Evans, Dr. Shane Harvey, and Dr. David Bimler who I have been privileged to work with over the last three years. Each of them added to this work in their own right. All of them contributed to my growth as a person and a budding academic.

Ian, your brilliance and at the same time positive style of mentoring often left me in admiration. Thank you for giving me the confidence to trust my own thoughts.

Shane, you started all of this! Thanks for teaching me about the “research world” out there and never being short on having a quick, enthusiastic debate around our work - in a hallway, on a train, or in the middle of the street. Thanks for being a mentor and a friend.

David, what would I have done without you? Your patience and support have been invaluable. Thanks for letting me look over your shoulder and never doubting that I will “get this” eventually. You have invested many hours in me and in this work – thank you.

I am also grateful to Associate Professor John Kirkland, who not only encouraged me to come to Aotearoa/New Zealand, but who also guided my very first steps in research and who taught me many of the skills needed for the completion of this thesis. John, I hope you will enjoy this. Special appreciation also goes to all the team members of the Rāanga Whatumanawa team for “taking me in” and letting me benefit from their diverse expertise during the process of developing the Sexual Abuse Practice Guidelines.

To my family and friends back home, it was difficult to do all of this so far away from you. My parents, Marlies and Hans, my sister Ira and the little Fee Amelie, my godchild Maximilian, *Danke fuer eine beschuetzte und gleuckliche Kindheit, all Eure Unterstuetzung, und den Glauben, dass man sein Schicksal selbst in die Haende nehmen kann.* Annette, Torben, and Gunnar, you have been so patient with me. Your support and encouragement even crossed the distance over to the other side of the world.



I believe that when you are working on a PhD, one of the difficult things may be that your “other” life does not stand still. The last three years have been a time of gains and losses. I would like to value and express my thanks to all, including those who only walked parts of the way with me. I also learned that when there seemed to be no light at the end of the tunnel, there was always a door opening somewhere. Thanks to Scott for being my rock, Amy for sticking by me, Carlene and Chris for giving me a home when I needed it the most, the “Annexe crew” of other PhD students for mutual support, Rachael Pond for all her valuable input, Robyn and her magic formatting skills, my “reference buddy”, and many more.

Last but not least, a sincere thank-you to all of the participants in this research. I hope I will treasure your willingness and courage to share your experiences and beliefs by writing this thesis. Today, six years ago, I arrived in this country – with a backpack and an undergraduate degree. It has been quite a journey....

---

All parts of the here presented research project were approved by the Massey University Human Ethics Committee or the Multiregional Human Ethics Committee (HEC: 04/176, MEC/05/03/036, HEC: 06/33; HEC: 06/54; HEC: 06/55).

## ABBREVIATIONS

---

ACC – Accident Compensation Corporation

ANOVA – Analysis of variance

BPD – Borderline personality disorder

CSA – Childhood sexual abuse

DID - Dissociative identity disorder

DSM-IV-TR - Diagnostic and statistical manual of mental disorders: IV-TR (American Psychiatric Association, 2000)

GOPA – Grouping, Opposites, Partitioning, Addition

MDS – Multidimensional scaling

MMPI-2 - Multiphasic Personality Inventory-2

MOSS – Method of Successive Sorts

PCA – Principle component analysis

PTSD – Posttraumatic stress disorder

RESA – Reporting Effects of Sexual Abuse

SDT – Signal detection theory

HR – Hit rate

MR – Miss rate

FAR – False alarm rate

CR – Correct rejection rate

## TABLE OF CONTENTS

---

DEDICATION .....	i
ABSTRACT .....	ii
ACKNOWLEDGMENTS .....	v
ABBREVIATIONS.....	vii
TABLE OF CONTENTS .....	viii
LIST OF APPENDIXES .....	xiv
LIST OF TABLES .....	xvi
LIST OF FIGURES.....	xvii
CHAPTER ONE	
Introduction .....	1
Study One .....	4
Study Two .....	5
Study Three.....	5
CHAPTER TWO	
Literature review .....	9
Prevalences and characteristics of sexual abuse .....	9
The role of perception .....	11
Media perceptions of CSA .....	11
Lay and professional perceptions of CSA.....	13
Impact of perceptions on general behaviour and clinical decision-making .	13
Self-perceptions following CSA.....	15
Summary.....	17
Long-term sequelae of CSA .....	17
Sexual abuse sequelae: Effects and coping efforts .....	18
Interface of effects and coping: Conceptual and treatment models.....	19
Effects of sexual abuse .....	21
Depression .....	22

Anxiety, fear, and panic attacks.....	23
Posttraumatic stress disorder .....	23
Sexual dysfunctions .....	24
High-risk sexual behaviour.....	25
Interpersonal relationships .....	26
Intrapersonal difficulties .....	27
Somatisation .....	27
Personality disorders.....	28
Summary .....	29
Coping with CSA.....	30
Constructive versus maladaptive coping.....	31
Avoidance.....	32
Dissociation and dissociative disorders .....	33
Eating disorders .....	34
Substance abuse .....	35
Acting-out.....	36
Sexual risk-taking .....	36
Self-harm/mutilation .....	37
Suicidal behaviour .....	37
Summary .....	38
Concluding themes.....	39

## CHAPTER THREE

### Study One

#### Inter-relationships of effects and coping following child sexual abuse:

Introduction of a profiling approach .....	41
Derivation of RESA – “Reporting Effects of Sexual Abuse” .....	43
Development of a methodological approach.....	47
Objective mapping.....	47
The ‘hotspot’ model and subjective profiling.....	48
Study aims .....	49

Method .....	50
Participants .....	50
Materials .....	51
Procedure.....	51
Objective mapping.....	51
Subjective profiling.....	52
Analyses .....	53
Objective mapping.....	53
Subjective profiling.....	54
Results .....	55
Objective mapping .....	55
Subjective profiling.....	58
Results and discussion of profiles.....	62
Functioning following CSA.....	62
Comparing functioning of participants with CSA and no experiences of trauma.....	68
Discussion of overall findings .....	72
Conceptual distinction between effects and coping efforts.....	72
Consistency and specificity of reported CSA effects.....	73
Consistency and specificity of reported CSA coping strategies.....	74
Consistency and specificity of reported effect-coping patterns.....	75
Limitations.....	75
Conclusion .....	76
 LINKING THOUGHTS I.....	 78
 CHAPTER FOUR	
Study Two	
Lay perceptions of child sexual abuse under the influence of emotional arousal:	
An analogue study.....	79
Perceptions of CSA.....	79

Emotional arousal .....	81
Cognitive re-structuring .....	82
Lay persons' perceptions of similarity: Categorisation.....	82
Emotional response categorisation .....	83
Lay persons' perceptions of CSA sequelae: Attitudes.....	85
Affective priming effects and automatic attitude activation .....	85
Hypothesis .....	86
Methodology.....	86
Participants .....	86
Materials .....	88
Priming stimuli .....	88
Measures.....	89
Procedure.....	89
Categorisation task.....	90
Attitude task.....	90
Analyses .....	90
Results .....	92
Effectiveness of manipulation .....	92
Categorisation task.....	92
Attitude task .....	95
Perceived versus reported sequelae of sexual abuse.....	98
Discussion .....	99
Categorisation.....	100
Attitude.....	101
Impact of emotion.....	103
Origin of cognitive schema .....	104
Media portrayal.....	104
Artefact conceptualisation: Barnum effect and illusory correlates.....	105
Reversed priming and social projection hypothesis.....	107
Conclusion .....	108

LINKING THOUGHTS II .....	110
CHAPTER FIVE	
Study Three	
A signal detection analysis of practitioners' decision-making on the sequelae of child sexual abuse .....	111
Gender .....	112
Professional background .....	113
CSA versus non-CSA consequences.....	114
Effects versus coping with CSA .....	114
Relevance for treatment.....	115
Study aims .....	116
Method.....	116
Approach .....	116
Participants .....	117
Stimuli and procedure .....	118
Effect task.....	118
Coping task.....	119
Analyses .....	119
Item analysis .....	119
Signal detection analysis .....	119
Results .....	121
Item analysis .....	121
Signal detection analysis .....	122
Gender and profession.....	126
Discussion.....	128
Non-specificity of CSA effects.....	129
Over attribution.....	129
The relevance of coping .....	130
Impact of gender and profession.....	132
Explanation of outcome.....	133

Conclusion .....	135
CHAPTER SIX	
Final discussion .....	136
Limitations.....	136
Integration of research findings .....	137
Adjustment to the empirical framework of CSA sequelae.....	139
Self-reports of clients with a history of sexual abuse .....	139
Lay persons’ oversimplified perceptions of CSA sequelae.....	142
Practitioners’ overinclusive perceptions of CSA sequelae.....	143
Implications for sexual abuse practice in Aotearoa/New Zealand.....	145
The impact of overinclusive bias .....	145
Assessment of coping in sexual abuse practice .....	147
Matching perceptions of sequelae: A necessity for effective treatment?.....	148
Implications for research: The quest for “true” sequelae of sexual abuse .....	149
Modelling a pathway for future research.....	150
CONCLUSIONS .....	152
CLOSING THOUGHTS .....	154
REFERENCES .....	156
APPENDIXES .....	178



## LIST OF APPENDIXES

---

Appendix A:	RESA – Reporting Effects of Sexual Abuse .....	179
Appendix B:	Sub-deck of items extracted from RESA .....	181
Appendix C:	Information sheet: Similarity mapping (Study One).....	182
Appendix D:	Grouping, Opposite, Partitioning, Adding (GOPA) record sheet.....	184
Appendix E:	Invitation to participate for adults with history of CSA (Study One) ...	185
Appendix F:	Information sheet and consent form: CSA sequelae (Study One) .....	186
Appendix G:	Instructions MOSS (Method of Successive Sort) template (Study One).....	190
Appendix H:	Information sheet: Reports on general functioning (Study One).....	192
Appendix I:	Consent form: Reports on general functioning.....	194
Appendix J:	List of RESA items clustering at dimensional poles of the lay and expert similarity map.....	195
Appendix K:	Hierarchical cluster analysis: Ward dendrogram for 113 adults with history of CSA (5 cluster solution).....	196
Appendix L:	Ward dendrogram using 29 non-traumatised adults reporting on their general functioning (3 cluster solution) (Study One).....	199
Appendix M:	Invitation to participate: Priming/ no-prime study (Study Two) .....	200
Appendix N:	Scripts for cognitive and emotive primes (Study Two) .....	201
Appendix O:	Questionnaire to evaluate effectiveness of priming manipulation (Study Two) .....	203
Appendix P:	Information sheet, consent forms and hand-outs for participants: Priming/ no-prime study (Study Two) .....	204
Appendix Q:	MOSS (Method of Successive Sort) template and record sheet for non-abused participants (Study Two) .....	211
Appendix R:	Dimensional clusters for prime/no-prime conditions.....	214

Appendix S:	Ward dendrogram 29 non-abused lay responses on CSA sequelae after cognitive prime (3 cluster solution) .....	216
Appendix T:	Ward dendrogram 28 non-abused lay responses on CSA sequelae after emotive prime (3 cluster solution) .....	217
Appendix U:	Dendrogram using Ward Method of 31 non-abused, non-primed lay responses on CSA sequelae (2 cluster solution) .....	218
Appendix V:	Comparing lay perceptions on CSA sequelae to self-report of adults with a history of CSA.....	219
Appendix W:	Information sheet and consent form: Practitioners' perceptions (Study Three) .....	220
Appendix X:	Instructions (presented electronically): Practitioners' perceptions (Study Three) .....	223
Appendix Y:	Noise items (non-related to CSA).....	225
Appendix Z:	Practitioners' perceptions on sexual abuse sequelae in Signal detection task in percentage (%) (Study Three).....	226

## LIST OF TABLES

---

Table 1:	Commonly Reported Item Groups Showing Effects/Coping Strategies Reported by 113 Adults with a History of CSA .....	60
Table 2:	Demographical Information of Sensitive Claims Practitioners in Signal Detection Research.....	118
Table 3:	Mean Values for Hit Rate (HR), False Alarm Rate (FAR), Signal Detection Indices of Sensitivity ( $d'$ and $P(A)$ ) and Response Bias (C).....	123

## LIST OF FIGURES

---

Figure 1:	Hypothesised framework of the multiplicity of perceptions of the sequelae of CSA.....	6
Figure 2:	Overview of three research studies to develop empirical framework of CSA sequelae.....	7
Figure 3:	Combined map derived from expert and lay informants on the similarity of effects and coping strategies .....	57
Figure 4:	Basic two-dimensional RESA framework.....	59
Figure 5:	CSA Profile 1 with the predominant effect-coping response from RESA reported by 27% of CSA clients.....	63
Figure 6:	CSA Profiles 2 and 3 with their respective effect-coping responses from RESA reported by 41% of CSA clients .....	64
Figure 7:	CSA Profiles 4 and 5 with their respective effect-coping responses from RESA reported by 32% CSA clients .....	66
Figure 8:	Five CSA profiles summarising effect-coping responses from 113 CSA clients using RESA .....	67
Figure 9:	Non-trauma Profiles 1, 2, and 3 summarising the level of functioning in last six months as reported by 29 non-traumatised female and male adults using RESA .....	68
Figure 10:	Comparison mean profile of self-reported functioning by 29 non-traumatised participants and five CSA profiles summarising CSA sequelae reported by 113 CSA clients.....	69
Figure 11:	Comparison showing primary effect-coping patterns of functioning reported by CSA clients (CSA Profile 1) and non-traumatised adults (Non-trauma Profile 1) .....	70
Figure 12:	Comparison showing similar effect-coping patterns of functioning reported by CSA clients (CSA Profile 2) and non-traumatised adults (Non-trauma Profile 3) .....	71
Figure 13:	Dimensions and item response categories recovered from the combined emotional, cognitive, and no-prime conditions .....	94
Figure 14:	Confidence intervals for mean profiles of CSA sequelae for each of the cognitive, emotional, and no-prime condition.....	95

Figure 15:	Profiles representing similarly-responding participants in each of the three conditions: CP (cognitive prime), EP (emotional prime), and NP (no-prime).....	97
Figure 16:	Comparison of weighted mean profile summarising CSA sequelae .... as hypothesised by all three prime/no-prime conditions to the most most CSA Profile 4 representing CSA clients sequelae.....	99
Figure 17:	Comparison of three profiles summarising functioning of 29 non-traumatised participants in the last six month compared to the weight mean profile reporting CSA sequelae as hypothesised by 88 participants in the no- prime (NP), cognitive (CP), and emotional (EP) priming condition.....	106
Figure 18:	Mean area under the receiver-operating characteristic curve (ROC) for discriminating effects from non-effects. The smooth, dark curve represents the mean ROC for all 85 participants. P(S/s) on the y-axis represents the Hit rate, while P(S/n) indicates the False Alarm rates on the x-axis.....	123
Figure 19:	Mean area under the ROC curve for discriminating effects from coping strategies following sexual abuse (darkened curve). Individual curves are also shown for all 85 participants. P(S/s) on the y-axis represents the Hit rate, while P(S/n) indicates the False Alarm rates on the x-axis.....	124
Figure 20:	ROC curves for z- transformed Hit (P(S/s) and False Alarm (P(S/n) rates, where sensitivity ( $d'$ ) is the distance between the chance line and the curve.....	125
Figure 21:	Gender and professional split of mean response bias (C) for discriminating effects from non-effects .....	126
Figure 22:	Gender split of response bias (C) for discriminating effects from coping strategies.....	127
Figure 23:	Empirical framework on the multiplicity of perceptions on the sequelae of CSA.....	139
Figure V-1:	Visual overlap of CSA sequelae hypothesised by primed/no-prime participants compared to self-reports of those who experienced CSA. A weighted mean profile was calculated to summarise the cognitive, emotional, and no-prime responses provided by non-abused participants. All samples used RESA items and empirically-derived hotspots to describe CSA outcomes.....	219

# CHAPTER ONE

---

## Introduction

This dissertation is the result of two of my journeys. From one perspective, it represents my personal journey. I learnt from people close to me about the impact CSA can have even after years have passed by. Clearly, I remember their confusion about the seemingly disconnected array of thoughts, emotions, and behaviour, and moreover, how it appears to become a re-occurring issue in their relationships with others. Their own confusion and difficulties to explain *why* they were behaving ‘differently’ in certain situations became a barrier to their engagement in every day life. As for most others with no personal history of sexual abuse, my reaction was one of unlimited commiseration, guided by my understanding of sexual abuse as an event of inexplicable pain, dismay, and life-long vulnerability. Not unlike many others, and with best intentions, I believed that the only way of expressing my emotions and powerlessness about their experience was to attribute all possible negative outcomes to the people who experienced CSA. I thought little about the impact my pessimistic, stereotypical beliefs may have on their perception of life and the abuse, their hope to cope, and their outlook of the future.

The other journey represents my academic development. About three years ago, I was privileged to join a team of experienced clinicians and researchers to help to develop the Aotearoa/New Zealand Practice Guidelines for Sexual Abuse for the Accident Compensation Corporation (ACC) (Rāranga Whatumanawa Research Project, in press-a, in press-b). New Zealand has quite a unique standing in the world for its system of funding rehabilitation for accidental injuries. Under the 2001/2005 Injury Prevention, Rehabilitation, and Compensation Act, ACC offers no-fault accident cover for those adults and children who have experienced physical or mental injury subsequent to a criminal attack. Since the late 1980s, sexual abuse is subsumed under this ACC scheme which became known as Sensitive Claims Services. In order to obtain funding, the person with a history of CSA and their practitioner must give a detailed account of the incident and the

mental injury following CSA, as described in Schedule 3 of the New Zealand Crimes Act of 2005 (Du Plessis, 2007). Children and adults are then entitled to counselling through a registered Sensitive Claim psychologist, psychotherapist, counsellor, or psychiatrist. The period of funded treatment is determined by an ACC Sensitive Claims case manager and is based on the practitioner's progress reports and independent data assessments.

Under the name of *Rāranga Whatumanawa: The weaving of the heart patterns*, a multidisciplinary research team developed evidence-based practice recommendations to assist Sensitive Claim professionals to offer high quality therapeutic services to those who experienced CSA<sup>1</sup>. Over the course of three years, research was conducted across Aotearoa/New Zealand to evaluate the sequelae of CSA, highlight effective treatment approaches, and to suggest means to monitor improvements over the course of therapy. After an international peer-review process, the Sexual Abuse Practice Guidelines are now due for publication in mid 2008 and will be disseminated to all practitioners currently registered under the Sensitive Claim Scheme (Rāranga Whatumanawa Research Project, in press-a, in press-b). The first study of this doctoral research<sup>2</sup>, which was primarily focussed on the development of a summary device to profile CSA outcomes, took place as part of the Rāranga Whatumanawa project and informed the guideline's practice recommendations on assessment and CSA sequelae.

My PhD research and my role as a researcher on the Rāranga Whatumanawa team gave me the opportunity to address the questions which occupied me throughout my personal journey: What impact does CSA have in adulthood? How can we make sense of the seemingly disconnected behaviours, emotions, and thoughts? After a first review of the

---

<sup>1</sup> The discourse "survivor" is not used in the present research to avoid labelling a person based on a single event rather than considering their accumulated, unique life experiences. As later shown, the label of a sexually abused adult is attached to negative stereotypes that may affect decision-making. The use of the above terminology aims to embed the experience of CSA amongst other influential life experiences to avoid associated stereotypical perceptions.

<sup>2</sup> This research was made possible by a grant from the ACC to investigate the assessment, diagnosis, treatment, and outcomes for mental injury arising from sexual abuse. No official endorsement of this report by ACC should be inferred, nor does it in any way reflect the policy and opinions of ACC.

literature it became evident that there was a considerable amount of disarray within the field of CSA research. Mostly correlational in nature, research often studied isolated characteristics and their prevalences in CSA samples rather than investigating the functional relationships of CSA outcomes. After over 30 years of research, modest conclusions can be drawn from the literature on the CSA-specific consequences: While not inevitable, those who have experienced CSA are at a higher risk of facing a range of behavioural, emotional, cognitive, social, and physiological effects<sup>3</sup>. Moreover, a plethora of abuse-related and unrelated variables, which can occur prior, during, and subsequent to the abuse, can impact on individual outcomes and restrain the identification of consistent pathways following CSA (Beitchman, Zucker, Hood, DaCosta, Akman, & Cassavia, 1992; Kendall-Tackett, Williams, & Finkelhor, 1993).

Overall, I realised that CSA for an adult was an event embedded amongst a set of other negative and positive life experiences making it unfeasible to conclude about causal links between CSA and psychopathology. However, although no indicators or causal CSA effect emerged from the empirical research, I noticed that society, media, professionals, and policy makers appeared to have a specific opinion about what follows CSA. In order to understand the sequelae of CSA, I would need to turn away from trying to identify the “true” sequelae but also focus my attention on how people “construct” the consequences of CSA. How do lay people and professionals perceive the outcome of CSA? How do these perceptions match the reports of those with a history of CSA? What are the implications of potential discrepancies in perceptions between lay persons, professionals, and those who experienced CSA?

I first became aware of the importance of perceptions regarding sexual abuse outcomes as I noticed gaps between what was believed to follow sexual abuse compared to empirical findings reported in the literature. One of these apparent discrepancies was linked to the ACC Sensitive Claims Act from 2005. There it was stated that funding is available only to

---

<sup>3</sup> The term “effects” is preferred to the word “symptom” as CSA is not conceptualised as a disease or illness (McGregor, 1999).



those who show evidence of a “diagnosable mental injury caused” by sexual abuse or sexual assault event (Du Plessis, 2007, p. 7). Mental injury is defined as a clinical dysfunction such as posttraumatic stress disorder (PTSD) or depression and which requires treatment. Although such a claim for causality is not viable according to research, this narrow ACC definition functions as standard to evaluate the impact of CSA and determine funding schemes for sexual abuse counselling.

### **Study One**

With this knowledge, I started the first study by gathering empirical information on the effects and ways of managing CSA-related distress as perceived by lay persons and practitioners working with adults with a history of CSA. The first study was designed to develop a domain of statements that helped adults to describe and understand their disjointed behaviour following CSA. After consultations of the literature, focus groups and key information interviews with Sensitive Claim practitioners, and an archival data file analysis, 100 descriptors of CSA sequelae formed *RESA – Reporting Effects of Sexual Abuse*. As a prerequisite to profiling sexual abuse outcomes, non-abused lay people and professionals working in the area of sexual abuse were then asked to organise and inter-relate RESA items based on their directly perceived meaning. This process helped to organise an internal structure of the newly developed instrument to ensure that items are understood in a similar manner. As items at this stage were still a reflection of the *perceptions* of practitioners’ views of CSA, it was important to ask adults with a history of CSA to confirm their relevance by using RESA to describe functioning prior to therapy. Using a profiling technique, sexually abused adults then highlighted those effects and coping efforts most salient following sexual abuse. To investigate if items were specific to an experience of CSA, RESA items were given to non-traumatised participants to describe their general functioning. Study One was designed to develop descriptors of long-term sequelae relevant to CSA, highlight the most salient consequences, and identify consistencies and specificity of effect and coping patterns.

## **Study Two**

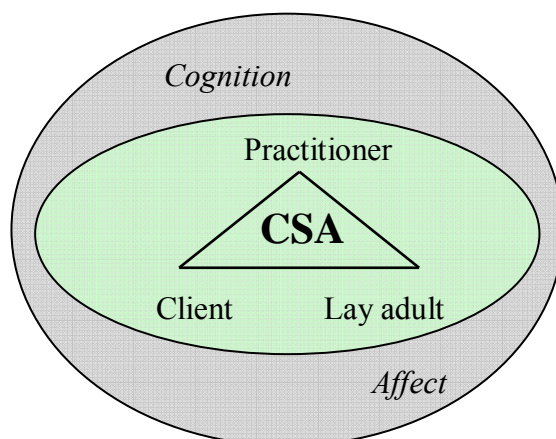
During my time with the Rāanga Whatumanawa team, I learnt that sexual abuse is not inevitably linked to life-long hopelessness as I crossed paths with a range of inspirational people who succeeded themselves, or who help others succeed, in their right to thrive in life. Due to the shift in my own perception on the sequelae of CSA, I also became aware of the array of beliefs and attitudes surrounding CSA commonly represented by the media and society (Frewin, Tuffin, & Pond, 2006). The second study was designed to enquire how non-abused lay persons perceive the outcome of CSA. Moreover, it was of interest to explore if such perceptions are affected by a simultaneous experience of emotion or after an educational tuition about CSA by a senior psychologist. Overall, Study Two addressed the question if current beliefs of what people perceive to follow CSA resemble the “real” sequelae reported by those who experienced CSA. As part of an automatic activation process, stereotypical perceptions have been shown to guide behaviour and influence our decision-making. Hence, lay persons perceptions are an important area of study, as they can yield an insight into societal responses to CSA. Mismatching perceptions of CSA consequences can lead to a range of inter- and intrapersonal difficulties for those who have experienced CSA.

## **Study Three**

Sensitive claim practitioners formed the missing piece between self-perceptions of sexually abused adults (Study One) and the lay beliefs maintained by those without experiences of CSA (Study Two). Similar to the lay population, professionals are not expected to be exempt from cognitive bias which can impact on clinical decision-making in therapeutic settings (Hetherington & Beardsall, 1998; Jackson & Nuttall, 1993). Study Three used a signal detection approach to evaluate practitioners’ sensitivity and possible bias in differentiating CSA sequelae from a set of behaviours, thoughts, and emotions supposedly unrelated to CSA. In addition, practitioners were asked to discriminate between sexual abuse effects perceived to directly follow CSA from efforts to cope with the emotional distress and negative affect following CSA. For practitioners, the assessment of clients’

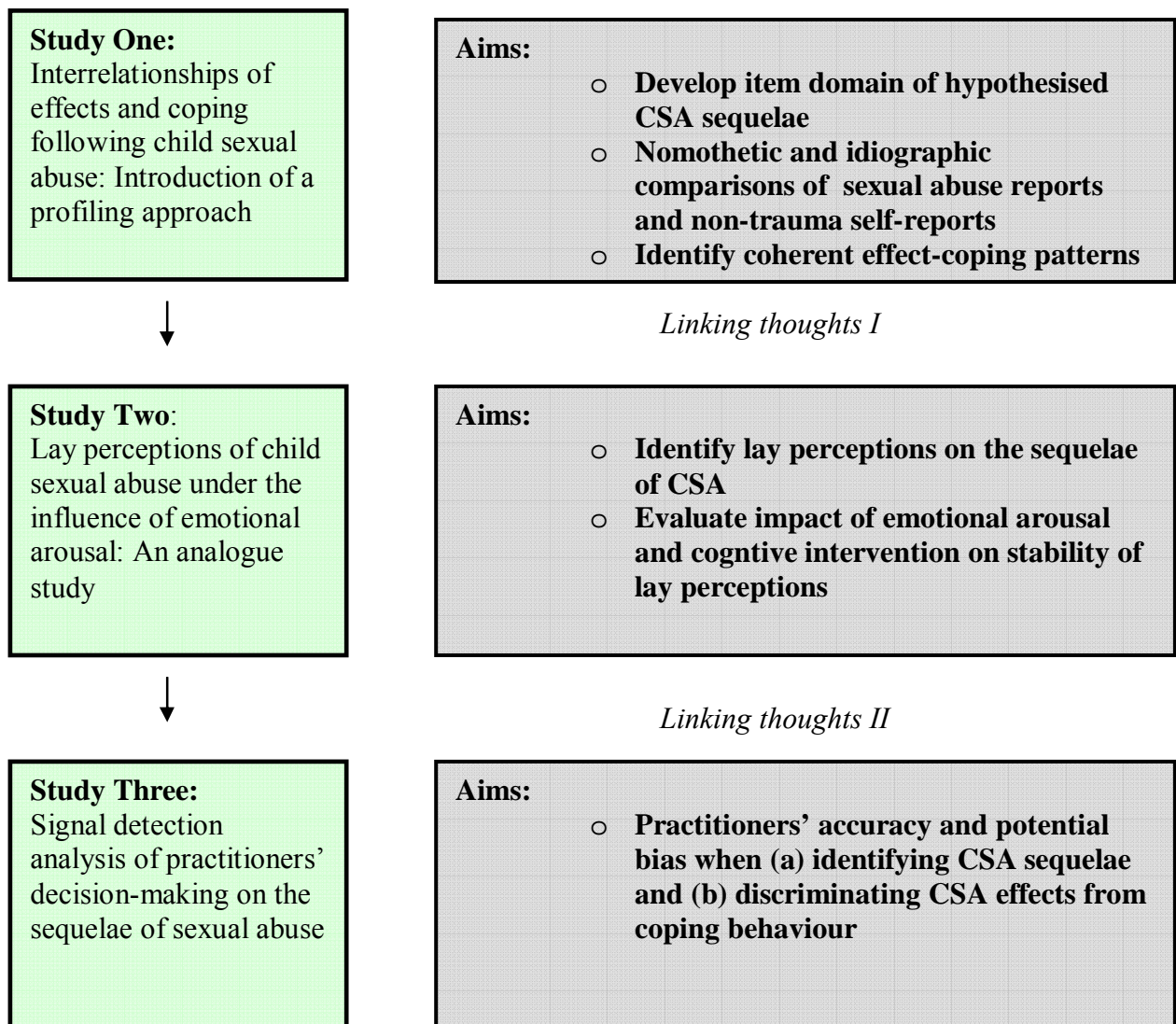
initial coping resources form a vital part of the therapeutic goal sequence in order to ensure the client's safety before engaging in abuse-related material likely to evoke emotional distress. Practitioners' gender and professional disciplines were considered as moderating variables.

Overall, this research programme aimed at identifying a domain of effects and means of coping related to CSA. Items were used to describe the perceptions on the consequences of CSA in adulthood as expressed by society and professionals, in comparison to self-report of those with a history of CSA. Figure 1 highlights the hypothesised framework of perceptions on the sequelae of sexual abuse. While practitioners, clients, and lay adults are likely to represent a different viewpoint of CSA, a shared understanding on what constitutes CSA was expected. The experiences of emotional arousal as well as cognitive re-structuring through education were furthermore thought to adjust adults' perceptions of sexual abuse. The present research collected empirical data on the three highlighted perspectives and the moderating variables of emotion and cognition. Findings of the three studies were then used to adapt the hypothesised model in order to build an empirical framework on the multiplicity of perceptions on CSA sequelae.



*Figure 1.* Hypothesised framework of the multiplicity of perceptions of the sequelae of CSA.

The next chapter is a review of the common perceptions and research developments regarding the sequelae of CSA. The literature review is tailored around two of this research's key rudiments: The role of people's perceptions on sexual abuse and a conceptual review of the long-term sequelae of CSA divided into primary effects and secondary coping efforts. The following three chapters then describe the three independent but complementary research studies as summarised in Figure 2.



*Figure 2.* Overview of three research studies to develop empirical framework of CSA sequelae.

Each of these three chapters is written in the format of a journal article, hence separately introducing key elements relevant to that study as well as having a method, results, and discussion section. Some linking thoughts are documented between the three studies to highlight the gradual development of the overall research. Chapter Six integrates and discusses the results of all three studies. Findings were used to modify the above hypothesised model of CSA perceptions by integrating empirical reports of sexual abuse sequelae by lay persons, professionals, and those with a history of sexual abuse. Implications for sexual abuse treatment and research in Aotearoa/New Zealand as well as the development of future pathways of research close this dissertation.

## CHAPTER TWO

---

### Literature review

CSA is not a homogenous event but can take various forms. It is generally defined as an “act or acts that result in the exploitation of a child or a young person whether consensual or not” by an adult or peer (Child Youth and Family, 2001, p. 8; McGregor, 1999). Often it is divided into forms of non-contact (exhibitionism, voyeurism, exposure to pornographic material, suggestive comments) and contact sexual abuse (clothed or unclothed fondling, masturbation, genital-oral contact, penetration of vagina or anus with finger, object, or penis, forced involvement in pornography or prostitution) (Child Youth and Family, 2001). The wide range of types of CSA makes it not only difficult to compare research results on prevalences but also indicates divergences in what the general public may consider as an act of sexual abuse.

Before exploring the perceptions of CSA sequelae, it is considered important to provide some information on the extent and scope of the problem of CSA in Aotearoa/New Zealand. Such demographics do not in themselves contribute to our understanding of outcomes, but give some ideas regarding the magnitude of the problem in our society and thus the intensity of public and professional perceptions.

#### **Prevalences and characteristics of sexual abuse**

A recent cross-sectional study interviewed 2855 females between 18-64 years in urban (Auckland) and rural regions (North Waikato) of Aotearoa/New Zealand (Fanslow, Robinson, Crengle, & Perese, 2007). Results highlighted that 23.5% of females in the urban region and 28.2% in the rural region reported unwanted sexual contact prior to the age of 15. According to this study, unwanted sexual contact is experienced by one in four girls in New Zealand. In 2005 alone, there were 1,824 convictions for sexual abuse. In 40% of these cases the recipient was under the age of 12 years, and in 36% they were

between the age of 12 and 16 years old. The vast majority of sexual crimes are conducted against girls under the age of 17 years (83%). A smaller percentage (17%) of sexual offences is targeted against boys younger than 17 years of age (Soboleva, Kazakova, & Chong, 2006). Overall, an 85% increase of sexual violence convictions was noted in Aotearoa/New Zealand between 1988 and 1999. While statistics initially suggest an increase in CSA incidents, the raise may also be due to a greater social awareness and acceptability to speak out about the abuse. The ACC Sensitive Claim services may have contributed to such a development, especially as in the late 1980s mental injury as a result of sexual abuse was included under the Injury Prevention Rehabilitation and Compensation Act. Since then sexual abuse and the ACC Sensitive Claims scheme have been a frequent topic in the media contributing to a heightened societal awareness of CSA (Frewin et al., 2006).

While New Zealand prevalences are similar to US estimates of around 25%-32% for females and 10-15% for males (Briere & Elliott, 2003; Dhaliwal, Gauzas, Antonowicz, & Ross, 1996; Romano & De Luca, 2001), a much lower rate of CSA was reported for Australian females (12%) and males (4%) (Dunne, Purdie, Cook, Boyle, & Najman, 2003). Divergences in prevalences of disclosed CSA across the two neighbouring countries may be partially attributed to a higher acknowledgment of CSA in Aotearoa/New Zealand. However, definitional variations are a common methodological problem in CSA research and can contribute to differences in CSA rates (Putnam, 2003). Fanslow and colleagues' (2007) definition of CSA as an unwanted sexual contact is likely to yield a much higher prevalence rate compared to Dunne and colleagues (2003) classification of CSA as a penetrative act. While both are common classification criteria, this example shows how CSA prevalences need to be interpreted with great caution.

Fanslow et al.'s (2007) finding that one in four New Zealand girls is exposed to CSA is highly likely to impact on societal and professional perceptions of sexual abuse, such as CSA being a common event, and one that is primarily reported by females. Yet, actual statistics lie in the dark as many incidences are not disclosed or remain unreported to

police or child protection services. A strong emphasis on CSA as an event in which a male perpetrator abuses a female, may decrease the public's awareness that sexual abuse can also happen to boys or be instigated by a female perpetrator. How much such perceptions may hinder the recognition of CSA and inhibit supportive responses to the disclosure of CSA are discussed in the following sections.

### **The role of perception**

In cognitive psychology, schemata signify the organisation of associated characteristics into meaningful clusters of knowledge as a way to make sense of our environment (Sternberg, 2003). Commonly referred to as *perceptions*, such cognitive schemata are understood as non-judgmental beliefs or ways of representing information on individual or event. The term *stereotype*, on the other hand, assumes a type of cognitive bias. Such biases often occur in the form of an over- or under- simplification of the previously formed schemata, in an attempt to minimise cognitive effort (Bower & Forgas, 2000). In contrast to a summary representation of information (perception), stereotypes need a point of “true” comparison to conclude if and what type of cognitive bias have been employed. The study of sexual abuse perceptions and stereotypes is essential as it was shown to guide our behaviour, hence, affect those who have experienced CSA (Cuddy, Fiske, & Glick, 2007).

### **Media perceptions of CSA**

As sexual abuse stories are typically sensational or negative in nature, they appear to have a strong presence in the media forum. Information portrayed by the media, however, is constructed through the beliefs and perceptions of the media editors and are likely to be shaped to cohere with the dominant cultural and moral order in which they occur (Frewin et al., 2006). While representations by the media are not necessarily a reflection of the reality, the edited and shared information is likely to influence public opinions and be understood by society as “real” (MacDonald, 2003). The media is therefore considered one of the main contributors to the formation of public perceptions. A critical media analysis highlighted the most common discourses on how CSA sequelae were constructed by the



Aotearoa/New Zealand print media (Frewin et al., 2006). Interestingly, the voices of those who experienced CSA were largely missing from the reports publicised, except for dramatic purposes. The person who experienced CSA and the challenges they face, were mainly constructed through the views of others. Predominantly these individuals are portrayed as ill-fated, damaged, and broken. In retrospect, this depiction of CSA is not unlike my own personal, initial perception of CSA before becoming further engrossed in the empirical CSA literature.

In the print media, three specific discourses were found to signify CSA outcomes: *frequent*, *serious impact*, and *complex effects* (Frewin et al., 2006). The terms ‘frequent effects’ implied a certain ordinariness of CSA sequelae. Instead of reporting specific consequences of CSA, this most prevalent rhetoric assumed that ‘everyone knows’ the universal outcome of sexual abuse. ‘Serious impact effects’ were applied to highlight the severity or magnitude of CSA’s negative sequelae. This particular discourse was characterised by the use of highly emotional and visually charged metaphors (“war zone”) rather than specifying the psychological impact on behaviour, feelings, and thoughts (Frewin et al., 2006, p. 59). In a sensational manner, the use of ‘serious impact’ discourse relied on pathos in order to provoke a response from the reader. Interestingly, the ‘complex effect’ discourse, which most closely resembles professional perceptions of CSA, is marginalised in the media. Reports which emphasised the complex and individual nature of sexual abuse were less prevalent than descriptions using the non-specific, sensational discourses.

Overall, the media is more likely to portray CSA as a homogenous event using sensational discourses emphasising the magnitude and ordinariness of effects without providing specific detail. Such a depiction of CSA is a very limited portrayal compared to the complex sequelae demonstrated by empirical research. Condensed media representations are likely to have a profound impact on the understanding of CSA formed by the general public.

## **Lay and professional perceptions of CSA**

A consensus on the general perceptions on CSA outcomes were found amongst lay, non-abused adults and those who work professionally in the area of CSA. Foremost, both groups attribute negative outcomes to CSA (Bornstein, Kaplan, & Perry, 2007; Hetherington & Beardsall, 1998; Kendall-Tackett & Watson, 1991). Particularly severe dysfunctions were attributed to certain types of CSA including intra-familial CSA conducted by a male adult or boys being abused by a male perpetrator. Sexual abuse of a boy by a female perpetrator, however, was commonly perceived as less traumatic (Bornstein et al., 2007; Hetherington & Beardsall, 1998; Kouyoumdjian, Perry, & Hansen, 2005).

While an overall consensus emerged from the literature regarding abuse characteristics and severity of trauma, none of the studies enquired about lay or professional perceptions on the *specific* consequences following CSA. As the previously reviewed media representation indicated that the frequency and magnitude are more often publicly discussed than the complexity of CSA, lay and professional perceptions on specific CSA consequences were addressed in the present research.

## **Impact of perceptions on general behaviour and clinical decision-making**

Psychological research has focussed on perceptions and stereotypes in order to determine how it may guide our behaviour and influence our decision-making (Snyder, Decker Tanke, & Berscheid, 1977). In their BIAS map model, Cuddy and colleagues (2007) addressed the question of how cognitive stereotypes and emotions affect subsequent behaviour. Stereotypical behaviour is explained as a result of the cognitive evaluation of a social group along two main dimensions of social perception: competence and warmth. Depending on the position of a group within this framework, one of four emotions is likely to be evoked. The role of affect was emphasised as it mediated the relationship between cognitive stereotypes and subsequent behaviour. Although not explicitly studied, adults with a history of CSA have generally been portrayed by others as warm individuals but who are low in competence. According to the BIAS map, the warm/incompetent

perceptions is likely to evoke feelings of pity and subsequently induce behaviour described as active facilitation (helping) or passive harm (avoidance, neglect, dismissive actions, patronising) (Cuddy et al., 2007). However, while the BIAS map provides a helpful approach to the understanding of the stereotype behavioural patterns, the emotion of pity appears to lead to ambiguous outcomes ranging from overly helpful to not helpful at all. The link between emotion and behaviour therefore loses some of its specificity in prediction. Nonetheless, the models highlight how cognitive bias of stereotypes guide intergroup behavioural tendencies, usually mediated by emotions. Cuddy et al. (2007) noted that regardless of a perceiver's position in society, there appears to be a consensus on the stereotypical behaviours and feelings towards other prominent groups in the community. Hence, exposure to societal stereotypes, even without endorsement, can considerably affect responses to adults with a history of CSA.

A mismatch between lay perceptions of CSA characteristics and empirical reports on CSA could hinder the recognition of CSA in the community. Moreover, it could lead to unsupportive responses to disclosure. For example, CSA is often understood by lay, non-abused people as an event in which a male perpetrator abuses a young female. Hence, disclosure by a male who reported sexual abuse by a female is likely to receive a less empathetic or believing response as such a gender constellation was rated as less harmful. Instead, societal perceptions of sexual activity between a younger male and an older female were often considered "lucky" (Rāranga Whatumanawa Research Project, in press-a). Due to differing perceptions of what constitutes CSA, lay persons' responses can invalidate the negative outcomes experienced by men. Unsupportive reactions to disclosure have a negative impact on the level of adjustment (Ullman, 2003; Ullman & Filipas, 2005). Those adults who received an initial supportive and validating reaction to disclosure, however, experienced fewer psychopathological outcomes (Collishaw et al., 2007; Jonzon & Lindblad, 2006; Lynskey & Fergusson, 1997; Steel, Sanna, Hammond, Whipple, & Cross, 2004)

Perceptions carried by practitioners working with adults with a history of CSA can also affect clinical-decision making and therefore the disposition and efficacy of treatment (DeRoma, Hansen, Tishelman, & D'Amico, 1997; Gore-Felton et al., 2000). For example, as mentioned earlier, CSA is commonly portrayed by the media and perceived by lays and professionals as incidents conducted against females. Research has shown that mental health professionals often fail to enquire about a history of CSA when working with a male client (Putnam, 2003). This shows that perceptions of CSA as an event predominantly experienced by females may impact on the decisions made in clinical settings. Practitioners are particularly likely to rely on their pre-formed perceptions when they are provided with limited clinical information. In these cases the decision-making was influenced by “cognitive bias in which they process new information in a manner corresponding to previous beliefs” (Gore-Felton et al., 2000, p. 375). Chapman and Chapman (1969) showed the persistent use of such “illusory correlations”, highlighting that people are guided by what they expect to see (p. 272). Practitioners working with clients with a history of CSA are likely to be provided with fragmented information rather than a detailed disclosure of CSA. They therefore need to be aware of the potential risk of cognitive bias or illusory correlates in their practice as these may influence diagnosis and treatment planning (Chapman & Chapman, 1969; Gore-Felton et al., 2000).

### **Self-perceptions following CSA**

Negative self schemata carried by adults with history of CSA have been linked to maladjustment in later life (Leonard & Follette, 2002; Meston, Rellini, & Heiman, 2006). Moreover, in terms of the clients’ own perceptions of CSA, a negative model-of-the-self has been found to predict cognitive distortion and impeded the ability to cope with stressful situations (Muller, Sicoli, & Lemieux, 2000; Roberts, Gotlib, & Kassel, 1996).

Positive self-perceptions, however, may contribute to high functioning after an adverse experience. Himelein and McElrath (1996) studied coping behaviour displayed after CSA in females who appeared well adjusted. Results showed that coping through minimisation

of the impact of CSA and positive reframing of the event were related to a better outcome. Possessing a personal attitude that one can learn and gain from even the worst cases of adversity differentiated high from low functioning adults (Himelein & McElrath, 1996). The experience of “significant positive change arising from the struggle with a major life crisis” has been coined “posttraumatic growth” and forms one of the opposites to a negative model-of-the-self (Calhoun, Cann, Tedeschi, & McMillan, 2000, p. 521). In order to effectively deal with the experience of CSA, such a cognitive reappraisal does not need to be based on reality. Distorted but positive perceptions of the self and the future can still improve functioning after CSA. Named “positive illusions”, they can exaggerate feelings of personal control or optimism about the future and have been linked to successful adaptation to stress following CSA (Valentine & Feinauer, 1993). Positive changes associated with posttraumatic growth include an increased appreciation of life, rethinking of life priorities and life possibilities, and gaining a personal sense of a strengthened self (Zoellner & Maercker, 2006). This perception is likely to stand in sharp contrast to the earlier reviewed societal and professional standpoints on CSA – a question explored in this research.

Another characteristic contributing to the development of a positive perception of the self and overall adjustment was the attribution of blame. Those who attributed the abuse to the perpetrator instead of their own characteristics or situation achieved a higher level of self-esteem and no significant levels of psychopathology were found (Feiring & Cleland, 2007; Lev-Wiesel, 2000). This is consistent with the research finding that adults who report internalisation of the abuse (self-blame) demonstrate poor psychological functioning, particularly in cases of penetrative abuse (Coffey, Leitenberg, Henning, Turner, & Bennett, 1996; Feiring & Cleland, 2007; Futa, Nash, Hansen, & Garbin, 2003; Steel, Sanna, Hammond, Whipple, & Cross, 2004). Self-blame is a variable expected to be highly influenced by the responses received to disclosure. Other people’s expressions of disbelief of CSA and assignment of blame to the adult who experienced it can therefore attribute to an increase of self-blame accompanied by higher levels of dysfunction. A supportive response to disclosure which emphasises the assignment of all blame to the perpetrator

may contribute to adjustment after CSA. Overall, a self-perception using external sources of blame and positive reframing of the event is a reliable indicator of recovery and therefore may serve as a buffer against long-term effects (Beutler, Williams, & Zetzer, 1994; Feiring & Cleland, 2007; Gibb, 2002).

### **Summary**

All individuals are likely to carry personal schemata about the consequences of CSA (Bornstein et al., 2007; Hetherington & Beardsall, 1998). Discrepancies in perceptions between those who have experienced CSA and lay or professional non-abused adults may lead to difficulties. Research has shown that perceptions may influence behaviour and decision making and can therefore, directly or indirectly, impact on a person's level of adjustment following CSA. Despite available research methodologies that can control or study these biases, "it is unfortunate that neither professional nor popular contemporary literature typically distinguishes between empirically derived facts and popular beliefs when discussing the nature and treatment of child sexual abuse victims" (Beutler et al., 1994, p. 157). The present study therefore evaluated perceptions from a variety of sources to view the impact of preformed cognitive schemata as a potentially moderating variable to reports of CSA sequelae.

### **Long-term sequelae of CSA**

Conceptually, sexual abuse research evolved in a "piecemeal" fashion beginning in the late 1970s. Until then, researchers did not study psychopathological outcomes of CSA as it was assumed that lasting effects were uncommon (Hulme, 2004). The acknowledgment of CSA as a significant social problem led to the first major wave of empirically-driven research in the early 1980s (Freeman & Morris, 2001). In the early stages, research focussed on identifying initial and long-term effects as direct consequences of CSA, in a quest to determine causal inferences between CSA and subsequent psychopathology. It soon became apparent that CSA did not classify as a disease with a set of pathognomonic signs. Pathways following CSA were rather marked by substantial variability due to a range of

abuse-related (type, severity and frequency of CSA, relationship to perpetrator) and unrelated factors (family functioning, social support) mediating the relationship between CSA and psychopathology (Beitchman, Zucker, Hood, DaCosta, & Akman, 1991; Beitchman et al., 1992; Kendall-Tackett et al., 1993). Nevertheless copious numbers of studies identified a range of behavioural, emotional, cognitive, social, and physiological changes that were associated with a history of CSA in clinical and community samples, here broadly described as *sequelae*.

### **Sexual abuse sequelae: Effects and coping efforts**

Sexual abuse sequelae are often divided into two classes of behaviours. On the one hand, *effects* are outcomes directly related to CSA, such as shame, anxiety, safety, or trust issues. On the other hand, adults are likely to have developed ways of dealing or *coping* with the abuse and its emotional distress (denial, avoidance, substance abuse, self-harm). Coping is defined as a reaction to CSA and its consequences; as a mean to manage, minimise, or relieve negative affect and thoughts experienced by the individual (Spaccarelli, 1994; Whiffen & MacIntosh, 2005). While in the literature coping has often been associated with adaptive and successful ways of dealing with stressful circumstances, it needs to be pointed out that coping is not always constructive. Adults who experienced CSA as children may have developed a range of conscious and unconscious strategies which help to relieve emotional distress (*constructive coping*). Yet, when used over extended periods of time, some coping efforts may in themselves be harmful to the person (*maladaptive coping*) (Futa et al., 2003; Merrill, Thomsen, Sinclair, Gold, & Milner, 2001). Nevertheless, the term “coping” is used throughout this thesis as the behavioural or psychological efforts that, first and foremost, fulfil their initial function to relieve the person of the experienced distress and negative affect. To indicate the overall adaptive or maladaptive outcome of the utilised coping strategies, all coping efforts are further divided into constructive or adaptive and harmful or maladaptive means of coping with CSA.

### **Interface of effects and coping: Conceptual and treatment models**

Various conceptual behavioural models have been proposed to help explain the interplay between effects and coping following CSA. The *cognitive-behavioural model* (Hoier et al., 1992) and the *contextual behavioural model* (Polusny & Follette, 1995) are based on Mowrer's (1960) *two-process learning theory* and aim to explain the development and maintenance of CSA sequelae in adulthood. Hayes and colleagues (1987) framework of *experiential avoidance* and other therapeutic approaches emphasising the role of coping in sexual abuse practice are introduced subsequently.

Mowrer's first process describes how neutral stimuli presented during the abuse will become conditioned and can elicit an abuse-resembling response accounting for a range of negative outcomes (physiological disruptions, hypervigilance, sleeping and concentration difficulties, and posttraumatic stress symptomatology). This process explains the occurrence of stimulus-related distress from which the people will then try and seek relief. The person aims to successfully escape or avoid the aversive stimuli (thought, memory, images, sexuality) by using constructive behaviours (cognitive restructuring, seeking support) or maladaptive behaviours (substance abuse, social isolation, suicide). While these behaviours can be effective in reducing or removing the aversive stimulus, they do not in themselves need to be constructive tools. Mowrer's second process proposes that the maintenance of these behavioural responses is achieved through operant conditioning mechanisms of negative reinforcement. In regards to CSA, these behaviours remained in a person's behavioural repertoire as she or he learned that they were initially "effective" in mastering or minimising emotional distress. It is not take into account however that the chronic use of such escape or avoidance strategies can become associated with more psychopathological outcomes (Freeman & Morris, 2001).

The *cognitive behavioural model* (Hoier et al., 1992) proposes that a generalisation of conditioned stimuli and cognitive processes account for the variability of effects and the continuation of effects into adulthood. Individuals use cognitive responses to establish



different antecedent-behaviour-consequence relations of their specific situation. Such cognitions function as rules (disclosure of CSA leads to harm of my family) that determine and maintain the person's behaviour (not disclosing CSA) and its associated outcomes (sequelae). The *contextual behavioural model* (Polusny & Follette, 1995), on the other hand, explains long-term behavioural effects in adults who have experienced CSA without considering cognitive processes. CSA sequelae are based on the individual's experiences as well as the interactional and socioeconomic context.

Behavioural manifestations over time can also be conceptualised within the framework of Hayes *theory of emotional or experiential avoidance* (Hayes, 1987). Experiential avoidance is the "unwillingness to experience unpleasant internal events (...) associated with an abuse history and subsequent attempts to reduce, numb, or alleviate these negatively self-evaluated internal experiences" (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996; Polusny & Follette, 1995, p. 158). It was proposed that emotional avoidance, similar to Briere's (1992) tension-reduction strategies, are negatively reinforced methods of coping intended to reduce or eliminate the distress following CSA. Several therapeutic approaches have incorporated this model as part of the treatment used with those with history of CSA. Acceptance Commitment Therapy (Hayes, Strosahl, & Wilson, 2003) highlights the need to replace avoidance with an internal state of acceptance associated with higher level of functioning. Cognitive Behavioural Therapies emphasise the need to reduce avoidance in order to engage in desensitisation interventions such as Prolonged Exposure (Follette & Ruzek, 2006).

Furthermore, Briere's Self-trauma model (Briere, 1992, 2002) proposes that child maltreatment impairs affect regulation which motivates a reliance on ways of avoiding the emotional distress. During the course of treatment the protective mechanism of avoidance used by the client needs to be, firstly, recognised by the therapists and secondly, the client needs to be provided with another means of dealing with the distress, before the maladaptive avoidant strategy can be dismantled. Regardless of the specific model, a person's available coping resources play an important safety role in the treatment

following trauma. When working with adults with a history of abuse, therapist should first assess and develop ways of coping with emotional distress likely to occur when engaging in abuse-related themes and memories (Briere, 2002; Rāanga Whatumanawa Research Project, in press-a, in press-b).

All of these models share a common approach in conceptualising coping behaviours as distinct from the more directly experienced effects of CSA. An advantage of the behavioural learning models is that functional processes can be studied empirically. The evaluation of coping resources is essential at the beginning of therapy to ensure the clients' safety when engaging in trauma-related materials. Furthermore, specific therapeutic models emphasise the need to reduce the use of maladaptive coping by introducing constructive means of dealing with experienced distress. Conceptual and treatment models highlight the usefulness of differentiating between CSA effects and coping efforts which is continued in the present research.

### ***Effects of sexual abuse***

This section is intended to report the overall common tendencies of sequelae rather than summarise all available evidence supporting and contradicting any described characteristic. Inconsistent results for all of the reported long-term effects, however, are common. This is due to a range of other abuse-related and unrelated variables that may take place prior, during, or after the sexual abuse which makes it hard to make inferences about causality. While effects and coping behaviours are listed separately, it does not imply that they are experienced in isolation. There are a variety of possible combinations and overlaps which determine the sequelae for individuals. This approach was chosen to introduce the reader to the range of psychopathological consequences and common attempts to cope with CSA-related distress.

In one of the first comprehensive reviews, Browne and Finkelhor (1986) found that between one-fifth to two-fifths of children who have experienced sexual abuse manifest

maladaptive symptoms. Amongst the initially experienced sequelae were fear, anxiety, depression, guilt, anger and aggression, acting-out, running away, academic and learning problems, neurobehavioural deficits in executive functioning, attention, and memory, sexually inappropriate behaviour, and some characteristics of posttraumatic stress disorders (Beers & De Bellis, 2002; Finkelhor, 1990; Kendall-Tackett et al., 1993). Yet as the immediate effects following CSA are likely to be altered as the child matures into an adult, direct links between initial and long-term effects are difficult to establish. The emerging trajectories of CSA sequelae developing from childhood through to adulthood are marked by great variability. What was demonstrated, however, was that about one-fifth of children who have been sexually abused continue to experience long-term psychopathology (Briere & Elliott, 2003; Browne & Finkelhor, 1986).

*Depression.* Depression was identified as the most common effect experienced by adults sexually abused as children (Browne & Finkelhor, 1986). Indeed, depression is three to five times more commonly found in females with a history of CSA than among their non-abused peers (Putnam, 2003). Depressive characteristics, as based on the Diagnostic and Statistical Manual of Mental disorders (DSM-IV-TR) ( American Psychiatric Association, 2000), were more often demonstrated in community, clinical, and high functioning samples of adults who have experienced CSA compared to non-abused adults (Briere & Runtz, 1988; Kendler, Kuhn, & Prescott, 2004; Nelson et al., 2002; Paolucci, Genius, & Violato, 2001). Interestingly, when Whiffen and Clark (1997) controlled for CSA histories, the typical 2:1 gender difference in depression amongst a sample of males and females diminished. It was proposed that CSA may account for a considerable part of gender differences in depression rates (Culter & Nolen-Hoeksema, 1991; Weiss, Longhurst, Mazure, 1999). Nonetheless, depression is a non-specific outcome of CSA. Base rates in the general, non-abused populations are high indeed, hence making it difficult to determine - even for this most common effect - how much CSA per se contributes to the development and diagnosis of depressive disorders.

*Anxiety, fear, and panic attacks.* Significantly higher levels of anxiety and fear have been reported by non-clinical and clinical samples of adults with a history of CSA (Briere & Runtz, 1988; Browne & Finkelhor, 1986; Polusny & Follette, 1995). Signs of generalised anxiety found in females and males can include tension, hypervigilance, and feeling unsafe. A longitudinal study of young adults in New Zealand also highlighted an increased risk of panic attacks following an experience of CSA (Goodwin, Fergusson, & Horwood, 2005). While anxiety and fear are common effects experienced by adults with history of CSA, these findings were often mediated by the presence or threat of force during the abuse (Beitchman et al., 1992). Anxiety and fear may therefore form a possible response to the fear of harm, physically or psychologically, rather than being a result of an incident of a sexual nature.

*Posttraumatic stress disorder.* One of the commonly reported long-term effects of CSA is the DSM-IV-TR diagnosis of posttraumatic stress disorder (PTSD) defined by the experience of intense fear or helplessness following a traumatic event (Briere, 1992; Rowan & Foy, 1993). While symptoms<sup>4</sup> within one month after the event are diagnosed as acute stress disorder, the persistence of (a) re-experience of symptoms (nightmares, obsessive thoughts, and flashbacks), (b) avoidance (people, objects, situations) and (c) increased arousal is classified as PTSD (American Psychiatric Association, 2000). For adults who have experienced CSA, a diagnosis of chronic PTSD is appropriate when symptoms are experienced beyond a period of six months. Multiple or chronic exposure to trauma are proposed to be understood as complex PTSD (Herman, 1992; Roth, Newman, Pelcovitz, van der Kolk, 1997; Zlotnick et al., 1996). PTSD has been linked to CSA in community samples as well as clinical samples in males and females (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995; Rodriguez, Ryan, Van de Kemp, & Foy, 1997; Saunders, Villepontoux, Lipovsky, Kilpatrick, & Veronen, 1992).

---

<sup>4</sup> Symptoms are used in the context of PTSD as these function as diagnostic criteria.

Since the 1980s, the PTSD framework has often been used to summarise outcomes of CSA (Briere, 2004b; Van der Kolk, McFarlane, & Weisaeth, 2007; Wolfe, Gentile, & Wolfe, 1989). Yet, PTSD as a core-symptom theory discounted the fact that not everyone with history of CSA will develop some or all of the defining symptoms of (chronic) PTSD. Epidemiological studies estimate that 35% of those with a history of CSA are diagnosed with PTSD compared to 55% of adults who experienced sexual assault/rape (Kessler et al., 1995). PTSD may therefore qualify as a model explaining the outcome of adverse life events, with PTSD symptoms forming a general reaction to high levels of distress. While PTSD was useful as one of the first coherent conceptual frameworks attempting to explain dynamics following CSA, Finkelhor (1990) cautioned that PTSD as a conceptualisation of CSA sequelae can result in a narrow and misplaced focus on affect while neglecting cognitive distortions. He argued that “to think of victims of sexual abuse as primarily suffering from PTSD will lead us to miss some of its most serious effects” (Finkelhor, 1990, p. 329; Kendall-Tackett et al., 1993).

*Sexual dysfunctions.* According to the DSM-IV-TR, sexual disorders or dysfunctions are an impairment of sexual functioning without medical cause (American Psychiatric Association, 2000). For those with a history of CSA disruptions to sexual functioning arousal or orgasm difficulties, painful intercourse, sexual aversion or exaggerated sexual response have been reported (DiLillo, 2001; Jackson et al., 1990; Leonard & Follette, 2002; Najman, Dunne, Purdie, Boyle, & Coxeter, 2005; Rumstein-McKean & Hunsley, 2001). However, perceptions of what is considered a “normal” sexual response vary widely. It is left to clinicians’ judgment to determine what frequency or level of intensity will be classified as a “disorder”. As sexuality is likely to be perceived as the most apparent part of one’s life affected by an experience of CSA, these beliefs may influence clinical decision-making by attributing sexual disorders to an experience of CSA.

Compared to adults in non-clinical samples, those who seek help for mental health difficulties reported more sexual dysfunction when both groups have had a history of CSA (Tsai, Feldman-Summers, & Edgar, 1979). Negative self-perceptions in regards to

sexuality (shame, guilt, self-blame) may therefore play a mediating role in the relationship between CSA-sexual dysfunctions (Gold, 1986; Meston et al., 2006). In addition, a range of other abuse-related variables have been studied to impact on sexual functioning after CSA, such as incest, penetration, frequency, or duration of CSA (Brunngraber, 1986; Tsai et al., 1979). However, while influential, none of these variables resulted in a consistent pathway in which sexual abuse, occurring under a certain set of circumstances, lead to a specific impairment of sexuality. Other studies have either found a small or no significant relationship between history of CSA and sexual adjustment in females and males (Bartoi & Kinder, 1998; Greenwald, Leitenberg, Cado, & Tarran, 1990; Meston, Heiman, & Trapnell, 1999; Sarwer, Crawford, & Durlak, 1997), for example, when controlling for parental supportiveness (Fromuth, 1986)

Overall, findings of the most ‘apparent’ effect of sexual abuse need to be considered with caution. The lack of standardised definitions of what constitutes CSA and sexual dysfunction and differing assessment methods make it difficult to draw inferences regarding prevalences and functional relationships (Leonard & Follette, 2002; Rind & Tromovitch, 2007).

*High-risk sexual behaviour.* A broad range of high-risk sexual behaviours have been demonstrated in females and males with a history of CSA. Sexualised behaviour included early-onset of sexual contact and intercourse, frequent sexual activity, sex trading, promiscuity, failure to use contraceptives and protection against sexually transmittable diseases including human immunodeficiency virus, and greater risk of engaging in commercialized sex (Arriola, Loudon, Doldren, & Fortenberry, 2005; Fergusson, Horwood, & Lynskey, 1997; Senn, Carey, & Venable, in press; Senn, Carey, Venable, Coury-Doniger, & Urban, 2006; Widom & Kuhns, 1996) Difficulties are associated with the definition of “risky” sexual behaviour. For example, criteria of what constitutes promiscuity vary and are considered against a perception of “normal” sexual behaviour constructed by society. How many non-abused individuals in the general population

engage in frequent sex with changing partners? And to what extent is such behaviour linked to maladaptive functioning?

Fanslow and colleagues (2007) found that New Zealand women with a history of CSA were significantly more likely to engage in sexual intercourse before the age of 15 years (24.8% compared to 5.6%;  $p < .0001$ ). They were also more likely to describe this event as forced compared to those with no such history who rarely described their first intercourse as unwanted (16.6% compared to 2%;  $p < .0001$ ). However, it should be noted that the first intercourse could have been the event of unwanted contact described as CSA. Interestingly, while some studies found an earlier onset of pregnancy for women with history of CSA (Zierler et al., 1991), when research designs control for social and family background, only the most severe forms of CSA were associated with early pregnancy (Mullen, Martin, Anderson, Romans, & Herbison, 1994) or no relationship remained (Herman-Giddens et al., 1998; Widom & Kuhns, 1996). Rather than CSA per se, negative self-perceptions, including lacking self-esteem and lacking assertiveness in interpersonal relationships and sexual situations, may avert adults from feeling the right to say no to unwanted sexual contact or insist on the use of condoms to protect themselves from pregnancy and sexually transmitted diseases.

Similar to other research reviewed in this chapter, not all studies revealed that adults who have experienced CSA also engage in sexually risk-taking behaviours. In fact, associations can be seen between sexualised behaviours and a range of experiences, for example, physical abuse by romantic partner (Littleton, Breitkopf, & Berenson, 2007). Such findings emphasise that engaging in unsafe sexual activity can result from a variety of life experiences. Hence, although sexual behaviour is likely to be perceived as one of the areas most obviously affected by CSA, no causal links are found between the experience of sexual abuse and later sexual behaviour (Senn et al., in press).

*Interpersonal relationships.* CSA has been often linked to general difficulties in adult interpersonal relationships such as social adjustment (DiLillo, 2001), parenting difficulties

(DiLillo & Damashek, 2003; Wright, Fopma-Loy, & Fischer, 2005), attachment issues (Alexander, 1992), and elevated rates of divorce and separation (Mullen et al., 1994; Mullen, Romans-Clarkson, Walton, & Herbison, 1988). Functional, high quality relationships, however, have been associated with psychological well-being in adulthood after CSA (Collishaw et al., 2007).

Although females with a history of CSA describe their relationships as controlling and low-caring, the role of negative self-perceptions, shame, and low self-worth may lead to a minimised expectation of others' emotional responsiveness. Negative perceptions of the self may also explain their fear, suspiciousness, dissatisfaction, and hostility towards others, and add to the difficulties in establishing and maintaining secure relationships (DiLillo, 2001; Rumstein-McKean & Hunsley, 2001). Interestingly, males appeared to have fewer complications in forming relationships but then struggle to remain authentic; in fact, they perceive to be exploited in relationships due to a lack of their own assertiveness (Whiffen & MacIntosh, 2005). Studying the impact of negative self-schemata may shed some light on adults' interpersonal challenges.

*Intrapersonal difficulties.* When reading through the literature, I noticed that research primarily focussed on studying effects with broad or diagnostic labels, rather than using small, single units of behaviours to understand the sequelae. Shame, guilt, and self-blame are good examples of this trend. While often subsumed by a broader term, such as intrapersonal difficulties or depression, only little empirical research has enquired about their specific relevance to functioning following sexual abuse (Feiring & Cleland, 2007; Feiring & Taska, 2005; Whiffen & MacIntosh, 2005). As shame, guilt, and negative attribution styles are linked to maladjustment, they are explored as individual, distinct effects of CSA in the present research.

*Somatisation* is defined as “the expression of emotional discomfort and psychosocial stress in the language of bodily symptoms” (Fry, 1993, p. 89). Even after controlling for family environment, research has highlighted that women who experienced CSA



demonstrate higher bodily preoccupation and increased levels of somatisation compared to non-abused women (Nash, Hulseley, Sexton, Harralson, & Lambert, 1993a). Medical problems found in adults with history of CSA in Aotearoa/New Zealand and overseas included chronic fatigue, bladder problems, headaches, pelvic and abdominal pain, painful intercourse, breast diseases, yeast infection, asthma, complicated pregnancies, irritable bowel syndrome, chronic pain, and non-epileptic seizures (Brown, Berenson, & Cohen, 2005; Leserman, Li, Drossman, & Hu, 1998; Romans, Belaise, Martin, Morris, & Raffi, 2002; Ross, 2005; Sharpe & Faye, 2006). Despite the presence of medical complaints, it needs to be emphasised that such a vast range of physiological manifestations can be derived from an array of sources, hence they are extremely difficult to trace back to an incident of CSA.

*Personality disorders.* Borderline personality disorder (BPD) is characterised by a negative sense of self, inability to engage and maintain relationships, and the tendency to be needy, clingy, helpless, and display inconsistent mood (American Psychiatric Association, 2000). The neediness is often contrasted by an extreme fear of abandonment in which individuals are also likely to push people away to avoid rejection. To regain attention, people with BPD are then at risk of engaging in self-harming behaviours. This dichotomy often leads to difficulties in establishing and maintaining functional relationships. Most of BPD diagnostic criteria are also individually related to CSA resulting in a rate as high as 70% of adults diagnosed with BPD who also report CSA (Herman, Perry, & Van der Kolk, 1989; Ogata et al., 1990). However, the excessive diagnosis of BPD in adults with a history of CSA has been criticised as not helpful especially when the context and behavioural dynamics that underlie such a diagnosis are not further evaluated (Berliner & Elliott, 2002). Again, this explains difficulties using broad, diagnostic labels in cases where insufficient attention is given to the individual behaviours that comprise a person's maladaptive functioning.

In addition, a variety of other variables are commonly found in adults who experience abuse and have been diagnosed with a personality disorder. For example, females who

experienced CSA and BPD are often diagnosed with eating disorders (Waller, 1993; Wonderlich & Swift, 1990). Moreover, a BPD diagnosis following CSA was also often characterised by severe abuse circumstances such as penetration or chronic CSA (Herman et al., 1989; Ogata et al., 1990). Hence, a high comorbidity with other disorders and abuse-related confounds make it difficult to conclude that personality disorders are a result of CSA.

*Summary.* While research highlights effects that are more commonly found in CSA than non-abused samples, the range of abuse-related and unrelated variables and comorbid difficulties, make it infeasible to establish causal links between CSA and any specific sequel. Indeed, Runtz and Schallow (1997) stated that

*studies basing their conclusions regarding the 'effects' of child abuse simply on correlations between childhood experiences and symptoms measured in adulthood may be oversimplifying this apparent relationship by not taking into account other important variables that might influence later adjustment (p. 212).*

Sexual abuse, especially as an experience in childhood, is an event embedded amongst a range of other life experiences (Wright et al., 2005). Even when research controlled for a range of known mediating and moderating variables, little consistencies in symptomatic pathways were found. Futa, Nash, Hansen, and Garbin (2003, p. 227) state that

*the effects of abuse uniquely manifest themselves in each individual, and the situations surrounding the abuse are different for each individual. Therefore, there is no set of symptoms that uniquely define the profile of a sexually abused person.*

Despite a review of the literature revealing no direct effects or core syndrome consistently follow CSA, ACC Sensitive Claims require evidence of a mental injury “caused” by CSA (Du Plessis, 2007, p. 7). Sexual abuse has no pathognomonic signs. Effects are likely to be caused by a chain of environmental, social, and biological reaction rather than outline a

specific link to CSA. Nevertheless, such results do not minimise the adversity of CSA. It rather emphasises that sexual abuse has an individual impact on each person and does not always lead to an outcome of a diagnosis or disorder (Putnam, 2003). The causality of an effect is not a necessary criterion to imply the adversity of an event. The level of functioning after an experience of sexual abuse is determined by a range of person and situational variables and other negative and positive life experiences. Moreover, how well a person can cope with the negative affect and distress likely to follow CSA depends on the behavioural and psychological efforts employed to manage or minimise the negative affect. Such coping efforts are reviewed in the next section.

### ***Coping with CSA***

Historically, coping emerged in the *Zeitgeist* of the cognitive revolution and became established as an independent field of psychology during the 1970s and 1980s (Folkman & Tedlie Moskowitz, 2004). Lazarus and Folkman (1984) introduced coping as “constantly changing cognitive and behavioural efforts to manage specific external and internal demands that are appraised as taxing and exceeding the resources of the person” (p. 141). Theoretically, a range of coping nomenclatures were proposed. Folkman and Lazarus distinguished between *emotion-focused strategies* (to ameliorate the emotion associated with problem) and *active problem-focussed strategies* (to address the problem causing the emotional distress). As they depend on the context, coping processes are not “inherently good or bad” (Folkman & Tedlie Moskowitz, 2004, p. 753). A successful utilisation of both emotional and active problem-focused coping would allow a gradual assimilation of the stressful event in manageable doses which has been related to well-being. The term “coping” is often used in the context of CSA to describe the behavioural and psychological efforts by an individual to master, minimise, or tolerate distress and negative affect subsequent to the abuse (Spaccarelli, 1994; Whiffen & MacIntosh, 2005). Coping in the present study is used to describe all behaviours that serve such a function, even if they are harmful in the longer term.

*Constructive versus maladaptive coping.* Coping can be considered *constructive* when efforts are (a) effective in relieving the person of experienced distress and (b) are associated with a decrease in psychopathology. With respect to sexual abuse, some constructive ways to adapt to unpleasant states of distress included social or family support, spirituality, positive reframing and self-perceptions, and the attribution of blame to the perpetrator (Banyard & Williams, 2007; Feiring & Cleland, 2007; Gall, 2006; Gold, 1986; Himelein & McElrath, 1996). All of these behaviours contribute to a positive self-perception following CSA and are associated with higher levels of functioning. It is estimated that around one third of those who experienced CSA do not exhibit mental health difficulties (Kendall-Tackett et al., 1993). Only a few reports highlight a possible asymptomatic outcome, most probably out of concern that such results could be misinterpreted as minimising the harm of CSA.

Behavioural, emotional, and cognitive coping efforts have been term *maladaptive* when they (a) successfully provide relief from the unpleasant states of distress but (b) are likely to negatively impact on functioning and increase psychopathology when used over an extended period of time (Brand & Alexander, 2003; Folkman & Tedlie Moskowitz, 2004; Futa et al., 2003; Whiffen & MacIntosh, 2005). The coping dynamics reviewed below are not unique to an experience of CSA. Indeed, most of these efforts can be understood as general strategies to cope with stress. Their chronic and indiscriminant use, however, is associated with an increase in psychopathology (Polusny & Follette, 1995). In fact, by the time individuals are referred to mental health services as a client, it is commonly noticed that these maladaptive “coping” behaviours can form a substantial part of the reported difficulty. Filipas and Ullman’s (2006) research showed that females with history of CSA who utilised maladaptive coping efforts, such as substance abuse, withdrawal, and sexual-acting out, were twice more likely to be exposed to another incident of sexual violence than sexually abused females who did not engage in such behaviour. Caution should be warranted when interpreting such results as unidirectional. With most studies retrospective in nature, it remains equivocal if negative coping increases the risk of revictimisation or

revictimisation increases the level of distress so that individuals engage in maladaptive coping.

The next section is intended to clarify why certain behaviours, emotions, and thinking styles which emerge subsequent to CSA can be conceptualised as means of coping with negative feelings and thoughts. As effects and maladaptive coping are both associated with negative outcomes, it is important to stress the point that coping is employed as a ‘tool’ which serves a particular purpose. Different ‘tools’ can fulfil the same function which implies that maladaptive coping can be replaced with a constructive means of coping. This in turn can improve individual functioning. In order for this process to be taking place, it is important to understand why people employ a coping strategy, or in other words, from which underlying effect or source of distress they seek relief from. This is specifically addressed in my first empirical study. In the following sections, a range of commonly reported maladaptive coping efforts are introduced. Only maladaptive coping strategies are reviewed as their explicit function will need to be understood in order to remove or replace them with constructive means of coping.

*Avoidance.* Different types of avoidant behaviour, including disengagement, emotional or cognitive suppression, self-isolation, and denial have been reported as a mean of coping after sexual abuse as it is thought to successfully relieve emotional distress and negative tension (Coffey et al., 1996; Hayes et al., 1996; Leitenberg, Greenwald, & Cado, 1992; Runtz & Schallow, 1997). Briere and Runtz (1991) explain that

*avoidant behaviour among victims of sexual abuse may be seen as attempts to cope with trauma and dysphoria induced by victimisation (...) (and) may represent a conscious or unconscious decision to be involved in seemingly dysfunctional and/or destructive behaviours rather than experiencing the considerable pain of abuse-specific awareness (p. 7).*

Specifically, denial, emotional suppression, and the withdrawal or isolation from social and intimate relationships are most commonly employed as means of coping with sexual abuse compared to other abuse and non-abused groups (Futa et al., 2003; Leitenberg et al., 1992). While avoidant coping can serve as an effective and constructive short-term coping mechanism, its indiscriminant and chronic use was related to poor psychological functioning (Brand & Alexander, 2003; Coffey et al., 1996; Leitenberg et al., 1992; Merrill et al., 2001) and additional experiences of sexual violence (Filipas & Ullman, 2006; Gibson & Leitenberg, 2001). Difficulties in terminology emerge in the literature as some research titles almost all types of coping behaviour as ‘avoidant’, such as substance abuse, because regardless of their actual physical expression they all serve the purpose of escaping the state of negative affect. However, broad labels summarising a range of diverse behaviour may oversimplify the complexity of coping mechanisms. This information is essential when trying to identify the specific protective mechanism they serve. Hence, throughout this thesis, avoidance is used in a literal sense to describe actual physical, emotional, or cognitive avoidance of stimuli.

*Dissociation and dissociative disorders.* Dissociation is understood as an individual’s disruption in consciousness, identity, memory, or perception (American Psychiatric Association, 2000). It has also been described as a “defense against the complete awareness of abuse-related thoughts, feelings, and behavior” (Berliner & Elliott, 2002, p. 63; Chu & Dill, 1990; Goodwin & Sachs, 1996). Research revealed that up to 90% of those adults diagnosed with dissociative identity disorder (DID) also report a history of CSA (Foote, Smolin, Kaplan, Legatt, & Lipschitz, 2006; Ross et al., 1991). Results, however, have to be viewed with caution due to the small numbers and the clinical nature of the samples. Dissociation can be used as a primary psychological defense providing a common and effective means to escape and block the negative tension after an adverse situation. Once an automatic process, this can inhibit a person’s engagement with reality. Nonetheless, some debate remains about the veracity of the disorder itself. It is therefore argued that studying the smallest units of dissociative characteristics (staring into space,

out of body experiences, temporarily losing sense of reality) and the circumstances under which they occur could provide valuable information about this behaviour as a means of coping before its automatic manifestation.

Finally, I would like to comment that although dissociative amnesia is associated with experiences of extreme adversity included in the nosological schemes, research is very contradictory about its relationship to CSA (McNally, 2003; Polusny & Follette, 1995). Questions surrounding the conscious or unconscious nature of this disorder led to a controversial debate about “False Memory Syndrome”, where the process of therapy supposedly ‘creates’ a memory of CSA. Such claims can be invalidating for the client and thus lead to an increase of negative effects. Moreover, they create a negative environment for adults who always remembered CSA but who engage and process new aspects of the event in the safe environment of therapy. Unless sophisticated methodological designs explore the function of amnesia as a defense mechanism to cope with the overwhelming experience of sexual trauma, such a debate is more harmful than contributory to our knowledge of CSA. Amnesia and recovered memory is therefore not studied in the present research.

*Eating disorders.* Research indicates that adults in CSA clinical and community samples are more often diagnosed with an eating disorder, in particular bulimia nervosa, than their non-abused peers (Dansky, Brewerton, Kilpatrick, & O’Neil, 1997; Smolak & Murnen, 2002; Wonderlich, Brewerton, Jolic, Dansky, & Abbott, 1997). The specific connection between an experience of CSA and eating difficulties as an outcome, however, remains equivocal as not all studies found eating disorders as more prevalent in sexual abuse samples than among non-abused controls (Pope & Hudson, 1992; Stice, 2002). It was rather shown that bodily dissatisfaction, negative self-representation and negative affect create a negative internal state from which bingeing, purging, or starving can provide relief (Preti, Incani, Camboni, Petretto, & Masala, 2006; Stice, 2002). Once such behaviours were effective in changing and escaping the unpleasant self-awareness, they are likely to be repetitively employed, hence becoming a risk for the manifestation of eating

disorders (Heatherton & Baumeister, 1991). Eating disorders are often described as a type of self-destructive behaviours similar to self-harm (Favaro, Ferrera, & Santonastaso, 2007; Van der Kolk, Perry, & Herman, 1991).

*Substance abuse.* The Christchurch Health and Development Study highlighted CSA as a factor predicting illicit use and dependency of drugs in Aotearoa/New Zealand (Boden, Fergusson, & Horwood, 2006). Substance abuse of alcohol, stimulants, sedatives, tranquilizers, and hallucinogens can serve as an escape from abuse-specific memories, images, or thoughts and their emotional responses. A review of the literature revealed that women who experienced CSA were nearly twice as likely to misuse substances compared to their non-abused peers (Simpson & Miller, 2002) and three times as likely as their non-abused twins (Kendler, Bulik, Silberg, Hetteima, Myers, & Prescott, 2000). Men with a history of CSA were also at a greater risk to engage in substance abuse behaviour than males in the general population.

Specifically, substance abuse has been described as a reinforced coping strategy to function as an immediate “self-medication”. This may explain its increased prevalence after incidences of sexual violence following which adults report highly disruptive mental health problems, such as intrusive thoughts and images in a diagnosis of PTSD (Saladin et al., 2003; Simpson & Miller, 2002). Smith, Davis, and Fricker-Elhai (2004) illustrated that women in a CSA college sample perceived illicit drug abuse, but not necessarily heavy drinking, as a less dangerous and more beneficial way of coping with CSA compared to non-abused females. While substance abuse was expected to provide an immediate way to master emotional distress, drug use as a primary means to escape and avoid unpleasant states will lead to an impairment of functioning in its own right and can result in poor risk recognition in potentially dangerous situations. Substance abuse for females in particular, was linked to unprotected sex and an increased risk for future unwanted sexual contact (Filipas & Ullman, 2006).



*Acting-out.* While only a small variability in the sequelae has been reported across gender, research has emphasised a difference in the way females and males deal with CSA-related distress. Explicitly, acting-out was to be more salient for males than females who in turn used internalising means of coping. Men were more likely to engage in physically or sexually aggressive behaviours as well as criminal activity, which was regarded as a reaction to the negative outcomes following an adverse event like CSA (Dhaliwal, Gauzas, Antonowicz, & Ross, 1996; Finkelhor, 1990; Romano & De Luca, 2001; Spataro, Mullen, Burgess, Wells, & Moss, 2004).

More recently, sexual offending as a harmful but effective “coping” strategy became the focus of research (Cortoni & Marshall, 2001). A comparison of child molesters, rapists, and non-sexual offenders revealed a significantly higher use of sex as a means to manage stressful situations among male sexual offenders. Moreover, situations of negative emotions often preceded the act of sexual aggression. For example, the use of sexual deviant fantasies was markedly increased when aggressors previously experienced a situation of conflict or loneliness (McKibben, Proulx, & Lusignan, 1994; Proulx, McKibben, & Lusignan, 1996). In contrast to men, women are less likely to engage in sexually harmful behaviours with children after they have experienced CSA themselves (Briggs, 1995). To which extent acting out, and sexual offending in particular, can be explained within the coping framework remains contentious. However, consistent with the employed definition of maladaptive coping, it is reasonable to consider physical and sexual aggression as a strategy to alleviate unpleasant states of negative emotions and distress.

*Sexual risk-taking.* While sexualised behaviour was earlier discussed as an effect of CSA, sexual risk-taking behaviours have also been argued to function as a means of defending against negative internal states. Hence was found even in college samples considered “high functioning” including earlier onset of sexual intercourse, more sexual partners, and sex trading (Senn et al., in press). Smith and colleagues (2004) found that women with a history of CSA associated great benefits and minimal risk with their

engagement in risky sexual behaviours suggesting that this may serve a negatively reinforced coping strategy. Women who experienced CSA have reported that sexual activity, as long as it is initiated by them, can provide a sense of control and power to compensate for the lack of such during the abuse (Rāanga Whatumanawa Research Project, in press-a). However, as frequent and indiscriminate sexual activity was also often accompanied by substance abuse, for example, to avoid intrusive thoughts and memories related to CSA, it can leave the person vulnerable to impaired judgment in terms of safe sex and future sexual violence (Filipas & Ullman, 2006; Gold, Sinclair, & Balge, 1999).

*Self-harm/mutilation.* Self-mutilation is defined as “deliberate, non-life-threatening, self-effected bodily harm or disfigurement of a socially unacceptable nature” (Walsh & Rosen, 1988, p. 10). Injurious behaviour has been described as a self-destructive strategy that nevertheless allowed females and males with a history of CSA to re-gain a sense of control over the body and reality. Van der Kolk and colleagues (1991) stated that “many patients report feeling numb and ‘dead’ prior to harming themselves. They often claim not to experience pain during self-injury and report a sense of relief afterwards” (p. 1665). This interplay of self-destruction and relief explains why harmful behaviour can become manifested in a persons’ behavioural repertoire.

As an alternative explanation, self-injury was seen as a reaction to a negative body image and dysfunctional self-representation following abuse (Putnam, 1990). Similar to the bingeing and purging in eating disorders, bodily self-harm like cutting, burning, scratching, or pulling or plucking skin or hair, was reported as a modulation or relief of negative affect. Interestingly, self-injury has been described as a “fundamentally adaptive and life-preserving coping mechanism” which assists individuals to deal with overwhelming affect and intense arousal (Connors, 1996, p. 199). It is to be differentiated from suicidal attempts as the self-injury aims at managing internal and external stress in order to avoid suicide.

*Suicidal behaviour.* While suicidal ideation and attempts are represented to a great extent in different samples of adults with a history of CSA, it was also mediated by

psychopathology and psychiatric diagnoses (Brezo et al., 2007; Molnar, Berkman, & Buka, 2001). In fact, in a New Zealand longitudinal study, psychiatric illness, in particular depression and anxiety disorders, and adverse life events other than CSA were the strongest predictor of suicidal behaviour (Fergusson, Woodward, & Horwood, 2000). It therefore suggested that suicidal behaviour forms a reaction to a general state of adversity or distress as well as a response to mental health problems. Sexual abuse forms a non-specific risk factor for engaging in suicidal behaviour, but which nevertheless needs close assessment and monitoring during the course of treatment. Suicidal ideation and attempts appear to form the final egress to achieve relief from the adversity of certain life circumstances.

*Summary.* While coping is still frequently intermingled with other outcomes following CSA, its underlying function to relieve or master specific negative affect and distress emphasises the need for an individually based assessment. Runtz and Schallow (1997) argue that

*how one copes with childhood trauma as an adult may be more relevant to adjustment than the actual extent of maltreatment experienced. Therefore, coping strategies and social support may be just two of the many possible factors that differentiate between those maltreated subjects who are relatively healthy and those who continue to show evidence of their struggle with the after-effects of child maltreatment (p. 223).*

The acknowledgment of the complex interplay of effects and coping after CSA is an important step to improve our understanding on the functional dynamics of seemingly disconnected emotion, behaviour, and cognition displayed after sexual abuse. Whiffen and MacIntosh (2005) note that those who experienced CSA may be “caught in a negative feedback loop in which abuse leads to feelings of emotional distress that are coped with in ways that perpetuate and extend emotional problems” (p. 34). The assessment of coping and its purpose is therefore of particular relevance for treatment. Once the function

underlying maladaptive coping is recognised, constructive means of coping which serve the same protective mechanisms but which are less harmful can be implemented. Such processes can ensure the safety of client when engaging in distressing materials and memories while improving their quality of functioning (Rāranga Whatumanawa Research Project, in press-a, in press-b).

### **Concluding themes**

I would like to close this literature review with an overall summary of the major themes derived in the order of research reviewed.

1. No causal links between CSA and any particular effect or disorder can be drawn from empirical research.
2. Causal perceptions, however, appear to be carried by media, lay persons, and professionals.
3. Perceptions can guide behaviour and affect clinical decision-making.
4. Negative self-perceptions are linked to aspects of maladaptive functioning.
5. Coping is a non-specific outcome of CSA generally used to relieve or alleviate unpleasant internal states. Coping therefore serves a protective function.
6. Coping can be constructive or maladaptive in nature, but regardless of their long-term outcomes, will provide effective relief in the moment they are employed.
7. Chronic and indiscriminant use of coping efforts contributes to maladjustment.

After over 30 years of research, do we really know what the consequences of sexual abuse are? If not, could this be partially explained by the fact that there are pre-existing perceptions of human functioning after abuse that do not match the reported effects of trauma? While research clearly does not identify any causal relationships, there nevertheless appear to be opinions and perceptions – in society, profession, and in research - about the damage CSA causes. Hence, the question of CSA outcomes cannot be answered until there is a lay and professional understanding of what is considered to be an

outcome of CSA, how to conceptualise it, and how to deal with fundamental differences between effects in relation to coping attempts. The goal of the present doctoral research was to address the role of perceptions of CSA sequelae by using specialised statistical models which allow the mapping and profiling of the construct of CSA outcomes as perceived by those with no knowledge of abuse, those who are committed to working with sexual abuse, and those with a history of sexual abuse.

## CHAPTER THREE

---

### Study One

#### **Inter-relationships of effects and coping following child sexual abuse: Introduction of a profiling approach**

This first study introduces the empirical development of a set of CSA consequences which were studied for emerging patterns and effect-coping relationships. Results are thought to provide information about the underlying processes of maladjustment commonly experienced after CSA. Of particular interest is the purpose or function that a maladaptive coping strategy serves among adults with a history of CSA. It is thought that the profiling technique using response relationships will assist therapists to identify sequelae patterns and safely replace harmful coping strategies without leaving clients exposed to their underlying emotional distress (Evans, 1993).

CSA is acknowledged to be a “complex life experience, not a disorder or a diagnosis” (Putnam, 2003, p. 269). As introduced in the previous chapter, a seemingly limitless array of emotional, behavioural, social, cognitive, and physical effects in adulthood makes it difficult to trace the pathways following CSA. Outcomes are known to vary depending on a range of abuse-related and abuse-unrelated variables and type of coping efforts (Beitchman et al., 1992; Whiffen & MacIntosh, 2005). In the present study, *effects* are outcomes more directly attributable to the abuse event, whereas *coping* is defined as a strategy to reduce negative tension and emotional distress. *Functioning* or *sequelae*, as overall terms, refer to both direct effects and secondary coping, and emphasize the need to evaluate their functional interrelationship. Effect-coping relationships can be illustrated using a profiling approach.

Very few research studies have attempted to profile the long-term effects of sexual abuse and none have yielded a reliable effect pattern of CSA (Elhai, Flitter, Gold, & Sellers,

2001; Follette, Naugle, & Follette, 1997). Mainly using the Minnesota Multiphasic Personality Inventory-2 (MMPI-2), researchers' primary outcome was that no profile could be identified as specific or causal to CSA as "each cluster was associated with appreciably different, though certainly not wholly unique, symptoms of psychological distress" (Follette et al., 1997, p. 863). The few consistencies in CSA sequelae that were found, demonstrated elevated rates of depression, somatic concerns, and interpersonal problems, which – as shown in the previous chapter -are also likely to follow life events other than CSA. The overlap in outcome across the profiling studies was also limited to the *pattern* (presence or absence of clinical features) while the *elevations* or intensity of experienced effects varied widely (Elhai et al., 2001).

It can be asked what accounts for this variable, non-specific outcome by previous profiling research. As introduced in Chapter Two, the long-term outcomes of sexual abuse are thought to be influenced by abuse-related and unrelated variables, as well as the available means of coping. Abuse-related variables have been subjected to study but have failed to have a distinct impact on sexual abuse profiles (Carlin & Ward, 1992). Even family functioning, previously emphasised as a strong contributor or even alternative explanation for psychopathology following CSA, was not found to vary across the profiles (Nash et al., 1993a; Rind, Tromovitch, & Bauserman, 1998). Yet, none of the previous studies specifically investigated whether consistencies in outcomes may depend on effect-coping interrelationships. The present study therefore explores if consistencies in CSA outcomes emerge when specific effects and their accompanied coping behaviours are profiled concurrently.

The search for effect-coping regularities originated from the idea that "although the diverse outcomes observed in clinical samples of sexual abuse survivors (e.g., dissociation, substance abuse, posttraumatic stress disorder, high-risk sexual behaviour, self-mutilation) are quite variant in topography, they may actually be relatively consistent in function" (Hayes et al., 1996, p. 1162). Once consistent interrelationships of effects and coping efforts are highlighted, these can provide some insights into the purpose or function that

the displayed coping behaviour may serve. Reasons why people need to cope, or in other words, from what effects they seek relief from, have not yet been explicitly studied. General “poor” coping abilities, however, were noted for almost all of the recovered MMPI-2 profiles in past research, but due to their broad clinical labels, no further details were provided (Elhai et al., 2001; Follette et al., 1997). Knowing why a person has the need to cope, or which negative state the client seeks relief from, can be valuable for tailoring treatment. Maladaptive coping can be safely replaced with constructive means of coping as long as it provides the same protective function of relieving the person of their negative affect. The new, constructive coping strategy therefore protects the individual from the same source of distress that the previous maladaptive efforts did, but without adding to the person’s psychopathology in the longer term.

As a preliminary step to such an investigation, a new reporting device to summarise CSA effects and coping characteristics was developed due to the limited number of standardised instruments validated for the Aotearoa/New Zealand context (Rāanga Whatumanawa Research Project, in press-a, in press-b). Common assessment measures used to portray the impact of CSA have also been criticised as too specific (PTSD) or too global (general health) (Briere & Elliott, 1993). None of the reviewed measures, however, collects comprehensive information on coping efforts parallel to assessing other psychopathology. The empirical development of an instrument to summarise and link a range of maladaptive effects and coping efforts was therefore a pre-requirement for the study of CSA sequelae in a profiling approach.

### **Derivation of RESA – “Reporting Effects of Sexual Abuse”**

First, I conducted an extensive review of the national and international literature on sexual abuse sequelae from which I generated a list of behavioural, emotional, cognitive, social, and physiological characteristics linked to CSA in adulthood. Moreover, I consulted a range of standardised sequelae measures such as the Trauma Symptom Inventory (Briere, Elliott, Harris, & Cotman, 1995), Brief Symptom Inventory (Derogatis & Melisaratos,



1983), Present State Examination (Wing, Cooper, & Sartorius, 1995); General Health Questionnaire (Goldberg & Hillier, 1979), Response to Childhood Incest Questionnaire (Edwards & Donaldson, 1989), Structured Interview for Disorders of Extreme Stress (Pelcovitz et al., 1997) and relevant coping scales, for example “How I deal with things” (Burt & Katz, 1988). The initial list based on the literature yielded over 350 items describing the various consequences of sexual abuse.

As part of the *Rāranga Whatumanawa* project work, I then conferred with over 150 Sensitive Claims practitioners in a number of focus groups and key information interviews across the South and North Island of Aotearoa/New Zealand. In a semi-structured interview, practitioners were asked to describe what they have seen to be the result of CSA. Professionals from a range of disciplines committed to working with CSA took part including psychologists, psychiatrists, counsellors, social workers, general practitioners, and doctors specialised in the care of sexual abuse (*DSAC* – Doctors for Sexual Abuse Care). Interviews were transcribed and coded for emerging themes describing CSA sequelae (*Rāranga Whatumanawa* Research Project, in press-a, in press-b). Interestingly, without specifically being asked about coping in relation to CSA, Sensitive Claims practitioners differentiated between behaviours used to relieve negative affect and distress and those effects more directly linked to sexual abuse. In addition to the practitioners’ focus groups, a data file analysis of archival ACC Sensitive Claims reports were reviewed to ensure that the most commonly diagnosed outcomes, and the language used by practitioners to describe consequence of CSA were captured. Overall, 125 anonymous ACC Sensitive Claims files were randomly selected from January 2003 until October 2004, from which a trained member of the Sensitive Claims unit extracted diagnoses and sequelae descriptions (Darrah, 2006). A national practitioner survey was also mailed out to 695 Sensitive Claim practitioners asking: “What are the most critical consequences affecting individuals who have been sexually abused?” Responses 166 practitioners who returned the questionnaire (response rate = 24%) were considered for the development of items summarising sexual abuse sequelae (*Rāranga Whatumanawa* Research Project, in press-a).

A list of the sequelae highlighted in the focus groups, interviews, data files, and national survey was then matched with the 350 statements retrieved from the previous review of the literature. Using an action-research approach and several iterative procedures, I then reduced the number of items to the final 100 statements forming RESA – *Reporting Effects of Sexual Abuse* (Appendix A). RESA consists of approximately equal parts of CSA effects and coping efforts. Items' classification as an "effect" or "coping" derived from the verbal and written reports of New Zealand practitioners during the course of Rāanga Whatumanawa project as well as the recent international research reports reviewed in Chapter Two. During the process of selecting the items, all statements were reconsidered by an adult with a history of CSA representing the voice of the Sensitive Claimants. Items were also reviewed for applicability and cultural sensitivity by a number of cultural advisors of the Rāanga Whatumanawa team (Rāanga Whatumanawa Research Project, in press-a, in press-b).

One of the main emphases in the development of RESA was the use of language. All items were written in lay, non-technical language describing the smallest units of behaviour, thoughts, or emotions rather than using broad mental health terms or psychiatric labels. An example of this process was that people who experienced CSA may have been described as 'anxious'. The items were then written to describe such feelings in simple, unambiguous, non-psychiatric form and tailored to specific situations such as "Frightened to be alone" or "Feeling unsafe at home". By adjusting the language of the items, I intended to make RESA a non-threatening instrument for clients and also suitable for practitioners from a range of disciplines. While RESA is not a diagnostic instrument, it is intended to link the often diverse and disconnected sets of behaviours, emotions, and thoughts in order to understand a person's individual level of functioning and their employed means of coping.

As mentioned earlier, RESA items were classified as effects or coping efforts based on the practitioners verbal or written reports as well as the definition based on coping research reviewed in the previous chapter. Effects hypothesised to be more directly linked to CSA included safety issues (*Frightened to be alone*), apprehension, lack of control (*Not in*

*control of my own life*), intrusive thoughts (*Sudden popping up of unpleasant images*), guilt, shame, pessimism, trust issues (*Fear others will leave*), low self-esteem, and problems related to high or low arousal (*Lack of energy, On edge*) (Appendix A). As physiological complaints (*Chronic pain*) were not consistently described as a coping strategy, this item group was categorised as effect at this stage in the research. Items were identified as coping if they were behavioural, cognitive, or emotional efforts made in response to an encounter seen as harmful or distressing, hence were employed to gain relief from negative feelings (Merrill et al., 2001; Whiffen & MacIntosh, 2005). ‘Coping strategies’ included substance abuse (*Experiment with drugs*), impulsivity (*Hot-tempered*), risk-taking behaviour (*Drink and drive*), harm of self or others (*Enjoy the feeling of pain; Have urges to beat or harm someone*), eating difficulties (*Have eating binges*), dissociation (*Can view self from the outside*), obsessive-compulsive behaviour (*Check things at least twice*), avoidance (*Push uncomfortable thoughts out of my mind*) and a range of sexualised behaviours (*Use sex to gain attention*) (Appendix A).

In order to explore functioning following CSA a profiling approach was developed using two complementary but interdependent steps called “objective mapping” and “subjective profiling” (Bimler & Kirkland, 2001; Kirkland, Bimler, Drawneek, McKim, & Schoelmerich, 2004). In the first step, non-abused participants were asked to organise the RESA items according to their perceived similarity in meaning. As RESA comprises a broad range of behavioural, emotional, and cognitive characteristics, this integrative step was important to confirm participants’ analogous understanding of the items. It is only when RESA items are initially understood in the same way that the profiles of adults with history of CSA can be reliably interpreted in the second step. Idiographic profiles were compared for overlap in sequelae among CSA clients and contrasted with profiles yielded from non-traumatised participants to highlight CSA-specific effects and coping strategies. The next section describes the methodological approach underlying this integrative two-fold procedure.

## Development of a methodological approach

### *Objective mapping*

Mapping the items according to their perceived similarity is an ancillary but necessary objective to later reliably view patterns of sequelae emerging from self-reports of clients with history of CSA. Multidimensional scaling (*MDS*) describes a set of analyses that displays judgments on the similarity of stimuli (*items*) in a geometrical space (*map*) (Kruskal, 1964a, 1964b; Schiffman, Reynolds, & Young, 1981; Shepard, 1962a, 1962b). Each item is represented by a point in a multidimensional Euclidean space in which the similarity amongst a pair of stimuli is shown by close geographical proximity (or inversely related to distances), while two dissimilar points are represented in distant locations in the map. MDS is a parsimonious method to highlight item relationships in a low dimensional space to study their complex hidden structure (Kruskal & Wish, 1978). Revealing the space's underlying dimensions allows meaningful description of the data as well as discovering the respondent's mental representation of stimuli explaining how similarity judgments were initially generated. I employed replicated non-metric MDS based on the general Euclidean distance model (Young, 1985). Matrix algebra was used to determine the distances,  $d_{ij}$ , defined by the Euclidean model

$$d_{ij} = [(\mathbf{x}_i - \mathbf{x}_j)(\mathbf{x}_i - \mathbf{x}_j)']^{1/2},$$

where  $x_i$  is the  $i^{th}$  row of  $X$  containing the coordinates of the  $i^{th}$  point on all dimensions  $P$ . The value of  $P$  is determined by the researcher based on the minimisation of residuals as explained later in this chapter. In contrast to classical MDS, replicated MDS allows the analysis of several similarity matrices simultaneously (Young, 1985).

As RESA items in this study were generated from a variety of sources (focus groups, interviews, data file analysis), MDS was used to observe the items' relationships to one another (Which items are most similar?) in order to identify redundant items and ensure a sufficient coverage of the defined content domain of CSA sequelae. Moreover, mapping

RESA items also reveals participants' underlying dimensions of thinking about CSA (Why are items more similar? What criteria do they share?). Overall, MDS aims to find a set of coherent rules used by all participants to organise the content domain without asking them to explicitly articulate their decision-criteria (Coxon & Davies, 1982; Treat et al., 2002). If such consistent rules are found for RESA, this implies that the meaning of the items is understood in a similar manner, thus the subsequent rankings on CSA sequelae can be meaningfully compared and interpreted.

### ***The 'hotspot' model and subjective profiling***

Subsequent to the mapping, CSA participants then assigned values to the items in a specialised Q-sort ranking task to indicate the frequency and intensity (salience) of each effect and coping descriptor represented by RESA. As all ranking data inevitably contains noise, the previously derived spatial semantic map functions as a 'filter' (Bimler & Kirkland, 2001). It can be assumed that if X and Y are in close proximity in the similarity map (similar in meaning), then X and Y are expected to have similar Q-sort rankings (similar probability to occur). Found discrepancies can be translated as noise and filtered by 'smearing out' each item's rank value by averaging it with other items in its neighbourhood. This reduces the pattern of all responses to 'hubs' of the most salient (most and least endorsed) items, also termed *hotspots*. In other words, hotspots represent clusters of items that are chosen by participants as the most frequently and strongly experienced characteristics following CSA. Hotspots contain items that were similarly understood (objective mapping) and which share probabilities of occurrence (subjective profiling). This modelling process is not unlike other methods such as Preference Mapping (Carroll, 1972) and Concept Mapping (Trochim, 1989).

The specific location for each hotspot was determined by calculating the partial derivative of the Badness-of-fit (defined as the degree to which a combination of hotspot weights predict each participant's actual ranking of the items summed over all participants). Using a steepest-gradient descent, hotspots are moved in a certain direction along each of the  $P$

dimensions until the partial derivative of the Badness-of-fit can no longer be reduced, thus indicating the best fit of hotspot locations within the map (Bimler & Kirkland, 2001; Kirkland et al., 2004). Hotspots form the best approximation for all response patterns. Once fixed, the same location of each hotspot is used to summarise all data. Each individual's response pattern can be illustrated as a profile across the set of standardised summary scales (hotspots) using a spreadsheet. Profiles can be compared across all participants to highlight consistencies in effects and coping patterns.

To re-trace the steps from the organisation of the RESA items to the derivation of the profiles, first, all items are organised according to their directly perceived meaning. After a shared understanding of the items has been confirmed due to an overlap in their similarity structure (map), item groups with the greatest salience for those with a history of CSA can be highlighted (hotspots). These psychological hotspots, or meaningful hubs of RESA items, are used as standardised means to visually compare participants' responses on CSA sequelae (*profiles*). Resulting profiles allow a client's individual functioning to be compared to normative data in order to make idiographic but nomothetically informed decisions on what to set as target goals in treatment.

### **Study aims**

As the sequelae of CSA has been conceptualised as a mixture of effects and coping efforts, the present study evaluates the role of effect-coping relationships among adults with a history of CSA. In particular, a detailed investigation was conducted to search for consistent (a) effect patterns and (b) effect-coping patterns in order to provide (c) information about coping's functional role. Adults with a history of CSA were profiled based on their self-reported functioning prior to therapy and subsequently compared to report on general functioning by non-traumatised individuals. The aim was to search for consistent and specificity of effect patterns and effect-coping relationships that may improve the understanding of the function of specific coping behaviours.

## Method

### *Participants*

Participants in the first part of the study were 31 non-abused university student volunteers [lay persons] (17 females and 14 males,  $Mean_{age} = 25.3$  years,  $SD_{age} = 5.7$ ) and 30 professionals [experts] (21 females and 9 males,  $Mean_{age} = 43.8$  years,  $SD_{age} = 11.7$ ) working with those with a history of sexual abuse. The heterogeneous expert sample was representative of the variety of disciplines involved in Sensitive Claims counselling in Aotearoa/New Zealand: psychology, counselling, social work, and psychiatry. Therefore the two samples did not only embody a range of experienced-based knowledge on CSA sequelae [lay persons vs. expert] but also varied widely within the practitioner sample with respect to underlying theories and world views particular to their professional discipline.

The second task was completed by 113 volunteer adults who received Sensitive Claims counselling following their history of CSA [CSA clients<sup>5</sup>] (92 females, 20 males, and 1 transgender participant). Participants lived in both rural and urban regions throughout the North and South Islands of New Zealand. The number of men recruited for the study was tailored to the 10-15% prevalence rate of male CSA reported by research (Romano & De Luca, 2001). The client group was recruited through CSA support groups and therapists as part of the Rārangā Whatumanawa project to develop therapy guidelines for sexual abuse. To ensure safety, all clients had completed their treatment at least six months ago and reported retrospectively about their functioning. The control group [non-trauma] (17 females and 12 males) were invited to participate via poster announcements and email postings at the university. All non-trauma participants confirmed that they had never experienced or witnessed a situation that involved an “actual or threatened death or serious injury, or a threat to the physical integrity of self or others” and which was accompanied by feelings of “intense fear, helplessness, or horror” (American Psychiatric Association,

---

<sup>5</sup> The term ‘CSA client’ was chosen as research has emphasised differences in the level of functioning between adults who seek therapeutic support (clinical) and those who do not seek treatment (non-clinical or high-functioning). All participants with a history of CSA who volunteered for this research, had previously received Sensitive Claims counselling.

2000, pp. 427-428). It should be noted that the lay, non-abused participants used in the first part of the study were distinct from non-trauma control group as the latter reported no experiences of any type of adversity, not limited to an experience of CSA.

### ***Materials***

For the first part of the study, non-abused participants were given the complete 100-item RESA deck (Appendix A). All items were printed on a separate card (35 by 75mm). In the second part, clients with a history of CSA used a 51-item subset called RESA-S which was representative of the original RESA deck (Appendix B). The decision to reduce the number of items was based on ethical concerns. The smaller sub-deck was selected to avoid unnecessary and prolonged exposure of the client to emotional distress that may be elicited during the task.

### ***Procedure***

The objective mapping task was approved by Massey University Human Ethics committee for both lay and expert groups (HEC: 04/176). Approval for the subjective profiling task with adults with history of CSA was provided by Multi-Region Ethics Committee, New Zealand (MEC/05/03/036). The self-reporting task by the non-traumatised control group was evaluated by peer-review and classified to be of low-risk (Appendices C-I).

*Objective mapping.* Non-abused lay and professional expert participants were asked about their perception of RESA items' similarity or "belong-togetherness", based on their directly perceived meaning or 'face value'. A four-step sorting task called GOPA (Group, Opposite, Partition, Adding) was completed (Bimler & Kirkland, 2007; Hyde, Kirkland, Bimler, & Pechtel, 2005) (Appendix D). The GOPA task elicits judgments about conceptual semantic similarities and dissimilarities between items and larger groups of items without asking participants to articulate their criteria of similarity. After the common sorting task of grouping items by similarity, participants merged the newly formed groups, split each individual group again into smaller more homogenous clusters, and finally



contrasted the overall groups of items. These responses were converted into estimates of the dissimilarity between each pair of items, which were averaged across participants. Previous research has demonstrated the reliability of these estimates, by comparing them to alternative procedures for accessing a participant's internal representation (Kirkland et al., 2004). The GOPA procedure enables research to access non-abused lay and experts' latent perceptions of the relationship of CSA characteristics to explore possible differences in understanding of the RESA items. If their understanding of 'belong-togetherness' varies, caution has to be warranted when using these RESA items for profiling.

*Subjective profiling.* For the assessment of self-reported functioning, the 51-item sub-deck (RESA-S; Appendix B) was extracted from the 100 RESA items. MDS enables such a procedure because the similarity map of items derived from the first task indicated which items were redundant. Items representing the same content are shown by highly similar coordinates in the MDS solution. Items summarising effects and coping mechanisms were equally represented in the sub-deck. Overall, due to MDS methodology, the sub-deck can be conceptualised as being a representative sample of the psychological space of the 100-item version of RESA.

The card sorting task employed was an advanced Q-sort known as Method of Successive Sorts (MOSS) (Kirkland et al., 2004). It consisted of a two-step hierarchical ranking task, in which CSA clients arranged RESA-S items depending on how commonly they experienced the displayed effects and coping strategies. First, items were sorted into three piles (applies more, unsure, applies less). Participants then took the "applies more" pile and further separated it into "clearly seen" or "seen, but applies less". The "unsure" pile was then reconsidered for any possible changes before being discarded. The "applies less" pile was then split into "possibly seen" and "not seen at all" (Appendix G). While item piles may have unequal number of cards, a minimum of 10 cards must be placed in each of the final end piles. The non-trauma control group completed same task as CSA clients, but to avoid artificially inflating a level of psychopathology, they were not constrained by the minimum number of items in each task. Q-sorts ranking tasks are believed to lead to a

greater consideration by participants when assigning their values to the items than the traditional rating tasks using Likert scales (Kirkland et al., 2004). They also induce less anxiety than questionnaire-type rating tasks which have previously been described by CSA clients as “exam-like” (Rāanga Whatumanawa Research Project, in press-a).

### ***Analyses***

*Objective mapping.* Similarity and dissimilarity ratings across the set of stimuli, as collected in the GOPA task, are the chief input to replicated non-metric MDS algorithms. Results are shown in an Euclidean-space in which the empirically-derived structure of  $N$  stimuli is placed in a  $P$ -dimensional solution. Each stimulus has a location on each of the dimensions where the dimensionality  $P$  is determined by the goodness of fit, a balance between minimisation of stress and dimensionality (Kruskal & Wish, 1978).

Kruskal (1964a) proposed a measure of deviation between distances  $d_{ij}$  and the observed dissimilarities used to determine the poorness-of-fit or *stress* function. The index  $d^*_{ij}$  stands for the distances after monotonic transformation to bring them into the same ordinal relationships as the dissimilarities.

$$s_1 = \sqrt{\sum_{ij} (d_{ij} - d^*_{ij})^2 / \sum_{ij} d_{ij}^2}$$

The selection of appropriate dimensionality is also aided by a scree or elbow test. Here stress is plotted against dimensionality, revealing an elbow after a certain number of dimensions if stress values are not substantially reduced. Despite some criticism that the elbow test, similar to the scree test in factor analysis, overestimates the number of appropriate dimensions, it forms a common tool to assist the determination of  $P$  (Bijmolt & Wedel, 1999; Bimler & Kirkland, 2007). The question of coherence between these similarity frameworks across the lay and multidisciplinary group of experts is addressed using canonical correlations, cophenetic correlations, Procrustes distances, and split-half

analysis to confirm internal reliability. Canonical correlations select a pair of linear components from the two sets of data so that their correlation ( $R_c$ ) is maximised. Subsequently, additional extractions are conducted, in which each new linear combination is orthogonal to the previously one (providing correlations  $R_2, R_3, \dots, R_p$ ) (Harris, 2001). Wilks' lambda statistic tests the significance of each correlation highlighting the number of dimensions shared by the two data sets.

*Subjective profiling.* The main goal of subjective profiling is to highlight the most salient items within the similarity frame and utilise these as standardised points of comparison when adults report on functioning (profiles). In the MOSS task, similar to the traditional Q-sorting procedure, participants assign numerical values to each of the items depending on how well they describe functioning after CSA (Block, 1961). Using MDS analysis, this information is then integrated into the similarity map to determine the item clusters that are most salient for CSA clients. As earlier introduced, these hubs of meaningful items are also known as psychological hotspots, in which items in an immediate neighbourhood receive more similar values than distances in the map would predict (Bimler & Kirkland, 2001; Kirkland et al., 2004). Hotspots summarise the most salient or frequently co-occurring CSA characteristics, in the form of a weighted sum of the normalized values assigned by a MOSS report to statements in its neighborhood. A core meaning for each hotspot (and its scale) is abstracted from the RESA items with the highest weights, i.e., the greatest proximity in the Euclidean space. Hotspot locations are optimized using steepest-gradient descent to allow response patterns to be reconstructed as accurately as possible (Kirkland et al., 2004).

Individual MOSS reports using RESA-S can be presented as idiographic summaries across the set of standardised hotspots (profiles). For the CSA clients and the non-trauma group, profiles were developed by adjusting each response with a weighted spreadsheet. In order to view the fit of the self-report data to the earlier derived similarity frame, canonical and cophenetic correlations were employed. As an alternative to the MDS analysis, Principal component analysis (PCA) was used to determine a factorial solution of the CSA client's

self-report data. An overlap of the similarity and self-report data determined by MDS and PCA would support the use of the organisational RESA frame for further analysis.

Finally, two types of cluster analyses were conducted to identify and combine similar profiles within each sample. First, an agglomerative hierarchical clustering method was used for a preliminary determination of the number of clusters required for the most meaningful solution. Squared Euclidean distance served as a proximity measure in this method, while cluster formation utilised Ward's (1963) method. Examination of the agglomeration schedule and dendrograms for each of the sexual trauma and non-trauma groups then determined the optimal number of clusters which served as input for the subsequent *k*-means analysis (Hartigan, 1975). The latter procedure is a more precise method to assign cluster membership by maximising the differences between cluster centroids while minimising within cluster variance. Cluster analyses show the overlap in sequelae within each sample as well as the minimum number of profiles necessary to summarise the complete sample. Ward's algorithm and *k*-means cluster analysis have been shown to be of benefit when determining sub-profiles amongst samples of adults with a history of CSA (Elhai et al., 2001; Follette et al., 1997)

## **Results**

### ***Objective mapping***

Effects hypothesised to follow CSA in adulthood were organised and interrelated according to their perceived similarity by samples of lay and expert participants. First, MDS and scree tests applied to each of the lay and expert data separately revealed a three-dimensional solution for each of the two data sets. Across the lay and expert maps, all three axes were significantly correlated ( $R_1 = 0.953$ ,  $R_2 = 0.926$ ,  $R_3 = 0.829$ ,  $p < 0.0005$ ), according to Wilks' lambda test. Moreover, as the cophenetic correlation comparing the distances among RESA effects within the separate lay and expert solutions revealed a high resemblance ( $r = 0.95$ ), a combined lay/expert solution to show RESA internal organisation was justified.

Regarding the combined map, a comparison of stress indices for the two- (0.298), three- (0.208), four- (0.155), and five- (0.127) dimensional MDS solutions, highlighted three dimensions as optimal. When plotting stress against dimensionality, the change from two to three dimensions led to a substantial reduction in stress. As further decreases in stress were not as sizable when the number of dimensions increased, a three-dimensional solution was selected as optimal for the combined map of lay and expert similarity responses.

Internal consistency of the combined solution was evaluated using split-half analysis. Every second case was selected yielding a total of 60 lay/expert informants in each half-sample. When comparing the two split-half solutions, the correlation between corresponding pairs of inter-point distances was high ( $r = .82$ ) while the Procrustes distance (the sum of residual distances between the corresponding points) was low ( $g_t = 0.049$ ). It was concluded that lay and expert participants carry a highly coherent and stable perception of the similarity of CSA sequelae, with these items aligning along three latent dimensions which are identified as 1) *risk-taking/externalising to avoiding/internalising behaviour*, 2) *hyper aroused/anxious to self-blame/low self-esteem*, and 3) *withdrawal: sexuality to withdrawal: detachment*. These dimensional labels, which were chosen in consultation with over 20 multidisciplinary experts during the process of the Rāranga Whatumanawa research project, are an empirical summary of items clusters at the bipolar ends of the axes (see Figure 3).

While the first and third dimensions underlying RESA mainly summarise ways of coping, items along the second dimension can be described more as direct effects of CSA. A comprehensive list of items at all six dimensional poles used to label the dimensional axes is shown in Appendix J.

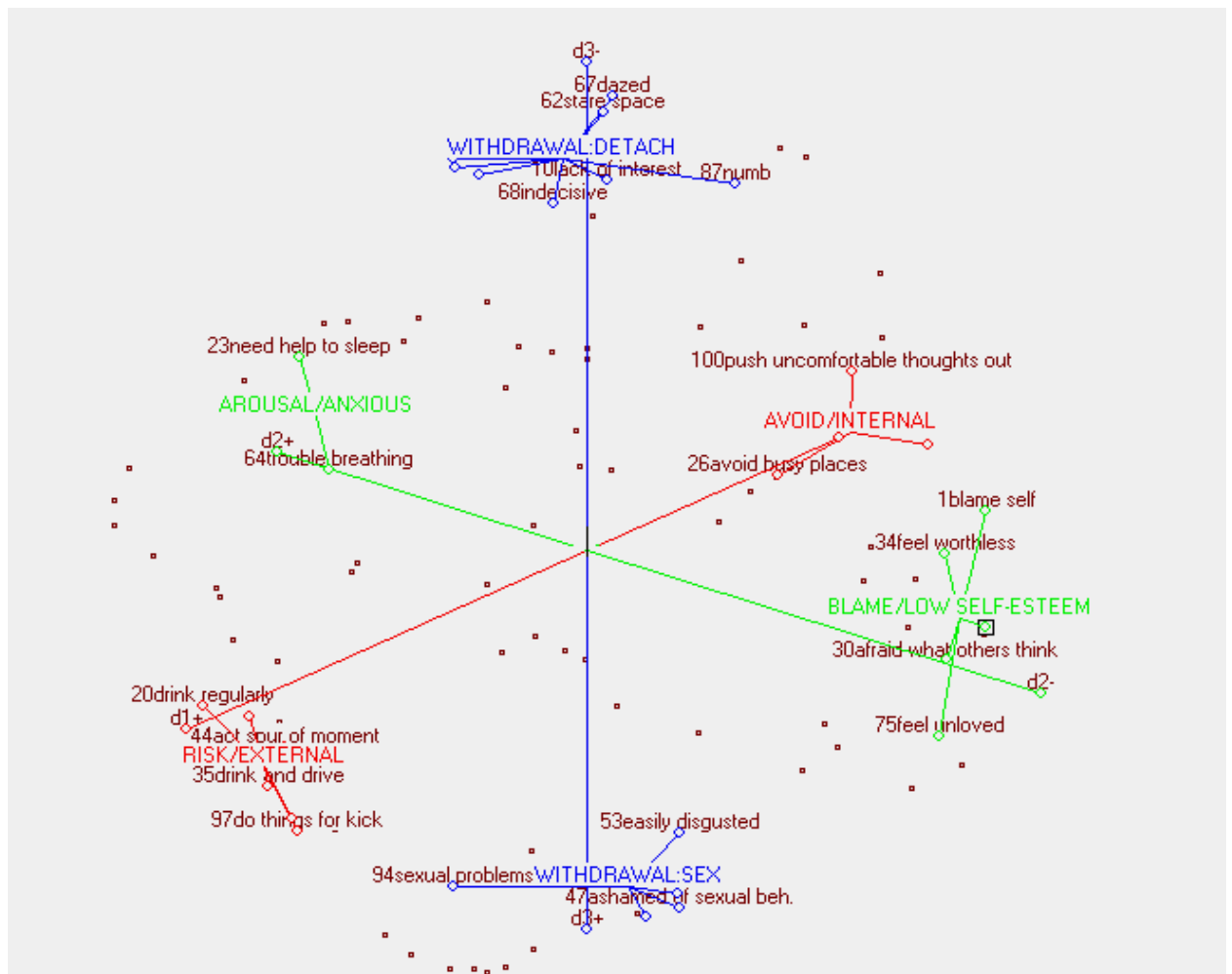


Figure 3. Combined map derived from expert and lay informants on the similarity of effects and coping strategies<sup>6</sup>.

Lay persons and experts differentiated between effects and coping strategies showing that in their internal representation of CSA sequelae, these two concepts are distinct. However, information on closely related CSA components is not limited to the highlighted clusters in Figure 3, but applies also to the non-labelled items distributed within the eight octants. Each item is located within the map by a spatial coordinate on each of the three dimensions, all contributing to its contextual understanding. Items at the extreme ends of a

<sup>6</sup> The Plot program used throughout this thesis is interface software for displaying 3D co-ordinates generated from MDS analyses (Drawneek, 2005).

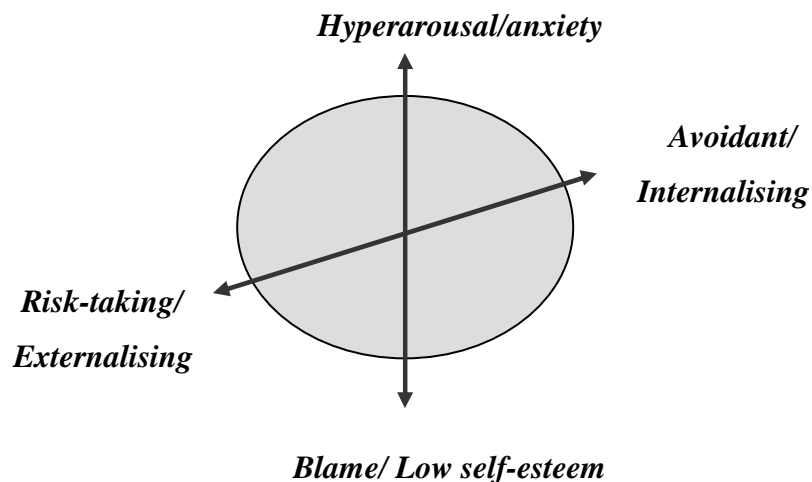
dimension can be understood as being the most representative of the construct summarised by that dimension. All three dimensions are crucial to understanding how CSA items are perceived, organised, and interrelated by lay persons and experts within a coherent framework. Hence a careful observation of this map provides preliminary information on each item's contextual position in terms of being a more direct CSA effect (dimension 2) or coping efforts (dimension 1 and 3) depending on their spatial 3D-coordinates. Results confirm the prior classification of effects and coping items in RESA (Appendix A).

Despite wide differences in their knowledge of CSA, both professionals and non-professionals showed a coherent and stable perception on the smallest units (items) of RESA and their interrelationships. This outcome implies that a combined solution, replicated across two independent sample groups, can serve as a stable paradigm for further analysis to integrate self-report data from CSA clients. Item statements selected for the development of RESA sufficiently covered the domain of CSA sequelae and did not appear to display any major voids. The recovered dimensions, as a reflection of participants' mental organisation of the item domain, highlighted that effects are understood as distinct from coping efforts by the lay as well as the expert sample.

### ***Subjective profiling***

A basic form of the internal map derived from similarity judgments was supported by the data from those with a history of CSA. Although the overlap of specific inter-item distances between the CSA clients' self-report MDS map and the MDS similarity map was only moderate ( $r = .404$ ,  $g_I = 0.14$ ), canonical correlation indicated that two of the three dimensions MDS were significant ( $R_c = 0.813$ ,  $R_2 = 0.677$ ,  $p < 0.0005$ ). While there were differences in how items were perceived to be similar in meaning and which items were reported to co-occur after abuse, the judgments for both of these tasks were generated using the same important aspects or criteria (dimensions).

In addition, PCA extracted a four-factor structure from the CSA client's self-report data, accounting for over 30% of the variance. Agreement between two different types of analyses (MDS vs. PCA) of client data was determined by visual item overlap. Items that exemplified the two poles of the three dimensions in the MDS map also loaded high on factors in the PCA solution. Two factors / dimensions were found to correspond between these methodological approaches, despite additional differences in sample (lay/expert vs. CSA client) and focus (similarity task vs. self-report). This replicated empirical two-dimensional RESA map, shown in Figure 4, forms the underlying framework for further discussion.



*Figure 4.* Basic two-dimensional RESA framework.

Within the RESA framework, nine regions of frequently co-occurring or most salient items formed the best approximation of response patterns (hotspots). Table 1 delineates the nine hotspots by listing the items most associated with them. Items at the top of each list lie in closest proximity to that cluster's core, hence contributed the most to the hotspot's interpretation. Items italicised in Table 1 represent these RESA items classified as efforts to cope rather than an effect of CSA. As earlier discussed in Chapter Two, this classification was based on the reports from Sensitive Claims practitioners and a review of the sexual abuse literature.



Table 1

*Commonly Reported Item Groups Showing Effects/Coping Strategies Reported by 113 Adults with a History of CSA*

Hotspot label	Hotspot items
<b>Avoidant</b>	<i>Avoid socialising or mixing with people, Enjoy being alone, Avoid certain places or activities, Avoid talking about the past, Trouble trusting others (e.g., friends, partner)</i>
<b>Anxious/fearful</b>	Frightened to be alone, On edge, Trouble breathing, Suddenly scared for no reason, Nightmares or bad dreams, Feeling unsafe
<b>Shame/low self-esteem</b>	Feel humiliated, Afraid of what other people think about me, Feel worthless, Lonely, Ashamed of self
<b>Pessimistic/depressed</b>	Bad things continue to happen, <i>Pessimistic about the future</i> , Feel worthless, <i>Thoughts about ending my own life</i> , Numb
<b>Sexual difficulties</b>	Sexual problems (e.g., cannot get aroused), <i>Sexually unsatisfied, Ashamed about my own sexual behaviour, Embarrassed if others talk about sex, Easily disgusted, Engage in sexual activity to make things go my way</i>
<b>Somatic complaints</b>	Irregular or severe menstrual periods, <i>Chronic pain (e.g. arms, lower back)</i> , Trouble breathing, Feeling unsafe, <i>Irregular eating habits (eat a lot and then nothing)</i>
<b>Arousal</b>	Trouble concentrating, Lack of energy, Easily frustrated, Indecisive, Trouble getting to sleep

<b>Pessimistic/self-harming</b>	<i>Thoughts about ending my own life, Lie without meaning to, Hurt myself on purpose (e.g. cutting, burning), Pessimistic about the future, Feel worthless, Bad things continue to happen</i>
<b>Impulsive/risk-taking</b>	<i>Drink regularly, Act on the spur of the moment, Drink and drive, Hot-tempered, Engage in unsafe activities (e.g. invite strangers into house, walk alone at night), Fantasies about hurting others</i>

---

*Note.* All coping efforts are italicised in this table.

Values assigned by clients to the each of the items in Table 1 were combined in weighted sums, yielding a score for each hotspot. Several hotspots were clearly recovered as representing a coping strategy. *Avoidance, sexual difficulties, self-harm, and impulsive/risk-taking behaviours* all contain RESA coping items with only one or two ambiguous (effect) items assigned to each hotspot. *Somatic complaints* and *pessimistic/depressed* both show an agglomeration of effect and coping items, hence are assumed to play a role in both processes. *Anxiety/fearfulness, shame/low self-esteem* and *arousal* all comprise RESA items of CSA effects. The hotspot analysis supports this study's previous results by lay persons and experts, in that sexual abuse sequelae is manifested separately as effects and coping processes. In order to simultaneously display participant's self-report on effect and coping efforts, their accumulated score on each hotspot is illustrated as a profile. Profiles are used to display patterns of effects and coping efforts to investigate consistent responses among those who reported a history of CSA.

In order to view consistencies within the sample of CSA clients, hierarchical clustering first determined the appropriate number of similar profiles in the data set of 113 CSA clients scoring across nine hotspots. Analysis and dendrogram suggested that all CSA profiles can be reduced to five coherent clusters of profiles ( $\chi^2(8) = 22.128, p < .005$ )

(Appendix K). Then to optimise the assignment of all CSA clients to these five clusters,  $k$ -means cluster analysis was applied with  $k=5$ .

The non-trauma control group data was collected using the same RESA items and procedure as well as hotspot and cluster analyses as the CSA client sample. Three subgroup profiles were selected to summarise all non-traumatised participants based on the Ward's method dendrogram (Appendix L). Using  $k=3$  for the subsequent  $k$ -means analysis, over 51% (N=15) of all non-trauma participants were assigned to one cluster. The remaining two non-trauma clusters each summarised approximately 24% of the non-trauma participants (N=7).

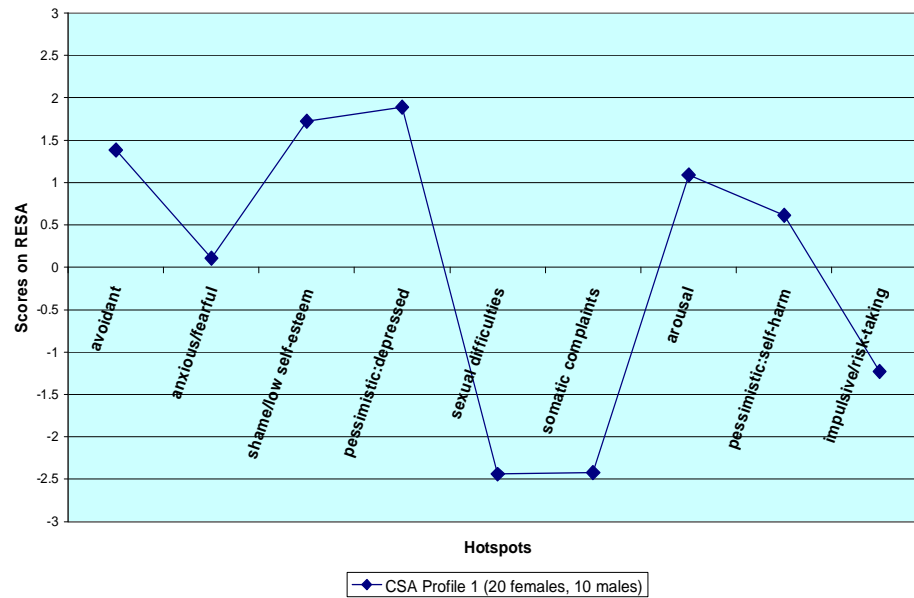
## **Results and discussion of profiles**

The trends in each profile are an aggregate of the values assigned to each RESA item by the CSA clients in the respective cluster, summarised across the nine hotspots. A high negative value on a single hotspot reflects the absence of that particular parameter, whereas an assigned value of zero demonstrates “unnoticed” rather than absent behaviour. Alternatively, profiles can be understood as an accumulation of effects and ways of coping to relieve underlying distress. This section investigates CSA and Non-trauma profiles with respect to *consistencies* and *specificity* of effect, coping, and effect-coping patterns to the experience of CSA.

### ***Functioning following CSA***

The following Figures 5, 6, and 7 show a detailed description of CSA clients' effect-coping responses presented in five CSA profiles which derived from cluster analyses. Profiles are discussed starting with the most commonly reported effect-coping response following CSA. Similar profiles are presented concurrently as they highlight important gender-specific responses. A figure overlapping all five CSA profiles will be presented subsequently. Finally, effect-coping response yielded from CSA clients are compared to profiles describing the level of functioning of adults without a history of trauma.

As the “primary” pattern, CSA Profile 1 was reported by 50% (N=10) of the male and 22% (N=20) of the female CSA clients in this study (see Figure 5). More than a quarter (27%) of all respondents with a history of abuse described their functioning according to CSA Profile 1. With standard deviations ranging from .77 to 1.36, small variability was demonstrated within the group of respondents across the hotspots’ mean scores.



*Figure 5.* CSA Profile 1 with the predominant effect-coping response from RESA reported by 27% of CSA clients.

CSA Profile 1 is characterised by high levels of depressed and ashamed behaviour, accompanied by low self-esteem and arousal difficulties (e.g., lack of energy, easily frustrated, indecisive, trouble sleeping). CSA clients reporting this effect pattern showed manifestations of avoidance and self-harm. Both have been highlighted as common means to seek relief from negative distress as described in the previous chapter. Externalised coping, such as impulsive or risk-taking behaviour, was absent in this profile. CSA clients reporting Profile 1 did not indicate any particular level (absence or presence) of anxiety. A lack of sexual and physiological complaints was reported by this group of CSA clients shown by negative values on RESA (Figure 5). It should be noted that half of the male CSA clients participating in this study described their functioning according to this profile.

Two other common effect-coping patterns were almost exclusively reported by female CSA clients. Profile 2 (25%, 27 females and 1 male;  $SD = .73-1.41$ ) and Profile 3 (16%, 18 females, 0 males,  $SD = .81-1.81$ ) were used by 49% ( $N=36$ ) of all females in the sample.

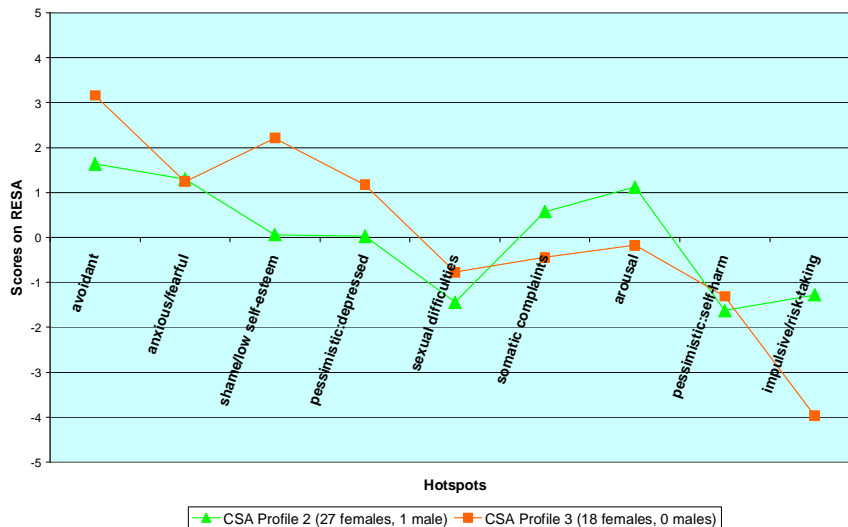


Figure 6. CSA Profiles 2 and 3 with their respective effect-coping responses from RESA reported by 41% of CSA clients.

As shown in Figure 6, both profiles are characterised by an elevated level of avoidance and show similar manifestation of anxiety. Moreover, Profiles 2 and 3 illustrate the absence of sexual difficulties, self-harm, and impulsive/risk-taking behaviour. Key differences, however, were also noted among these two CSA profiles. Females reporting CSA Profile 3 demonstrated twice as much presence of avoidant characteristics (score > 3) than females in CSA Profile 2. This variability could be due to a different underlying pattern of effects. For example, in Profile 3 the very high level of avoidance is accompanied by the highest overall presence of shame/low self-esteem (score > 2) and pessimism/depressed characteristics (score > 1) whereas the lower level of avoidance in Profile 2 are associated with no particular indication of shame/low self-esteem and pessimism/depressive characteristics. In contrast to Profile 3, Profile 2 highlights elevated levels of arousal (trouble sleeping or concentrating, easily frustrated, indecisive) and greater physiological

complaints (severe menstrual periods, trouble breathing, chronic pain, eating difficulties). The former may also be related to the use of avoidance in an attempt to seek relief from unpleasant states of arousal. Interestingly, the level of anxiety, often assumed to be related to the presence of avoidance, does not vary among two CSA profiles.

Overall, CSA Profiles 2 and 3 seem to represent a predominantly female effect-coping response, characterised by an increased presence of the avoidance of thoughts, activities, emotions, and memories and a moderate manifestation of anxiety. Experiences of shame, low self-esteem, and depression may vary among females with a history of CSA. Females describing their sequelae according to these profiles also revealed the smallest likelihood of engaging in impulsive and risk-taking behaviour such as substance abuse, aggression, or acting unsafely or means of self-harm (cutting, burning, suicidal ideation or attempts).

Finally, CSA Profiles 4 and 5 show a mixture of female and male respondents with a history of CSA. These two profiles were endorsed by 32% of the CSA clients' participating in this study (see Figure 7). Profile 4 represents 21% of responses consisting of 17 females, 6 males, and 1 transgender client ( $SD = .87-1.35$ ). Profile 5, on the other hand, only describes 12% (10 females and 3 males) of client's functioning as reported using RESA. Apart from representing the smallest number of CSA clients, Profile 5 also demonstrates larger variability ( $SD = .62$  to  $2.0$ ). As shown in Figure 7, a few similarities characterise CSA Profiles 4 and 5: absence of anxiety/fearfulness, and somatic complaints and the elevated levels of pessimism/depression. On all remaining effect and coping characteristics, Profile 4 and 5 yielded different outcomes (avoidance, shame/low self-esteem, sexual difficulties, arousal, self-harm, and impulsive/risk-taking). Across the whole sample, CSA clients represented by Profile 4 are among the only adults to report difficulties with their sexuality. This implies that only 21% of all CSA clients participating in the study indicated minor problems (score  $< 1$ ) with arousal, sexual satisfaction, shame and disgust in regards to sexual topics and actions, and reported to frequently engage in sexual activity to re-gain control.

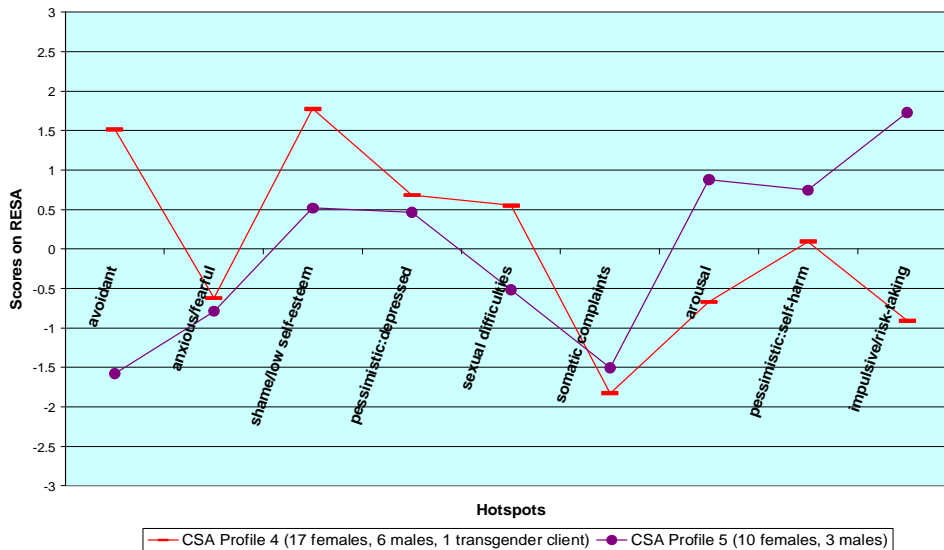


Figure 7. CSA Profiles 4 and 5 with their respective effect-coping responses from RESA reported by 32% CSA clients.

Profile 5 shows the least resemblance to the overall set of CSA profiles. It was the only CSA profile that demonstrated the presence of impulsive and risk-taking strategies as utilised by both females and males alike. This outcome is of particular interest as research has previously highlighted acting-out or externalised coping behaviour as one of the few differences in female and male sequelae following CSA (Dhaliwal et al., 1996; Spataro et al., 2004). Moreover, the “mirrored” manifestation of avoidant and impulsive/risk-taking parameter in Profiles 4 and 5 may suggest that CSA clients display *either* the avoidance *or* impulsive/risk-taking in an attempt to deal with the emotional distress following the experience of CSA.

Alongside, impulsive/risk-taking behaviour, Profile 5 was characterised by the highest level of self-injurious behaviour which was concurrently presented with the only reported effect of arousal difficulties (trouble concentrating, lack of energy, easily frustrated, trouble getting to sleep) (see Figure 7).

Lastly, it should be noted that Profile 4, in particular, supports the results earlier found in CSA Profile 1 and CSA Profile 3. Efforts to avoid thoughts and memories were more commonly present in co-occurrence with effects of shame/low self-esteem and depression rather than linked to a simultaneous experience of anxiety.

As shown by the detailed descriptions above, a mixture of similarities and differences can be found among the five CSA response profiles given by CSA clients in this research (Figure 8). This implies that (1) general responses following CSA are variable and complex, hence do not yield one *consistent* outcome of CSA and (2) although a few consistencies can be highlighted across the CSA profiles, these will need to be compared to a control group of non-traumatised participants to view their *specificity* to CSA.

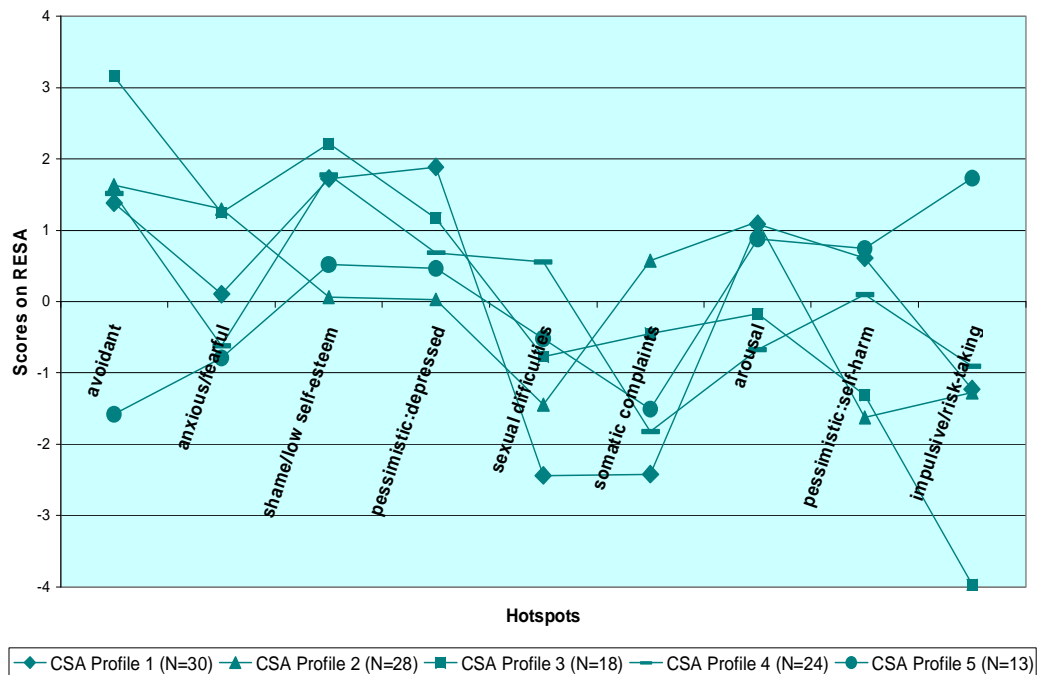


Figure 8. Five CSA profiles summarising effect-coping responses from 113 CSA clients using RESA.



***Comparing functioning of participants with CSA and no experiences of trauma***

Twenty-nine non-traumatised participants (17 females and 12 males) reported on their general functioning in the last six months. Cluster analysis revealed that more than half of these participants (52%) described their functioning in accordance with Non-trauma Profile 1, as shown in Figure 9. Non-trauma Profile 2 and 3 were reported by 24% of the participants without an experience of trauma, respectively.

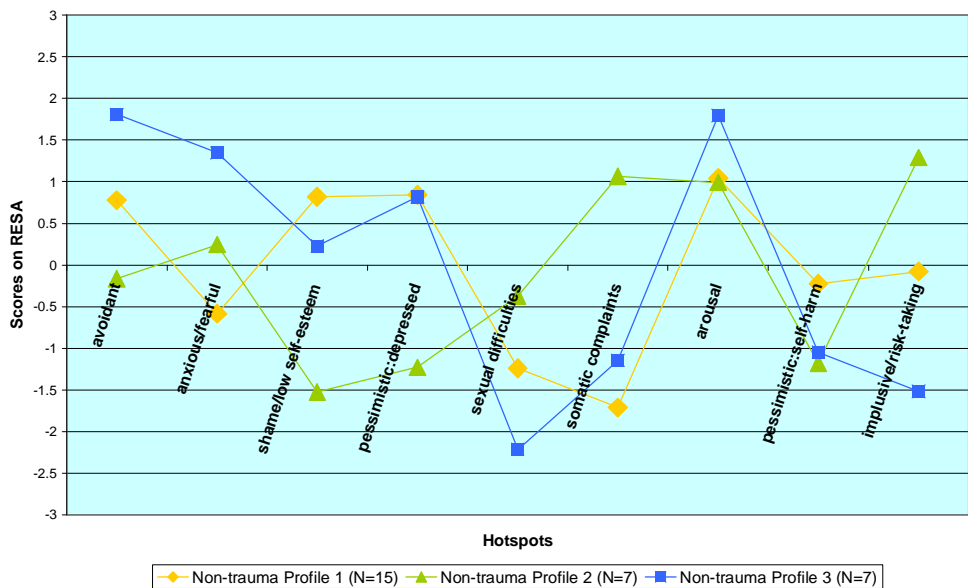


Figure 9. Non-trauma Profiles 1, 2, and 3 summarising the level of functioning in last six months as reported by 29 non-traumatised female and male adults using RESA.

Overall, the non-trauma reports illustrated only moderate elevations and descents across all hotspots with only one hotspot value exceeding a score of 2 (Sexual difficulties = -2.21 in Non-trauma Profile 3). Only moderate overall elevations were to be expected as RESA was specifically tailored to summarise CSA sequelae as guided practitioners and other experts committed to working with adults with a history of CSA. RESA items however appeared to have a general level of relevance because they were applicable, although in a more moderate range, to those adults who have never been exposed to a traumatic incident.

Figure 10 shows the overlap between a calculated Mean non-trauma profile ( $SD = .45-1.5$ ) and the five CSA profiles introduced in the previous section to view the specificity CSA outcomes. The overall comparison highlights that non-traumatised adults only reported the lowest scores on two (shame/low self-esteem and pessimistic/depressed) out of the nine hotspots when compared to the sequelae reported by CSA clients. Non-traumatised adults indicated more difficulties with arousal than CSA clients.

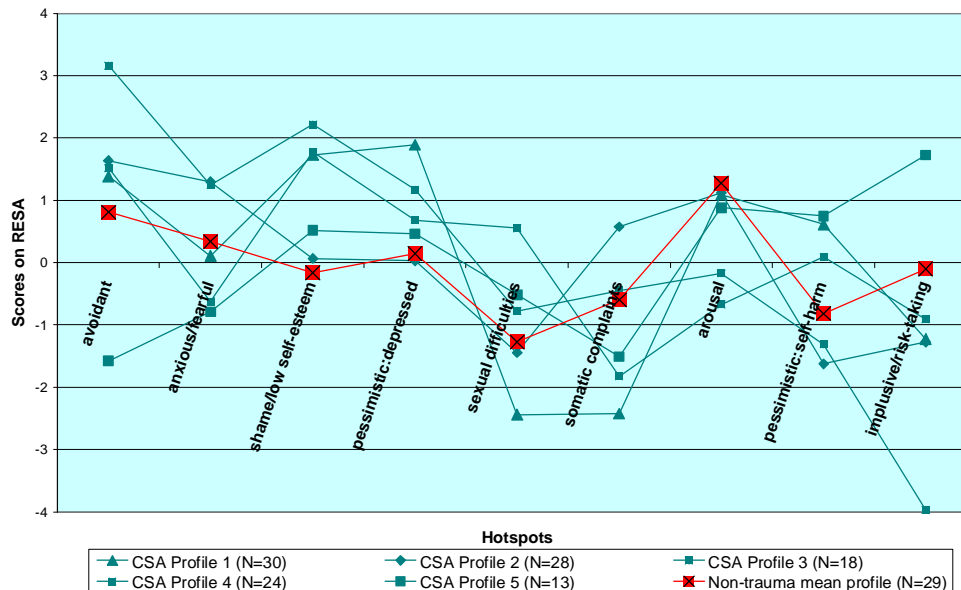


Figure 10. Comparison mean profile of self-reported functioning by 29 non-traumatised participants and five CSA profiles summarising CSA sequelae reported by 113 CSA clients.

Generally, however reports by non-traumatised participants are embedded among the effect-coping response given by CSA clients. Such a similarity indicates that no single effect or coping characteristic, and no effect-coping relationship is specific or exclusively related to CSA. Nevertheless, clients mostly endorsed a higher *intensity* of the reported difficulties and greater salience of coping (avoidance, self-harm). As similar type of difficulties emerged across the CSA, none of the patterns form a sufficient criterion to discriminate CSA profiles from Non-trauma profiles. It is emphasised that this evaluation does not imply that CSA is not harmful, but it rather suggests that CSA outcome as

reported in this study may not be uniquely related or indicative of CSA. None of the effect-coping pattern was present in CSA profile and absent in the non-trauma sample.

While the overall overlap was illustrated in Figure 10, the next section will provide a detailed comparison CSA and Non-trauma Profiles. Two primary CSA profiles (1, 2) are compared to the two principal Non-trauma Profiles in Figure 11 and 12 to explore the specificity of effect-coping patterns with regards to CSA. Interestingly, responses from 52% of non-traumatised adults which were combined in Profile 1 bear a close resemblance to CSA Profile 1 representing the primary response of clients (27%) who experienced CSA (see Figure 11).

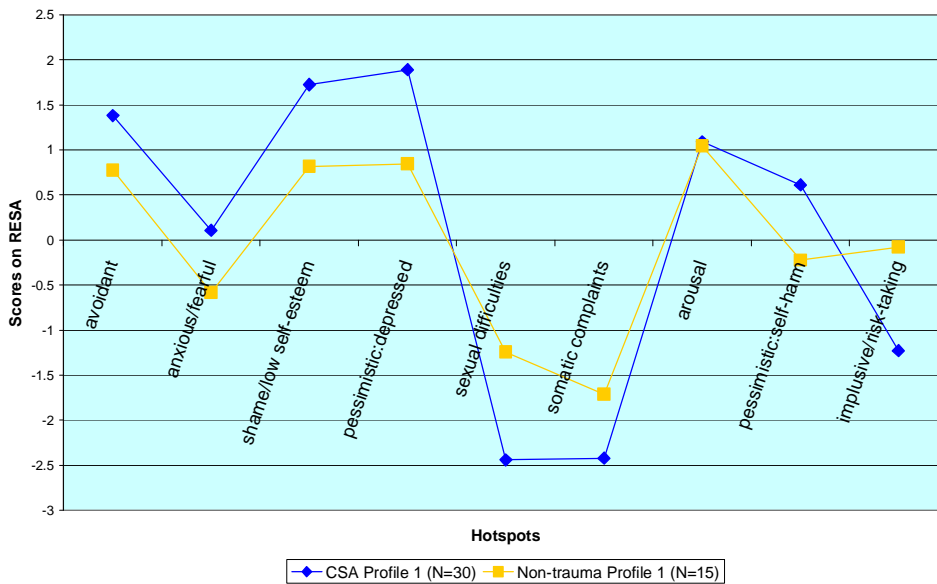
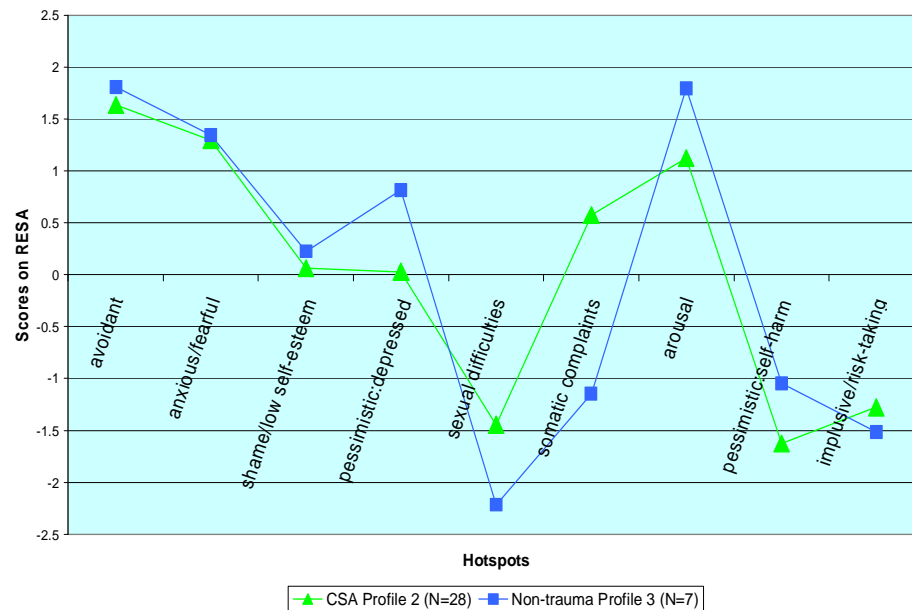


Figure 11. Comparison showing primary effect-coping patterns of functioning reported by CSA clients (CSA Profile 1) and non-traumatised adults (Non-trauma Profile 1).

Figure 11 indicates that while a history of CSA appears to elevate the *level* of experienced outcomes, the type or *pattern* of certain effects (shame/low self-esteem, pessimistic/depressed, arousal) and coping descriptors (avoidance) remain similar among the sexual abuse and no-trauma samples. Absent behaviours were reported for physical and sexual

difficulties. Thus, as shown by this detailed example comparison, no effect constellation or effect-coping processes appear specific to an experience of CSA.

In Figure 12, the overlap between the Non-trauma Profile 3 and one the main CSA clients' responses (CSA Profile 2) is illustrated. Elevated rates of anxiety, fear, and arousal were reported alongside avoidant behaviours and thoughts as a means of coping.



*Figure 12.* Comparison showing similar effect-coping patterns by of functioning reported by CSA clients (CSA Profile 2) and non-traumatised adults (Non-trauma Profile 3).

One difference between the two profiles is a higher indication of somatic complaints by the CSA clients, which are reported as absent in the non-traumatised sample. Furthermore, non-traumatised adults even showed a slightly higher presence of pessimistic/depressed behaviour and arousal problems than CSA clients, thus indicating the non-specificity of these characteristics to CSA as assessed by RESA. Apart from these last points, Non-trauma Profile 3 and CSA Profile 1 provide further evidence of akin patterns of effect and effect-coping mechanisms underlying functioning, regardless of a history of CSA. Further implications of the introduced profiles are discussed following discussion of overall findings.

## **Discussion of overall findings**

Adults with a history of CSA have highlighted a considerable variability in their behavioural, emotional, social, and cognitive sequelae yielding a CSA non-specific pattern of maladjustment. The present research explored whether additional assessment of coping behaviours may account for some of the differences amongst the sequelae of CSA. While previous studies had profiled negative outcomes following abuse, they often did not explicitly include detailed coping behaviours simultaneously with symptomatic effects. Nor did they compare such results with a control group of non-traumatised individuals (Elhai et al., 2001; Follette, Alexander, & Follette, 1991). In this study, 113 CSA clients were profiled based on their self-reported functioning prior to therapy. They were subsequently compared to a sample of 29 non-traumatised individuals. The aim was to search for consistency and specificity of effect patterns and effect-coping relationships that may improve the understanding of the function of specific coping behaviours.

### ***Conceptual distinction between effects and coping efforts***

First it should be noted that responses from lay persons, experts, and CSA clients all confirmed a distinction between effects directly related to CSA and secondary coping efforts as previously reviewed in Chapter Two. Lay and expert participants' organised descriptors of CSA sequelae along two main dimensions: externalised/ internalised (coping) and a gradient ranging from hyperarousal/anxiety to blame/low self worth (effects). Within this frame of hypothesised sequelae, salient areas of functioning were then confirmed by those reporting their sequelae following CSA. Meaningful effects included anxiety/fearfulness, shame/low self-esteem, arousal. Available coping resources included avoidance, sexual difficulties, self-harm, and impulsiveness/risk-taking. Somatisation and pessimism/depression were also commonly experienced by adults sexually abused as children but yielded mixed support for being classified as effect or coping efforts. Consistent with research reviewed in the previous chapter, coping forms an important part of CSA sequelae (Whiffen & MacIntosh, 2005).

### ***Consistency and specificity of reported CSA effects***

One of this study's goal of finding consistencies in the sequelae reported by CSA clients was only moderately achieved. Generally, functioning after CSA was marked by considerable variability rather than yielding one consistent pattern of functioning reported by all CSA clients. Some consistencies, however, were found across the CSA profiles as all clients reported some degree of low self-esteem, pessimism, and depressive characteristics. Other experiences commonly recognised in client profiles were elevated levels of fearfulness/anxiety and arousal problems. Generally, sexual difficulties and somatic complaints, which included eating difficulties, were absent. While these consistencies are similar to previous patterns recovered in other profiling studies using the MMPI-2 (Elhai et al., 2001; Follette et al., 1997), consistencies do not appear to be specific to the event of CSA. Generally, CSA effect patterns also emerged in profiles reported by individual with no traumatic experiences. Although indicated to a lesser degree in non-trauma adults, shame, low self-esteem, pessimistic/depressed, and arousal difficulties were nevertheless representative of functioning in adults who describe themselves as never having been exposed to any kind of emotional or physical trauma as defined by the DSM-IV-TR (American Psychiatric Association, 2000). These effects patterns can therefore be assumed to form a non-specific outcome to an experience of sexual abuse.

Two of the possible explanations to this outcome are further considered. First, RESA as a newly developed instrument could fail to assess CSA specific outcomes. However, RESA was developed as part of the Rārangā Whatumanawa project to develop practice guidelines for CSA. Items were derived from close collaboration with multidisciplinary practitioners sharing their clinical experience on what follows CSA in focus groups and key interviews. Moreover, a systematic review of the CSA literature, an archival data file of Sensitive Claim practitioners, and a national practitioner survey on clients' CSA sequelae were studied for comprehensiveness and language of the items included in RESA (Rārangā Whatumanawa Research Project, in press-a). Overall, all efforts were undertaken to make RESA a summary device relevant and specific to clients with a history of abuse.

A further explanation for the lack of CSA-specific outcomes feeds into an argument raised by Follette and colleagues (1997) in which “sexual abuse per se may not be the only or necessarily the most relevant variable in explaining current distress. A common history of child sexual abuse alone does not produce a homogenous population” (p. 864). CSA may not yield a specific, distinct pathway of maladjustment, but produces highly elevated levels (greater frequency and intensity) of those signs of distress that are also found in the general population on a smaller scale. Such possibilities are not intended to minimise the harm in those with a history of abuse, but rather emphasises the need to temper searching for a specific CSA-symptom or syndrome and extend the assessment of functioning, especially when entering treatment, to a broad range of effects and chosen ways of coping.

### ***Consistency and specificity of reported CSA coping strategies***

Similar results were found for coping behaviours. Consistencies were demonstrated as 88% of all CSA clients reported a high use of avoidant strategies (score > 1) which is in accordance with previous research outcomes (Hayes et al., 1996; Leitenberg et al., 1992). A comparison to the non-traumatised group, however, demonstrated that 76% of participants also reported a high use of avoidant coping in the last six months although to a smaller degree. Avoidant coping was found in CSA and non-trauma profiles, despite previous research proposing that the excessive or chronic use of avoidance was associated with higher levels of distress and psychopathology. Future research could further investigate the role of avoidant coping after sexual abuse, preferably using clinical and high functioning samples of adults with a history of abuse as well as a non-traumatised control group. Differences between the groups may carry significant information on circumstances under which avoidance is effective and when it starts to pose a risk to a person’s psychological well-being.

Nevertheless CSA clients appear to show a greater need for coping, hence rely more heavily on avoidance than non-trauma controls. Some therapeutic approaches, such as cognitive-behavioural therapy for trauma (Follette & Ruzek, 2006) and Acceptance

Commitment Therapy (Hayes et al., 2003), focus on reducing the client's tendencies to avoid trauma-related materials, but instead set therapeutic goals of trying to gradually release distressing material within the safe environment of therapy. One of the coping efforts exclusively endorsed by the CSA sample but not the non-traumatised group was pessimistic/self-harming behaviours. Yet, such an outcome does not imply a causal link between self-harm and sexual abuse. First, because not all adults within the sexual abuse sample reported an increased risk of self-harm and, secondly, as reviewed in the previous chapter, this behaviour often mediated by negative body image and dysfunctional self-representation which can be affected by a range of other life experiences (Putnam, 1990).

### ***Consistency and specificity of reported effect-coping patterns***

New information regarding the underlying function of avoidance coping was also found in this present study. Consistent effect-coping patterns, however, were again not specific or exclusively related to adults with a history of CSA. For both CSA client and non-trauma samples, avoidant behaviour was primarily reported when shame, low self-esteem, pessimism, and depression were among the main underlying effects rather than in cases in which fearfulness and anxiety were present (CSA Profile 1, CSA Profile 3, CSA Profile 4, Non-trauma Profile 1). If avoidance is understood as a mean of coping with negative affect, it appears to be primarily reported when a person has a negative self-perception (shame, guilt, low self-worth) rather than in the presence of fearful or anxious feelings.

### ***Limitations***

First, it needs to be acknowledged that the sample of CSA clients is not representative of the CSA population as it excluded those who are currently in therapy or have never sought therapy. Reports on functioning were also provided in retrospect. While this is a common approach to collect data for sexual abuse due to safety concerns, it nonetheless forms a less than ideal condition of collecting information. Still, adults were asked to remember their functioning at a memorable turning point in their life, more precisely, when they decided to seek therapy for the first time in their life. It should also be noted that although it would



have been practical to use clients with a history of sexual abuse for both of the tasks, including the similarity mapping, the individuals' safety was of primary concern. The similarity mapping of RESA using the GOPA task is a lengthy task demanding high levels of sustained and focused attention. This task can therefore easily lead to frustration, which due to the use of CSA descriptors is likely to elicit a negative emotional response among those who have experienced CSA. Nonetheless, two diverse samples of lay persons and experts yielded a highly similar organisation of item suggesting a coherent understanding of the meaning of RESA descriptors.

## **Conclusion**

Overall, it can be concluded that no *effects*, *coping*, or *effect-coping patterns* were found to be specifically linked to a history of CSA. All participants, whether they had been exposed to trauma or not, reported some level of shame, low self-esteem, depressive and anxious characteristics, and reported the tendencies to avoid unpleasant situations and thoughts. This interplay of effects and coping may provide some insights into functionality, for example, as avoidance appears to be a particular effective means of relieving negative distress in the case of a person's negative self-perception (shame, low self-worth, and hopelessness). In terms of identifying an underlying function of coping, this profiling technique shows promise in highlighting initial reasons to cope particularly for individual clients. As some coping strategies, such as the excessive use of avoidant efforts or self-harm, can increase the maladjustment and pose a risk to personal safety, profiling may assist a therapist to assess initial functioning, evaluate coping-effect patterns, and identify reasons or functions for maladaptive coping. Information on the *function* of coping enables practitioners to provide clients with constructive coping tools without leaving them exposed to the effects and sources of emotional distress they originally suffered and sought protection from. This profiling approach is not only applicable to sexual abuse, but can assist in tailoring therapy to the individual needs of all clients.

Despite the non-specificity found, RESA could potentially help clients articulate their complex and often disconnected set of behaviours, emotions, thoughts, and physiological responses. RESA and the profiling approach combined, is a useful tool to summarise and visually inter-relate disjointed attributes following CSA. This can be an important part of validating a client's experience of maladjustment. Future research needs to acknowledge the separate role of coping from the effects following CSA. Lay and expert mental representation revealed a split in the dimensional organisation of RESA which distinguished a main coping (internalising/externalising) and an effect dimension (hyperarousal-anxiety/blame-low self-esteem) to frame the domain of CSA sequelae. When CSA clients described their functioning by highlighting groups of co-occurring items, they also distinguished between effects and coping sequelae resulting in separate effect and coping hotspots. Individual summaries across hotspots can therefore be useful for practitioners to identify particular effects and coping strategies that appear to hinder client's adjustment, tailor intervention, and most importantly, gain a better understanding of the actual reasons for coping. Overall the current research suggests that identifying effect-coping relationships could provide a vital element to our understanding of functioning following CSA by gathering group profiles for research, and individual profiles to benefit therapeutic practice.

As a closing thought of this first study, it is important to further explain the implications of the non-specific relationship of psychopathological outcome and CSA that was found. Non-specificity does not imply that CSA clients cannot experience severe impairment of functioning. Rather it means that no unique effects, coping behaviours, or effect-coping patterns were *exclusively* linked or indicative of CSA, as these appear to have a high base rate in the general population. Hence, CSA has no pathognomonic signs that suggest causal relationships. While the same *sets or types* of negative characteristics appear in non-traumatised and CSA participants, their *frequency* and degree of *intensity* (level) are stronger for those adults who experienced CSA. This, however, is not a sufficient criterion to determine CSA prevalences.

## LINKING THOUGHTS I

---

Overall, the first study's findings highlighted that there appears to be a great variability in the outcomes of CSA suggesting that no specific causal links between CSA and the reported level of functioning can be found. The non-specificity of consequences stood in contrast to my initial understanding that a range of negative outcomes can be attributed to sexual abuse. These findings were particularly startling considering that a mental injury "directly caused" by sexual abuse is still a pre-requirement to obtain funding under the ACC Sensitive Claims scheme. However, Study One's findings matched the recent research developments as reviewed in Chapter Two, which portrays CSA as a risk factor, but non-specific contributor, to psychopathological outcome.

As a consequence to the diversity, I realised that in order to understand CSA sequelae, I needed to also explore people's perceptions of what is assumed to follow CSA. In Study Two, I therefore shifted my focus away from the self-described functioning following CSA to public's general perspective of what, hypothetically, follows CSA. It became of interest to explore how much of the variability found in CSA sequelae was actually mediated by our subjective perceptions. Do emotions adjust what we perceive to follow sexual abuse? How much are we influenced by educational information? Do our perceptions change at all?

The second study investigates what the non-abused, lay person *perceives* to follow sexual abuse compared to the *empirical* CSA sequelae reported in Study One. It is of particular interest to explore under which conditions we are likely to adjust our beliefs.

## CHAPTER FOUR

---

### Study Two

#### **Lay perceptions of child sexual abuse under the influence of emotional arousal: An analogue study**

The first study showed that adults with a history of CSA vary in their functioning later in life yielding multiple effect-coping constellations. Reports of general functioning in non-abused adults resembled the overall sequelae pattern, yet show a reduced intensity of effects and need for coping. The present study investigated lay beliefs on what follows sexual abuse sequelae. The term *lay* is used to describe a group of adults who have no specific knowledge or personal experience of CSA. Lay reports are thought to represent societal perceptions and beliefs about sexual abuse.

#### **Perceptions of CSA**

As introduced in Chapter Two, *perceptions* are understood as non-judgmental terms that signify a belief or attitude of representing information on an person or experience. Perceptions differ from *stereotypes* as the latter implies a type of cognitive bias, for example, resulting from an over- or under-simplification of information to minimise cognitive effort. In order to evaluate lay persons' perceptions of CSA, two aspects were studied: The perception of similarity of CSA outcomes (categorisation) and the perceived relationship of items to be part of the sequelae of CSA (attitude). The role of emotional arousal and the impact of cognitive re-structuring as mediating variables were explored.

Non-abused adults seem to carry perceptions of CSA and its characteristics. While perceptions of an adult with a history of CSA are generally negative, the manipulation of abuse characteristics, such as age of the child and the gender of the perpetrator, has been shown to alter peoples' opinions with respect to the perceived severity of CSA (Bornstein et al., 2007; Kouyoumdjian et al., 2005; Maynard & Wiederman, 1997). Changes in

perception were consistently found among non-abused adults suggesting stable cognitive schemata depending on certain CSA circumstances. A consensus of these schemata has also been shown across non-abused, professionals, and psychiatric samples and coincided with research findings on CSA sequelae (Davenport, Browne, & Palmer, 1994). While research commonly focuses on the manipulation of abuse variables to observe differences in attitudes, hitherto fewer studies explored peoples' general perceptions on the consequences of CSA without adjusting abuse characteristics.

Perceptions of CSA are likely to stem from prevalent societal attitudes (Broussard, Wagner, & Kazelskis, 1991; Kouyoumdjian et al., 2005). As discussed in Chapter Two, a high general awareness and intense public perceptions of the impact of CSA is expected in Aotearoa/New Zealand as sexual abuse is widely discussed in the media (Frewin et al., 2006). In concordance with Finkelhor and Browne's (1985) traumagenic dynamics, societal beliefs surrounding CSA are expected to influence the perceptions and long-term outcomes for those who report such an event through socialisation processes and stigmatization. But why is the study of lay persons' perception of particular importance with respect to functioning after sexual abuse?

Specifically in the context of sexual abuse, adults are at risk of "applying and reacting to the label of 'sexually abused child' even if the child is not exhibiting any adverse effects of sexual abuse. These negative expectations (...) could potentially interfere with children's resilience and consequently promote adverse effects in asymptomatic children" (Hetherington & Beardsall, 1998; Kendall-Tackett & Watson, 1991; Kouyoumdjian et al., 2005). The study of lay CSA beliefs in particular, may provide information on how individuals will perceive and respond when confronted with a person's disclosure of CSA (Bornstein et al., 2007). A study by Smith (1993) used lay students to simulate a juror's decision processes on forming a verdict. She found that while major discrepancies between their lay knowledge and the law exist, students relied on their lay perception when determining the final verdict. Even when discouraged from using their personal beliefs, it did not prevent students to ground their judgment on naïve concepts. It is therefore important to raise the

awareness of the impact that personal beliefs and expectations may have on behaviour and evaluation.

Overall, all people appear to carry perceptions on sexual abuse, which most likely stem from prevalent societal attitudes. Non-abused adults perceptions on sexual abuse are at risk to influence our behaviour, in particular in interactions with those who have experienced CSA.

### ***Emotional arousal***

CSA is a sensitive topic likely to arouse emotion among those who experience abuse as well as those who are confronted with someone's disclosure. Beutler and colleagues (1994) stated that

*intense feelings and beliefs can distort and even alter both one's judgment and one's evaluation of reality. The actions taken by the non-victims, including the media, are based upon the assumption that they make about the effect of sexually abusive experience. Because it is usually assumed that sexual abuse leads to severe adult dysfunction, the reactions are likely to be very strong (p. 157).*

Emotional arousal is also thought to influence cognitive decision-making, hence can form a key element in therapy. Clients are likely to experience high levels of emotional distress when reporting CSA which can pose a barrier to their self-regulation. In these moments, however, the therapist is expected to be able to gain emotional distance in order to facilitate their own emotional regulation (Ayduk, Mischel, & Downey, 2002). If emotion is likely to affect the perception of CSA sequelae, for example, to increase the perceived severity due to difficulties in self-regulation, this can have considerable implications for the therapeutic relationship and setting. The impact of emotional arousal was therefore studied in the present research.

### ***Cognitive re-structuring***

Reliance on lay perceptions for the evaluation of a target appears to be an automatic and persistent process. Maynard and Wiederman (1997, p. 833) argue that “individuals with stereotypic beliefs will remember and interpret events about a target person in a way that will bolster and support the current stereotype”. Simple dissuasion about the use of one’s personal perception did not prevent participants from using their pre-existing schemata of CSA. However, after a training session in which relevant, supplementary information was provided, lay students revised their existing representation and improved their decision accuracy (Smith, 1993). This suggests that a cognitive training intervention to re-structure thinking about an event or object may achieve shifts in perceptions and inhibit the automatic activation of personal cognitive schemata. A brief cognitive intervention was incorporated in the present study to see its potential impact to adjust lay persons’ perceptions of CSA.

### **Lay persons’ perceptions of similarity: Categorisation**

Similar to Study One, categorisation is intended to highlight differences in lay individual’s organisation of CSA descriptors according to their directly perceived similarity. Participants are not being asked to articulate their grouping criteria or evaluate the items’ relevance to CSA. In order to arrange stimuli into coherent categories, people tend to rely on (dis)similarities of relevant features. Yet “similarity”, as a loose description of the criteria underlying such categories, may not sufficiently account for their use (Goldstone, 1994; Medin, Goldstone, & Gentner, 1993). Bruner, Goodnow, and Austin (1956) differentiated between three classes of categories. *Affective*, *functional*, and *formal* criteria were thought to form people’s criteria for assimilating stimuli. Affective classes are based on the assumption that “certain forms of grouping appear to depend very heavily upon whether or not the things placed in the same class evoke a common affective response” (Bruner et al., 1956, p. 4). Functional categories are expected to cohere because items share a common goal or associative relationship, while formal classes specify defining properties of the group.

### ***Emotional response categorisation***

Based on Bruner and colleagues' (1956) idea of affective classes, Niedenthal and colleagues developed their theory of emotional response categorisation (Niedenthal & Halberstadt, 1995; Niedenthal, Halberstadt, & Innes-Ker, 1999). They argued that "people group things together, treat them as the same, associate them closely in memory, and generally behave as if they are using a concept when those things or events evoke the same emotional response" (Niedenthal & Halberstadt, 2000, p. 169). In a series of experimental studies, it was shown that when evoking an emotional state, participants routinely oriented their selective attention more to the emotional meaning or dimensions underlying the set of stimuli when compared to non-emotional controls. As a consequence, emotional arousal will cause participants to re-organise stimuli in categories by means of an emotion rather than taxonomy or function (Halberstadt & Niedenthal, 1997; Innes-Ker & Niedenthal, 2002; Niedenthal & Halberstadt, 2001; Niedenthal et al., 1999; Niedenthal, Rohmann, & Dalle, 2003).

In order to identify people's underlying criteria for categorisation, a dimensional and a categorical model have been proposed. First, a (multi)dimensional model anticipated that all emotional experiences are explained by a specific number of dimensions, commonly varying between one dimension of valence to up to four dimensions. Russell (1980) conceptualized the space in which emotional responses are located as ranging along two dimensions: Pleasure to displeasure and high to low arousal. Davidson (1992), however, emphasized that withdrawal and approach processes form the two primary dimensions underlying the affective space. The second approach for evaluating possible emotional responses has focused on the nature of the emergent categories. The categorical model argues that individuals primarily use a standard set of basic emotions, such as sadness, happiness, anger, disgust, and fear, to determine similar groups (Ekman, 1984; Niedenthal & Halberstadt, 2001).



Several theories, mostly of categorical nature, have been proposed in order to explain the reasons why individuals may re-organise their categorisation criteria as a response to an induced emotion. One of the predominant theories, the associative network/spreading activation model (Bower, 1981), suggest that discrete emotions are embodied in memory as specific units that are activated by the subjective experience of an emotion. These units represent the emotion's verbal, behavioural, and physiological expressions, as well as memories of past events that elicited such a response. Once activated through a subjective feeling, different information will be accessed than in the absence of the emotion. This process is thought to account for the varying responses between a non-emotional and an emotional situation (Bower, 1981). Bower then further specified his theory to propose particular processing strategies under which affect is likely to impact on cognition, known as the multifaceted Affect Infusion Model (AIM) (Bower & Forgas, 2000). It was assumed that people minimize their cognitive effort when faced with a judgment task, always opting for the easiest and simplest processing strategy. Participants' choices of processing strategies depend on *information* (complexity, familiarity, typicality), *person* (affective state, cognitive capacity, motivation, personality, relevance), and *situation* variables (demand effects, expectations). The resulting four processing strategies include *direct access* and *motivational processing*, which are least likely to be influenced by affect infusion, and *heuristic* and *substantive processing* which require constructive thinking, hence are expected to be highly influenced by emotion.

Bower and Cohen (1982) furthermore emphasised that a distinction between the activation of *hot* emotion nodes, which represent subjective feelings of emotion (*affective feeling*), and *cold* emotion nodes, representing knowledge and beliefs about that emotion (*affective concepts*) is indispensable. Innes-Ker and Niedenthal (2002) compared judgments of a target story after some participants were exposed to a film evoking affective feelings, while others engaged in word scrambling tasks activating only affective concepts. Results indicated that only *feeling* happy, but not *dealing* with happy concepts, lead to an emotional evaluation of a target story. It was concluded that "affect, but not the activation about affective concepts, is a necessary condition for the occurrence of assimilation effect

of affect” (Ric & Niedenthal, 2007, p. 110). In this study, individuals are therefore expected to access their declarative knowledge about an emotional concept without interferences of a subjective feeling of an emotion which will be investigated in *hot* and *cold* conditions.

### **Lay persons’ perceptions of CSA sequelae: Attitudes**

The second facet to the study of perception focuses on individuals’ subjective attitudes and evaluations of the specific consequences of CSA as “attitudes are widely construed as an intervening construct between belief and behaviour” (Hetherington & Beardsall, 1998, p. 1266). It is investigated whether affective feelings impact on likelihood judgments of what follows CSA, hence mediating the activation of cognitive schemata.

### ***Affective priming effects and automatic attitude activation***

Similar to the previously discussed spreading activation processes for categorisation (Bower, 1981), similar priming effects are evident for attitudes. It is argued that “presentation of an attitude object has been shown to automatically activate from memory the evaluation that an individual associates with the object” (Fazio, 2001, p. 115). Primes do not need to be consciously evaluated to activate the associated concept from memory, hence the label automatic attitude activation (De Houwer & Hermans, 2001). The robustness of the affective priming effect has been demonstrated for a variety of priming stimuli, including high resolution colour images, and target stimuli, such as written statements, similar to the ones used in the present study. However, the associated strength of a prime has been shown to moderate the likelihood of automatic attitude activation (Fazio, 2001). Due to common discussion in the media as well as the emotional arousal attached to the topic of CSA, the primes for this research are expected to meet this criterion. Depending on the experimental instructions, if individuals feel they recognise the underlying idea tested by the research, however, they will have shown to engage in a ‘reverse priming effect’ by correcting their response and facilitate a non-automatic response (Glaser & Banaji, 1999).

Automatic attitude activation is an important process for study as attitudes can influence behaviour in a relatively spontaneous manner without active consideration or necessary awareness of its impact. Automatically activated attitudes can “influence how the person construes the object in the immediate situation, and this spontaneous appraisal will affect the person’s behavioural response” (Fazio, 2001, p. 129). Readily accessible attitudes increase the likelihood of using this knowledge to evaluate and behave accordingly.

In regards to the perceptions and attitudes of CSA outcomes, such attitude-guided behaviour can have a substantial impact on those with a history of CSA and their adjustment, for example, the reaction to disclosure.

## **Hypothesis**

The purpose of this experiment was to elucidate how exposure to an emotion-inducing prime (hot focus) and a cognitive training session (cold focus) impacts on similarity categorisation and attitude to CSA sequelae compared to a non-primed control group. First, according to Niedenthal et al.’s (1999) research on emotional response categorisation, participants in the hot group were expected to categorise items by means of any emotion, while the cold group uses different, functional criteria underlying their categories. Responses of the no-prime group were anticipated to resemble the cold rather than the hot priming condition, as the no-prime and cold prime groups both access affective concepts without eliciting emotions (Hypothesis 1). Secondly, it was hypothesised that attitudes on the consequences of CSA would differ between hot, cold, and no-prime conditions (Hypothesis 2). For both hypotheses, an emotional response was expected for the emotionally aroused group compared to the non-emotional group.

## **Methodology**

### ***Participants***

One hundred and eighty New Zealand participants were included in this study: 118 were exposed to different priming conditions in an analogue study design; 62 participants formed a control condition in which they were not exposed to a prime. Although analogue

studies have been subject to criticism due to a higher risk of social desirability and limited generalizability, analogue designs from a valuable method for the study of perception and judgment (DeRoma et al., 1997; Kouyoumdjian et al., 2005).

For the analogue study, participants were randomly assigned to one of the four experimental priming conditions ( $2$  [*emotional vs. cognitive prime*]  $\times$   $2$  [*categorisation vs. attribution task*] design). Group 1 (emotional prime/categorisation task) was composed of 30 individuals (16 females; 14 males), Group 2 (emotional prime/attribution task) comprised 28 participants (17 females; 11 males), Group 3 (cognitive prime/categorisation task) consisted of 31 participants (18 females; 13 males), while 29 participants (18 females, 11 males) were assigned to Group 4 (cognitive prime/attribution task). On a separate occasion, two control groups, who were not exposed to a prime, completed either the categorisation (Group 5:  $N = 31$ , 17 females, 14 males) or the attitude task (Group 6:  $N = 31$ , 13 females, 18 males). The no-prime categorisation data were drawn from a larger data set of responses from non-abused lay adults collected for Study One. Control group data for the attitude task, however, were collected as part of the present study. All participants were blind to group membership to minimise the risk of participants' adjusting their responses by detecting the intent of the research.

Participants were over 18 years of age with a 7<sup>th</sup> form (12<sup>th</sup> Grade) English reading ability. None of the participants had a personal history of CSA/sexual assault (rape) or described themselves as being in close personal contact with someone having such an experience. Participants were recruited by newspaper advertisement, announcements by a job agency, as well as via university e-mailing lists (Appendix M). Interested participants were shown a list of statements, one of which referred to sexual trauma. It was explained that if any of these criteria applied to them or someone close in their immediate network, they were advised to not take part in the study. This screening procedure ensured that individuals were able to decline participation without having to specify or disclose incidences of sexual trauma.

## **Materials**

*Priming stimuli.* The priming stimuli were two 8-minute video clips presented on a large screen in a standardised group setting. Visual primes and their respective lengths have previously been shown to be effective for the induction of emotions (Fazio, 2001; Innes-Ker & Niedenthal, 2002). Visual stimuli have also been described as advantageous over auditory primes as they often evoke one specific emotion rather than causing a blend of affective responses (Niedenthal & Halberstadt, 2000). The associated strength of the primes was thought to be substantial due to the emotional nature of the topic, its common discussion in the media, as well as their video presentation in a visual format. Hence, the visual primes of CSA used in the present study meet the requirements for both tasks in order to function as affective primes.

The *cold or cognitive* condition simulated a university lecture in which a male lecturer introduced the DSM-IV-TR diagnostic criteria for anxiety, depression, and PTSD as result of CSA (American Psychiatric Association, 2000) (Appendix N). The cold prime provided a brief training session to stimulate cognitive restructuring of participant's perception of CSA. This presentation of information was intended to influence lay participants' schemata surrounding CSA sequelae without inducing an emotional state (affective concepts/ no affective feelings). The cognitive intervention was based on Smith's (1993) research in which lay students' previously stable perceptions were adjusted using a feature-by-feature training session. The *hot or emotional* prime was a non-verbal portrayal of a CSA scenario with background music, rather than dialogue providing information about CSA (Appendix N). This prime was expected to elicit an emotional response without contributing to an audience's declarative knowledge (affective feelings/no affective concepts). Produced in Australia, the film is currently part of a teacher's training programme in the tertiary educational sector and is available in the public domain (Hughan, Michaelson, & Video Education Australasia, 2005). Neither the emotional nor the cognitive video prime was shown in the control (no-prime) condition.

*Measures.* The 100-items version of RESA were used in both experimental (priming) and control (no-prime) conditions (Appendix A). Details about the empirical derivation of RESA as a summary device to report CSA effects and coping efforts have been explained in the previous chapter (Study One). Subsequent to the sorting tasks, participants completed a brief short-answer questionnaire asking “*What do you remember from the film?*” and “*How did it make you feel?*” (Appendix O). As all participants were blind to their group membership, short-answer questionnaires are a common procedure to validate the effectiveness of the manipulation (Maynard & Wiederman, 1997; Niedenthal & Halberstadt, 2000).

### ***Procedure***

The study was approved by the Massey University Human Ethics Committee (HEC: 06/33; HEC: 06/54) (Appendix P). All priming participants in the analogue study (N=118) were seated and informed about the general aims of the study. Instructions about the respective tasks were given in a standardised format and were the same two tasks (GOPA, MOSS) as employed in Study One. All individuals consented to participate.

Participants were randomly assigned to (a) either the cognitive or emotional priming condition, and to (b) either the categorisation or the attitude task resulting in four experimental groups. A between-subjects design was chosen as it was unknown how long the impact of the prime would last, and to prevent practice effects caused by the use of the same set of descriptors. Films in the cognitive and emotional priming groups were screened at the same time in different rooms and were immediately followed by the card-sorting exercises. All task-related questions were answered prior to the beginning of the video to ensure sufficient carry-over effect of primed arousal to the task. Following the card-sorting exercise, the primed groups completed a questionnaire on their experienced feelings and thoughts in order to evaluate the effectiveness of the manipulation. Participants were debriefed in the presence of a clinical psychologist.

*Categorisation task.* Groups 1 (emotional) and 3 (cognitive) were asked to complete the categorisation task using 100 printed cards stating possible CSA effects. This task was the same as used in Study One to map the similarity of RESA items. Summed up by the acronym GOPA (Group, Opposite, Partition, Addition; see Appendix D), the task invites participants to form categories of items based on similarities, identify homogenous and heterogeneous status of assembled item groups, and split categories into smaller subgroups based on the items' directly perceived meaning or 'face value' (Kirkland et al., 2004). Control group data (Group 5) for the categorisation task were retrieved from non-abused lay sample in Study One.

*Attitude task.* Groups 2 (emotional) and 4 (cognitive) participated in a two-step card sort task called *Method of Successive Sorts* (MOSS) (Kirkland et al., 2004). The MOSS task is similar to the ranking task used by CSA clients in Study One; however, the wording on the instruction template was adjusted for the present task (see Appendix Q). Here participants ranked items based on their likelihood to be a consequence of CSA. First, items were split into three piles: "likely", "unsure" or "unlikely" to be a symptom of sexual abuse. Then, the first pile was again divided into "clearly seen" or "seen, but applies less" piles, while the third pile was further separated into "possibly seen" and "not seen at all". The "unsure" pile was subsequently reviewed for possible shifts to the other piles. The control group data followed the same set of standardised instruction for the attitude task (Group 6) without being previously exposed to a visual prime. Control group data were also collected using RESA. Experimental and control group data were recorded on anonymous response sheets. Completion of the whole task took approximately 60 minutes.

### ***Analyses***

The same type of replicated non-metric MDS as in Study One was used to account for the overall criteria underlying participants' schemata (dimensions) as well as identify major emotive categories (Kruskal, 1964a, 1964b). Results of the categorisation task were presented in a spatial map in which the empirically-derived structure of  $N$  stimuli was

placed in a  $P$ -dimensional framework. Dimensionality  $P$  was determined by the data's goodness of fit, a balance between minimisation of stress and dimensionality (Kruskal & Wish, 1978). A plot of *dimensionality x stress* was used to determine the appropriate number of dimensions. 'Elbows' suggested the appropriate  $P$  by showing that additional dimensions only resulted in marginal improvements of the goodness of fit (decrease in stress). Items have a location on each of the derived dimensions by which content similarity is represented through local proximities within the geographical space, following a Euclidean model of distance (Young, 1984). Cophenetic correlations, canonical correlations, and Procrustes distances were employed to quantify the overlap of similarity maps across all conditions (Harris, 2001).

In the attitude task, participants' responses were analysed across the set of nine standardised hotspots, empirically-derived from the previous study. Each hotspot consisted of a group of five to seven RESA items (Table 1). Hotspots were empirically derived from previous research and indicate the frequent co-occurrence of effects as reported by CSA clients (Study One). They are optimised to reconstruct response patterns as accurately as possible (Bimler & Kirkland, 2001; Kirkland et al., 2004). Scores assigned to each CSA effect were summed into scaled hotspots scores: Avoidant, anxious/fearful, shame/low self-esteem, pessimistic/depressed, sexual difficulties, somatic complaints, arousal, pessimistic/self-harm, and impulsive/risk-taking behaviours. Summarising individual responses to 100 CSA items as nine scaled scores across these hotspots allows for a manageable comparison of participants' judgments on CSA sequelae.

Ward's method, as a means of hierarchical cluster analysis, was used as a preliminary step to determine the appropriate number of clusters using each group's resulting dendrogram or hierarchical tree (Ward, 1963). The number of appropriate clusters was then used as chief input in a non-hierarchical  $k$ -means analysis (Hartigan, 1975). Participants were assigned to clusters based on minimisation of within-cluster variance and maximisation of between-cluster variance. Clustered participants' response patterns were then shown as profiles across nine hotspots. Two weighted mean profiles were calculated, one



summarising all clusters within each arousal conditions, the other pooling the emotive, cognitive, and no-prime data. Chi-square analyses were employed to highlight meaningful gender differences.

## Results

### *Effectiveness of manipulation*

A short-answer questionnaire enquired about participants' emotions and thoughts to check for the effectiveness of the primes. Blind to original group membership, I divided all answers according to descriptions of *affective feelings* or *affective knowledge*. The effectiveness of the different primes was confirmed as all participants were correctly matched back to their original priming condition, simply based on their reported feelings and thoughts. No ambiguous responses were found. Participants in the emotional group described subjective feelings, such as feeling sad and frustrated while remembering scenes of emotional content, for example, the father kissing the child. The cognitive group did not report any emotions but rather described the film as informative and/or uninteresting, while remembering facts about PTSD, depression, and anxiety. Questionnaire responses highlighted that the primes lasted effectively at least until the card-sorting tasks were completed.

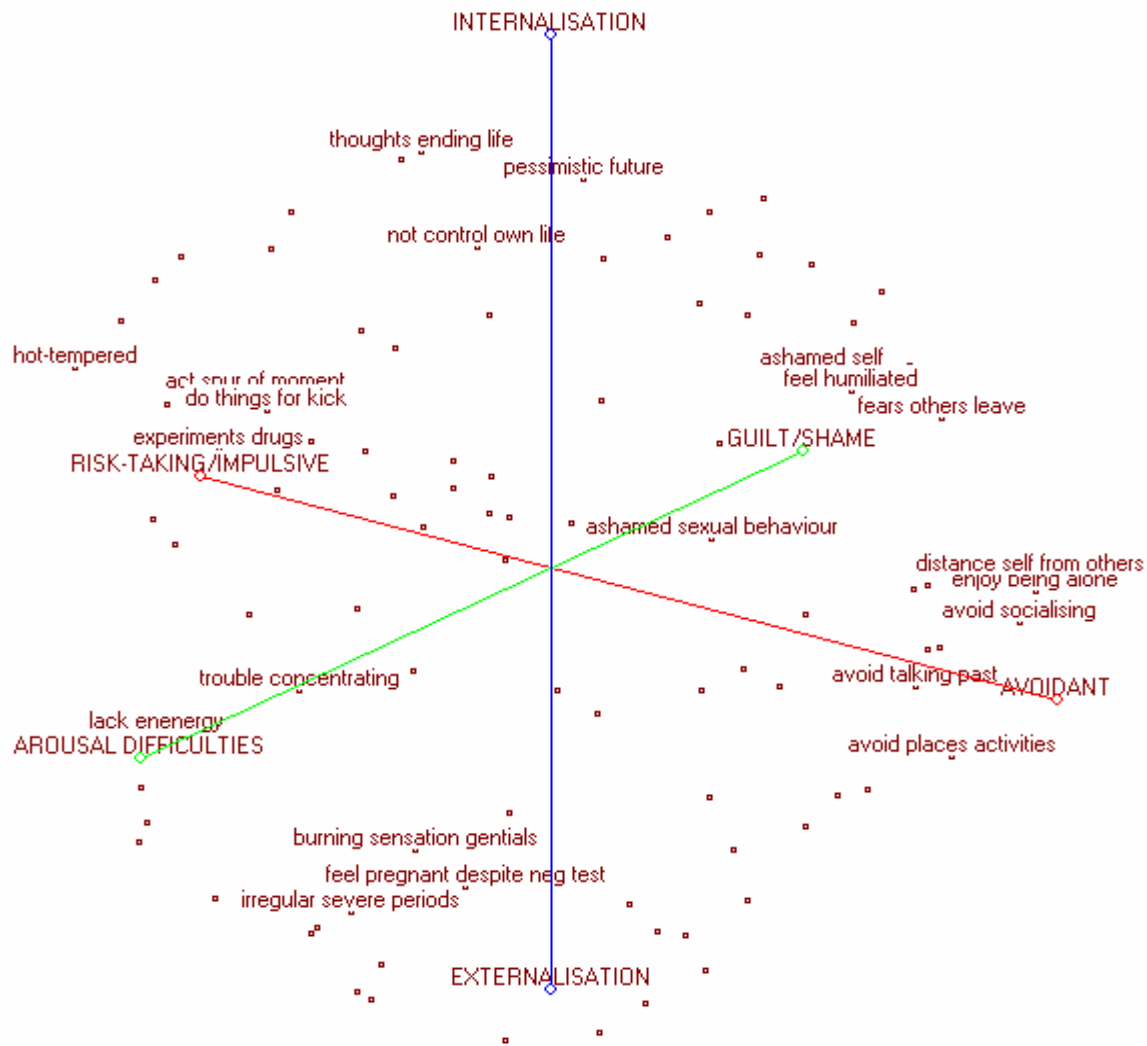
### *Categorisation task*

Each MDS solution is a "similarity map". Though individual sorters may depart from the map, it constitutes a consensus of the similarity perceptions of the appropriate group of participants. On the basis of the *dimensionality x stress* plot, three-dimensional solutions were selected as best fit for both the cognitive ( $stress_1 = 0.223$ ) and the emotional ( $stress_1 = 0.234$ ) priming condition. These solutions were then compared. The cophenetic correlation (comparing corresponding inter-point distances in the two solutions) revealed a 79% overlap in overall structure ( $r = 0.79, p < 0.001$ ). Only small differences between the location of each item in the emotional and the cognitive solution was shown by a low Procrustes distance ( $g_1 = 0.178$ ). That is, independent of the arousal condition, participants

demonstrated highly congruent responses in regards to which items are used to form categories. Dimensional overlap was also indicated by high canonical correlations in which all three dimensions in either solution were significantly correlated with their counterpart in the other solution ( $R_c = 0.949$ ;  $R_2 = 0.879$ ;  $R_3 = 0.854$ ;  $p < 0.001$ ). Due to this high overlap of item structure and dimensionality, further analysis pooled the hot- and cold-priming data, and examined a combined solution.

The combined priming map ( $stress_I = 0.238$ ) was then compared to the three-dimensional similarity map derived from participants who were not probed with a prime (Study One). Cophenetic correlations showed a highly significant overlap between prime and no-prime conditions ( $r = .80$ ,  $p < 0.001$ ) while residual distances were very low ( $g_I = 0.0601$ ). Three canonical correlates were high and significant suggesting a close dimensional resemblance between the three pooled similarity maps ( $R_c = 0.944$ ;  $R_2 = 0.898$ ;  $R_3 = 0.791$ ;  $p < 0.0001$ ). These results converge upon a similarity framework in which structure (dimensions) and response categories are shared by all 92 participants independent of their state of arousal.

Figure 13 highlights the primary dimensions and categorical clusters of items recovered from the combined (emotional, cognitive, and no-prime) similarity map. Dimensional labels arise from the items clustering at each bipolar end of combined map (Appendix R). The first underlying criterion for participants categorising items ranged from avoidant to risk-taking/impulsive behaviour. Items that were aligned at the opposite poles of this dimension reflect coping efforts, hence form functional response categories (avoiding places, thoughts, and people, vs. acting-out, substance abuse behaviour) as items shared a common goal. The second dimension signalled an emotional response as an underlying implicit criterion for categorization. Effects fell together, depending on the negative emotional response likely to evoke them: ranging from guilt and shame at one pole, to difficulties with arousal at the other. Split results were found for the third dimensions with one bipolar end being functional in nature (externalisation), while the opposite dimensional pole summarised items likely to be elicited by an emotion associated with pessimism and helplessness (internalisation).



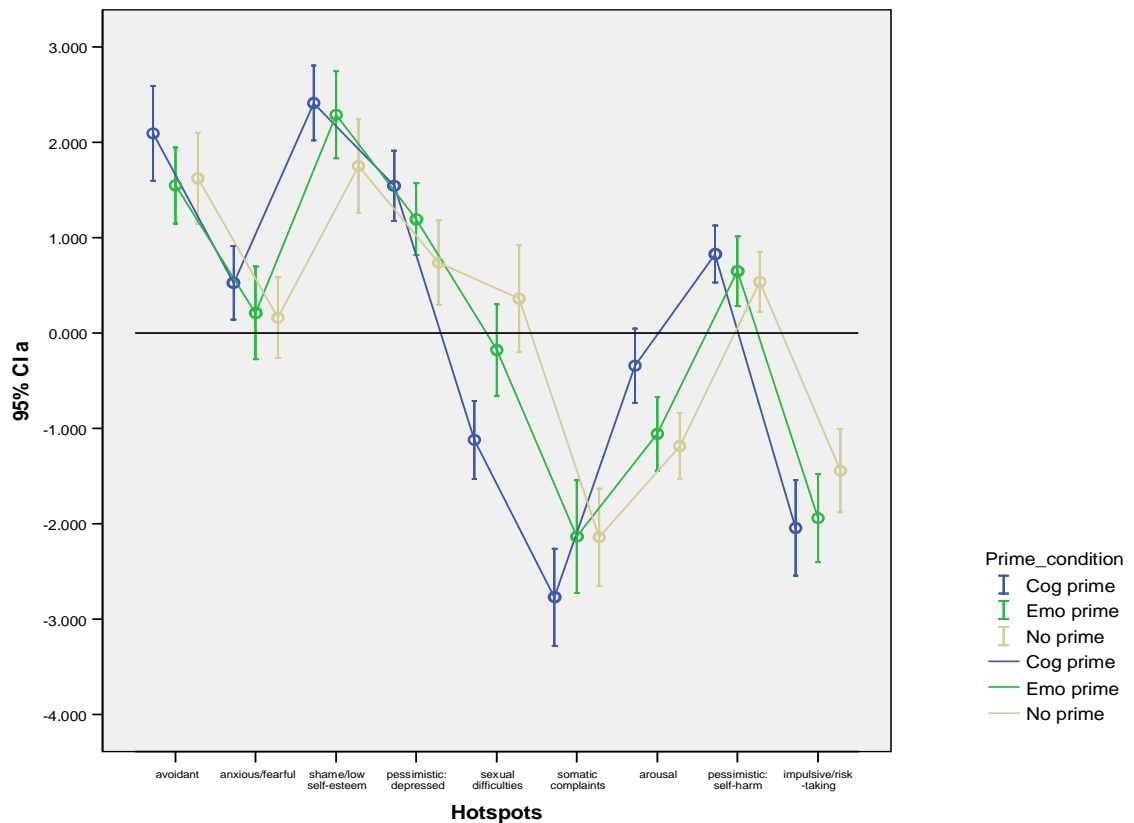
*Figure 13.* Dimensions and item response categories recovered from the combined emotional, cognitive, and no-prime conditions.

Overall, participants organised the items in a highly similar manner regardless of whether they experienced emotion or were briefly taught by a professional about the CSA consequences. Participants did not clearly use emotive categories as one of the primary axes was functional in nature. Coping was again separately sorted from items describing more directly experienced effects following CSA.

***Attitude task***

Overall, perceptions of the consequences of CSA were coherent and stable among the non-abused lay participants, regardless of acute state of arousal. Recall that participants ranked items according to likelihood as a consequence. Mean responses and variability were again summarised across the nine summary scales (hotspots) derived empirically from CSA clients in Study One (Figure 14).

**Confidence Intervals for Mean Profiles for Emotional prime, Cognitive prime, & No Prime condition**



*Figure 14.* Confidence intervals for mean profiles of CSA sequelae for each of the cognitive, emotional, and no-prime condition.

Participants emphasised *shame/low self-esteem* ( $Mean = 2.0, SD = 1.0$ ) as well as *pessimistic, depressed* behaviours ( $Mean = 1.0, SD = .90$ ) as the key effects experienced by adults with a history of CSA. *Avoidant* behaviour ( $Mean = 1.55, SD = .92$ ) and heightened risk of *self-harm* ( $Mean = .67, SD = .57$ ) were suggested as the most common ways to cope or relieve negative distress after CSA. Participants judged physiological complaints (chronic pain, trouble breathing, vomiting) and impulsive/risk-taking behaviour (drink driving, experimentation with drugs) ( $Mean = -1.6, SD = .88$ ) as least likely to be a consequence of CSA. No unusual levels of anxiety and arousal difficulties (indecisiveness, trouble concentrating, sleeping problems) were indicated.

All participants showed a strong consensus on this behavioural pattern following CSA regardless of their described differences in arousal (emotional vs. cognitive vs. no-prime). Their agreement was least on somatic complaints ( $Mean = -2.19, SD = 1.2$ ) and sexual difficulties ( $Mean = -.24; SD = 1.1$ ) following CSA. Participants agreed most about the association between CSA and self-harm, arousal ( $Mean = -.81; SD = .73$ ), and anxiety ( $Mean = .26; SD = .82$ ).

Cluster analysis was applied separately to each of the conditions to extract common response patterns (profiles) recurring across the judgments of CSA consequences from each group of participants. A three cluster solution was selected upon inspection of the respective dendrograms yielding three profiles for each of the cognitive and emotional arousal situation (see Appendix S-T). Only two profiles were selected to summarise responses of all non-primed participants (Appendix U). Again, participants' perceptions of what follows CSA highlighted effects of shame, low self-esteem, depression, and anxiety while the predominant coping behaviours were avoidance and self-harm as shown in Figure 15.

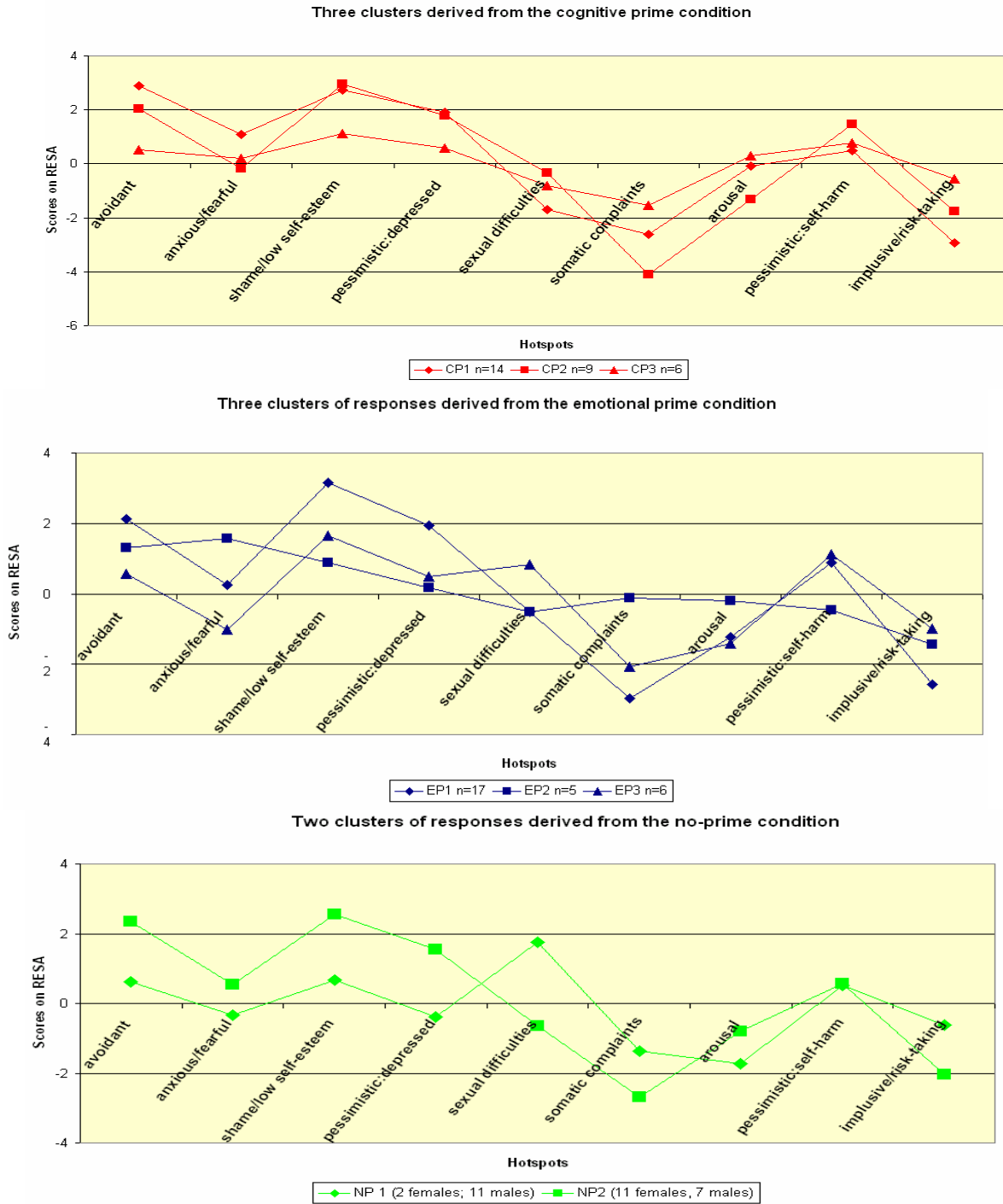


Figure 15. Profiles representing similarly-responding participants in each of the three conditions: CP (cognitive prime), EP (emotional prime), and NP (no-prime).

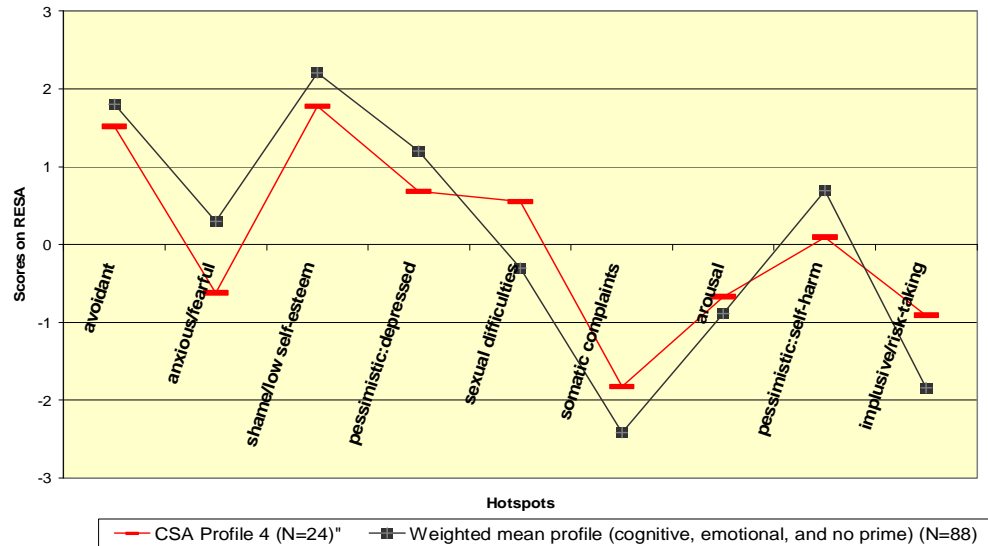
Statistically significant gender differences in profile membership only emerged in the no-prime condition ( $\chi^2(1) = 0.11, p < 0.05$ ). These were expressed in terms of a higher overall intensity of CSA symptoms emphasised by the non-primed females, in particular for avoidance, shame/low self-esteem and pessimism/depression. Sexual and physiological difficulties were the only times the primarily male group indicated a greater intensity of effects than the predominately female cluster. Other statistically significant gender differences in cluster membership were not found for any of the priming conditions.

In this study, however, eight profiles showed minimal variability when a mean profile was calculated across the emotional, cognitive, and no-prime group ( $SEM_{avoid} = .32$ ;  $SEM_{anx} = .29$ ;  $SEM_{shame} = .35$ ;  $SEM_{depr} = .32$ ;  $SEM_{sex} = .38$ ;  $SEM_{soma} = .42$ ;  $SEM_{arous} = .26$ ;  $SEM_{harm} = .20$ ) which justifies the use of a combined mean profile for the prime/no-prime conditions for further comparisons.

### ***Perceived versus reported sequelae of sexual abuse***

Lay perceptions about CSA sequelae showed considerable stability across the prime and no-prime conditions. The combined prime/no-prime mean profile of CSA consequences hypothesised by non-abused lay persons to follow CSA was compared to the most similar CSA profile of CSA clients in Study One (see Figure 16).

Results illustrated that non-abused lay perceptions of what follows sexual abuse resemble, in parts, patterns recovered from one of the primary client profiles. The cognitive schema used by those without a history of abuse, regardless of their state of arousal, slightly overestimated the intensity and frequency of avoidance, self-harm, fearfulness, shame, and pessimism/depressive, while underestimated physiological expressions, like sexual difficulties and somatic complaints, as well as the use of impulsive and risk-taking behaviours (drinking, aggressive or daring behaviour, exposure to high risk situations).



*Figure 16.* Comparison of weighted mean profile summarising CSA sequelae as hypothesised by all three prime/no-prime conditions to the most similar CSA Profile 4 representing CSA clients sequelae.

However, it is emphasised that this perception of lay adults only matches one out of five profiles that represented the sequelae as reported by those with such an experience. Appendix V shows a complete comparison of all sexual abuse profiles to the mean profile calculated for this combined prime/no-prime sample to highlight the complexity and variability of the sexual abuse reports which are not accounted for by the lay perception.

## Discussion

It can be concluded that lay participants, independent of their state of emotional arousal or educational training, reveal mainly *one* stable CSA-specific schema. This study's lay perceptions match to some degree the actual CSA sequelae reported in Study One (CSA Profile 4) in regards to experiences of shame, low self worth, depression, and a high need for coping through avoidance and self-harm. However, the overall variability of CSA sequelae for CSA clients as shown in multiple profiles is not reflected in the basic schema



of lay participants. Oversimplified cognitive schemata are often used as a 'short-cut' to reduce information-processing efforts but can contribute to the formulation of stereotypes (Bower & Forgas, 2000).

Despite their basic nature, perceptions are expected to guide behaviour and influence decision-making (Fazio, 2001; Hetherington & Beardsall, 1998; Kouyoumdjian et al., 2005). Pre-perceived expectations of a person's CSA sequelae may increase the risk that a diverse presentation of CSA outcomes, which may not match lay persons' current schema, may therefore not be recognised as consequences of CSA. If basic lay models of sexual abuse stand in contrast to a person's experienced sequelae, lay peoples' response to a disclosure of CSA may also be at risk to be less supportive or marked by disbelief (Bornstein et al., 2007). As previously reviewed, unsupportive response to disclosure can have a detrimental impact on the adjustment of those with a history of CSA (Ullman, 2003; Ullman & Filipas, 2005).

### ***Categorisation***

Based on Niedenthal et al.'s (1999) theory of emotional response categorisation, this study's first hypothesis proposed that the induction of affective feelings (emotive prime), but not the activation of affective knowledge (cognitive prime), would cause participants to re-organise their perceptions of effect similarities and CSA sequelae. However, while emotion formed the means of categorisation for some item groups (guilt, shame, arousal), these categories were also endorsed by all participants of the emotional, cognitive, and no-prime group. Participants seem to have organised CSA descriptors according to a function or common goal as one of the primary criteria for classification, for example, by grouping together different coping efforts (risk-taking/impulsive or avoidant behaviour). Overall, an even split of functional and emotional response categories was reported. Emotional arousal did not cause participants to consistently organise categories by means of emotion, hence, no support for Bower's (1981) associative network/spreading activation model was found.

In the recovered similarity framework, however, some dimensions in this sexual abuse research corroborate with previous general research using MDS to determine underlying criteria for categorisation, such as arousal difficulties (Russell, 1980) and avoidance/withdrawal (Davidson, 1992). Study Two's outcome corresponds to Study One's findings using an additional sample of expert participants. This research's emotional axis of arousal difficulties and guilt/shame shows thematic resemblance to the hyperarousal/anxiety and blame/low self-esteem poles of the combined lay-expert framework (Study One). Resulting from the two studies, it can be concluded that participants carry a stable and congruent model of which CSA effects are related or "belong-together". This organisation is independent of their level of "expert" knowledge, attempts of cognitive restructuring through training by a professional, or their emotional state at the time of the task. Such shared internal representations ensure participants similar understanding of the effects and coping descriptors on RESA hence form a preliminary step to interpreting participants' attitudes in the next task.

### *Attitude*

The second hypothesis of this study, based on the affective priming effects, proposed that all priming and no-prime conditions will yield different attitudes of CSA sequelae. The cognitively primed group was also expected to be different from the no-prime group because only the former group was given the chance in an 'expert lecture' to adjust their underlying models about CSA. Although the post-study questionnaires demonstrated that participants processed the content of the short films according to the intended experimental effect, participants' responses of CSA sequelae did not vary between the groups. Contrary to the study's second hypothesis, common trends were again found across the emotional, cognitive, and no-prime samples. One can argue that these results portray the common cognitive schema or perception about CSA outcome carried by a high number of non-abused individuals. This was the case although evidence has shown that negatively aroused participants are those trying to over-compensate for bias in the study (reversed priming

effect) and are less likely to rely on their pre-formed knowledge (Glaser & Banaji, 1999). Reversed priming increases the likelihood that participant will over-correct their judgment and become more cautious in their evaluation. Gender differences in judgments were only found for our non-primed sample with female attributing significantly more maladjustment to CSA than men. Previous research on abuse detection has indicated gender differences, with females showing greater tendency to suspect child abuse (Kendall-Tackett & Watson, 1991). However, as there were only small numbers of participants in each profile, female and male perceptions were again investigated in the following Study Three.

Several alternative explanations for the study's outcome can be considered before conceptual ideas on the origin of stable CSA perceptions are discussed. Firstly, ineffectiveness of the primes could account for the similar results, as Fazio (2001) reported that the associated strength of the prime moderates automatic attitude activation. Short responses to a questionnaire completed after the study, however, displayed differences in participants' emotional states, thus validating the effectiveness of the primes.

Secondly, it could be argued that all participants were in a state of (emotional) equilibrium regardless of the manipulation. For example, the exposure to *written stimuli* describing CSA effects could evoke a similar emotional response across all individuals, also known as semantic priming, which could account for the matched perceptions. However, Innes-Ker and Niedenthal (2002, p. 807) showed that "processing of emotional verbal material does not necessitate the induction of an emotional state" by finding that participants' emotional state was not affected by completing an unscrambling task of emotional sentences. Another reason for the emotional equilibrium could be that the exposure to the *task* and its *instructions* may have elicited emotions. As the attitude task specifically asked participants to imagine what will follow sexual abuse, it is probable that thinking about CSA can lead to subjective feelings of distress in the participants. Yet again, previous research has demonstrated that concentrating on cold cognitive aspects during an emotional procedure can prevent participants from actually experiencing the emotion. Niedenthal and Halberstadt (2001) used an emotion-evoking film in which one half of the participants

were instructed to focus only on cold, cognitive aspects of the prime (number of camera perspectives) to prevent them from experiencing an emotional reaction. It was shown that while the emotional group was more likely to use emotional response categorisation, the cognitively stimulated group was not systematically affected by the film. Participants who concentrated on cold aspects of the prime still reported awareness and could recall the emotional content. They did not, however, actually experience the emotion and therefore produced non-emotional categories (Niedenthal & Halberstadt, 2001). This result is similar to the cognitive group in the present research, who, as shown in the questionnaires, recalled cognitive aspects of the film without reporting emotional responses despite engaging in a potentially emotion-inducing task.

### ***Impact of emotion***

A state of equilibrium could have been achieved by relying on similar processing strategies that do not accommodate for emotion to influence cognition. According to the AIM model, information, situation, and person variables determine the processing strategy aimed at minimising cognitive effort (Bower & Forgas, 2000). The sample for the present task can be described as being *highly familiar* with CSA as the topic is commonly discussed in the media. Although CSA has not been experienced by participants themselves or someone in their immediate network (*low personal relevance*), the seriousness of the topic and the awareness of taking part in a research study was likely to lead to a high level of performance motivation (*high motivation, high expectations*). This variable constellation proposes a *motivated processing strategy* in which emotion is least likely to affect cognition (Bower & Forgas, 2000). Participants may control their mood in order to quickly gain access to their internal schemata of CSA which was not substituted by available expert knowledge on CSA. Similar to the automatic attitude activation model (Fazio, 2001), my research suggests that participants share a similar “surface” model of what follows CSA which is readily accessible (not consciously evaluated or retrieved from memory) and forms a common cognitive response as long as the processing strategy prevents emotion from impacting on cognition.

The current study demonstrated that in the presence of an emotion, knowledge underlying this emotion is still obtainable. Accessing *generic knowledge* about an emotion (What follows CSA?), does not inevitably cause an individual to *actually experience an emotion* (guilt, shame, sadness). In terms of the therapeutic setting this implies that an emotional engagement with a client who has been sexually abused does not necessarily interfere with practitioner's ability to access their own knowledge about CSA which is essential to tailor effective treatment. As previously mentioned, if emotion affects the way individuals make sense of presented stimuli, the client-practitioner relationship would be at a potential risk of communication confusion.

### ***Origin of cognitive schema***

As similar perceptions of sexual abuse were one of the primary outcomes of this research, the following section discusses three conceptual ideas enquiring about the origin of such stable beliefs.

*Media portrayal.* As sexual abuse is often discussed in the media, publicised views on CSA sequelae could partly lay the foundation for people's stable internal representations which can be readily activated. Frewin et al. (2006) conducted a critical discourse analysis on how psychological consequences of sexual abuse are portrayed in the print-media in Aotearoa/New Zealand. As earlier discussed in Chapter Two, in the media " 'frequent effects' refer to the most prevalent rhetoric informing the effects of sexual abuse" (Frewin et al., 2006, p. 58). Prevalences and magnitudes are mostly named when consequences of CSA are publicly discussed, mainly to emphasize the severe impact the event can have on a person's life. Other more general discourses describe the impact of abuse in rather non-specific terms such as "it talks of destroyed lives, devastation, death and suicide, disability, permanent mental injury...There is talk of horror, worlds blown apart, ruination and blighted lives" (Frewin et al., 2006, p. 59). Overall, media reports, while expected to have some influence, failed to specifically identify common discourses that could account for the effects and coping efforts highlighted by all participants in the present study (high

levels of shame, low self-esteem, avoidance, and self-harm). However, the discourse analysis focussed primarily on ACC related publications and was limited to print media excluding other potential sources, such as movies or television, which are likely to disseminate stereotypical information regarding CSA.

*Artefact conceptualisation: Barnum effect and illusory correlates.* The artefact conceptualisation is based on the assumption that systematic errors, also known as reliable inaccuracy, account for highly similar responses. It was proposed, for example, that participants generally tend to endorse vague statements which occur at a high base-rate in the general population, commonly referred to as the Barnum effect (Emery & Lilienfeld, 2004; Meehl, 1956; Snyder, Shenkel, & Lowery, 1977).

Conversely, all 100 RESA items on CSA sequelae were developed in collaboration with practitioners working in the area of CSA and based on a range of CSA instruments, research reports, a national survey, and archival data file analysis (Darrah, 2006; Rāanga Whatumanawa Research Project, in press-a). Moreover, if the current item deck actually consists of vague, always-applicable statements, then previous research would not have recovered (a) different profiles among a sample of CSA clients (Study One; Figure 5, 6, 7) and (b) differences in responses from non-traumatised participants reporting on their own well-being compared to reports by non-abused lay persons describing CSA consequences (see Figure 17).

In Study One, the author asked non-traumatised participants to describe their general functioning in the past 6 months without specifying that the used items were specifically related to CSA. Instead of endorsing large number of effects as expected under the Barnum condition, participants only reported a small number of items as applicable to themselves.

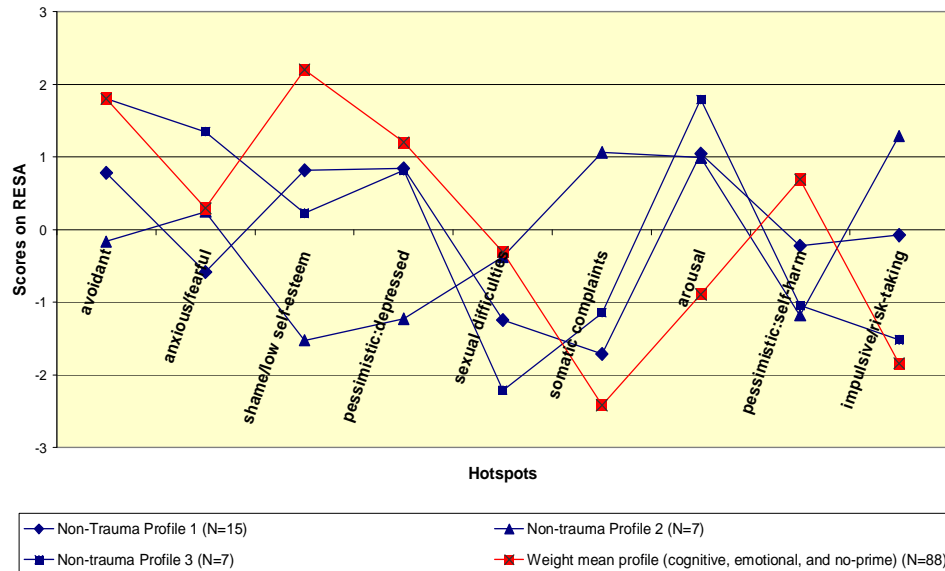


Figure 17. Comparison of three profiles summarising functioning of 29 non-traumatised participants in the last six month compared to the weight mean profile reporting CSA sequelae as hypothesised by 88 participants in the no-prime (NP), cognitive (CP), and emotional (EP) priming condition.

Another artefact explanation for the highly stable responses in this study is based on a series of experiments in the late 1960's. Chapman and Chapman (1967) found that

*systematic errors are produced by variables inherent in the stimuli observed, and are of such a nature that entirely naive observers (...) would report the same erroneous correlates of patients' symptoms (p. 193-194).*

Termed *illusory correlates*, it was suggested that the occurrence of one element is strongly associated with the occurrence of another. Illusory correlates reported by naive participants matched the responses of experienced clinicians; however both sets of answers did not correspond to the actual outcomes observed in clinical cases (Chapman & Chapman, 1967, 1969). The study highlighted that consensus validation amongst participants, which was regarded as evidence of validity, could simply be a result of a shared systematic error

rather than due to the associative strength of two stimuli. Alas, Chapman and Chapman did not further explore the origin and reasons for such illusory correlates for which lay persons and professionals are equally prone.

In regards to the present study, the coherent responses amongst the different prime/no-prime groups could be attributed to the phenomenon of such illusory correlates. The consensus response of shame/low self-esteem and depression/pessimism could suggest high associative strength; proposing the occurrence of one could lead to the presence of the other. However, avoidance and self-harming strategies may not be initially associated.

Interestingly, attempts by Chapman and Chapman (1967, 1969) to train and re-structure the associative strength between two stimuli failed, similarly to the cognitive training intervention of the present research. Overall, the primary argument against a systematic error among lay persons' hypothesised sequelae is the actual overlap between the profiles found in the present study and the empirical reports of CSA clients (Study One). In Chapman's research no overlaps between the hypothesised responses and the actual observation were found. Nonetheless, one challenging questions may be raised: If all people are prone to illusory correlates, how prevalent may those associations be amongst self-reports? At this stage the CSA sequelae hypothesised by lay adults matches the consistent outcomes collected by some CSA clients. However, non-abused perceive the sequelae of CSA as less complex than the reports by those who have experience CSA.

The third study will shed more light on this argument by comparing lay and CSA client outcomes to reports by sexual abuse practitioners.

*Reversed priming and social projection hypothesis.* As shown in Figure 17, lay participants' self-reports describing their own functioning versus lay perceptions of what follows CSA, demonstrate variability but, moreover, illustrate a "mirrored" profile across some of the hotspots (shame/low self-esteem, self-harm, arousal, somatic complaints). This reverse effect can be explored by discussing self-reference as a primary point of evaluation. Based on a model of dissimilarities, participants who have not been abused could attribute features that they do not see in themselves to the event of CSA (shame, low



self-esteem, self harm), while characteristics commonly experienced in a non-traumatised population are not endorsed as CSA sequelae (arousal difficulties).

Krueger and Stanke (2001) introduced the social-projection hypothesis which emphasised that in order to make judgments about group attributes, participants rely more strongly on self-referent information – even more so than integrating available other-referent knowledge which could explain the unsuccessful cognitive priming effect. Similar to the AIM model's assumption of effort minimisation, Krueger and Stanke argue that self-knowledge is employed because egocentric encoding causes self-referent information to be more readily accessible (faster, easier, and stable access) than considering other-referent information (expert). Participants refer to their own declarative knowledge underlying CSA which is likely to be a pre-determined schema based on strongly cued retrieval of stored cognitive content. This passive conservation of a common model of CSA as opposed to active generation of new information is likely to be shared by others, especially as responses are less likely to be tainted by emotion.

Motivated-processing strategies which lead participants to access their cognitive schemata are thought to be based on a low effort model of self-reference, hence it may account for some of the here found stability in responses. It is therefore argued that self-knowledge continues to be a primacy source of information, likely to be readily activated, when evaluating familiar and unfamiliar situations even when participants are not representative of the group and in the face of experienced arousal. Again, this emphasises the role of perceptions carried by individuals, which only match some empirical CSA reports and fail to account for the underlying variability.

### ***Conclusion***

Non-abused participants carry highly stable and coherent perceptions of what follows CSA and what effects conceptually belong together. Neither an emotional experience nor educational information was associated with specific perceptions regarding CSA sequelae.

Such a stable schema was noted despite a large sample for each task ( $N=88$ ) using a broad range of 100 possible CSA effects covering emotion, cognition, behaviour, and physiology. Results did not confirm previous research on emotional response categorization or automatic affective activation, but rather suggest a common and stable cognitive CSA schema. Neither emotional arousal nor the availability of expert information was associated with a distinct or condition-specific perception of CSA sequelae. Non-emotional processing strategies are thought to lead participants to access pre-determined cognitive schema when asked about CSA. A readily accessible model of self-reference was discussed as one of the possible origins for participants' strongly cued perceptions despite individuals not being representative of the target group. While lay perceptions match some of the empirically reported sexual abuse sequelae, they nevertheless appear to form a simplified version as they do not capture the complexity and variability in reported functioning after sexual abuse.

## **LINKING THOUGHTS II**

---

Thus far in the programme of research, it has emerged that CSA clients show a considerable amount of variability in their sequelae, and thus do not yield a CSA-specific effect-coping pattern. Non-abused lay people, on the other hand, carry one stable perception of CSA sequelae which is highly similar regardless of the presence of emotional arousal or attempts at cognitive re-structuring. Lay perceptions were concluded to only partially overlap with sequelae patterns reported by CSA clients but do not account for the complexity of outcomes presented after CSA. In fact, lay participants display an oversimplified perception of the sequelae of CSA.

With Study One emphasising variability in experienced CSA consequences and Study Two revealing oversimplified perceptions carried by lay persons, it became of particular interest to explore if practitioners are exempt from such perception bias. Study Three was therefore designed to investigate professionals' sensitivity in identifying CSA consequences as well as discriminating between effects and coping. Previous findings of both studies have confirmed that the conceptualisation of effects and coping as two different parts of the sequelae can shed some light on underlying functional processes. As the previous no-prime condition revealed gender differences in perceptions of the severity of sequelae, practitioners' gender was considered as a mediating variables as well as their professional discipline.

## CHAPTER FIVE

---

### Study Three

#### **A signal detection analysis of practitioners' decision-making on the sequelae of child sexual abuse**

After the investigation of both, self-reported functioning following abuse and lay beliefs on CSA sequelae, the present study was interested in the views of practitioners working in the field of sexual abuse. Practitioners' conceptualisation of CSA can be placed as an intermediate puzzle piece between those who have had a personal experience (Study 1) and those who are not in close contact with CSA (Study 2). Signal detection analysis was used to independently determine sensitivity and potential bias made by practitioners when identifying CSA sequelae and discriminating CSA effects from coping to relieve negative distress. The impact of professional training and gender on the perception on CSA sequelae was explored.

As found in Study Two, lay, non-abused individuals appear to carry stable beliefs of CSA consequences. Yet, stereotypic perceptions of sexual abuse have also been found amongst professionals working with those with a history of CSA. Similar to lay persons, these perceptions are subject to change if the characteristic of the abuse scenarios are manipulated. Moreover, for professionals such preformed perceptions are likely to guide clinical judgment (Hetherington & Beardsall, 1998; Kendall-Tackett & Watson, 1991; LaBarbera, Martin, & Dozier, 1980; Wagner, Aucoin, & Johnson, 1993). Unconscious attitudes about CSA, including "sex role stereotypes, belief systems connected to professional training, and personal history, are likely to influence decisions about which data clinicians find important and how they are interpreted" (Jackson & Nuttall, 1993, p. 128). Professionals are therefore not exempt from perception bias and its potential to impact on clinical decision-making. It rather appears that they may be unaware of such processes which can make it difficult to identify variables influencing their decisions and

to adjust their responses (Nisbett & Wilson, 1977). With perceptions thought to guide behaviour and clinical judgment, it is my interest to view practitioners' perceptions of clients' functioning after sexual abuse.

## **Gender**

The formations of CSA-specific perceptions appear to vary amongst gender groups. Research highlights that females indicate a greater tendency to be more "credulous" than their male peers (Eisenberg, Owens, & Dewey, 1987; Jackson & Nuttall, 1993, p. 127). For a small number of non-abused lay females, support for this outcome was shown in Study Two. Females, who were not probed with a prime, attributed significantly more distress and a greater need for coping to an experience of CSA than a non-primed, non-abused male group. Only sexual difficulties were rated as more likely to be a result of SA by non-primed, non-abused lay men (Study Two).

Among professionals, gender has also been found to impact decision making. Research indicates that females are more strongly guided by their beliefs when forming decisions about sexual violence, for example, in alleged child abuse cases (Kendall-Tackett & Watson, 1991). Bassuk and Aspler (1983), exploring practitioners' perceptions of the sequelae of sexual assault found that female therapists reported significantly higher levels of functional impairment and symptom severity in those who experienced assault compared to their male colleagues.

Overall, it has been shown "that female professionals tend to be more pro-victim in their judgments compared to their male counterparts" (Hetherington & Beardsall, 1998, p. 1267) and view CSA as a "more serious and prevalent problem" (Attias & Goodwin, 1985, p. 530) than their male peers. Some, indeed, have argued that minimisation of CSA by male professionals may serve a self-protective function as the perpetrator is primarily of the same sex (Attias & Goodwin, 1985; Jackson & Nuttall, 1993).

Yet, gender differences as such are not necessarily specific to the study of CSA. In a signal detection study using a word recognition task, Marquie and Baracat (2000) noted that male respondents employed more conservative decision criteria compared to the more liberal criteria used by their female counterparts. To study differences in practitioners' perceptions regarding CSA sequelae, gender was investigated in the present study as a moderating variable.

### **Professional background**

As part of the Rārangā Whatumanawa guidelines, interviews with over 150 New Zealand registered Sensitive Claims practitioners highlighted a wide range of beliefs and attitudes about sexual abuse (Rārangā Whatumanawa Research Project, in press-a, in press-b). The impact of these views on clinical judgment in Aotearoa/New Zealand was explored for the first time explored in the present study. Differences in practice orientation amongst various disciplines have been at least partially attributed to philosophical differences (Saunders, 1988).

Perceptions on CSA sequelae among different professional groups have been shown to affect clinical judgment and influences decision-making processes about appropriate interventions (Hetherington & Beardsall, 1998; Jackson & Nuttall, 1993). Saunders (1988) studied perceptions and responses of five different professional groups in regards to CSA including social workers, police, and judges. Significant differences emerged regarding the judged credibility of the abuse reports and the appropriate punishment. Perceptions and decision-making were closely linked to the assigned role of their respective professional agency. Langer and Abelson (1974) as well as Snyder (1977) demonstrated that different school of thought affect practitioners' evaluations of maladjustment and their attribution regarding the locus of the problem, particularly when participants received a clinical and non-clinical label. Professional discipline was therefore included in the present study as a moderating variable to view the impact of CSA.

### **CSA versus non-CSA consequences**

In the past 30 years, the conceptualisation of CSA has changed from being an inevitable life-long disorder to a complex life event with a variety of possible, but not inevitable, outcomes which are mediated by a range of variables and coping recourses (Beitchman et al., 1992; Putnam, 2003). Clinical practice, in an attempt to link and understand such a variety of behaviours, is therefore a challenging information-processing task for practitioners (Lopez, 1989). This study evaluated practitioners' sensitivity to identify items related to CSA from those expected to have no links to sexual abuse.

When RESA was developed, all items derived from consultation with CSA practitioners across Aotearoa/New Zealand via focus groups, key interviews, a national survey and an archival data file analysis (Study One). In addition I reviewed the national and international literature to generate a list of emotional, behavioural, and cognitive descriptors. A team of experts help to finalise the set of 100 RESA items including CSA effects and ways of coping with negative distress. While RESA's relevance to describe sexual abuse functioning was confirmed by 113 clients in Study One, it was also revealed that the overall pattern of functioning reported after CSA resembled the responses of a sample of non-traumatised participants. Thus, the first task of the present study takes a reverse approach on again confirming the application of the items included in RESA by embedding those amongst a set of supposedly non-related items. Practitioners' sensitivity and possible bias in discriminating CSA sequelae from non-sequelae were explored.

### **Effects versus coping with CSA**

So why is it necessary to recognise the nature and level of coping in each individual who has experienced sexual abuse? As established in Chapter Two, coping can be conceptualised as a tension-reduction strategy employed to provide immediate relief from emotional distress and negative tension following CSA (Briere, 1992; Whiffen & MacIntosh, 2005). However, the most commonly utilised coping approach (avoidance), which was also rated as the most helpful, has been shown to lead to poor psychological

adjustment in the long-term (Leitenberg et al., 1992). Moreover, the use of maladaptive coping strategies, which may even be effective in providing initial relief, also substantially increased a person's risk of revictimisation (Filipas & Ullman, 2006). This emphasises the need for practitioners to recognise maladaptive coping strategies and replace them with a constructive way of coping which provides similar relief but poses less harm to their overall functioning.

### ***Relevance for treatment***

Coping also plays an important part in the disposition of therapy, for example, in terms of safe goal setting. Briere's Self-Trauma model (2002) emphasises the role of coping, or "self-skills", as a necessary tool to withstand trauma-focused therapy. Practitioners are asked to evaluate clients' initial coping ability and ensure sufficient self-resources are implemented before turning the attention to trauma-related events. Maladaptive coping can also hinder the progress of therapy. Cognitive-Behavioural Therapies for trauma emphasise the importance of minimising avoidance strategies to prevent negative affect, particularly when using an intervention like Prolonged Exposure (Follette & Ruzek, 2006). In some therapeutic approaches the shift from maladaptive to constructive means of coping even form the overall goal. Acceptance Commitment Therapy (Hayes et al., 2003) emphasises the need to replace maladaptive coping (experiential avoidance) with a state of acceptance of one's internal states of emotion and cognition in order to improve functioning. All of these therapeutic approaches were identified by the Aotearoa/New Zealand Practice Guidelines for Sexual Abuse (Rāanga Whatumanawa, in press-a, in press-b) as beneficial in helping adults with a history of sexual abuse to improve their well-being and life satisfaction.

Overall, a variety of behavioural, cognitive, and integrative treatment programmes utilise an approach in which effect-coping dynamics are actively evaluated. Ideally, a therapist's ability to initially assess a client's type and level of coping forms a pre-requirement to the treatment process to ensure the safety of the client. The reinforcement of constructive



strategies and replacement of avoidance or self-destructive coping have shown to be an effective approach to sexual abuse treatment (Rāranga Whatumanawa Research Project, in press-b). Nevertheless, difficulties may emerge as the assessment at the beginning of therapy is likely to be a complex and challenging information-processing task. Practitioners are often faced with a mixed set of CSA-related and unrelated behaviours as well as a range of learned coping strategies. The present study simulated such a situation and explored practitioners' underlying conceptualisation of CSA effects and associated coping.

### **Study aims**

As a means to determining professional perceptions of CSA sequelae, the present study explored practitioners' accuracy and response bias when asked to discriminate (a) CSA effects from non-effects, and (b) direct CSA effects from secondary coping strategies. Gender and professional background were investigated as potential moderating variables impacting on participants' decision-making.

### **Method**

#### ***Approach***

Signal detection theory (SDT) (Green & Swets, 1966; Macmillan & Creelman, 1991) has been used as a supplement to MDS to provide a specific index of sensitivity independent of the participant's decision criterion (reflecting the degree of response bias). In conjunction with multidimensional models, SDT has received strong support as a "well developed, promising, powerful" method to evaluate clinical assessment accuracy (Abdi, 2007; McFall & Treat, 1999, p. 237). For the purpose of the present study, SDT provides a more detailed account of the specific criteria and bias underlying participants' judgments than those emerging from MDS profiles.

SDT yields four possible response outcomes for a set of stimuli consisting of 'signal' and 'noise' items. In the first task of the present study, a signal item is a statement that describes

a consequence of CSA, whereas a noise item is a statement that is not a consequence of CSA. In the second task, coping strategies secondary to CSA were included as signal items, while noise items consisted of statements that describe effects directly related to CSA. When presented with a signal, participants either correctly identify it as a signal (a *hit*), or incorrectly as a noise (a *miss*). A *correct rejection* occurs when a noise item is correctly identified, and a *false alarm* when incorrectly identified. The total number of hits is referred to as the hit rate (HR), usually expressed as a proportion or a percentage. Similar procedures are used for the determination of the miss rate (MR), the correct rejection rate (CR), and the false alarm rate (FAR). SDT specifies that it is necessary to use only HR and FAR to calculate estimates of sensitivity and response bias, because MR and CR, respectively, are their compliments ( $HR = 1 - MR$  and  $FAR = 1 - CR$ ) (Egan, 1975; Green & Swets, 1966; Macmillan & Creelman, 1991; McNicol, 1972).

### ***Participants***

Demographics of participants in the present study provided a balanced representation of the gender-ratio and multidisciplinary professions currently registered under the ACC Sensitive Claims scheme in Aotearoa/New Zealand, with the exception of the least represented profession of psychiatry (8%) which was not included in the present study. Eighty-five practitioners (72 females, 13 males) experienced of working with adult clients with a history of CSA took part in an online survey about the consequences of CSA. This study's gender ratio of 85% female and 15% male practitioners matches the ACC gender ratio of the female and male practitioners currently registered to provide Sensitive Claims services. Further information on the multidisciplinary professions included in the present research is presented in Table 2. As a mean of comparison, practitioners' providing current Sensitive Claims services for ACC consist to 56% counsellors, 21% psychologists, and 15% psychotherapists. Table 2 highlights that the practitioners identifying themselves as psychotherapist are overrepresented in the present study compared to the reported demographics provided by ACC (ACC Statistical Unit, personal communication, February 8, 2008).

Table 2

*Demographical Information of Sensitive Claim Practitioners in Signal Detection Research*

Professional discipline	Females	Males	Total N
Clinical psychologist, Psychologist (Psych)	17 (20%)	3 (3%)	20 (23%)
Psychotherapist, Psychotherapy (Thera)	21(25%)	5 (6%)	26 (31%)
Counsellor, Counselling psychologist, Social Worker (Coun/Soc)	33 (39%)	5 (6%)	38 (45%)
Missing identification (Missing)	1 (1%)	-	1 (1%)
Total	72 (85%)	13 (15%)	85 (100%)

***Stimuli and procedure***

The online signal detection study was approved by the Massey University Human Ethics Committee (HEC: 06/55). A letter of invitation was posted to potential participants explaining the aims and nature of the two-part online study followed by a reminder e-mail one month later. Information sheets, consent forms, and instructions were presented online and were immediately followed by the beginning of the two consecutive rating tasks (Appendix W-X).

*Effect task.* In the first task, participants were asked to rate each of 48 statements on a 6-point Likert scale according to their likelihood of being a “direct consequence of CSA” seen in adult clients (Appendix X). Of the 48 items, 24 'signals' were extracted from the empirically-derived RESA instrument summarising behaviours, emotions, cognitions, and physiological effects and various coping strategies linked to CSA. The remaining 24 'noise' items consisted of behaviours not thought to be specifically related to sexual abuse, for example, *diabetes*, *fear of large animals*, and *superstitiousness* (Appendix Y). Noise items used in this task were previously evaluated in a pilot study with regards to the statements

positive and negative connotations to match the set of signal items. Effects and non-effects were displayed in a random order on the computer screen one at a time.

*Coping task.* After reading a bridge page (filter), participants were then asked to rate items according to their likelihood to be a “way of coping with CSA” (Appendix X). Twenty-four supposed coping strategies (signals) were extracted from RESA, while the remaining 24 noise items consisted of presumed direct CSA effects (noises) derived from the same instrument. The initial effect-coping classification in RESA was based on the reports of Aotearoa/New Zealand practitioners, collected in the verbal and written form, during the course of the Rāanga Whatumanawa project (Study One). Moreover, efforts of coping or ways of relieving emotional distress have been classified in accordance with the literature (Chapter Two). Some of the items used in this second task were also part of the first exercise. Subsequent to the completion of both tasks, participants were debriefed and thanked for their participation.

## **Analyses**

### ***Item analysis***

Participants’ likelihood ratings of one, two, or three on the 6-point Likert scale were counted as signal responses, while scores from four to six counted as noise responses (McNicol, 1972). All signal and noise items were then hierarchically ranked, ranging from the most commonly correctly identified items to the most commonly incorrectly identified items.

### ***Signal detection analysis***

HR was calculated as the number of correctly detected signal items divided by the total number of signal items in the study. FAR was determined by dividing the total number of noises incorrectly identified as signals divided by the total number of noise items.

Adding the total number of noises incorrectly identified as signals divided by the total number of noise items determined the FAR (McNicol, 1972). HR and FAR probabilities

were calculated for each participant and transformed into  $z$  or standard scores. The parametric measure of sensitivity,  $d'$ , is defined as  $d' = z(\text{HR}) - z(\text{FAR})$  (Green & Swets, 1966; McNicol, 1972). Large  $d'$  values indicate a high level of sensitivity, whereas values close to zero show no ability to discriminate between signal and noise items. The  $d'$  index assumes equal variances of the signal and noise distributions underlying the SDT model. Due to this study's participant-stimuli ratio, a non-parametric measure of sensitivity,  $P(A)$ , was also calculated.

The parametric measure,  $C$ , quantified participants' response bias. This measure is defined as  $C = -1/2[z(\text{HR}) + z(\text{FAR})]$  (Macmillan & Creelman, 1991). Values of  $C$  close to zero indicate little or no bias when making signal and noise judgments. Values of  $C > 0$  occur when a participant responds "signal" only when quite sure a signal item has been presented. That is, there is a bias towards identifying items as noise items. When  $C < 0$ , the participant has a liberal bias, tending to make more signal than noise responses (Abdi, 2007). According to SDT,  $d'$  and  $C$  are independent; thus, the two measures should not correlate. A non-parametric measure of bias was calculated using  $B = \exp [-1/2(z\text{HR}^2 - z\text{FAR}^2)]$  (Macmillan & Creelman, 1991).  $B$  values are not individually reported as  $B$  yielded highly similar results to  $C$ .

The receiver-operating characteristic (ROC) curve is a plot of HR (y-axis) against FAR (x-axis). The area under the resulting curve defines  $P(A)$ , a non parametric measure of sensitivity. The area under the ROC curve will be 1.0 (100%) where the participant makes no false alarms, and 0.5 (50%) when the participant is unable to discriminate between signal and noise items.  $P(A)$  is not affected by the nature of the signal and noise distributions underlying the SDT model (Egan, 1975; Green & Swets, 1966; McNicol, 1972). A factorial analysis of variance (ANOVA) was calculated for sensitivity ( $d'$ ) and response bias ( $C$ ) to view main and interaction effects of across professional disciplines and gender.

## Results

### *Item analysis*

In the first task, participants were asked to discriminate CSA effects from non-effects. Percentages indicate the number of participants providing *correct responses* for each item. Signal items (CSA effects) that were most commonly identified by the 85 participants as CSA sequelae were: *Feeling unsafe* (95%), *Sexual problems (e.g., cannot get aroused)* (95%), *Feel humiliated* (94%), *On edge* (94%), *Trouble concentrating* (93%), and *Avoid socialising or mixing with people* (92%). While linked to CSA in previous research, *Feelings of pregnancy despite negative testing* (32%), *Had sex with someone of the same gender* (40%), and *Vomiting* (52%) were endorsed by only half or less of all participants.

Noise items commonly correctly identified as non-effects were: *Diabetic* (84%), *Fear of large animals* (79%), *Fond of science-fiction books/movies* (79%), *Exercise daily (sport)* (79%), *Skin problems (acne)* (71%), *Strong religious beliefs* (69%), *Perceive own self as "bullet proof"* (61%), and *Low pain threshold* (60%). Yet, the non-effect least likely to be endorsed as a consequence (Diabetic) was still claimed by 14 out of 85 professional practitioners to be related to CSA.

Interestingly, some of the study's purported non-effects were in fact very highly endorsed to be a consequence CSA such as *Self-conscious (e.g., dislike being photographed)* (94%), *Feelings of guilt when experiencing happiness* (89%), *Inappropriate responses (e.g., giggles in sad moments)* (80%), *Dictatorial (need to be in control)* (76%), *Agreeable* (75%), and *Gambling* (74%).

In the second task, participants were asked to distinguish CSA effects (noise) from commonly used ways of coping with CSA (signal). All of the following signal items were correctly identified as coping strategies by the vast majority of participants: *Avoid socialising or mixing with people* (96%), *Trouble trusting others (e.g., friends, partner)* (98%), *Push uncomfortable thoughts out of mind* (95%), *Often have the urge to wash or*

*bath myself* (94%), *Hurt myself on purpose (e.g., cutting, burning)* (94%), *Have sex with someone hardly known* (94%), *Sexual problems (e.g., cannot get aroused)* (94%), *Engage in unsafe sex* (93%), *Experiment with drugs* (92%), *Perfectionist* (92%), and *Thoughts about ending own life* (91%). Whereas *Had sex with someone of the same gender* (49%), *Irregular or severe menstrual periods* (53%) and *Vomiting* (60%) had the lowest level of confirmation of actually being a coping reaction following CSA.

Although coping was previously defined as a strategy to reduce distress, over 90% of participants interpreted the following effects as a common way of coping with CSA: *Ashamed of self*, *Angry*, *On edge*, *Feeling unsafe*, *Not in control of own life*, *Guilty*, *Worry about a lot of things*, *Feel worthless*, *Numb*, *Pessimistic about the future*, *Feel humiliated*, *Trouble concentrating*, and *Afraid of what other people think about me*. Only very few CSA effects were correctly identified as *not* being a way of coping with CSA: *Feelings of pregnancy despite negative testing* (36%); *Hear things that others don't believe are there* (64%), *Cry easily* (66%). All results of the item analysis of the first and the second task are listed in Appendix Z.

### ***Signal detection analysis***

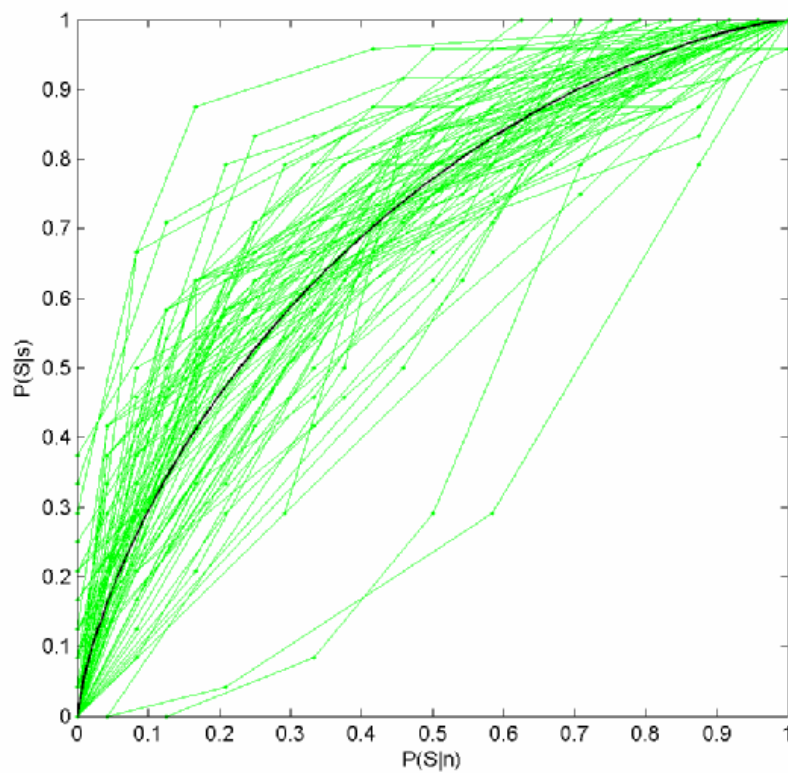
Only very small correlations for  $d'$  and  $C$  were found for the first ( $r = -.102$ ) and second ( $r = -.022$ ) tasks. These results suggest that, on average, participants' sensitivity was relatively independent of response bias. As parametric and non-parametric measures of sensitivity yielded similar results, the interpretation of  $d'$  for further analysis was justified (Table 3).

In the first task, participants were highly sensitive when distinguishing signals (effects) from noise (non-effects) ( $d' = 0.93$ ;  $SD = 0.66$ ). The measure of bias indicated a small tendency to lean towards signal responses, as participants employed a minimally liberal criterion ( $C = -0.49$ ;  $SD = 0.77$ ) (see Figure 18).

Table 3

*Mean Values for Hit Rate (HR), False Alarm Rate (FAR), Signal Detection Indices of Sensitivity ( $d'$  and  $P(A)$ ) and Response Bias ( $C$ )*

<b>Task</b>	<b>HR</b>	<b>FAR</b>	<b><math>d'</math></b>	<b><math>P(A)</math></b>	<b><math>C</math></b>
1. Effect vs. No-effect	0.78	0.53	0.93	0.70	-0.49
2. Effect vs. Coping	0.83	0.86	-0.10	0.46	-1.43

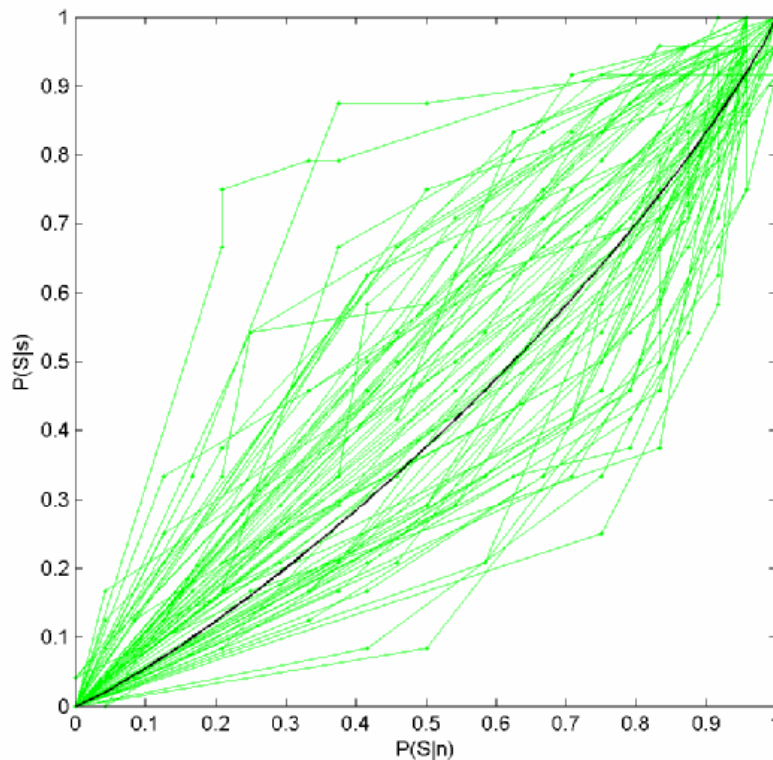


*Figure 18.* Mean area under the receiver-operating characteristic curve (ROC) for discriminating effects from non-effects. The smooth, dark curve represents the mean ROC for all 85 participants.  $P(S/s)$  on the y-axis represents the Hit rate, while  $P(S/n)$  indicates the False Alarm rates on the x-axis.



Figure 18 shows the ROC curves for all participants when asked to discriminate effects from non-effects (Task 1). The mean area under the curve exceeds 70% ( $ROC_{mean} = 0.70$ ;  $SD = 0.08$ ), revealing generally good discriminant abilities. All but two participants produced ROC curves whose  $P(A)$  values are  $>50\%$ . The two aberrant participants that had  $P(A)$  values  $<50\%$  were generally responding to effects as non-effects, and vice versa.

When asked to distinguish effects from coping behaviour (Task 2), participants' accuracy in decision-making was extremely reduced. Negative  $d'$  values and a mean ROC curve below the chance line indicate that participant did not correctly discriminate between effects and coping items ( $d' = -0.10$ ;  $SD = 0.73$ ;  $ROC_{mean} = 0.46$ ;  $SD = 0.11$ ) (Figure 19).



*Figure 19.* Mean area under the ROC curve for discriminating effects from coping strategies following sexual abuse (darkened curve). Individual curves are also shown for all 85 participants.  $P(S/s)$  on the y-axis represents the Hit rate, while  $P(S/n)$  indicates the False Alarm rates on the x-axis.

In fact, many more participants in Task 2 were prone to identifying noise items as signal items, and vice versa, compared to Task 1. On average, participants used a highly liberal criterion ( $C = -1.43$ ;  $SD = 0.99$ ), demonstrating an over inclusive attitude to identifying items as ways of coping with CSA (see Table 3). Out of 85 participants, 79 yielded negative values for  $C$ . In other words, 92% of all participants leaned (sometimes strongly) towards making signal (coping) responses.

Figure 20 shows the average ROC curves for Tasks 1 and 2, this time with the HR and FAR values transformed to their  $z$ -score equivalents. Such a transformation yields a straight-line ROC curve, in the present case, the curve having a slope very close to unity. This outcome for Task 1 strongly suggests that participants' degree of sensitivity remained constant, yielding a straight line with a slope of approximately unity, irrespective of the decision criterion value (represented by different pairs of hit and false alarm rates) adopted. For Task 2, the ROC curve clearly shows an inability to discriminate between signal and noise items, with participants' responses falling almost on the chance line.

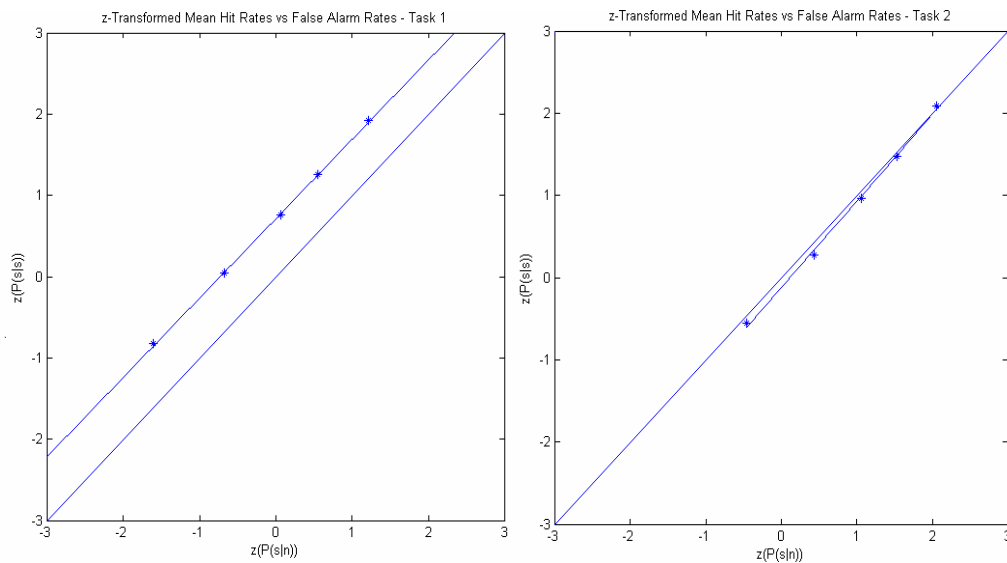


Figure 20. ROC curves for  $z$ -transformed Hit ( $P(S/s)$ ) and False Alarm ( $P(S/n)$ ) rates, where sensitivity ( $d'$ ) is the distance between the chance line and the curve.

*Gender and profession.* Sensitivity, or accuracy, in distinguishing effects from non-effects did not depend on gender or professional discipline. However, gender was linked to significant differences in the type of response bias (see Figure 21). Mean differences for the measure of bias ( $C$ ) revealed a tendency for females to be overinclusive when discriminating effects from non-effects, due to lax criteria towards signal (effect) responses ( $Mean_{females} = -.63$ ,  $SD_{females} = .62$ ). Males employed a more cautious or conservative criterion ( $Mean_{males} = .25$ ,  $SD_{males} = 1.10$ ). The mean difference for female and male response bias reached statistical significance,  $F(1, 78)=15.561$ ,  $p < 0.05$ .

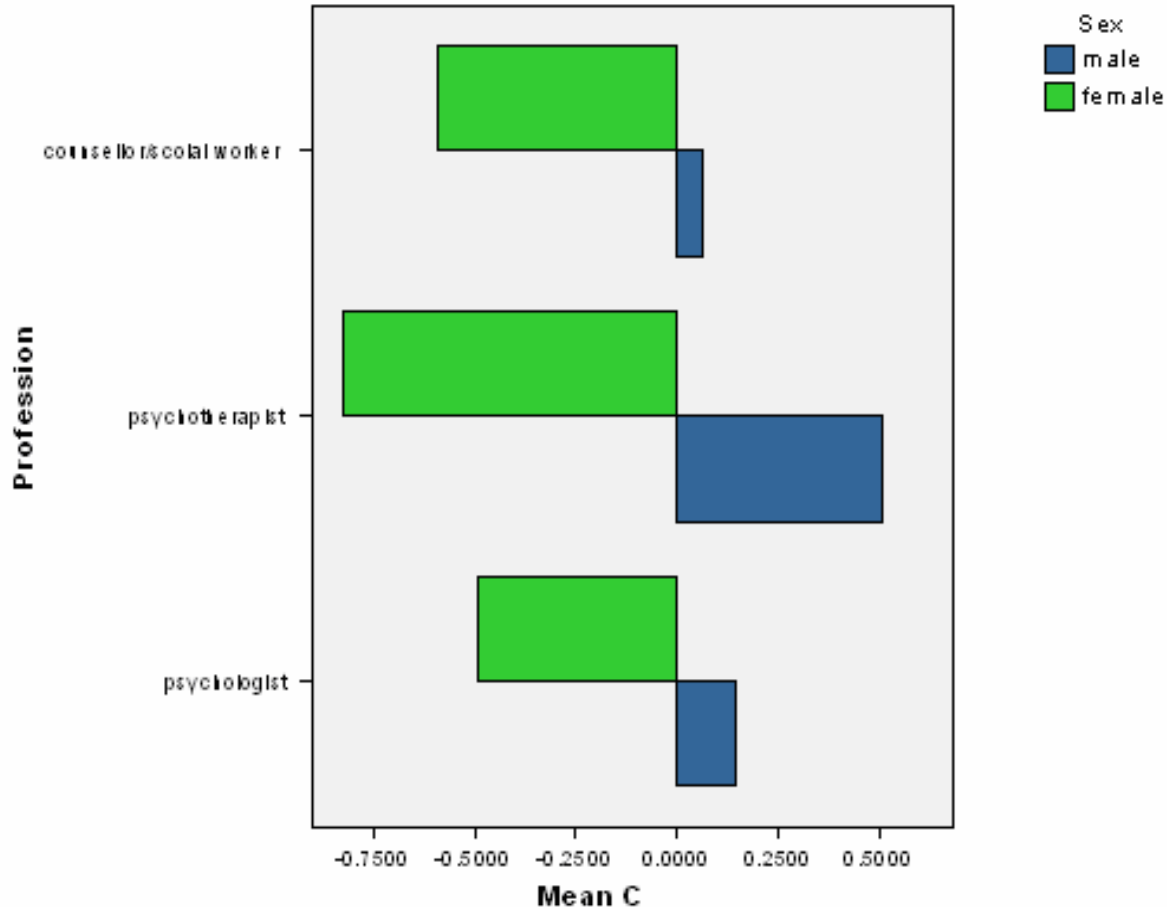


Figure 21. Gender and professional split of mean response bias ( $C$ ) for discriminating effects from non-effects.

No significant main effects for  $C$  were found across the three professional disciplines ( $Mean_{Psych} = -.40$ ,  $SD_{Psych} = .60$ ;  $Mean_{Thera} = -.57$ ,  $SD_{Thera} = .90$ ;  $Mean_{Coun/Soc} = -.50$ ;  $SD_{Coun/Soc} = .78$ ). Interestingly, Figure 21 shows that female psychotherapists employed very liberal decision-criteria compared to their female peers. Male psychotherapists however, showed indicated the most conservative criteria towards signal responses across the overall sample. However, ANOVA revealed no significant interaction effects for either accuracy or response bias across gender and the three professional disciplines for Task 1.

In the second task, no significant main effects for sensitivity were found for gender or professional disciplines. Yet, a statistically significant variation was again recovered for the type of bias made by females and males,  $F(1, 78) = 5.083$ ,  $p < 0.05$  (see Figure 22).

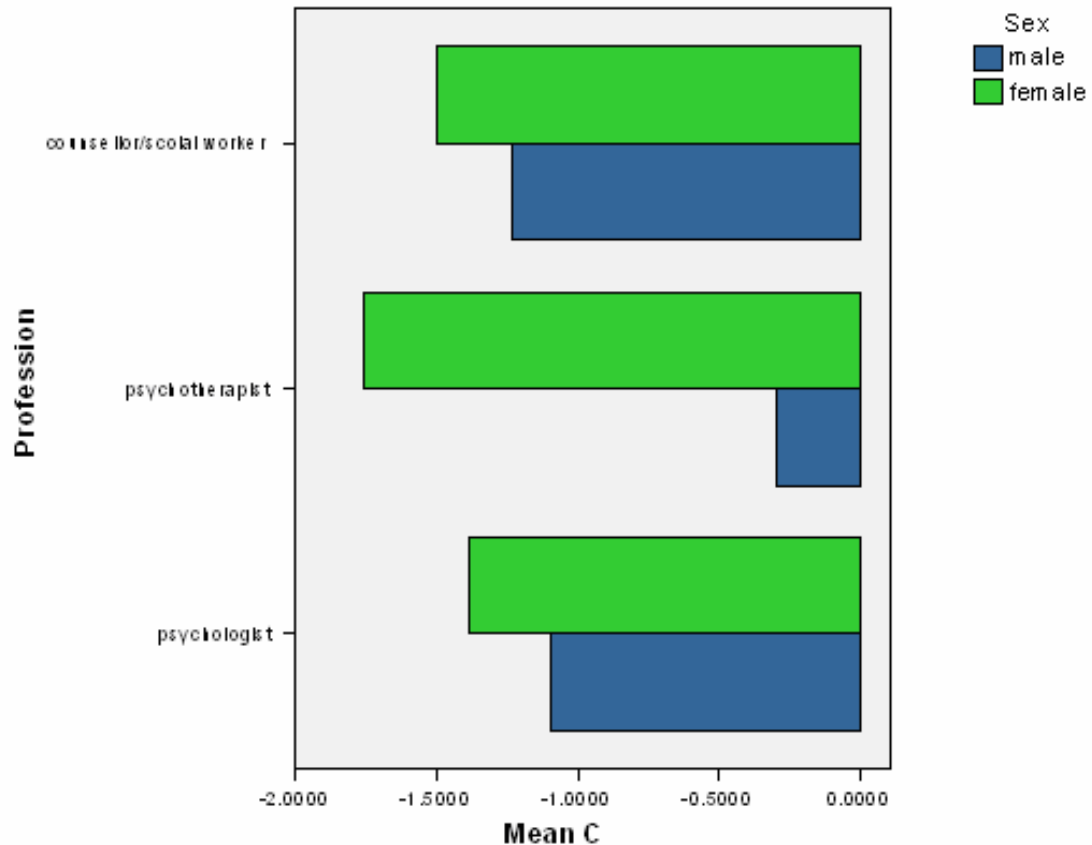


Figure 22. Gender split of response bias ( $C$ ) for discriminating effects from coping strategies.

While males were somewhat over inclusive ( $Mean_{\text{males}} = -.84$ ,  $SD = 1.20$ ), females showed a very strong tendency ( $Mean_{\text{females}} = -1.54$ ,  $SD = 1.00$ ) to identify almost all of the presented stimuli as ways of coping with CSA. Similar to Task 1, professional disciplines did not yield significant differences in response bias. Mean bias across all professions was highly similar ( $Mean_{\text{Psych}} = -1.34$ ,  $SD_{\text{Psych}} = 1.27$ ;  $Mean_{\text{Thera}} = -1.47$ ,  $SD_{\text{Thera}} = 1.01$ ;  $Mean_{\text{Coun/Soc}} = -1.46$ ;  $SD_{\text{Coun/Soc}} = .82$ ). Although the interaction effect did not reach significance, male psychotherapists showed the least tendency and female psychotherapists the greatest tendency to be overinclusive by classifying most CSA effects as a method of coping with CSA.

## Discussion

SDT methodology was successfully utilised as a functional method in this study to quantify participants' judgment accuracy independent of their tendency to make signal or noise responses. Practitioners showed a high agreement that adults with a history of CSA commonly experience difficulties with safety, sexuality, shame, and hypervigilance. Most of these effects (low self-esteem/shame, depression, anxiety/fearfulness, arousal) have previously been reported by CSA clients (Study One) and by lay adults to describe their perception of CSA consequences (Study Two). However, the SDT results also highlighted that practitioners attributed sequelae to CSA that went beyond the lay persons' perceptions of what follows CSA, for example impulsive/ risk-taking behaviour including aggression (Appendix Z). Nonetheless, the basic agreement among lay adults and sexual abuse practitioners about CSA sequelae highlights that both groups share similar judgment criteria when making inferences about a client with a sexual abuse history. In Study One, highly similar lay-expert judgments were also found for their perception of similarity of RESA items. Only very few effects initially thought to be related to CSA, and therefore included in RESA, were reported as unlikely to follow CSA (convinced of pregnancy, same-sex experiences, vomiting). At this stage the applicability of the majority of RESA items to the CSA population is therefore supported. This does not imply, however, that RESA is specific to the assessment of CSA sequelae.

### ***Non-specificity of CSA effects***

Interestingly, in the present study out of 24 supposed non-effect items for which no affiliation with CSA was expected, all items were reported as likely to be a direct consequence of CSA by at least some practitioners. Their responses highlighted that almost all types of behaviour can somehow be associated with CSA even when no current empirical links have been found. Moreover, previous responses illustrated that CSA items can also be used to describe general functioning in non-traumatised participants (Study One).

Yet these findings do not invalidate the use of RESA with CSA clients. Regardless of whether or not RESA is uniquely related to CSA, items were still pertinent for clients to self-report functioning (Study One) and for others to describe CSA sequelae (Study Two). While profiles provided a useful tool to view impaired and well-adjusted areas of functioning that need attention in therapy, RESA did not succeed in discriminating between CSA clients and non-abused adults based on their respective profiles. No effects or effect-coping constellations are indicative of CSA due to a great variability even among the CSA client group. Sexual abuse is rather marked by a set of maladaptive outcomes that appear to be of greater intensity in those who experienced CSA compared to non-traumatised adults.

### ***Over attribution***

The high level of attribution of non-effects to CSA, showed that practitioners preferred to be overinclusive (i.e., biased towards "effect" responses) in their decision-making instead of running the risk of failing to link certain behaviours to CSA. Lopez (1989, p. 184) termed such a phenomenon "overpathologising bias". It was previously suggested that an over-attribution of sequelae by a sample of practitioners may be due to the "penalty" principle (Pain & Sharpley, 1989, p. 6). Practitioners working with those who have experienced CSA would be more aware of the penalties of misdiagnosing or under-reporting CSA sequelae, in terms of the consequences for the client, their own professional

standing, and continuation of availability of Sensitive Claims funding (ACC). In the latter case, the present findings would be unique to the New Zealand setting and may highlight difficulties of practitioners being directly involved in the decision process to obtain funding. Practitioners may perceive that it is part of their responsibility as sexual abuse counsellors to actively secure funding for their clients. The implication of this over-attribution to the actual case formulation, however, will need to be subject to further research, for example, how continuous overpathologising by a therapist after funding has been secured may impact on the development of negative self-perceptions of the client. Previous research has shown that such perceptions can form a significant barrier to constructive coping (Muller, Sicoli, & Lemieux, 2000; Roberts et al., 1996).

At this stage it needs to be noted, however, that the classification of items as ‘non-effects’ in the present study derived from review of research and empirical reports from practitioners in Aotearoa/New Zealand. Although I failed to find sufficient links in the literature that would associate the non-effects with CSA (‘noise’ in this study), it should nevertheless be considered that items which are very highly and consistently endorsed by practitioners could highlight missing components in the study of CSA sequelae. Gambling, inappropriate social responses, high need for control in relationships, problems in formulating own needs, and postnatal depression may be in strong need of assessment. Taking an exploratory approach, it is therefore “invalid to assume, a priori, that abuse has only limited effects and that it should only be studied by abuse-oriented instruments” (Nash, Hulse, Sexton, Harralson, & Lambert, 1993b, p. 290)

### ***The relevance of coping***

The study yielded very different results for the discrimination in the second task. Similar to a therapeutic setting, practitioners were presented with a mixture of effects and coping behaviours, which were all related to CSA. Practitioners were then asked to differentiate effects from coping behaviour. Practitioners consistently reported that the most common ways of dealing with CSA are avoidance, social isolation, self-harm, sexual risk-taking

behaviour, substance abuse, and obsessive/compulsive perfectionism. Self-reports by CSA clients (Study One) and lay persons' perceptions of CSA (Study Two), however, highlighted avoidance and self-harm as predominant ways to relieve sources of negative distress. Externalising behaviours, including sexual risk-taking and substance abuse, were only endorsed by one small group of clients (Profile 2; N=13). Study Two, none of the lay participants, independent of their priming condition, proposed risk-taking behaviour to be related to CSA. In addition, Study Three revealed that very few behaviours which were initially thought to be a way of coping with CSA consequences were not seen in clients (same sex experiences, physical reactions, such as vomiting). This finding confirms the initial classification of items in RESA as coping strategies, with the exception of physiological responses, for example, vomiting and homosexual experiences.

While participants accurately identified the CSA coping strategies among a mixed set of stimuli, they also incorrectly declared a large number of CSA effects as coping behaviours (shame, anger, hypervigilance, safety concerns, guilt, lack of control, and depression). Only a small number of items initially thought to be noise (non-coping) were correctly identified as such (crying, pregnancy, hearing voices). This finding raises several questions: Do practitioners generally not recognise distinct sources of coping in clients? Do they generally not consider coping to be important? Both explanations for the low level of differentiation would be surprising because evaluating and ensuring clients are sufficiently coping is a central component to the safe goal setting and pacing in CSA therapy, even before turning to trauma-related issues (Briere, 2002). Despite the copious amount of empirical support reviewed in Chapter Two, are effects and coping merely theoretical constructs that fade or blend together in the therapeutic setting? Finally, there is a possibility that although the tasks were intended to simulate the therapeutic setting that the effect vs. coping task was too complex and not understood by participating practitioners. More research needs to be conducted to further investigate the reasons for this outcome. At this stage, however, practitioners' responses reflect that all presented stimuli, regardless of being an immediate effect or resulting coping strategy, can be conceptualised as a means of managing CSA-related distress.



***Impact of gender and profession***

Interestingly, this over-attribution of items to sexual abuse was particularly strong for female practitioners. This confirms previous studies finding a more “credulous” tendency for females’ response’ when asked about CSA (Attias & Goodwin, 1985; Hetherington & Beardsall, 1998; Jackson & Nuttall, 1993, p. 127). In both tasks of the present study females showed a very different degree of response bias to their male colleagues by endorsing an increased number of stimuli as functionally related to CSA. Male practitioners, on the other hand, were more conservative in their attribution of behaviour to the event of CSA. The present findings add to earlier research on therapists' perceptions of sexual violence in which female practitioners reported greater symptom severity and impairment of functioning compared to their male colleagues (Attias & Goodwin, 1985; Bassuk & Apsler, 1983). Due to a small sample size for males in the present study, research with a larger sample should further investigate this outcome.

One of the explanations for female practitioners’ strong emphasis on the severity of CSA could be their increased level of empathy or emotional involvement, as their clients are likely to be predominately female. Female practitioners may be more affected by the nature of the event than their male peers as sexual violence is more commonly conducted against women. Previous research has similarly suggested female professionals may maintain a “pro victim view” when this is congruent with the expected role of their professional agency (Hetherington & Beardsall, 1998, p. 1267). It would be of particular interest to view the gender constellation of therapists and clients in order to further explore this identification hypothesis of decision-making with reference to CSA. Also, as concluded by Marquie and Baracat’s (2000) SDT study, the results may even reflect a genuine difference in response between males and females, regardless of the topic or their profession.

In contrast to other studies, the present research did not reveal any differences in bias for the different professional disciplines (Hetherington & Beardsall, 1998; Jackson & Nuttall, 1993; Saunders, 1988). The small sample sizes for each professional sub-group may

account for this divergent result. Although a *gender x profession* interaction effect for bias did not reach significant levels in this study, identified trends may become an area of interest for future research using larger numbers of participants. Moreover, it would be interesting to simulate Langer and Abelson's (1974) research by studying potential variation in response bias across different professional disciplines in the presence or absence of a "sexual abuse" label.

### ***Explanation of outcome***

As previously mentioned, it is important to note that the classification of items as signal or noise are somewhat arbitrary and may even highlight errors in the current assessment of CSA sequelae. RESA categorisation into effect and coping classes, however, were highlighted by Aotearoa/New Zealand practitioners as part of the instrument development and subsequently confirmed by experts, lay, and clients with a history of CSA (Study One). Moreover, the literature justifying RESA's effect-coping classification was reviewed in Chapter Two. This present study provided additional support for the relevance and anticipated classification of RESA items as "effects" (Task 1) and confirmed the coping labels as all RESA coping items were correctly identified as such (Task 2).

Regardless of their multidisciplinary professions, practitioners demonstrated higher discriminant ability when faced with behaviours related/unrelated to CSA than differentiating coping from direct CSA consequences. It could be argued that an increase in difficulty in tasks account for the participants' reduced performance in Task 2. However, the presentation of a complex set of mixed and ambiguous descriptors of functioning is likely to be the common situation in a therapeutic setting and should therefore be a familiar, but nevertheless complex, situation for this sample. Lopez (1989) argued that "the biased clinician is like any other information processor who has to synthesize much complex information to make decisions regarding diagnosis and treatment. Like many decision makers, clinicians use short cuts" (p. 192). Biases in clinical judgments are more likely to occur when (a) a specific problem is given (CSA) and (b) when errors are likely to

be systematic (negative evaluation of CSA). Overall it can therefore be argued that the task presented here was of a complex nature, and hence resulted in a “short cut” where practitioners used selective information processing rather than actual sentiments.

A specific systematic error introduced in the previous study is illusory correlation (Chapman & Chapman, 1967, 1969). Previous research found that highly similar judgments amongst lay persons and practitioners are due to an associative strength rather than being an indicator of actually observed outcomes. This study, however, revealed that practitioners’ responses differ from lay perceptions of CSA with the former being highly overinclusive. Hence, illusory correlates are not likely to account for the outcomes found here.

Finally, as found in previous research, it needs to be considered that professionals’ perceptions of CSA can guide their clinical decision-making (Hetherington & Beardsall, 1998; Kendall-Tackett & Watson, 1991; LaBarbera et al., 1980; Wagner et al., 1993). Practitioners’ low sensitivity in discriminating between effect and coping behaviour stands in contrast to various therapeutic models highlighting such an evaluation as a safe and essential part of working with sexual abuse (Rārangā Whatumanawa Research Project, in press-a, in press-b; Briere, 2002; Follette & Ruzek, 2006). Furthermore, Chapter Two reviewed extensive empirical evidence that maladaptive coping can lead to more severe psychopathology and an increased risk of revictimisation. Constructive coping, on the other hand, may form a key element to high functioning after CSA (Banyard & Williams, 2007; Filipas & Ullman, 2006; Himelein & McElrath, 1996). Hence, the initial identification and replacement of maladaptive coping strategies with constructive coping skills appears to be imperative to sexual abuse practice – even before touching on CSA-relevant issues.

## **Conclusion**

Practitioners working with adults with a history of CSA are highly sensitive to the effects of CSA when these are presented amongst non-related behaviours. However, all practitioners, regardless of their therapeutic model and professional discipline, appear to conceptualise the outcomes of CSA as one construct rather than differentiate between immediate effects and secondary coping behaviours. Practitioners' responses imply that most supposedly unrelated behaviours, thoughts, and emotions can still be seen as CSA sequelae or understood as a means of coping. It is suggested that future research continues to explore the conceptual differentiation between direct effects and secondary coping to ensure client safety in withstanding the emotional distress associated with trauma-focused therapy, and improved functioning through the utilisation of constructive coping.

## CHAPTER SIX

---

### Final discussion

The research programme for this thesis explored a multiplicity of perceptions on what constitutes the sequelae of CSA in adulthood. A particular interest of mine was to evaluate the role of coping in relationship to the emotional, cognitive, behavioural, social, and physiological outcomes of CSA as perceived by a variety of involved and naive adults.

#### Limitations

In addition to the concerns raised in the discussions of each of the three previous studies, some aspects impact on the overall conclusion of this research. As mentioned in Study One, empirical data on sexual abuse outcomes were collected retrospectively through client reports. Adults who had completed therapy addressing CSA were asked to describe their functioning just before they entered therapy. While preferably data should be collected prior to therapy and not in retrospect, I decided against this option because of possible safety concerns. The time in which a person seeks help is likely to be marked by high levels of instability and insufficient ways of dealing with sources of emotional distress. Although items and procedures were first thorough trialled, the use of newly developed descriptors and a sorting procedure may have posed a safety risk at a time in which a person may not have effective coping strategies available and therefore seeks treatment. However, as the clients have given positive feedback about the card-sorting procedure and usefulness of the items, RESA may now be valuable as a summary device for clients and practitioners to determine initial level of functioning and coping at the beginning of therapy. Although from a research design standpoint, the collection of data in a retrospective design is considered less than ideal, it is a common method to ensure the safety of clients who have experienced sexual abuse.

Another issue arises with collecting the data subsequent the therapy. As all adults have been through at least one phase of treatment, the verbal exchange with their practitioners as

well as the diagnostic terminology and therapeutic model used, may have tainted the person's self-description of functioning. To minimise this, lay, non-psychiatric language was emphasised in the development of RESA. Instead of asking clients whether or not they feel "depressed", which is likely to be endorsed if such a diagnosis was originally given to them by their therapist, RESA provides adults with an opportunity to use smaller units of behaviour, emotions, or thoughts to describe themselves (*feeling worthless, lack of energy, bad things continue to happen, trouble concentrating, thoughts about ending my own life*). Due to the use of lay descriptors rather than psychologically loaded terms, RESA is expected to minimise distortions of clients' self-representation after their therapy experience.

## **Integration of research findings**

In this final chapter, I will first summarise the four overall themes that emerged from this research with their respective support from the three studies. These findings will then be used to adjust and interpret the empirical framework of CSA sequelae introduced in the first chapter of this thesis. Implications for sexual abuse practice in Aotearoa/New Zealand will then be discussed alongside recommendations for future research and my closing thoughts.

### **I. Effects and coping efforts are understood as distinct parts of CSA sequelae.**

Effects and coping emerged as two separate criteria when lay and expert adults were asked to organise RESA descriptors according to their directly perceived meaning (*Study One*). These stable judgment criteria were also part of the similarity perceptions of non-abused lay persons regardless of whether they had been exposed to emotional arousal and attempted re-structuring through cognitive training (*Study Two*). Self-reports of adults who have experienced CSA confirmed the split of effects and ways of coping when describing their own functioning (*Study One*). Practitioners, however, showed low performance accuracy when asked to identify coping strategies among a set of CSA effects (*Study Three*).

**II. Identified effects and coping patterns are non-specific outcomes of CSA.**

Nomothetic comparisons of self-reported functioning revealed similar patterns of effects and coping for a sample of sexually abused and non-traumatised adults (*Study One*). While some coherence was found in the profiling pattern, the intensity level of the experienced effects and simultaneously presented need for coping were higher amongst those with a history of abuse. No causal effects or unique profiles were indicative of CSA as reported by CSA clients, lay adults, or professionals (*Study One, Study Two, Study Three*).

**III. Non-abused, lay adults carry one basic cognitive schema of CSA sequelae (under-attributing stereotype) which remains unaffected by emotional arousal or attempts of cognitive re-structuring.**

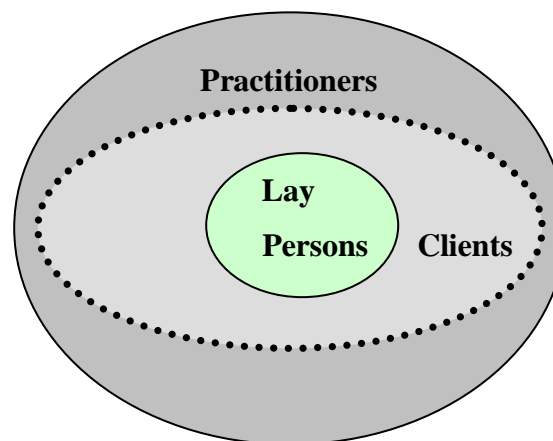
Responses of lay, non-abused participants demonstrated highly similar perceptions of what follows CSA across the different experimental conditions. Lay perceptions on CSA outcomes only matched parts of the empirical reports by adults with a history of CSA (shame, low self-esteem, depression, avoidance, self-harm), and hence did not account for their variability (*Study One, Study Two*).

**IV. Practitioners carry overinclusive schemata of CSA sequelae (over-attributing stereotype). Females are assumed to show greater tendencies of indiscriminant biases.**

Practitioners displayed overinclusive tendencies when identifying CSA effects and discriminating coping strategies presented alongside a set of noise items (*Study Three*). Over-attribution of sequelae was particularly found among lay female adults (*Study Two*) and female practitioners (*Study Three*). Gender-differences, however, will need to be subjected to further research using a larger sample.

### **Adjustment to the empirical framework of CSA sequelae**

The above findings resulted in necessary amendments to the previously hypothesised framework on CSA sequelae (Figure 1). Figure 23 illustrates the modified version of the frame based on the empirical findings from this research. First of all, affect and cognitive training did not yield specific perceptions of what follows sexual abuse. While there appears to be some consensus on what comprises CSA outcomes (*low self-esteem/shame, depression/pessimism, avoidance, self-harm*), lay adults appear to utilise a very narrow or basic cognitive schema and practitioners an overinclusive model compared to the empirical self-reports of adults who have experienced CSA.



*Figure 23.* Empirical framework on the multiplicity of perceptions on the sequelae of CSA.

### ***Self-reports of clients with a history of sexual abuse***

Essentially, clients showed a considerable amount of variability in their self-reported functioning after CSA which is represented by the dotted line in Figure 23. Only few consistencies were found among all CSA clients such as increased levels of *shame, low self-esteem, pessimism, depression*, and the presence of *avoidant and self-harming* coping strategies. These outcomes have commonly been reported to be part of adults' CSA sequelae (Browne & Finkelhor, 1986; Polusny & Follette, 1995). Interestingly, with the exceptions of self harm, these sequelae patterns were also part of the self-reported



functioning of adults who have not experienced trauma - although to a smaller degree. In fact, a small group of non-traumatised adults (Figure 12) reported a higher level of arousal difficulties than all of the five profiles summarising functioning after CSA.

These results raise questions regarding DSM-IV-TR's definition of "trauma" as a necessary criterion for the development of psychopathology. Several primary conceptual models of sexual abuse argue that the traumatic nature and feelings of an event (threat of injury or life accompanied by fear, helplessness, and horror) will lead to the manifestation of "trauma-specific" psychopathology (Briere, 2004a). Study One however, has shown that general life experiences not subsumed under the trauma definition can also - although to a smaller degree - lead to similar types of sequelae as those experienced after CSA. First of all, this implies that the presence of a traumatic event is not necessary to display such a pattern of malfunctioning. Secondly, it shows that no distinct or trauma-specific sequelae pattern emerged from the research that would suggest causal links to CSA or to the experience of trauma. A discrimination of sexual abuse histories from general non-traumatising life experiences is therefore not justified. An event does not need to be traumatic to be harmful.

These thoughts, however, should by no means minimise the harm experienced by those with a history of CSA. Several aspects will need to be considered. Foremost, while the same *pattern* of sequelae was utilised to describe general functioning by non-traumatised adults, the *levels* of negative outcomes were mostly higher amongst CSA clients. Adults with a history of CSA displayed higher frequencies and intensities which were accompanied by a greater use of coping including self-harm. Furthermore, one needs to be aware that only the consistencies among CSA clients were able to be compared to the non-trauma outcomes. Generally, there appears to be a substantial amount of *individualised* CSA outcome that appears to not directly be related to an event or experience but rather shows an interplay of effects and coping specific to each person. The overlapping sequelae of low self-esteem, pessimism, depression, and avoidance as negative outcomes may therefore form a common response to a variety of positive and negative life events that do

not have to meet the criteria for trauma. When sexual abuse takes place in childhood, it cannot be seen as an event in isolation but is embedded among a range of other factors taking place before, during, and after the event.

In order to clearly determine the value of the identified sequelae as “signs” of CSA, one will need to study the underlying base rates, false positives and false negatives for each of the components perceived to follow CSA (Faust, 1986). For example, in order to view the “true” association of CSA and depression as an effect specific to the experience of sexual abuse, research will need to assess the relative frequencies across the two samples ([CSA/depression][No trauma/depression] [CSA/no depression][No trauma/no depression]).

Overall, CSA is not an isolated event resulting in an apparently unique, trauma-specific outcome. Rather it is shaped by the variable life events specific to the individual and in which it is embedded. The recovered type or pattern of outcome is not causally linked or indicative of sexual abuse, but may form a general response to a range of life events. It is the intensity of maladjustment and the accompanied need for coping that appeared stronger for those adults who have experienced CSA. Although more research is required to investigate the following point, it may be suggested that humans have a general response to adversity (same *type* of sequelae), which vary in their degree of psychopathological intensity and frequency depending on the nature and severity of the event that is accompanied by a greater need for coping.

The advantages of profiling clients’ type and levels of functioning, however, are not tied to the result of one or multiple causal CSA profiles. Instead, RESA’s benefits lie in the identification and prioritisation of patterns of dysfunction, the evaluation of the associated safety risks, tailoring of treatment to individual needs, and monitoring the efficacy of interventions.

***Lay persons' oversimplified perceptions of CSA sequelae***

Lay perceptions of what constitutes the sequelae of CSA are highlighted as the inner green module in the adjusted framework (see Figure 23). Perceptions by lay adults only cover a small segment of sequelae proposed by other groups (CSA clients, practitioners). Non-abused adults only overlap with some parts of the empirical reports made by CSA clients (*low self-esteem, pessimism, depression, avoidance, and self-harm*) but essentially do not account for their variability in sexual abuse outcome. Lay adults display *one* basic pattern of effects and coping, while adults with a history of CSA yielded five variable profiles. The fundamentals shared by lay and CSA sample were also found in adults who never experienced any type of trauma suggesting that lay persons' underlying schema of sexual abuse appear non-specific to CSA. This oversimplified schema of CSA is thought to function as an information-processing short-cut for which only minimal cognitive effort is required (Bower & Forgas, 2000; Krueger & Stanke, 2001).

So why is it of importance to consider a lay person's oversimplified perception in order to understand adults' functioning after sexual abuse? When incorporating a type of cognitive bias, perceptions are also termed stereotypes. As earlier explained by Cuddy et al.'s (2007) BIAS map or Fazio's (2001) automatic attitude activation model, stereotypes are prone to influence and guide behaviour. Oversimplified models of CSA are therefore thought to have an indirect impact on the adjustment of those who have experienced CSA. If lay models diverge from actual expression of sequelae, their recognition of CSA in community may be lowered. Moreover, there is an increased likelihood of an unsupportive, disbelieving response to disclosure as individuals will remember and interpret a target situation based on their current stereotype (Bornstein et al., 2007). Negative responses to disclosure have been shown to influence the development of maladjustment for those with a history of CSA (Ullman, 2003; Ullman & Filipas, 2005). While cognitive training sessions, with an aim to adjust people's underlying models, were successful in some studies (Smith, 1993), an analogue of such intervention failed to shift CSA perceptions in the present research

Interestingly, one effect that was rated as highly likely to follow CSA by non-abused lay persons and practitioners, but which was not self-reported by those who experienced CSA, was sexualised behaviour. On the one hand, it could be concluded that sexual difficulties or coping through sexualised behaviour either do not form a common outcome or are, as such, not in of the immediate awareness of adults who have experienced CSA. Self-report bias may also contribute to the low report rate of sexual difficulties as the acknowledgement of sexualised behaviour may prove difficult for those adults with a history of CSA, even in an anonymous rating task. On the other hand, however, the finding may be explained by a systematic error inherent to the non-abused adults and practitioners. The strong link between sexualised behaviour and CSA may be an example of an illusory correlate, reflecting “reliable inaccuracy” by the lay adults and practitioners due to high associative strength, but which presence is not confirmed by clinical observations (Chapman & Chapman, 1967, p. 193).

### ***Practitioners’ overinclusive perceptions of CSA sequelae***

While lay adults displayed an oversimplified model of sequelae, possibly as a means to minimise cognitive effort, sexual abuse practitioners revealed an overinclusive perception regarding CSA sequelae. Practitioners confirmed the effects and coping strategies previously highlighted by non-abused adults and CSA clients (*shame, low self-esteem, pessimism, depression, avoidance, coping*), but considered a range of other behaviours to be part of the CSA sequelae. Sexual abuse practitioners appear to carry a somewhat indiscriminant schemata about what follows abuse, showing that they are more overinclusive than their clients or the general lay perception. Practitioners seemed to have difficulties excluding items not related to CSA even when the task only called for a specific element of a person’s sequelae as indicated in the coping/non-coping task. These overinclusive, biased perceptions can be understood as stereotypes, thus they are at risk of influencing behaviour as discussed in the next section on the implications for practice.

In his work *Research on human judgment and its application to clinical practice*, Faust (1986) reviewed several studies that support such a low performance in clinical judgment by practitioners (Faust, 1987; Garb, 1987). The two primary explanations for this phenomenon reflect an old and complex debate on cognitive-based versus emotion-based origin of judgment errors (Faust, 1986). In term of cognitive-based errors, research suggested an overpathologising attitude can be a result of the selective information-processing model of clinical judgment bias. It was thought to predominantly occur for problem-specific events (CSA) and when errors are expected to be of a systematic nature (CSA yields negative outcomes) (Lopez, 1989). Possible implications of such errors in clinical judgment may pose a barrier to individualised treatment and may impact negatively on the clients' self-perceptions.

Due to the complex nature of sexual abuse, both the under- and over-attribution of effects to CSA, are thus likely to function as a strategy to minimise cognitive effort. Faust (1986) proposes that “many judgment errors do not result from one having done the wrong thing (...) but from an inability to do the right thing because of insufficient judgment capacities” (p. 422). In the therapeutic setting, sexual abuse practitioners are faced with several challenges - how to obtain information in this sensitive area, matching of the retrieved information to nosological categories, and the integration of a plethora of relevant and irrelevant information provided by the client. Actuarial methods have been proposed to assist clinicians with some of these tasks in order to minimise the demand of cognitive effort (Dawes, Faust, & Meehl, 1989). Summary devices such RESA and its resulting profiles are intended to aid practitioners to sensitively obtain and identify areas of dysfunction while at the same time integrating diverse and seemingly disconnected aspects of CSA sequelae. Although not a diagnostic instrument, summary devices like RESA are expected to significantly reduce the risk of clinical errors due to high cognitive efforts. Most importantly, it is neither useful, nor intended by the present research, to point the finger at the practitioner and their level of “performance” but instead highlight the need to tailor tools to lighten practitioners' cognitive workload. The complexity of sexual abuse with its mediating variables and variable consequences clearly needs to be acknowledged.

### **Implications for sexual abuse practice in Aotearoa/New Zealand**

Under the current Sensitive Claim scheme, practitioners function as a mediator between clients in need for treatment and the New Zealand service provider ACC. As mentioned in the introduction, I first became aware of the importance of perception when noticing the discrepancy between ACC expected and research's empirical understanding of sexual abuse consequences. According to ACC Sensitive Claims services, practitioners are required to provide evidence of a mental injury which is directly caused by sexual abuse, for example, depression or PTSD (Du Plessis, 2007). Although it is likely that ACC uses such a narrow definition to specify the type of accidents and limit the number of claims falling under the Sensitive Claims scheme, in the light of the present study this definitional prerequisite is nevertheless prone to pose difficulties.

No direct causal links between the event of CSA and subsequent psychopathology were found. In fact, occurrences of hypothesised CSA consequences were also – although to a differing degree – reported by those without a history of trauma. Depression, for example, noted as the most common result of CSA (Browne & Finkelhor, 1986), is nevertheless a non-specific outcome of CSA as it likely to be related to a range of other life events. Sexualised behaviour, as commonly assumed to be the most 'direct' result of CSA, has not been confirmed by CSA clients and has therefore been discussed as a possible illusory correlate of CSA (Chapman & Chapman, 1969; LaBarbera et al., 1980).

#### ***The impact of overinclusive bias***

In the face of all these difficulties to provide sufficient evidence for a mental injury 'caused' by CSA, practitioners are likely to consider it their responsibility to help clients obtain funding for treatment after sexual abuse. As practitioners were registered Sensitive Claim providers, their overinclusive attitudes regarding CSA consequences may therefore stem from an emotional-based judgment bias as an endeavour to meet the ACC requirements (Faust, 1986). Although all participants were assured that this doctoral research was an independent study, which would not serve as an evidence-base for the

development of the ACC guidelines, a majority of the participants knew about my involvement in the Rāanga Whatumanawa guideline project. To avoid characteristics being used as ‘exclusion criteria’ by ACC, practitioners may have therefore confined themselves to an emotion-based, cautious approach in which none of the items was identified as unrelated to CSA. This interpretation could explain why none of the “noise” items in both tasks of the signal detection study were identified as such. In this case, over-attributing sequelae to CSA may be a finding unique to the Aotearoa/New Zealand setting and could highlight problems due to ACC definitional requirements and the active involvement of practitioners in the Sensitive Claims funding process. However, if practitioners display a general tendency to overpathologise, this can have significant implications for the treatment following sexual abuse beyond the context of Aotearoa/New Zealand.

Interestingly, such an overinclusive approach appears very similar to my initial understanding of CSA as explained at the beginning of this thesis. While reasonable, it nevertheless has to be considered how it may affect those who have experienced sexual abuse and the provided therapeutic practice. Pessimistic and overinclusive perceptions can be passed onto the clients increasing their negative self-representation. Such negative models-of-the-self have been shown to reinforce cognitive distortions and to inhibit clients’ ability to cope constructively. In fact, Himelein and McElrath (1996) and other research on posttraumatic growth (Calhoun et al., 2000; Zoellner & Maercker, 2006) has highlighted that positive appraisal and reframing of a traumatic event were related to recovery and less psychopathology. The impact of positive attitudes, which one can gain even from the worst case of adversity, was so substantial that it differentiated adults who function well in life from those who continue to struggle with maladjustment. Future research will therefore need to address if such over-attributing stereotypes were specific to this Aotearoa/New Zealand research, hence highlighting difficulties associated with Sensitive Claims services, or whether in fact it mirrors a cognitively-based origin of judgment error with global implications for the practice with adults with a history of sexual abuse (Faust, 1986).

### *Assessment of coping in sexual abuse practice*

It also needs to be questioned if the over-inclusive bias which was particularly found in the coping task may actually highlight a certain course of sexual abuse practice in Aotearoa/New Zealand. Although the coping detection task was cognitively demanding, it nonetheless was designed to simulate the therapeutic setting in which clients present a mixture of effects and coping behaviours. Does this mean that the evaluation of coping resources prior to therapy is not part of the common practice of Sensitive Claims practitioners? Yet, during the course of developing RESA and the Sexual Abuse Practice guidelines, practitioners vocalised the different coping efforts noted with their clients in focus group meetings across Aotearoa/New Zealand. Moreover, therapeutic models which emphasising the role of coping, such as Briere's Self-Trauma model (2002), cognitive-behavioural strategies such as Prolonged Exposure (Follette & Ruzek, 2006) and Acceptance and Commitment Therapy (Hayes et al., 2003), were identified by practitioners as effective treatment approaches. It may be sensible to consider that a description of common practice in a research study funded by ACC can deviate from actual behaviour when faced with a complex and demanding situation of prioritising CSA sequelae in the therapeutic setting.

Nevertheless, the New Zealand Sensitive Claims Practice guidelines emphasise the need to assess coping strategies as part of an effective and safe practice with adults who have experienced CSA. Clients are likely to become more vulnerable during the course of treatment for which an early detection of maladaptive coping strategies, such as self-harm or high risk-behaviour, is indispensable (Rāanga Whatumanawa Research Project, in press-b; Principle 1: Safety). Also in order to shift a client's coping efforts to more positive means of dealing with distress, practitioners are advised to identify maladaptive coping and provide constructive strategies that fulfil the same need before dismantling any old harmful behaviours (Rāanga Whatumanawa Research Project, in press-b; Principle 5: Effects). These recommended processes were drawn from empirical research on effective practice in



Aotearoa/New Zealand and highlight the need to identify coping strategies from amongst a mixed set of effects similar to the situation simulated in Study Three.

***Matching perceptions of sequelae: A necessity for effective treatment?***

The impact of perceptions is also acknowledged in the ACC Sexual Abuse Practice Guidelines. When evaluating clients' level of functioning, practitioners are strongly encouraged to "observe and reflect on their own emotions, behaviours, and thoughts as part of the assessment process" as the accuracy of judgment is likely to be influenced by the assessor's overall negative or positive perceptions of client (Rāanga Whatumanawa Research Project, in press-b, p. 26; Principle 6: Assessment). As clinical judgment as a sole source of assessment is considered "unsafe", the guidelines recommend a balanced use of formal and informal methods of assessment (Rāanga Whatumanawa Research Project, in press-b, p. 23). RESA was developed to provide practitioners with an additional tool to summarise the abuse sequelae and evaluate sufficiency of coping resources. Results using RESA have contributed to the formulation of several principles in the final Sensitive Claims Practice Guidelines on Sexual Abuse for Aotearoa/New Zealand.

Nevertheless, it needs to be asked how important shared perceptions of CSA sequelae are for the efficacy of treatment. Are matching perceptions of the effects and means of coping situation a pre-requirement for effective practice? Davenport and colleagues (1994) argued that a shared understanding was essential to build a safe and effective client-practitioner relationship in which the client "has greater chance of their expectation being met and of receiving appropriate empathy and help to understand and treat the consequences of CSA" (p. 735-736). Certainly, an alliance between client and practitioner forms a key element to effective practice (Rāanga Whatumanawa Research Project, in press-b). While clients should feel heard and their experiences validated, I argue that a completely matched understanding of the presented sequelae is unlikely and maybe even unnecessary. Essential is merely the acknowledgment of the influence of perceptions and the use of appropriate

tools to highlight differences in clients and practitioners understanding of the presented behaviours, emotions, and thoughts and benefits of coping.

As a summary device, RESA has been trialled in practice with a range of Sensitive Claim practitioners. Profiles can be anonymously added to the practitioners' data base to view client's individual progress over time or to see consistencies in sexual abuse pathways when profiles are compared to clients with similar sexual abuse histories. Most importantly, practitioners have also made use of RESA to report their perceptions of a clients' level of functioning and compared these clients' self-reported adjustment. Practitioners described RESA as a useful tool to become aware of possible communication confusion and to highlight thematic areas that had not emerged during the initial assessment but are relevant for the setting and safe achievement of the therapeutic goals.

### **Implications for research: The quest for “true” sequelae of sexual abuse**

*People can't seem to make up their minds whether ... (sexual abuse) is a sickness, a crime, or a family problem ... how you deal with it depends on how you perceive it (MacFarlane & Bulkley, 1982, p. 66).*

One of the main difficulties in this research is the determination of the accurate perception of “true” sequelae. The evaluation of sensitivity in judgment, such as the over-attributing practitioner and the under-attributing lay person, is based on a fixed point of comparison. In this research these “factual” outcomes derived from the clients' empirical self-reports of functioning after CSA. Yet several difficulties arise from such an assumption. Essentially, the previously reviewed research demonstrated that reports by CSA clients are marked by substantial variability. Moreover, consensual outcomes were not specific to CSA. It is also likely that self-reports by clients are tainted by their own perceptions and efforts to make sense of their disjointed behaviours. Thus due to the continuous variability, sexual abuse

reports form a somewhat illusory point of “true” sequelae against which other perceptions can be evaluated.

Considering the possibility that all evaluations of CSA consequences are influenced by one’s own perception, a set of ‘true’ sequelae may be unlikely to exist. However, I would question the relevance and benefits of identifying such true and untainted outcomes. Although there is a possibility that clients’ reports of CSA may not actually reflect the actual true occurrence, it is that individual’s unique perspective of areas of dysfunction that form the key information to tailor treatment. After all, the practitioner’s viewpoint of sequelae needs to at least acknowledge (maybe even share) the client’s perception of CSA consequences in order to achieve change rather than correspond to a ‘true’ outcome which, if existent, is not intrinsic to everyone. As divergent negative or positive attitudes by others impact on clients’ level of adjustment, their perception is therefore regarded as the chief ‘fixed’ point of comparison.

### **Modelling a pathway for future research**

While the past waves of sexual abuse research highlighted the field’s unsuccessful efforts to solve the complex puzzle of CSA sequelae by aiming to explore all contributing pieces (abuse-related and unrelated variables, coping strategies), the study of perceptions may provide some explanation for the existing variability. Despite available research methodologies which can control or study these biases, “it is unfortunate that neither professional nor popular contemporary literature typically distinguishes between empirically derived facts and popular beliefs when discussing the nature and treatment of child sexual abuse victims” (Beutler et al., 1994, p. 157). While we assume that individual perceptions of sexual abuse derive from prevalent societal and media presentation more research would be necessary to view how people form their schemata on CSA sequelae. This can be particularly useful when trying to broaden the restricted or oversimplified perceptions of what follows sexual abuse in the general public. As this study demonstrated that all groups are likely to carry cognitive schemata of CSA, it may be of interest to

further evaluate how different cognitive biases specifically influence subsequent behaviour in the Aotearoa/New Zealand context. As earlier noted, oversimplified perceptions by lay persons may reduce the ability to recognise CSA in the community or lead to unsupportive responses to disclosure. Overinclusive responses by practitioners may induce negative self-models in the clients, and hence inhibit a positive re-appraisal and posttraumatic growth.

Finally, research will need to investigate practitioners' reasons for indiscriminant attitudes, in particular when asked to identify coping behaviours amongst a set of CSA effects. It is of interest to see if practitioners perceptions are a reflect of primary treatment models used in Aotearoa/ New Zealand de-emphasising the function of coping, or whether they are a consequence of the practitioners' role in the Sensitive Claims funding scheme. Regardless of the underlying reasons for these indiscriminant responses, the impact of practitioners' difficulty to identify coping will need to be explored with respect to the safety and effectiveness of treatment.

Overall, perceptions and their impact on CSA may shape another shift in research focus since the late 1970s. A future wave of research could model a pathway away from the search for "true" CSA-specific sequelae to a broader study that emphasises the functional processes of effects and coping interrelationships. Investigating the purpose behaviour can serve has not been a new research development but dates back to the beginning of behavioural therapies and functional assessment in the late 1930s. For sexual abuse research it is of particular importance to look beyond the displayed behaviour, emotion, and thoughts to gain an understanding of why certain harmful dynamics occur. Research will need to turn away from merely noting the presence or absence of behaviour emerging concurrent with CSA to an enquiry about the purpose or function in order to understand through which operant conditioning processes harmful behaviours (maladaptive coping) become manifested in persons' behavioural repertoire. This information can be vital for tailoring treatment and offering constructive means of coping with underlying sources of distress.

## CONCLUSIONS

---

The study of perception has been established as an important aspect in improving our understanding of the consequences of sexual abuse. My research has highlighted that perceptions of sexual abuse appear to be carried by everyone regardless of their association with CSA. These perceptions also appear to be universal - independent of emotions or attempts of cognitive re-structuring. Perceptions of the effects and coping efforts commonly seen after CSA were collected from three divergent groups to build an empirical framework: lay, non-abused adults, adults with a history of CSA, and Sensitive Claim practitioners committed to the work with CSA. Despite yielding generally consistent responses within each of the groups, reports on CSA sequelae varied in complexity depending on the person's relationship to CSA.

While adults with a history of CSA can display a wide range of effects and coping efforts, society only appears to recognise basic elements of these as related to sexual abuse. Professionals working in the sexual abuse area, on the other hand, revealed an indiscriminant attitude in which most behaviour, thoughts, and emotions are identified as part of the sexual abuse sequelae, in particular as a mean of coping with negative distress. The discrepancies highlighted in this research may have indirect and direct consequence for the adjustment of females and males with a history of sexual abuse. Oversimplified beliefs may pose a barrier to recognising the prevalence of sexual abuse in the community or may result in an unsupportive response of disbelief in cases of disclosure. Overinclusive responses by New Zealand practitioners, regardless whether due to cognitive-based or emotion-based judgment errors, may increase the risk of endorsing negative models-of-self within their clients which is thought restrain positive reframing and constructive coping with the event. Moreover, practitioners' difficulty in identifying coping efforts among a set of effects stands in contrast to the recent Aotearoa/New Zealand Practice Guidelines for Sexual Abuse. Treatment recommendations for sexual abuse emphasise the need to assess clients' initial coping resources as a protective function during the course of therapy and in

order to effectively improve functioning by replacing maladaptive with constructive means of relieving negative distress (Rāranga Whatumanawa Research Project, in press-a, in press-b).

After over 30 years of research, the question of what follows CSA may be in urgent need of adjustment. In this research programme, no specific pathways or causal outcomes were found for adults with a history of CSA. In fact, the type or pattern of sequelae, but not the intensity of effects and need for coping, matched the descriptions of general functioning by non-traumatised adults. Although patterns of common sequelae are helpful for practice, understanding of their underlying functional processes may be of greater benefit for our understanding CSA sequelae, and to tailor treatment to the individual needs of the clients. Without minimising the harm or severity of outcomes, sexual abuse should no longer be conceptualised as an isolated event with a specific outcome of pathognomonic signs.

## CLOSING THOUGHTS

---

I would like to express a few thoughts at the end of this dissertation to close the cycle of my personal and academic journey. As mentioned earlier, my personal understanding of sexual abuse shifted as a result of this research. I realised that an indiscriminant over-attribution of negative outcomes is, despite best intentions, not valuable to those who are in need of an explanation for their seemingly disconnected behaviour and who would benefit from a hint of optimism. My perception of CSA sequelae prior to this research appears not that different from the practitioners' responses of this study.

Under no circumstances, however, are any of the conclusions drawn from this research intended to minimise the harm following sexual abuse. For example, the encouragement to exclude aspects that are not related to CSA, to raise concerns regarding the causality of outcomes, and to question the relevance of the trauma label, are all notions intended to help progress the field of research rather than diminish the seriousness or harmfulness of the experience. In fact, I would like to think that is our ethical obligation to avoid circumstances that contribute to the severity of the experienced sequelae. These include aspects discussed previously, such as adjusting an unsupportive environment by avoiding narrow perceptions displayed by society, and to help to develop best-practice standards by endorsing, for example, differentiated, positive treatment approaches (Rāranga Whatumanawa Research Project, in press-a, in press-b).

While sexual abuse research should not be a quest for a "true" outcome, it should nevertheless be a constant push and query to improve adult functioning by differentiating more clearly what is and is not helpful for the healing process. While I believe that I gained from the shift in my perception, I am also aware that none of the possible perspectives can be exempt from cognitive bias - this includes research on sexual abuse. Once we have attributed copious amounts of behaviours, thoughts, and emotions to the event of CSA, often by uncontrolled, correlational studies, we have added so much noise to the

experience that the key information essential to gain insight into the pathways following CSA may be tainted. Research into the long-term outcomes of CSA has steadily progressed since the 1970s. However, as researchers we should continue to be aware of the impact of our own perceptions and possible bias. The question of what follows sexual abuse will need to be addressed in a differentiated and critical manner.



## REFERENCES

---

- Abdi, H. (2007). Signal detection theory. In N. Salkind (Ed.), *Encyclopedia of measurement and statistics*. Thousand Oaks, CA: Sage.
- Alexander, P. C. (1992). Application of attachment theory to the study of sexual abuse. *Journal of Consulting and Clinical Psychology, 60*, 185-195.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Arriola, K. R. J., Louden, T., Doldren, M. A., & Fortenberry, R. M. (2005). A meta-analysis of the relationship of child sexual abuse to HIV risk behavior among women. *Child Abuse & Neglect, 29*, 725-746.
- Attias, R., & Goodwin, J. (1985). Knowledge and management strategies in incest cases: A survey of physicians, psychologists and family counselors. *Child Abuse & Neglect, 9*, 527-533.
- Ayduk, O., Mischel, W., & Downey, G. (2002). Attentional mechanisms linking rejection to hostile reactivity: The role of "hot" versus "cold" focus. *Psychological Science, 13*, 443-448.
- Banyard, V. L., & Williams, L. M. (2007). Women's voices on recovery: A multi-method study of the complexity of recovery from child sexual abuse. *Child Abuse & Neglect, 31*, 275-290.
- Bartoi, M. G., & Kinder, B. N. (1998). Effects of child and adult sexual abuse on adult sexuality. *Journal of Sex & Marital Therapy, 24*, 75-90.
- Bassuk, E. L., & Apsler, R. (1983). Are there sex biases in rape counseling? *American Journal of Psychiatry, 140*, 305-308.
- Beers, S. R., & De Bellis, M. D. (2002). Neuropsychological function in children with maltreatment-related posttraumatic stress disorder. *American Journal of Psychiatry, 159*, 483-486.
- Beitchman, J. H., Zucker, K. J., Hood, J. E., DaCosta, G. A., & Akman, D. (1991). A review of the short-term effects of child sexual abuse. *Child Abuse & Neglect, 15*, 537-556.

- Beitchman, J. H., Zucker, K. J., Hood, J. E., DaCosta, G. A., Akman, D., & Cassavia, E. (1992). A review of the long-term effects of child sexual abuse. *Child Abuse & Neglect, 16*, 101-118.
- Berliner, L., & Elliott, D. M. (2002). Sexual abuse of children. In J. E. B. Myers & L. Berliner (Eds.), *APSAC handbook on child maltreatment* (2nd ed., pp. 55-78). Thousand Oaks, CA: Sage Publications.
- Beutler, L. E., Williams, R. E., & Zetzer, H. A. (1994). Efficacy of treatment for victims of child sexual abuse. *The Future of Children, 4*, 156-175.
- Bijmolt, T. H. A., & Wedel, M. (1999). A comparison of multidimensional scaling methods for perceptual mapping. *Journal of Marketing Research, 36*, 277-285.
- Bimler, D., & Kirkland, J. (2001). School truants and truancy motivation sorted out with multidimensional scaling. *Journal of Adolescence Research, 16*, 75-102.
- Bimler, D., & Kirkland, J. (2007). Constructing personality maps, mapping personality constructs: Multidimensional scaling recovers the Big Five Factors from internal and external structure. *The Spanish Journal of Psychology, 10*, 68-81.
- Block, J. (1961). *The Q-sort method in personality assessment and psychological research*. Springfield, IL: Charles C. Thomas.
- Boden, J. M., Fergusson, D. M., & Horwood, L. (2006). Illicit drug use and dependence in a New Zealand birth cohort. *Australian and New Zealand Journal of Psychiatry, 40*, 156-163.
- Bornstein, B. H., Kaplan, D. L., & Perry, A. R. (2007). Child abuse in the eyes of the beholder: Lay perceptions of child sexual and physical abuse. *Child Abuse & Neglect, 31*, 375-391.
- Bower, G. (1981). Mood and memory. *American Psychologist, 36*, 129-148.
- Bower, G., & Cohen, P. (1982). Emotional influences in memory and thinking: Data and theory. In M. S. Clark & S. T. Fiske (Eds.), *Affect and cognition* (pp. 291-332). Hillsdale, NJ: Erlbaum.
- Bower, G., & Forgas, J. (2000). Affect, memory, and social cognition. In E. Eich, J. F. Kihlstrom, G. H. Bower, J. P. Forgas & P. M. Niedenthal (Eds.), *Cognition and emotion* (pp. 87-168). New York: Oxford Press.

## References

- Brand, B. L., & Alexander, P. C. (2003). Coping with incest: The relationship between recollections of childhood coping and adult functioning in female survivors of incest. *Journal of Traumatic Stress, 16*, 285-293.
- Brezo, J., Paris, J., Tremblay, R., Vitaro, F., Hebert, M., & Turecki, G. (2007). Identifying correlates of suicide attempts in suicidal ideators: A population-based study. *Psychological Medicine, 37*, 1551-1562.
- Briere, J. (1992). *Child abuse trauma: Theory and treatment of the lasting effects*. Thousand Oaks, CA: Sage Publications, Inc.
- Briere, J. (2002). Treating adult survivors of severe childhood abuse and neglect: Further development of an integrative model. In J. E. B. Myers, L. Berliner, J. Briere, C. T. Hendrix, T. Reid & C. Jenny (Eds.), *The APSAC handbook on child maltreatment*. (2nd ed.). California: Sage Publications.
- Briere, J. (2004a). *Psychological assessment of adult posttraumatic states: Phenomenology, diagnosis, and measurement (2nd ed.)*. Washington, DC: American Psychological Association.
- Briere, J. (2004b). *Psychological Assessment of Child Abuse Effects in Adults*. New York, NY: Guilford Press.
- Briere, J., & Elliott, D. M. (1993). Sexual abuse, family environment, and psychological symptoms: On the validity of statistical control. *Journal of Consulting and Clinical Psychology, 67*, 284-288.
- Briere, J., & Elliott, D. M. (2003). Prevalence and psychological sequelae of self-reported childhood physical and sexual abuse in a general population sample of men and women. *Child Abuse & Neglect, 27*, 1205-1222.
- Briere, J., Elliott, D. M., Harris, K., & Cotman, A. (1995). Trauma Symptom Inventory: Psychometrics and association with childhood and adult victimization in clinical samples. *Journal of Interpersonal Violence, 10*, 387-401.
- Briere, J., & Runtz, M. (1988). Symptomatology associated with childhood sexual victimization in a nonclinical adult sample. *Child Abuse & Neglect, 12*, 51-59.
- Briere, J., & Runtz, M. (1991). The long-term effects of sexual abuse: A review and synthesis. In J. Briere (Ed.), *Treating victims of child sexual abuse*. San Francisco, CA: Jossey-Bass.
- Briggs, F. (1995). *From victims to offender: How child abuse victims become offenders*. St. Leonards, Australia: Allen & Unwin.

- Broussard, S., Wagner, W. G., & Kazelskis, R. (1991). Undergraduate students' perceptions of child sexual abuse: The impact of victim sex, perpetrator sex, respondent sex, and victim response. *Journal of Family Violence, 6*, 267-278.
- Brown, J., Berenson, K., & Cohen, P. (2005). Documented and Self-Reported Child Abuse and Adult Pain in a Community Sample. *Clinical Journal of Pain, 21*, 374-377.
- Browne, A., & Finkelhor, D. (1986). Impact of child sexual abuse: A review of the research. *Psychological Bulletin, 99*, 66-77.
- Bruner, J. S., Goodnow, J. J., & Austin, G. A. (1956). *A study of thinking*. New York: Wiley.
- Brunngraber, L. S. (1986). Father-daughter incest: Immediate and long-term effects of sexual abuse. *Advances in Nursing Science, 8*, 15-35.
- Burt, M. R., & Katz, B. L. (1988). Coping strategies and recovery from rape. In R. A. Prentky & V. L. Quinsey (Eds.), *Human Sexual Aggression: Current Perspectives* (Vol. 528, pp. 345-358). New York: The New York Academy of Sciences.
- Calhoun, L., Cann, A., Tedeschi, R., & McMillan, J. (2000). A correlational test of the relationship between posttraumatic growth, religion, and cognitive processing. *Journal of Traumatic Stress, 13*, 521-527.
- Carlin, A. S., & Ward, N. G. (1992). Subtypes of psychiatric inpatient women who have been sexually abused. *Journal of Nervous and Mental Disease, 180*, 392-397.
- Caroll, J. D. (1972). Individual differences and multidimensional scaling. In R. N. Shepard, K. Romney & S. B. Nerlove (Eds.), *Multidimensional scaling: Theory and applications in the behavioral sciences* (Vol. 1). New York: Seminar Press.
- Chapman, L. J., & Chapman, J. P. (1967). Genesis of Popular but Erroneous Psychodiagnostic Observations. *Journal of Abnormal Psychology, 72*, 193-204.
- Chapman, L. J., & Chapman, J. P. (1969). Illusory correlation as an obstacle to the use of valid psychodiagnostic signs. *Journal of Abnormal Psychology, 74*, 271-280.
- Child Youth and Family. (2001). *An interagency guide to breaking the cycle: Let's stop child abuse together*. Wellington, New Zealand.
- Chu, J. A., & Dill, D. L. (1990). Dissociative symptoms in relation to childhood physical and sexual abuse. *American Journal of Psychiatry, 147*, 887-892.

- Coffey, P., Leitenberg, H., Henning, K., Turner, T., & Bennett, R. T. (1996). The relation between methods of coping during adulthood with a history of childhood sexual abuse and current psychological adjustment. *Journal of Consulting and Clinical Psychology, 64*, 1090-1093.
- Collishaw, S., Pickles, A., Messer, J., Rutter, M., Shearer, C., & Maughan, B. (2007). Resilience to adult psychopathology following childhood maltreatment: Evidence from a community sample. *Child Abuse & Neglect, 31*, 211-229.
- Connors, R. (1996). Self-injury in trauma survivors: 1. Functions and meanings. *American Journal of Orthopsychiatry, 66*, 197-206.
- Cortoni, F. A., & Marshall, W. L. (2001). Sex as a coping strategy and its relationship to juvenile sexual history and intimacy in sexual offenders *Sexual Abuse: A Journal of Research and Treatment, 13*, 27-43.
- Coxon, A. P. M., & Davies, P. M. (1982). *Key texts in multidimensional scaling*. London: Heinemann Educational.
- Cuddy, A. J., Fiske, S. T., & Glick, P. (2007). The BIAS map: Behaviors from intergroup affect and stereotypes. *Journal of Personality and Social Psychology, 92*, 631-648.
- Culter, S. E., & Nolen-Hoeksema. (1991). Accounting for sex differences in depression through female victimization: Childhood sexual abuse. *Sex Roles, 24*, 425-438.
- Dansky, B., Brewerton, T., Kilpatrick, D., & O'Neil, P. (1997). The National Women's Study: Relationship of victimization and posttraumatic stress disorder to bulimia nervosa. *International Journal of Eating Disorders, 21*, 213-228.
- Darrah, A. J. (2006). *An Analysis of ACC funded sensitive claim files: Characteristics of sexual abuse within the New Zealand context*. Unpublished master's thesis, Massey University, Palmerston North, New Zealand.
- Davenport, C., Browne, K., & Palmer, R. (1994). Opinions on the traumatizing effects of child sexual abuse: Evidence for consensus. *Child Abuse & Neglect, 18*, 725-738.
- Davidson, R. J. (1992). Emotion and affective style: Hemispheric substrates. *Psychological Science, 3*, 39-43.
- Dawes, R. M., Faust, D., & Meehl, P. E. (1989). Clinical Versus Actuarial Judgment. *Science, 243*, 1668-1674.
- De Houwer, J., & Hermans, D. (2001). Automatic affective processing. *Cognition & Emotion, 15*, 113-114.

- Derogatis, L. R., & Melisaratos, N. (1983). The Brief Symptom Inventory: An introductory report. *Psychological Medicine, 13*, 595-605.
- DeRoma, V. M., Hansen, D. J., Tishelman, A. C., & D'Amico, P. (1997). Influence of information related to child physical abuse on professional ratings of adjustment and prognosis. *Child Abuse & Neglect, 21*, 295-308.
- Dhaliwal, G. K., Gauzas, L., Antonowicz, D. H., & Ross, R. R. (1996). Adult male survivors of childhood sexual abuse: Prevalence, sexual abuse characteristics, and long-term effects. *Clinical Psychology Review, 16*, 619-639.
- DiLillo, D. (2001). Interpersonal functioning among women reporting a history of childhood sexual abuse: Empirical findings and methodological issues. *Clinical Psychology Review, 21*, 553-576.
- DiLillo, D., & Damashek, A. (2003). Parenting characteristics of women reporting a history of childhood sexual abuse. *Child Maltreatment, 8*, 319-333.
- Drawneek, A. (2005). Plot [Computer Software]. See <http://www.suchandsuch.biz/>.
- Du Plessis, J. (2007). Information for ACC registered counsellors. Retrieved 12.2.2008, from [http://www.acc.co.nz/PRD\\_EXT\\_CSMP/groups/external\\_providers/documents/internet/dis\\_ctrb096043.pdf](http://www.acc.co.nz/PRD_EXT_CSMP/groups/external_providers/documents/internet/dis_ctrb096043.pdf)
- Dunne, M. P., Purdie, D. M., Cook, M. D., Boyle, F. M., & Najman, J. M. (2003). Is child sexual abuse declining? Evidence from a population-based survey of men and women in Australia. *Child Abuse & Neglect, 27*, 141-152.
- Edwards, P. W., & Donaldson, M. A. (1989). Assessment of symptoms in adult survivors of incest: A factor analytic study of the responses to childhood incest questionnaire. *Child Abuse & Neglect, 13*, 101-110.
- Egan, J. P. (1975). *Signal detection theory and ROC analysis*. New York: Academic Press.
- Eisenberg, N., Owens, R. G., & Dewey, M. E. (1987). Attitudes of health professionals to child sexual abuse and incest. *Child Abuse & Neglect, 11*, 109-116.
- Ekman, P. (1984). Expression and the nature of emotion. In K. Scherer & P. Ekman (Eds.), *Approaches to emotion*. Hillsdale, NJ: Erlbaum.
- Elhai, J. D., Flitter, J. M. K., Gold, S. N., & Sellers, A. H. (2001). Identifying subtypes of women survivors of childhood sexual abuse: An MMPI-2 cluster analysis. *Journal of Traumatic Stress, 14*, 157-175.

- Emery, C. L., & Lilienfeld, S. O. (2004). The validity of childhood sexual abuse checklists in the popular psychology literature: A Barnum effect? *Professional Psychology: Research and Practice, 35*, 268-274.
- Evans, I. M. (1993). Dynamic response relationships: The challenge for behavioral assessment. *European Journal of Psychological Assessment, 9*, 206-212.
- Fanslow, J. L., Robinson, E. M., Crengle, S., & Perese, L. (2007). Prevalence of child sexual abuse reported by cross-sectional sample of New Zealand women. *Child Abuse & Neglect, 31*, 935-945.
- Faust, D. (1986). Research on human judgment and its application to clinical practice. *Professional Psychology: Research and Practice, 17*, 420-430.
- Faust, D. (1987). "Research on human judgment and its application to clinical practice": Response to Garb. *Professional Psychology: Research and Practice, 18*, 549-550.
- Favaro, A., Ferrera, S., & Santonastaso, P. (2007). Self-injurious behaviour in a community sample of young women: Relationship with childhood abuse and other types of self-damaging behaviors. *Journal of Clinical Psychiatry, 68*, 122-131.
- Fazio, R. H. (2001). On the automatic activation of associated evaluations: An overview. *Cognition and Emotion, 15*, 115-141.
- Feiring, C., & Cleland, C. (2007). Childhood sexual abuse and abuse-specific attributions of blame over 6 years following discovery. *Child Abuse & Neglect, 31*, 1169-1186.
- Feiring, C., & Taska, L. S. (2005). The persistence of shame following sexual abuse: A longitudinal look at risk and recovery. *Child Maltreatment, 10*, 337-349.
- Fergusson, D. M., Horwood, L. J., & Lynskey, M. T. (1997). Childhood sexual abuse, adolescent sexual behaviors and sexual revictimization. *Child Abuse & Neglect, 21*, 789-803.
- Fergusson, D. M., Woodward, L. J., & Horwood, L. J. (2000). Risk factors and life processes associated with the onset of suicidal behaviour during adolescence and early adulthood. *Psychological Medicine, 30*, 23-39.
- Filipas, H., & Ullman, S. (2006). Child sexual abuse, coping responses, self-blame, posttraumatic stress disorder, and adult sexual revictimisation. *Journal of Interpersonal Violence, 21*, 652-671.

- Finkelhor, D. (1990). Early and long-term effects of child sexual abuse: An update. *Professional Psychology: Research and Practice, 21*, 325-330.
- Finkelhor, D., & Browne, A. (1985). The traumatic impact of child sexual abuse: A conceptualization. *American Journal of Orthopsychiatry, 55*, 530-541.
- Folkman, S., & Tedlie Moskowitz, J. (2004). Coping: Pitfalls and promise. *Annual Review of Psychology, 55*, 745-774.
- Follette, V. M., Alexander, P. C., & Follette, W. C. (1991). Individual predictors of outcome in group treatment for incest survivors. *Journal of Consulting & Clinical Psychology, 59*, 150-155.
- Follette, V. M., & Ruzek, J. I. (2006). *Cognitive-behavioral therapies for trauma*. New York: Guilford Press.
- Follette, W. C., Naugle, A. E., & Follette, V. M. (1997). MMPI-2 profiles of adult women with child sexual abuse histories: Cluster-analytic findings. *Journal of Consulting and Clinical Psychology, 65*, 858-866.
- Foote, B., Smolin, Y., Kaplan, M., Legatt, M. E., & Lipschitz, D. (2006). Prevalence of dissociative disorders in psychiatric outpatients. *American Journal of Psychiatry, 163*, 566-568.
- Freeman, K. A., & Morris, T. L. (2001). A review of conceptual models explaining the effects of child sexual abuse. *Aggression & Violent Behavior, 6*, 357-373.
- Frewin, K., Tuffin, K., & Pond, R. (2006). *Sexual abuse and the media*. Palmerston North, New Zealand: School of Psychology, Massey University.
- Fromuth, M. E. (1986). The relationship of childhood sexual abuse with later psychological and sexual adjustment in a sample of college women. *Child Abuse & Neglect, 10*, 5-15.
- Fry, R. (1993). Adult physical illness and childhood sexual abuse. *Journal of Psychosomatic Research, 37*, 89-103.
- Futa, K. T., Nash, C. L., Hansen, D. J., & Garbin, C. P. (2003). Adult survivors of childhood abuse: An analysis of coping mechanisms used for stressful childhood memories and current stressors. *Journal of Family Violence, 18*, 227-239.
- Gall, T. L. (2006). Spirituality and coping with life stress among adult survivors of childhood sexual abuse. *Child Abuse & Neglect, 30*, 829-844.



- Garb, H. N. (1987). Comment on "Research on human judgment and its application to clinical practice." *Professional Psychology: Research and Practice*, 18, 548-549.
- Gibb, B. E. (2002). Childhood maltreatment and negative cognitive styles: A quantitative and qualitative review. *Clinical Psychology Review*, 22, 223-246.
- Gibson, L. E., & Leitenberg, H. (2001). The impact of child sexual abuse and stigma on methods of coping with sexual assault among undergraduate women. *Child Abuse & Neglect*, 25, 1343-1361.
- Glaser, J., & Banaji, M. R. (1999). When fair is foul and foul is fair: Reverse priming in automatic evaluation. *Journal of Personality and Social Psychology*, 77, 669-687.
- Gold, E. R. (1986). Long-term effects of sexual victimization in childhood: An attributional approach. *Journal of Consulting and Clinical Psychology*, 54, 471-475.
- Gold, S. R., Sinclair, B. B., & Balge, K. A. (1999). Risk of sexual revictimization: A theoretical model. *Aggression & Violent Behavior*, 4, 457-470.
- Goldberg, D. P., & Hillier, V. F. (1979). A scaled version of the General Health Questionnaire. *Psychological Medicine*, 9, 139-145.
- Goldstone, R. L. (1994). The role of similarity in categorization: Providing a groundwork. *Cognition*, 52, 125-157.
- Goodwin, J., & Sachs, R. (1996). Child abuse and the etiology of dissociative disorders. In L. Michelson & W. Ray (Eds.), *Handbook of dissociation: Theoretical, empirical, and clinical perspectives*. New York: Plenum Press.
- Goodwin, R. D., Fergusson, D. M., & Horwood, L. J. (2005). Childhood abuse and familial violence and the risk of panic attacks and panic disorder in young adulthood. *Psychological Medicine*, 35, 881-890.
- Gore-Felton, C., Koopman, C., Thoresen, C., Arnow, B., Bridges, E., & Spiegel, D. (2000). Psychologists' beliefs and clinical characteristics: Judging the veracity of childhood sexual abuse memories. *Professional Psychology: Research and Practice*, 31, 372-377.
- Green, D. M., & Swets, J. A. (1966). *Signal detection theory and psychophysics*. New York: John Wiley and Sons, Inc.

- Greenwald, E., Leitenberg, H., Cado, S., & Tarran, M. J. (1990). Childhood sexual abuse: Long-term effects on psychological and sexual functioning in a nonclinical and nonstudent sample of adult women. *Child Abuse & Neglect, 14*, 503-513.
- Halberstadt, J. B., & Niedenthal, P. M. (1997). Emotional state and the use of stimulus dimensions in judgment. *Journal of Personality and Social Psychology, 72*, 1017-1033.
- Harris, R. J. (2001). *A primer of multivariate statistics*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Hartigan, J. A. (1975). *Clustering algorithms*. New York: Wiley.
- Hayes, S. C. (1987). A contextual approach to therapeutic change. In N. Jacobson (Ed.), *Psychotherapists in clinical practice: Cognitive and behavioral perspectives* (pp. 327-387). New York: Guilford Press.
- Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (2003). *Acceptance and Commitment Therapy: An experiential approach to behavior change*. New York: Guilford Press.
- Hayes, S. C., Wilson, K. G., Gifford, E. V., Follette, V. M., & Strosahl, K. (1996). Experiential avoidance and behavioral disorders: A functional dimensional approach to diagnosis and treatment. *Journal of Consulting and Clinical Psychology, 64*, 1152-1168.
- Heatherton, T. F., & Baumeister, R. F. (1991). Binge eating as escape from self-awareness. *Psychological Bulletin, 110*, 86-108.
- Herman-Giddens, M. E., Kotch, J. B., Browne, D. C., Ruina, E., Winsor, J. R., Jung, J.-W., et al. (1998). Childbearing patterns in a cohort of women sexually abused as children. *Journal of Interpersonal Violence, 13*, 504-513.
- Herman, J. L. (1992). Complex PTSD: A syndrome in survivors of prolonged and repeated trauma. *Journal of Traumatic Stress, 5*, 377-391.
- Herman, J. L., Perry, J., & Van der Kolk, B. A. (1989). Childhood trauma in borderline personality disorder. *American Journal of Psychiatry, 146*, 490-495.
- Hetherington, J., & Beardsall, L. (1998). Decisions and attitudes concerning child sexual abuse: does the gender of the perpetrator make a difference to child protection professionals? *Child Abuse & Neglect, 22*, 1265-1283.
- Himelein, M. J., & McElrath, J. A. V. (1996). Resilient child sexual abuse survivors: Cognitive coping and illusion. *Child Abuse & Neglect, 20*, 747-758.

- Hoier, T. S., Shawchuck, C. R., Pallotta, G. M., Freeman, T., Inderbitzen-Pisaruk, H., & MacMillan, V. M. (1992). The impact of sexual abuse: A cognitive-behavioral model. In W. O'Donohue & J. Geer (Eds.), *Sexual Abuse of Children: Clinical Issues* (Vol. 2, pp. 100-142). New Jersey: Lawrence Erlbaum Associates.
- Hughan, R., & Michaelson, R. (Writer) (2005). *Crimes of the heart*. Australia: Video Education Australasia.
- Hulme, P. A. (2004). Theoretical perspectives on the health problems of adults who experienced childhood sexual abuse. *Issues in Mental Health Nursing, 25*, 339-361.
- Hyde, T., Kirkland, J., Bimler, D., & Pechtel, P. (2005). An empirical taxonomy of social-psychological risk indicators in youth suicide. *Suicide and Life-Threatening Behavior, 35*, 436-447.
- Innes-Ker, A., & Niedenthal, P. M. (2002). Emotion concepts and emotional states in social judgment and categorization. *Journal of Personality and Social Psychology, 83*, 804-816.
- Jackson, H., & Nuttall, R. (1993). Clinician responses to sexual abuse allegations. *Child Abuse & Neglect, 17*, 127-143.
- Jackson, J. L., Calhoun, K. S., Amick, A. E., Maddever, H. M., & et al. (1990). Young adult women who report childhood intrafamilial sexual abuse: Subsequent adjustment. *Archives of Sexual Behavior, 19*, 211-221.
- Jonzon, E., & Lindblad, F. (2006). Risk factors and protective factors in relation to subjective health among adult female victims of child sexual abuse. *Child Abuse & Neglect, 30*, 127-143.
- Kendall-Tackett, K., & Watson, M. (1991). Factors that influence professionals' perceptions of behavioral indicators of child sexual abuse. *Journal of Interpersonal Violence, 6*, 385-395.
- Kendall-Tackett, K. A., Williams, L. M., & Finkelhor, D. (1993). Impact of sexual abuse on children: A review and synthesis of recent empirical studies. *Psychological Bulletin, 113*, 164-180.
- Kendler, K. S., Bulik, C. M., Silberg, J., Hetttema, J. M., Myers, J. M. S., & Prescott, C. A. (2000). Childhood sexual abuse and adult psychiatric and substance use disorders in women: An epidemiological and Cotwin control analysis. *Archives of General Psychiatry, 57*, 953-959.

- Kendler, K. S., Kuhn, J. W., & Prescott, C. A. (2004). Childhood sexual abuse, stressful life events and risk for major depression in women. *Psychological Medicine, 34*, 1475-1482.
- Kessler, R. C., Sonnega, A., Bromet, E., Hughes, M., & Nelson, C. (1995). Posttraumatic stress disorder in the National Comorbidity Survey. *Archives of General Psychiatry, 52*, 1048-1060.
- Kirkland, J., Bimler, D., Drawneek, A., McKim, M., & Schoelmerich, A. (2004). An alternative approach for the analyses and interpretation of attachment sort items. *Early Child Development and Care, 174*, 701-719.
- Kouyoumdjian, H., Perry, A. R., & Hansen, D. (2005). The role of adult expectations on the recovery of sexually abuse children. *Aggression and Violent Behaviour, 10*, 475-489.
- Krueger, J., & Stanke, D. (2001). The role of self-referent and other-referent knowledge in perceptions of group characteristics. *Personality and Social Psychology Bulletin, 27*, 878-888.
- Kruskal, J. B. (1964a). Multidimensional scaling by optimizing goodness of fit to a non-metric hypothesis. *Psychometrika, 29*, 1-27.
- Kruskal, J. B. (1964b). Nonmetric multidimensional scaling: A numerical approach. *Psychometrika, 29*, 115-129.
- Kruskal, J. B., & Wish, M. (1978). *Multidimensional scaling*. Beverly Hills, California: Sage Publications Inc.
- LaBarbera, J. D., Martin, J. E., & Dozier, J. E. (1980). Child psychiatrists' view of father-daughter incest. *Child Abuse & Neglect, 4*, 147-151.
- Langer, E. J., & Abelson, R. P. (1974). A patient by any other name . . . : Clinician group difference in labeling bias. *Journal of Consulting and Clinical Psychology, 42*, 4-9.
- Lazarus, R. S., & Folkman, S. (1984). *Stress appraisal and coping*. New York: Springer.
- Leitenberg, H., Greenwald, E., & Cado, S. (1992). A retrospective study of long-term methods of coping with having been sexually abuse during childhood. *Child Abuse and Neglect, 16*, 399-407.
- Leonard, L. M., & Follette, V. M. (2002). Sexual functioning in women reporting a history of child sexual abuse: Review of the empirical literature and clinical implications. *Annual Review of Sex Research, 13*, 346-388.

## References

- Leserman, J., Li, Z., Drossman, D., & Hu, Y. (1998). Selected symptoms associated with sexual and physical abuse history among female patients with gastrointestinal disorders: The impact on subsequent health care visits. *Psychological Medicine, 28*, 417-425.
- Lev-Wiesel, R. (2000). Quality of life in adult survivors of childhood sexual abuse who have undergone therapy. *Journal of Child Sexual Abuse, 9*, 1-13.
- Littleton, H., Breitkopf, C. R., & Berenson, A. (2007). Sexual and physical abuse history and adult sexual risk behaviors: Relationships among women and potential mediators. *Child Abuse & Neglect, 31*, 757-768.
- Lopez, S. R. (1989). Patient variable biases in clinical judgment: Conceptual overview and methodological considerations. *Psychological Bulletin, 106*, 184-203.
- Lynskey, M. T., & Fergusson, D. M. (1997). Factors protecting against the development of adjustment difficulties in young adults exposed to childhood sexual abuse. *Child Abuse & Neglect, 12*, 1177-1190.
- MacDonald, M. (2003). *Exploring media discourse*. London: Arnold.
- MacFarlane, K., & Bulkley, J. (1982). Treating child sexual abuse: An overview of current program models. *Journal of Social Work & Human Sexuality, 69-91*.
- Macmillan, N. A., & Creelman, C. D. (1991). *Detection Theory: A user's guide*. Cambridge: Cambridge University Press.
- Marquie, J. C., & Baracat, B. (2000). Effects of age, education, and sex on response bias in a recognition task. *Journals of Gerontology: Series B: Psychological Sciences and Social Sciences, 55*, 266-272.
- Maynard, C., & Wiederman, M. (1997). Undergraduate students' perceptions of child sexual abuse: Effects of age, sex, and gender-role attitudes. *Child Abuse & Neglect, 21*, 833-844.
- McFall, R. M., & Treat, T. A. (1999). Quantifying the information value of clinical assessment with signal detection theory. *Annual Review of Psychology, 50*, 215-241.
- McGregor, K. (1999). *Therapy guidelines. Adult survivors of child sexual abuse*. Auckland: ACC Healthwise.

- McKibben, A., Proulx, J., & Lusignan, R. (1994). Relationships between conflict, affect, and deviant sexual behaviors in rapists and pedophiles. *Behavioral Research Therapy, 32*, 571-575.
- McNally, R. J. (2003). Progress and controversy in the study of posttraumatic stress disorder. *Annual Review of Psychology, 54*, 229-252.
- McNicol, D. (1972). *A primer of signal detection theory*. London: George Allen & Unwin Ltd.
- Medin, D. L., Goldstone, R. L., & Gentner, D. (1993). Respects for similarity. *Psychological Review, 100*, 254-278.
- Meehl, P. E. (1956). Wanted - a good cook-book. *American Psychologist, 11*, 263-272.
- Merrill, L. L., Thomsen, C. J., Sinclair, B. B., Gold, S. R., & Milner, J. S. (2001). Predicting the impact of child sexual abuse on women: The role of abuse severity, parental support, and coping strategies. *Journal of Consulting and Clinical Psychology, 69*, 992-1006.
- Meston, C. M., Heiman, J. R., & Trapnell, P. D. (1999). The relation between early abuse and adult sexuality. *Journal of Sex Research, 36*, 385-395.
- Meston, C. M., Rellini, A. H., & Heiman, J. R. (2006). Women's history of sexual abuse, their sexuality, and sexual self-Schemas. *Journal of Consulting and Clinical Psychology, 74*, 229-236.
- Molnar, B. E., Berkman, L. F., & Buka, S. L. (2001). Psychopathology, childhood sexual abuse and other childhood adversities: relative links to subsequent suicidal behaviour in the US. *Psychological Medicine, 31*, 965-977.
- Mowrer, O. (1960). *Learning theory and behavior*. New York: Wiley.
- Mullen, P. E., Martin, J. L., Anderson, J. C., Romans, S. E., & Herbison, G. P. (1994). The effect of child sexual abuse on social, interpersonal and sexual function in adult life. *British Journal of Psychiatry, 165*, 35-47.
- Mullen, P. E., Romans-Clarkson, S. E., Walton, V. A., & Herbison, G. P. (1988). Impact of sexual and physical abuse on women's mental health. *The Lancet*, 841-845.
- Muller, R. T., Sicoli, L. A., & Lemieux, K. E. (2000b). Relationship between attachment style and posttraumatic stress symptomatology among adults who report the experience of childhood abuse. *Journal of Traumatic Stress, 13*, 321-332.

- Najman, J. M., Dunne, M. P., Purdie, D. M., Boyle, F. M., & Coxeter, P. D. (2005). Sexual Abuse in Childhood and Sexual Dysfunction in Adulthood: An Australian Population-Based Study. *Archives of Sexual Behavior, 34*, 517-526.
- Nash, M. R., Hulseley, T. L., Sexton, M. C., Harralson, T. L., & Lambert, W. (1993a). Long-term sequelae of childhood sexual abuse: Perceived family environment, psychopathology, and dissociation. *Journal of Consulting and Clinical Psychology, 61*, 276-283.
- Nash, M. R., Hulseley, T. L., Sexton, M. C., Harralson, T. L., & Lambert, W. (1993b). Reply to comment by Briere and Elliott. *Journal of Consulting & Clinical Psychology, 61*, 289-290.
- Nelson, E. C., Heath, A. C., Madden, P. A., Cooper, M. L., Dinwiddie, S. H., & Bucholz, K. K. (2002). Association between self-reported childhood sexual abuse and adverse psychosocial outcomes: Results from a twin study. *Archives of General Psychiatry, 59*, 139-145.
- Niedenthal, P. M., & Halberstadt, J. B. (1995). The acquisition and structure of emotional response categories. In D. L. Medin (Ed.), *The psychology of learning and motivation* (Vol. 33, pp. 23-64). New York: Academic Press.
- Niedenthal, P. M., & Halberstadt, J. B. (2000). Emotional response as conceptual coherence. In E. Eich, J. F. Kihlstrom, G. H. Bower, J. P. Forgas & P. M. Niedenthal (Eds.), *Cognition and emotion* (pp. 169-203). New York: Oxford University Press.
- Niedenthal, P. M., & Halberstadt, J. B. (2001). Grounding categories in emotional response. In J. P. Forgas (Ed.), *Feeling and thinking: The role of affect in social cognition* (pp. 357-386). Cambridge, UK: Cambridge University Press.
- Niedenthal, P. M., Halberstadt, J. B., & Innes-Ker, A. H. (1999). Emotional response categorization. *Psychological Review, 106*, 337-361.
- Niedenthal, P. M., Rohmann, A., & Dalle, N. (2003). What is primed by emotion concepts and emotion words? In J. Musch & K. C. Klauer (Eds.), *The psychology of evaluation: Affective processes in cognition and emotion* (pp. 307-333). Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Nisbett, R. E., & Wilson, T. D. (1977). The halo effect: Evidence for unconscious alteration of judgments. *Journal of Personality and Social Psychology, 35*, 250-256.

- Ogata, S. N., Silk, K. R., Goodrich, S., Lohr, N. E., & et al. (1990). Childhood sexual and physical abuse in adult patients with borderline personality disorder. *American Journal of Psychiatry*, *147*, 1008-1013.
- Pain, M. D., & Sharpley, C. F. (1989). Varying the order in which positive and negative information is presented: Effects on counselors' judgments of clients' mental health. *Journal of Counseling Psychology*, *36*, 3-7.
- Paolucci, E. O., Genuis, M. L., & Violato, C. (2001). A meta-analysis of the published research on the effects of child sexual abuse. *The Journal of Psychology*, *135*, 17-36.
- Pelcovitz, D., van der Kolk, B., Roth, S., Mandel, F., Kaplan, S., & Resick, P. (1997). Development of a criteria set and a structured interview for disorders of extreme stress (SIDES). *Journal of Traumatic Stress*, *10*, 3-16.
- Polusny, M. A., & Follette, V. M. (1995). Long-term correlates of child sexual abuse: Theory and review of the empirical literature. *Applied & Preventive Psychology*, *4*, 143-166.
- Pope, H. G., & Hudson, J. I. (1992). Is childhood sexual abuse a risk factor for bulimia nervosa? *American Journal of Psychiatry*, *149*, 455-463.
- Preti, A., Incani, E., Camboni, M. V., Petretto, D. R., & Masala, C. (2006). Sexual abuse and eating disorder symptoms: The mediator role of bodily dissatisfaction. *Comprehensive Psychiatry*, *47*, 475-481.
- Proulx, J., McKibben, A., & Lusignan, R. (1996). Relationships between affective components and sexual behaviors in sexual aggressors. *Sexual Abuse: A journal of research and treatment*, *8*, 279-289.
- Putnam, F. W. (1990). Disturbances of "self" in victims of childhood sexual abuse. In R. Kluft (Ed.), *Incest-related syndromes of adult psychopathology* (pp. 113-131). Washington, DC: American Psychiatric Association.
- Putnam, F. W. (2003). Ten-year research update review: Child sexual abuse. *Journal of the American Academy of Child & Adolescent Psychiatry*, *42*, 269-278.
- Rārangā Whatumanawa Research Project. (in press-a). *Sexual abuse and mental injury: Practice guidelines for Aotearoa New Zealand: Practice guide*. Wellington, New Zealand: Accident Compensation Corporation.



## References

- Rāranga Whatumanawa Research Project. (in press-b). *Sexual abuse and mental injury: Practice guidelines for Aotearoa New Zealand: Principles and recommendations*. Wellington, New Zealand: Accident Compensation Corporation.
- Ric, F., & Niedenthal, P. M. (2007). Assimilation and contrast effects on affect on judgement. In D. A. Stapel & J. Suls (Eds.), *Assimilation and contrast in social psychology* (pp. 99-115). New York: Psychology Press.
- Rind, B., & Tromovitch, P. (2007). National samples, sexual abuse in childhood, and adjustment in adulthood: A commentary on Najman, Dunne, Purdie, Boyle, and Coxeter (2005). *Archives of Sexual Behavior*, *36*, 101-106.
- Rind, B., Tromovitch, P., & Bauserman, R. (1998). A meta-analytic examination of assumed properties of child sexual abuse using college samples. *Psychological Bulletin*, *124*, 22-53.
- Roberts, J. E., Gotlib, I. H., & Kassel, J. D. (1996). Adult attachment security and symptoms of depression: The mediating roles of dysfunctional attitudes and low self-esteem. *Journal of Personality and Social Psychology*, *70*, 310-320.
- Rodriguez, N., Ryan, S. W., Van de Kemp, H., & Foy, D. W. (1997). Posttraumatic stress disorder in adult female survivors of child sexual abuse: A comparison study. *Journal of Consulting and Clinical Psychology*, *65*, 53-59.
- Romano, E., & De Luca, R. V. (2001). Male sexual abuse: A review of effects, abuse characteristics, and links with later psychological functioning. *Aggression & Violent Behavior*, *6*, 55-78.
- Romans, S., Belaise, C., Martin, J., Morris, E., & Raffi, A. (2002). Childhood abuse and later medical disorders in women: An epidemiological study. *Psychotherapy and Psychosomatics*, *71*, 141-150.
- Ross, C. A. (2005). Long term effects of child sexual abuse: Childhood sexual abuse and psychosomatic symptoms in irritable bowel syndrome. *Journal of Child Sexual Abuse*, *14*, 27-38.
- Ross, C. A., Miller, S. D., Bjornson, L., Reagor, P., & et al. (1991). Abuse histories in 102 cases of multiple personality disorder. *The Canadian Journal of Psychiatry / La Revue canadienne de psychiatrie*, *36*, 97-101.
- Roth, S., Newman, E., Pelcovitz, D., & van der Kolk, B. (1997). Complex PTSD in victims exposed to sexual and physical abuse: Results from the DSM-IV field trial for posttraumatic stress disorder. *Journal of Traumatic Stress*, *10*, 539-555.

- Rowan, A., & Foy, D. (1993). Post-traumatic stress disorder in child sexual abuse survivors: A literature review. *Journal of Traumatic Stress, 6*, 3-20.
- Rumstein-McKean, O., & Hunsley, J. (2001). Interpersonal and family functioning of female survivors of childhood sexual abuse. *Clinical Psychology Review, 21*, 471-490.
- Runtz, M., & Schallow, J. R. (1997). Social support and coping strategies as mediators of adult adjustment following childhood maltreatment. *Child Abuse & Neglect, 21*, 211-226.
- Russell, J. A. (1980). A circumplex model of affect. *Journal of Personality and Social Psychology, 39*, 1161-1178.
- Saladin, M. E., Drobles, D. J., Coffey, S. F., Dansky, B. S., Brady, K. T., & Kilpatrick, D. G. (2003). PTSD symptom severity as a predictor of cue-elicited drug craving in victims of violent crime. *Addictive Behaviors, 28*, 1611-1629.
- Sarwer, D. B., Crawford, I., & Durlak, J. A. (1997). The relationship between childhood sexual abuse and adult male sexual dysfunction. *Child Abuse & Neglect, 21*, 649-655.
- Saunders, B. E., Villepontoux, L. A., Lipovsky, J. A., Kilpatrick, D. G., & Veronen, L. J. (1992). Child sexual assault as a risk factor for mental disorders among women. A community survey. *Journal of Interpersonal Violence, 7*, 189-204.
- Saunders, E. J. (1988). A comparative study of attitudes toward child sexual abuse among social work and judicial system professionals. *Child Abuse & Neglect, 12*, 83-90.
- Schiffman, S. S., Reynolds, M. L., & Young, F. W. (1981). *Introduction to multidimensional scaling*. New York: Academic Press.
- Senn, T. E., Carey, M. P., & Venable, P. A. (in press). Childhood and adolescent sexual abuse and subsequent sexual risk behavior: Evidence from controlled studies, methodological critique, and suggestions for research. *Clinical Psychology Review*.
- Senn, T. E., Carey, M. P., Venable, P. A., Coury-Doniger, P., & Urban, M. A. (2006). Childhood Sexual Abuse and Sexual Risk Behavior Among Men and Women Attending a Sexually Transmitted Disease Clinic. *Journal of Consulting and Clinical Psychology, 74*, 720-731.
- Sharpe, D., & Faye, C. (2006). Non-epileptic seizures and child sexual abuse: A critical review of the literature. *Clinical Psychology Review, 26*, 1020-1040.

## References

- Shepard, R. N. (1962a). The analysis of proximities: Multidimensional scaling with an unknown distance function. Part I. *Psychometrika*, 27, 125-140.
- Shepard, R. N. (1962b). The analysis of proximities: Multidimensional scaling with an unknown distance function. Part II. *Psychometrika*, 27, 219-246.
- Simpson, T. L., & Miller, W. R. (2002). Concomitance between childhood sexual and physical abuse and substance use problems: A review. *Clinical Psychology Review*, 22, 27-77.
- Smith, D. W., Davis, J. L., & Fricker-Elhai, A. E. (2004). How does trauma beget trauma? Cognitions about risk in women with abuse histories. *Child Maltreatment*, 9, 292-303.
- Smith, V. L. (1993). When prior knowledge and law collide: Helping jurors use the law. *Law and Human Behavior*, 17, 507-536.
- Smolak, L., & Murnen, S. K. (2002). A meta-analytic examination of the relationship between child sexual abuse and eating disorders. *International Journal of Eating Disorders*, 31, 136-150.
- Snyder, C. (1977). "A patient by any other name" revisited: Maladjustment or attributional locus of problem? *Journal of Consulting and Clinical Psychology*, 45, 101-103.
- Snyder, C., Shenkel, R. J., & Lowery, C. R. (1977). Acceptance of personality interpretations: The "Barnum effect" and beyond. *Journal of Consulting and Clinical Psychology*, 45, 104-114.
- Snyder, M., Decker Tanke, E., & Berscheid, E. (1977). Social perception and interpersonal behavior: On the self-fulfilling nature of social stereotypes. *Journal of Personality and Social Psychology*, 35, 656-666.
- Soboleva, N., Kazakova, N., & Chong, J. (2006). *Conviction and Sentencing of Offenders in New Zealand: 1996 to 2005*. Wellington, New Zealand: Ministry of Justice.
- Spaccarelli, S. (1994). Stress, appraisal, and coping in child sexual abuse: A theoretical and empirical review. *Psychological Bulletin*, 116, 340-362.
- Spataro, J., Mullen, P. E., Burgess, P. M., Wells, D. L., & Moss, S. A. (2004). Impact of child sexual abuse on mental health: Prospective study in males and females. *British Journal of Psychiatry*, 184, 416-421.

- Steel, J., Sanna, L., Hammond, B., Whipple, J., & Cross, H. (2004). Psychological sequelae of childhood abuse: abuse-related characteristics, coping strategies, and attributional style. *Child Abuse & Neglect, 28*, 785-801.
- Stice, E. (2002). Risk and maintenance factors for eating pathology: A meta-analytic review. *Psychological Bulletin, 128*, 825-848.
- Sternberg, R. J. (2003). *Cognitive Psychology: Third edition*. Belmont, CA: Wadsworth/Thompson.
- Treat, T. A., McFall, M. R., Viken, R. J., Nosofsky, R. M., MacKay, D. B., & Kruschke, J. K. (2002). Assessing clinically relevant perceptual organization with multidimensional scaling techniques. *Psychological Assessment, 14*, 239-252.
- Trochim, W. M. K. (1989). An introduction to concept mapping for planning and evaluations. *Evaluation and Program Planning, 12*, 1-16.
- Tsai, M., Feldman-Summers, S., & Edgar, M. (1979). Childhood molestation: Variables related to differential impacts on psychosexual functioning in adult women. *Journal of Abnormal Psychology, 88*, 407-417.
- Ullman, S. E. (2003). Social reactions to child sexual abuse disclosures: A critical review. *Journal of Child Sexual Abuse, 12*, 89-121.
- Ullman, S. E., & Filipas, H. (2005). Gender differences in social reactions to abuse disclosures, post-abuse coping, and PTSD of child sexual abuse survivors. *Child Abuse & Neglect, 29*, 767-782.
- Valentine, L., & Feinauer, L. L. (1993). Resilience factors associated with female survivors of childhood sexual abuse. *American Journal of Family Therapy, 21*, 216-224.
- Van der Kolk, B. A., McFarlane, A. C., & Weisaeth, L. (2007). *Traumatic stress: The effects of overwhelming experienced on the mind, body, and society*. New York: Guilford Press.
- Van der Kolk, B. A., Perry, J. C., & Herman, J. (1991). Childhood origins of self-destructive behaviour. *The American Journal of Psychiatry, 148*, 1665-1674.
- Wagner, W. G., Aucoin, R., & Johnson, J. T. (1993). Psychologists' attitudes concerning child sexual abuse: The impact of sex of perpetrator, sex of victim, age of victim, and victim response. *Journal of Child Sexual Abuse, 2*, 61-74.

## References

- Waller, G. (1993). Association of sexual abuse and borderline personality disorder in eating disordered women. *International Journal of Eating Disorders, 13*, 259-263.
- Walsh, B. W., & Rosen, P. M. (1988). *Self-mutilation: Theory, research, and treatment*. New York, NY: Guilford Press.
- Ward, J. H., Jr. (1963). Hierarchical grouping to optimize an objective function. *Journal of the American Statistical Association, 58*, 236-244.
- Weiss, E., Longhurst, J. G., & Mazure, C. M. (1999). Childhood sexual abuse as a risk factors for depression in women: Psychosocial and neurobiological correlates. *American Journal of Psychiatry, 156*, 816-828.
- Whiffen, V. E., & Clark, S. E. (1997). Does victimization account for sex differences in depressive symptoms? *British Journal of Clinical Psychology, 36*, 185-193.
- Whiffen, V. E., & MacIntosh, H. B. (2005). Mediators of the link between childhood sexual abuse and emotional distress: A critical review. *Trauma, Violence, & Abuse, 6*, 24-39.
- Widom, C. S., & Kuhns, J. B. (1996). Childhood victimization and subsequent risk for promiscuity, prostitution, and teenage pregnancy: A prospective study. *American Journal of Public Health, 86*, 1607-1612.
- Wing, J. K., Cooper, J. E., & Sartorius, N. (1995). *Measurement and classification of psychiatric symptoms: An instruction manual for the PSE and Catego program*. Oxford: Cambridge University Press.
- Wolfe, V. V., Gentile, C., & Wolfe, D. A. (1989). The impact of sexual abuse on children: a PTSD formulation. *Behavior Therapy, 20*, 215-228.
- Wonderlich, S., Brewerton, T., Jovic, Z., Dansky, B., & Abbott, D. (1997). Relationship of childhood sexual abuse and eating disorders. *American Academy of Child and Adolescent Psychiatry, 36*, 1107-1115.
- Wonderlich, S., & Swift, W. J. (1990). Borderline versus other personality disorders in the eating disorders: Clinical description. *International Journal of Eating Disorders, 9*, 629-638.
- Wright, M. O. D., Fopma-Loy, J., & Fischer, S. (2005). Multidimensional assessment of resilience in mothers who are child sexual abuse survivors. *Child Abuse & Neglect, 29*, 1173-1193.
- Young, F. W. (1985). *Multidimensional scaling* (Vol. 5). New York: John Wiley & Sons.

- Zierler, S., Feingold, L., Laufer, D., Velentgas, P., & et al. (1991). Adult survivors of childhood sexual abuse and subsequent risk of HIV infection. *American Journal of Public Health, 81*, 572-575.
- Zlotnick, C., Zakriski, A. L., Shea, T. M., Costello, E., Begin, A., Pearlstein, T., et al. (1996). The long-term sequelae of sexual abuse: Support for a complex posttraumatic stress disorder. *Journal of Traumatic Stress, 9*, 195-205.
- Zoellner, T., & Maercker, A. (2006). Posttraumatic growth in clinical psychology: A critical review and introduction of a two component model. *Clinical Psychology Review, 26*, 626-653.



## **Appendixes**





## Appendix A

### RESA – Reporting Effects of Sexual Abuse

1. Blame myself for things that went wrong in life
2. Nightmares or bad dreams
3. *Perfectionist*
4. Feel unsafe at home
5. Not in control of my own life
6. *Find myself in relationships with the wrong people*
7. Cautious
8. Trouble concentrating
9. *Sexually unsatisfied*
10. Lack of interest
11. Go to pieces under stress
12. *Embarrassed if others talk about sex*
13. *Engage in unsafe activities (e.g. invite strangers into house, walk alone at night)*
14. Fear others will leave (e.g., partner)
15. *Refuse to eat*
16. Feel humiliated
17. Afraid at night
18. *Fantasies about hurting others*
19. *Had sex with someone of the same gender*
20. *Drink regularly*
21. Judged by society
22. *Irregular eating habits (eat a lot and then nothing)*
23. *Need help to get a good night's sleep (e.g., sleeping pills, alcohol)*
24. Sudden 'popping up' of unpleasant images
25. *Hear things that others don't believe are there*
26. *Avoid busy places (public transportation, mall)*
27. *Thoughts about ending my own life*
28. Trouble trusting others (e.g., friends, partner)
29. Feeling unsafe
30. Afraid of what other people think about me
31. *Have sex with someone hardly known*
32. Chronic pain (e.g. arms, lower back)
33. *Vomiting*
34. Feel worthless
35. *Drink and drive*
36. *Have a lot of sex without really enjoying it*
37. *Avoid socializing or mixing with people*
38. *Check things at least twice (e.g. locked doors, light switches)*
39. *Life often seems unreal*
40. Guilty
41. Easily frustrated
42. *Often have the urge to wash or bath myself*
43. *Enjoy being alone*
44. *Act on the spur of the moment*
45. *Feelings of pregnancy despite negative testing*
46. Cry easily
47. Ashamed about my own sexual behaviour
48. *Lie without meaning to*
49. *Engage in unsafe sex*
50. Feel misunderstood

## Appendix A

51. Threatened
52. *Attempted to take my own life*
53. *Easily disgusted*
54. Worry about a lot of things
55. *Have urges to beat or harm someone*
56. *Avoid talking about the past*
57. Trouble getting to sleep
58. *Can view self from the outside*
59. Burning sensations in genitals (not during intercourse)
60. *Disgusted by sexual activities*
61. *Have eating binges*
62. *Stare into space*
63. *Neat and tidy*
64. Trouble breathing
65. *Engage in sex activity to make things go my way*
66. *Other's won't notice me unless I do something dramatic*
67. *Dazed*
68. Indecisive
69. *Gaps in childhood memories*
70. *Hot-tempered*
71. Sudden mood changes
72. Complicated physical health
73. *Hurt myself on purpose (e.g. cutting, burning)*
74. *Avoid certain places or activities*
75. Feel unloved
76. *Distance myself from others*
77. *Experiment with drugs*
78. *Avoid intimacy*
79. Ashamed of self
80. Lack of energy
81. Suddenly scared for no reason
82. Blue
83. *Use sex to gain attention*
84. Bad things continue to happen
85. Clingy
86. Irregular or severe menstrual periods
87. Numb
88. *Daring*
89. *Do not talk about myself or my own feelings*
90. Angry
91. Need to push myself hard to get things done
92. Frightened to be alone
93. On edge
94. *Sexual problems (e.g., cannot get aroused)*
95. Panicky
96. Pessimistic about the future
97. *Do things for a kick (e.g. reckless driving)*
98. Lonely
99. *Enjoy the feeling of pain*
100. *Push uncomfortable thoughts out of mind*

---

*Note.* All coping strategies included in RESA are italicised.

## Appendix B

### Sub-deck of items extracted from RESA

2. Nightmares or bad dreams
8. Trouble concentrating
9. *Sexually unsatisfied*
10. Lack of interest
12. *Embarrassed if others talk about sex*
16. Feel humiliated
18. *Fantasies about hurting others*
20. *Drink regularly*
22. *Irregular eating habits (eat a lot and then nothing)*
24. Sudden ‘popping up’ of unpleasant images
25. *Hear things that others don’t believe are there*
27. *Thoughts about ending my own life*
28. Trouble trusting others (e.g., friends, partner)
29. Feeling unsafe
30. Afraid of what other people think about me
32. Chronic pain (e.g. arms, lower back)
34. Feel worthless
35. *Drink and drive*
37. *Avoid socializing or mixing with people*
41. Easily frustrated
43. *Enjoy being alone*
44. *Act on the spur of the moment*
47. Ashamed about my own sexual behaviour
48. *Lie without meaning to*
53. *Easily disgusted*
56. *Avoid talking about the past*
57. Trouble getting to sleep
58. *Can view self from the outside*
62. *Stare into space*
63. *Neat and tidy*
64. Trouble breathing
65. *Engage in sex activity to make things go my way*
66. *Other’s won’t notice me unless I do something dramatic*
68. Indecisive
69. *Gaps in childhood memories*
70. *Hot-tempered*
73. *Hurt myself on purpose (e.g. cutting, burning)*
74. *Avoid certain places or activities*
78. *Avoid intimacy*
80. Lack of energy
81. Suddenly scared for no reason
84. Bad things continue to happen
85. Clingy
86. Irregular or severe menstrual periods
87. Numb
92. Frightened to be alone
93. On edge
94. *Sexual problems (e.g., cannot get aroused)*
96. Pessimistic about the future
98. Lonely

---

*Note.* All coping strategies included in RESA-S are italicised.

## Appendix C

### Information sheet: Similarity mapping (Study One)



**Massey University**  
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES  
Te Kura Pūkenga Tangata

SCHOOL OF PSYCHOLOGY  
Te Kura Hinengaro Tangata  
Private Bag 11 222  
Palmerston North 4442  
New Zealand  
T 64 6 356 9099 extn 2040  
F 64 6 350 5673  
[www.massey.ac.nz](http://www.massey.ac.nz)  
<http://psychology.massey.ac.nz>

### *Mapping Symptoms of Sexual Abuse*

#### INFORMATION SHEET

***Who are the researchers and where can they be contacted?***

Shane Harvey and Pia Pechtel are conducting this research. Shane's phone number and e-mail address for correspondence are (06) 356 9099 xtn 7171 and [S.T.Harvey@massey.ac.nz](mailto:S.T.Harvey@massey.ac.nz). Pia Pechtel's phone number is 06 356 9099 xtn 8613 and her email address is: [P.Pechtel@massey.ac.nz](mailto:P.Pechtel@massey.ac.nz). Questions or enquiries should be directed to Shane in the first instance.

***What is the purpose of the research?***

The purpose of this research is to find similarities amongst effects or symptoms following sexual abuse. All of the listed symptoms are related to sexual abuse and derive from a review of national and international literature and assessment instruments.

***What will I be asked to do?***

A small deck of cards will be given to each participant. Each card has a separate symptom printed on it. Participants will be asked to organise the cards into groupings of similar topic clusters. Participants will then identify opposite groupings, sub-divide groupings, and merge groupings. Participants will not be asked to apply the items to themselves in any way. Instead, groupings are based on semantic-like similarity judgments. Students will be asked to write down their judgments onto anonymous record sheets.

***How much time will be involved?***

The entire sorting procedure, which includes both item decks, should take approximately 120 minutes. This includes time to understand the instructions.

***What will you get out of it?***

Each participant receives \$25 as reimbursement for travel and time.

***Who do we want to participate?***

Massey survey needs 17 males and 17 females for a similarity card sort. Participants must be 18 years or older, with English as first language. Participants must not have a history of sexual abuse, rape and/or have not accessed ACC sensitive claims services. This is because some items may be distressing for those individuals who have had a history of sexual abuse. If you experience distress at any stage of this research, please contact the primary researcher. An experienced practitioner will be made available for those who require appropriate debriefing. All data is anonymous.

***What will happen to the information and data sheets?***

Information from the data sheets will be entered onto the computer and analyzed. No personal information is collected, and your participation and data will remain anonymous. The original data sheets will be put into safe storage with the researcher. This way any data entry errors may be corrected. Computers will be password locked.

**Appendix C***What will happen to the data on the completion of the research?*

The raw data sheet will be kept in a safe location and secured from unauthorized access. No personal identifying information is noted on these data sheets. As it is not possible to link the data sheets to participants anonymity is assured.

*What can I expect from the researcher?*

Massey University Human Ethics Committee guidelines are adhered to at all times. The participants' rights include:

- decline to participate
- withdraw from the study at any time
- confidentiality. No identifying information will be requested.
- No individual results are available as data remains anonymous. However, participants have access to overall results summary if desired.
- Full reimbursement of participation is guaranteed even if participants decide to withdraw.

Research will only be used for the purposes of this research topic and publications arising from it. There are no known potential harm or risk effects for participants, the researcher or for Massey University.

Thank you very much for your co-operation.

*Pia Pechtel*

Shane Harvey, PhD

Pia Pechtel

This project has been reviewed and approved by the Massey University Human Ethics Committee, PN Application 04/176. If you have any concerns about the conduct of this research, please contact Professor Sylvia V Rumball, Chair, Massey University Human Ethics Committee: Palmerston North, telephone 06 350 5249, email [humanethicspn@massey.ac.nz](mailto:humanethicspn@massey.ac.nz).

**Appendix D**

**Appendix D**

**Grouping, Opposite, Partitioning, Adding (GOPA) record sheet**

**Phase one – grouping**

Make up at least 8 (and up to 16) different groups of similar items with no more than 7 items per group. A group may have a single item. Keep each group’s item numbers on the same line. Please print neatly. Do NOT number groups.

Example: 7 22 1 43 78 12

**Phase three – partition**

For all phase 1 groups with more than 2 items, copy all these numbers onto the identical line below but use brackets to show sub groups, that is how the most similar items go together. A sub group may have a single item within brackets.

(12 43 22) (1 7) (78)


**Phase two – opposites**

Which of the phase 1 groups are the most different? Record these “opposites” by entering any one item number from each group on the spaces below. Try to find at least two sets of opposites.

Opposite set 1: \_\_\_\_\_, \_\_\_\_\_# Opposite set 2: \_\_\_\_\_, \_\_\_\_\_# Opposite set 3: \_\_\_\_\_, \_\_\_\_\_#

**Phase four – adding**

Join together the most similar groups in phase 1. To show which groups go together enter any one item number from each group on the spaces below. Only some groups will join up, many will not. Try to make at least two merges. If there are more than three, continue showing pairs.

merger a) \_\_\_\_\_, \_\_\_\_\_# merger b) \_\_\_\_\_, \_\_\_\_\_# merger c) \_\_\_\_\_, \_\_\_\_\_

## Appendix E

### Invitation to participate for adults with history of CSA (Study One)



#### *Invitation to Participate*



- **Have you been affected as a result of sexual abuse?**
- **Have you received counselling associated with sexual abuse?**

We are a Massey University Research Team, funded by ACC, to research services on mental injury provided for child and adult survivors of sexual abuse. We need your help to develop safe and effective treatment guidelines **for practitioners working with survivors of sexual abuse.**

We wish to run an **anonymous exercise** to learn about the effects following sexual abuse or sexual assault. This information will be invaluable in contributing to the researchers' understanding of your experience regarding assessment and effective treatment of sexual abuse.

We are inviting adults, who have accessed counselling services for sexual abuse or sexual assault to participate.

#### **Interested?**

To find out more, please contact the Project Co-ordinator for Rārangā Whatumanawa on **0800 200 235** or [A.Ryan@massey.ac.nz](mailto:A.Ryan@massey.ac.nz) (**in strict confidence**).

More information is also available on our website: <http://Whatumanawa.massey.ac.nz>





## Appendix F

## Appendix F

Information sheet and consent form: CSA sequelae  
(Study One)

**Massey University**  
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES  
Te Kura Pūkenga Tangata

SCHOOL OF PSYCHOLOGY  
Te Kura Hinengaro Tangata  
Private Bag 11 222  
Palmerston North 4442  
New Zealand  
T 64 6 356 9099 extn 2040  
F 64 6 350 5673  
www.massey.ac.nz  
http://psychology.massey.ac.nz

*Sexual Abuse Survivors Experiences of Services Provided by  
Practitioners*

INFORMATION SHEET

You are invited to participate in a group discussion about your experiences with assessment and treatment provided by therapists. Your participation is voluntary (it is your choice). As a consumer, your experiences of this area are highly valued. Your knowledge will make an important contribution to this project. This study, although funded by ACC, is being conducted independently, and is being led by Cheryl Woolley from Massey University. It comprises several team members who are skilled in conducting research, as well as working with survivors of sexual abuse. This study is part of a broader project titled *Research services on mental injury in survivors of sexual abuse: Diagnosis and rehabilitation guidelines*. Your input in this study will contribute to recommendations made by the research team in the development of best practice guidelines for practitioners.

***Am I eligible to take part?***

You are eligible to take part in this study if you are aged 18 years and over and have received counselling associated with sexual abuse

***What am I being asked to do?***

First, we would like to invite you to complete a short card sort as an individual task. Each item card describes an effect that may follow sexual abuse. You are asked to sort each item according to how these effects applied to you before receiving treatment. This will be followed by a group discussion about your experiences of the assessment and treatment services you received relating to your sexual abuse. As part of the larger project we think it is very important to know what you think of the services provided by practitioners (e.g. Doctors, counsellors, Social Workers, Psychotherapists).

This second part will consist of a focus group meeting that will involve up to seven other people, and will take about two hours of your time. It will be organised at a time and place that is suitable for everyone in the group. You are able to bring a support person with you, but for reasons of confidentiality they will not be able to be present in the focus group itself. Participants will agree to preserving the confidentiality of opinions expressed by other members of the group, as well as respecting all views and perspectives. We will provide some refreshments at the meeting and also \$20 per participant to compensate you for your travel costs. We will audio tape the focus group conversation, although you are free to ask for the recorder to be turned off at any time. Two researchers will be present during the discussion, one will lead the discussion and another will take notes during the discussion, to capture talk that is not picked up by the audio tape. After the discussion, the senior researchers will discuss with the group and each participant whether you experienced any discomfort during the discussion. Further information will be provided on the services available if required. You will be provided with the contact

## Appendix F

details (toll free) of the two researchers who participated in the group discussion. It is important for you to understand that the researchers who conduct the group discussion are unable to provide you with counselling, but they will provide you with information about where you can access help if you think it's necessary.

### *Why am I being asked to help?*

The benefits to you as a participant in this research is the opportunity to contribute your perspective on the therapeutic services provided by practitioners. This valuable insight will help inform practice guidelines for the treatment of mental injury resulting from sexual abuse. However the researchers' are very aware of the potential risk of participants' experiencing an adverse psychological reaction resulting from the discussion. This issue will be discussed with you during the initial information session, prior to any request for consent to participate. You should also know that each focus group will be run by an experienced practitioner who has worked with sexual abuse clients and that a debriefing will occur with the group and individual participants. If any adverse psychological reaction is experienced during the focus group, the group facilitator will move the group to the debriefing session and end the focus group. All participants will be provided with a list of services available to address mental injury resulting from sexual abuse and also information regarding accessing or re-accessing ACC services. In addition, all participants will be provided with the opportunity to discuss any further concerns with the group facilitator on a toll free number up to three weeks after the group discussion.

You are guaranteed full confidentiality in participating in this project, your counsellor will not be contacted nor will they have any knowledge of your participation. You should also know that your participation will not affect any future ACC claims.

### *What will happen to my information?*

The introductory card sort information will be used to identify meaningful groups of symptoms for the purpose of improving the understanding about the consequences of sexual abuse in adult and child survivors.

The information from the focus group discussion will be used to analyse what you (and other members of the focus group) think about the type of assessment and treatment services that you (and other members of the focus group) received. The person who conducts the interview will take part in the analysis of your transcript. Analysis of the transcripts is to be conducted by the research team (their names are available at the end of this form). Be assured that no one will be able to identify you in any of this material, although we may use some brief quotations from the discussions to illustrate common concerns that people have.

All materials and tape recordings will be kept (separately) in a locked filing cabinet at the Psychology Clinic, Massey University. The tapes will be destroyed at the end of the research project. The written transcripts will be held for five years following the conclusion of the research project, as is normal practice for research data, and then destroyed.

We will send you a summary of our findings at the end of the study if you wish and a website will provide the focus group summary feedback and reports available to the public from the larger research project. Information resulting from the group discussion will be used to develop guidelines for working with survivors of sexual abuse in Aotearoa. ACC registered practitioners will have access to these guidelines.

### *What are my rights?*

If you decide to participate in this project, the researchers will respect your right to:

- ask any questions of the researchers about the study at any time during participation;

## Appendix F

- decline to discuss any particular issue in the focus group;
- withdraw from the focus group discussion;
- provide information on the understanding that your name will not be used;
- ask for the audio-tape to be turned off at any time during the discussion
- be given a summary of the findings. Further feedback about the study and the broader research project we are conducting will be available at <http://whatumanawa.massey.ac.nz>

### *Who can I speak with about my participation in this project?*

If you have further questions or concerns, please do not hesitate to contact the Project Co-ordinator, Anne Ryan. All calls are toll free. Contact details are below:

#### **Anne Ryan (Research Officer)**

School of Psychology, Massey University, Private Bag 11-222, Palmerston North  
Telephone: 0800 200 235; Email: [A.Ryan@massey.ac.nz](mailto:A.Ryan@massey.ac.nz)

#### **The Principle Investigator may also be contacted:**

Cheryl Woolley Psychology Clinic Massey University, Private Bag 11 222  
Palmerston North Telephone (06) 3505196 ext.2076 Email: [C.C.Woolley@massey.ac.nz](mailto:C.C.Woolley@massey.ac.nz)

**Research Team Members:** Cheryl Woolley (Principal Investigator), Ian Evans, Joanne Taylor, Shane Harvey, Jan Dickson, Jhanitra Gavala, Ruth Mortimer, Pia Pechtel, Anne Ryan, Karen Frewin

If you have assessed services through ACC, and have any concerns about the service you received, the researchers are able to inform you of the process to be followed if you wish to make a complaint to ACC.

If you have any queries or concerns regarding your rights as a participant in this study you may wish to contact a Health and Disability Advocate, telephone:

Northland to Franklin	0800 555 050
Mid and lower North Island	0800 423 638 (4 ADNET)
South Island except Christchurch	0800 377 766
Christchurch	03 377 7501

This study has received ethical approval from the Multi-region Ethics Committee, which reviews National and Multi regional studies (MEC/05/03/036)

### **Compensation Statement**

In the unlikely event of a physical injury as a result of your participation in this study, you may be covered by ACC under the Injury Prevention, Rehabilitation and Compensation Act. ACC cover is not automatic and your case will need to be assessed by ACC according to the provisions of the 2002 Injury Prevention Rehabilitation and Compensation Act. If your claim is accepted by ACC, you still might not get any compensation. This depends on a number of factors such as whether you are an earner or non-earner. ACC usually provides only partial reimbursement of costs and expenses and there may be no lump sum compensation payable. There is no cover for mental injury unless it is a result of physical injury. If you have ACC cover, generally this will affect your right to sue the investigators. If you have any questions about ACC, contact your nearest ACC office or the investigator.



**Massey University**  
 COLLEGE OF HUMANITIES AND SOCIAL SCIENCES  
 Te Kura Pūkenga Tangata

SCHOOL OF PSYCHOLOGY  
 Te Kura Hinengaro Tangata  
 Private Bag 11 222  
 Palmerston North 4442  
 New Zealand  
 T 64 6 356 9099 extn 2040  
 F 64 6 350 5673  
 www.massey.ac.nz  
 http://psychology.massey.ac.nz

*Sexual Abuse Survivors Experiences of Services Provided by  
 Practitioners*

**PARTICIPANT CONSENT FORM**

This consent form will be held for a period of five (5) years

- I have read the Information Sheet and have had the details of the study explained to me.
- My questions about the study have been answered to my satisfaction, and I understand that I may ask further questions at any time.
- I understand that taking part in this study is my choice and that I have the right to decline to discuss any particular issue during the focus group discussion and may withdraw from the study at any point in time.
- I agree to provide information to the researchers on the understanding that it is completely confidential.
- I agree as a participant not to disclose anything discussed in the Focus Group.
- I agree to the group discussion being audio taped and the second researcher taking notes during the discussion.
- I understand I have the right to ask for the tape to be turned off at any time during the interview.
- I understand that the discussion will be stopped if I or another participant appears to be experiencing some discomfort during the group discussion.
- I understand that the researchers who are conducting the group discussion are unable to provide me with individual counselling.
- I understand the researchers are able provide me with information as to where I can access help.
- I have had time to consider whether to take part in this study and I know who to contact if I have any negative effects due to my participation in the study.

I wish to receive feedback about the group discussion in the form of a written summary of the findings in which individual contributors will not be identified in any way.

Yes  Postal Address: \_\_\_\_\_

No

I hereby agree to participate in this study under the conditions set out in the Information Sheet.

Signed: \_\_\_\_\_  
 Full Name (Print): \_\_\_\_\_  
 Researcher: \_\_\_\_\_  
 Date: \_\_\_\_\_

**Appendix G****Appendix G****Instructions MOSS (Method of Successive Sort) template  
(Study One)**

This is an individual warm-up task. You will be given a deck of around 50 cards. Each card contains a number and a statement that describes different effects or symptoms that might follow sexual abuse. We want you to make a judgement about which symptoms applied to you before you sought therapy.

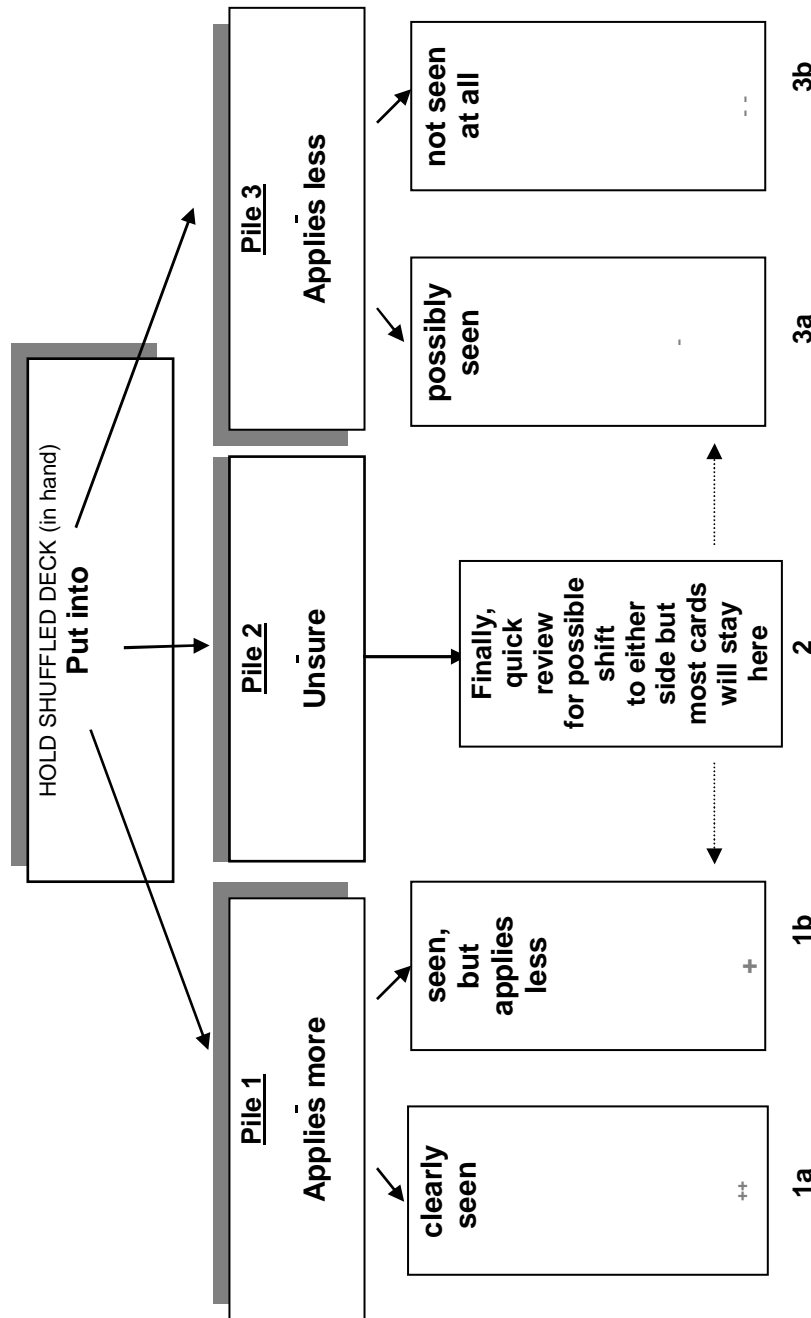
Please remember that there are no right or wrong answers.

We will now hand you an instruction sheet and five envelopes (hold up). Please take the cards out of the bag and shuffle them in your hand. The sorting of the cards should be made directly on the boxes indicated on the instruction sheet (demonstrate).

1. Follow the instruction by sorting all cards into three piles of “applied more” to me (Pile 1), to “not sure” if I ever had these issues (Pile 2), to “applied less”, I do not think I had trouble with these issues (Pile 3). Please keep in mind that these judgements are based on your experience before seeking help. After sorting these three piles, at least 10 cards should be in each end pile.
2. Then pick up all cards in Pile 1 and split them into two further piles of “clearly seen” before treatment (Pile 1a) and “seen, but applied less” (Pile 1b).
3. Afterwards, please pick up Pile 2 and check if you want to shift any of the cards into either side piles. Note that cards can be shifted between piles at any time during this task.
4. Finally, split Pile 3 into two further pile of “possibly seen” (Pile 3a) and symptoms “not seen at all” (Pile 3b).

Please place each of the final five piles (1a, 1b, 2a, 3a, and 3b) in the same marked envelopes and seal them (demonstrate). A researcher will then come around and collect the envelopes. Please note that no personal information is collected and that the envelopes cannot be traced back to you.

Appendix G



When making the first three piles put at least 10 in each end pile (i.e. Pile 1 and Pile 3). Cards may be shifted between piles at any time. Final 5 piles may have an uneven number of cards in them.

## Appendix H

### Information sheet: Reports on general functioning (Study One)



**Massey University**  
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES  
Te Kura Pūkenga Tangata

SCHOOL OF PSYCHOLOGY  
Te Kura Hinengaro Tangata  
Private Bag 11 222  
Palmerston North 4442  
New Zealand  
T 64 6 356 9099 extn 2040  
F 64 6 350 5673  
[www.massey.ac.nz](http://www.massey.ac.nz)  
<http://psychology.massey.ac.nz>

#### *Self-report of general functioning in adults with no history of trauma*

##### INFORMATION SHEET

You are warmly invited to participate in a research study to share your perception of your general well-being in the last six months.

##### *Who are the researchers?*

Pia Pechtel is conducting this research as a partial fulfillment of her PhD degree in Psychology through Massey University. Her two relevant supervisors are Prof. Ian Evans and Dr. Shane Harvey. Pia will be present while you are undertaking this study. Questions or enquiries should be directed to Pia in the first instance.

##### *What is the purpose of the research?*

The purpose of this research is to ask about your perception on your general functioning during the last six months. It is important for you to know that the statements that you are invited to describe yourself with do not form a diagnostic measure evaluating well-being or determine mental illness. They also do not identify personal hidden experiences of trauma as there are no unique descriptors or indicators of trauma. In this research there are no right or wrong answers as you are the expert! We are interested to combine the results across all participants to a group summary and then compare it to the perceptions and self-reports collected from a traumatized group of individuals.

##### *Who do we want to participate?*

We will need 15 females and 15 males for this research to improve our understanding on general functioning in a group of individual who do not have a history of trauma. A traumatic event is defined as having

- ❖ either a personal or witnessed experiences or confrontation of at least one situation that involved
- ❖ an "actual or threatened death or serious injury, or a threat to the physical integrity of self or others"
- ❖ which was accompanied by feelings of "intense fear, helplessness, or horror" (Diagnostic and Statistical Manual of Mental Disorders, 2000, p. 427-428)

All participants must be 18 years or older, with English as first language. If you feel uncomfortable at any stage during the study, please make sure you let the researcher know.

##### *What will I be invited to do?*

You will be invited to complete a short card sorting tasks. A small deck of 100 cards will be given to each participant. Each card has a few words printed on it that describe behaviour, feelings, thoughts, or a body sensation. We would like you to rank each card according to how much this describes yourself in the last six months. You will be given a template and an explanation on how to sort items into five piles ranging from "likely to describe myself" to "unlikely to describe myself".

There is no forced choice which means you can sort as many or little descriptors in each pile as applies - you are the expert! After the completion of the task, you will have a chance to talk to the researcher about your thoughts and the study.

##### *How much time will be involved?*

The estimated time ranges from 10-15 minutes.

## Appendix H

### *What will happen to the data sheets on the completion of the research?*

Information from the data sheets will be entered onto a password-locked computer and analyzed. Apart from gender, no personal information is collected, and your participation and data will remain anonymous. The original data sheets will be kept in a safe location and secured from unauthorized access. This way any data entry errors may be corrected afterwards. As the data remains anonymous, no connection between the recording sheets and you as a participant can be made. After a period of five years, the data sheets and the consent forms will be disposed of.

### *How do I agree to participate in this study?*

After reading through the information sheet, you will spend some time with the researcher who is happy to answer all of your remaining questions. With a signature on the consent form, you are agreeing to participate in this study. Please note that you may ask further questions at any time.

### *How can I access a summary of the findings?*

On the consent form, you can also indicate if you like to know about the overall findings of this research. You are invited to leave your e-mail/mail details on the consent form in which case a summary of the group findings will be e-mailed/mailed out to you after the completion of the study. As this study is not obtaining individual results, a personalized summary of the outcomes cannot be handed out.

### *What can I expect from the researcher?*

Massey University Human Ethics Committee guidelines are adhered to at all times. You are under no obligation to accept this invitation. If you decide to participate, you have the right to

- decline to participate in any particular task;
- withdraw from the study at any time;
- ask any questions about the study at any time during participation;
- anonymity; no identifying information will be requested;
- access the study's overall findings.

Information obtained will only be used for the purposes of this research topic and publications arising from it. There are no known potential harm or risk effects for participants, the researcher or for Massey University.

In case you have any questions or concerns, please do not hesitate to contact any of the researchers.

Thank you very much for your co-operation,

*Pia Pechtel*

**Pia Pechtel**

06 356 9099 xtn 7678  
P.Pechtel@massey.ac.nz

**Shane Harvey, PhD**

(06) 356 9099 xtn 7171  
S.T.Harvey@massey.ac.nz

Prof. Ian Evans, (chief supervisor), College of Humanities and Social Sciences, School of Psychology, Massey University, Private Bag 11-222, Palmerston North. Telephone: (06) 356 9099 xtn 2070, I.M.Evans@massey.ac.nz

**This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named above are responsible for the ethical conduct of this research.**

If you have any concerns about the conduct of this research that you wish to raise with someone other than the researcher(s), please contact Professor Sylvia Rumball, Assistant to the Vice-Chancellor (Ethics & Equity), telephone 06 350 5249, e-mail humanethics@massey.ac.nz



Appendix I

# Appendix I

## Consent form: Reports on general functioning (Study One)



**Massey University**  
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES  
Te Kura Pūkenga Tangata

SCHOOL OF PSYCHOLOGY  
Te Kura Hinengaro Tangata  
Private Bag 11 222  
Palmerston North 4442  
New Zealand  
T 64 6 356 9099 extn 2040  
F 64 6 350 5673  
[www.massey.ac.nz](http://www.massey.ac.nz)  
<http://psychology.massey.ac.nz>

### *Self-report of general functioning in adults with no history of trauma*

#### PARTICIPANT CONSENT FORM

This consent form will be held for a period of five (5) years

I have read the Information Sheet and have had the details of the study explained to me. Any questions I have asked have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree to participate in this study under the conditions set out in the Information Sheet.

Yes, I would like to receive a summary of the overall findings of the study. Please e-mail/mail a copy of the findings to the following address (please print clearly):

---

---

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Full Name - printed \_\_\_\_\_

## Appendix J

### List of RESA items clustering at dimensional poles of the lay and expert similarity map

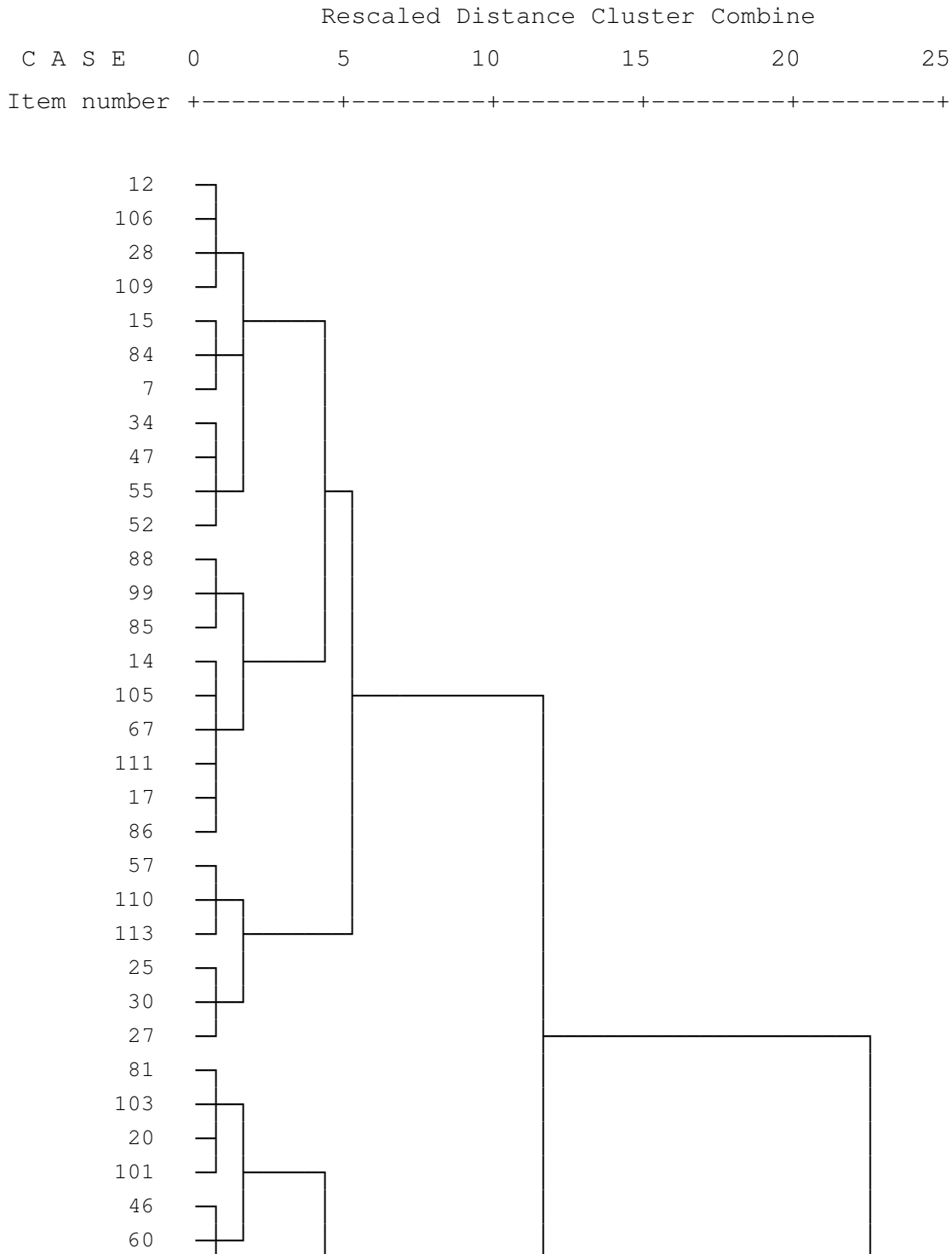
<p><b>d1+</b> <b>risk-taking/externalising behaviour</b></p>	<p><b>d1-</b> <b>avoiding/internalising behaviour</b></p>
<p>77. <i>Experiment with drugs</i> 44. <i>Act on the spur of the moment</i> 20. <i>Drink regularly</i> 35. <i>Drink and drive</i> 88. <i>Daring</i> 97. <i>Do things for a kick (e.g., reckless driving)</i></p>	<p>26. <i>Avoid busy places (public transportation, mall)</i> 100. <i>Push uncomfortable thoughts out of mind</i> 56. <i>Avoid talking about the past</i></p>
<p><b>d2+</b> <b>hyper aroused/anxious</b></p>	<p><b>d2-</b> <b>self-blame/low self-esteem</b></p>
<p>64. <i>Trouble breathing</i> 23. <i>Need help to get a good night's sleep (e.g., sleeping pills, alcohol)</i></p>	<p>40. <i>Guilty</i> 75. <i>Feel unloved</i> 50. <i>Feel misunderstood</i> 34. <i>Feel worthless</i> 1. <i>Blame myself for things that went wrong in life</i></p>
<p><b>d3+</b> <b>withdrawal: sexuality</b></p>	<p><b>d3-</b> <b>withdrawal: de-attachment</b></p>
<p>60. <i>Disgusted by sexual activities</i> 12. <i>Embarrassed if others talk about sex</i> 53. <i>Easily disgusted</i> 47. <i>Ashamed about my own sexual behaviour</i> 94. <i>Sexual problems (e.g., cannot get aroused)</i></p>	<p>67. <i>Dazed</i> 10. <i>Lack of interest</i> 68. <i>Indecisive</i> 91. <i>Need to push myself hard to get things done</i> 80. <i>Lack of energy</i> 62. <i>Stare into space</i> 8. <i>Trouble concentrating</i> 87. <i>Numb</i></p>

Note. All RESA items describing coping strategies are italicised.

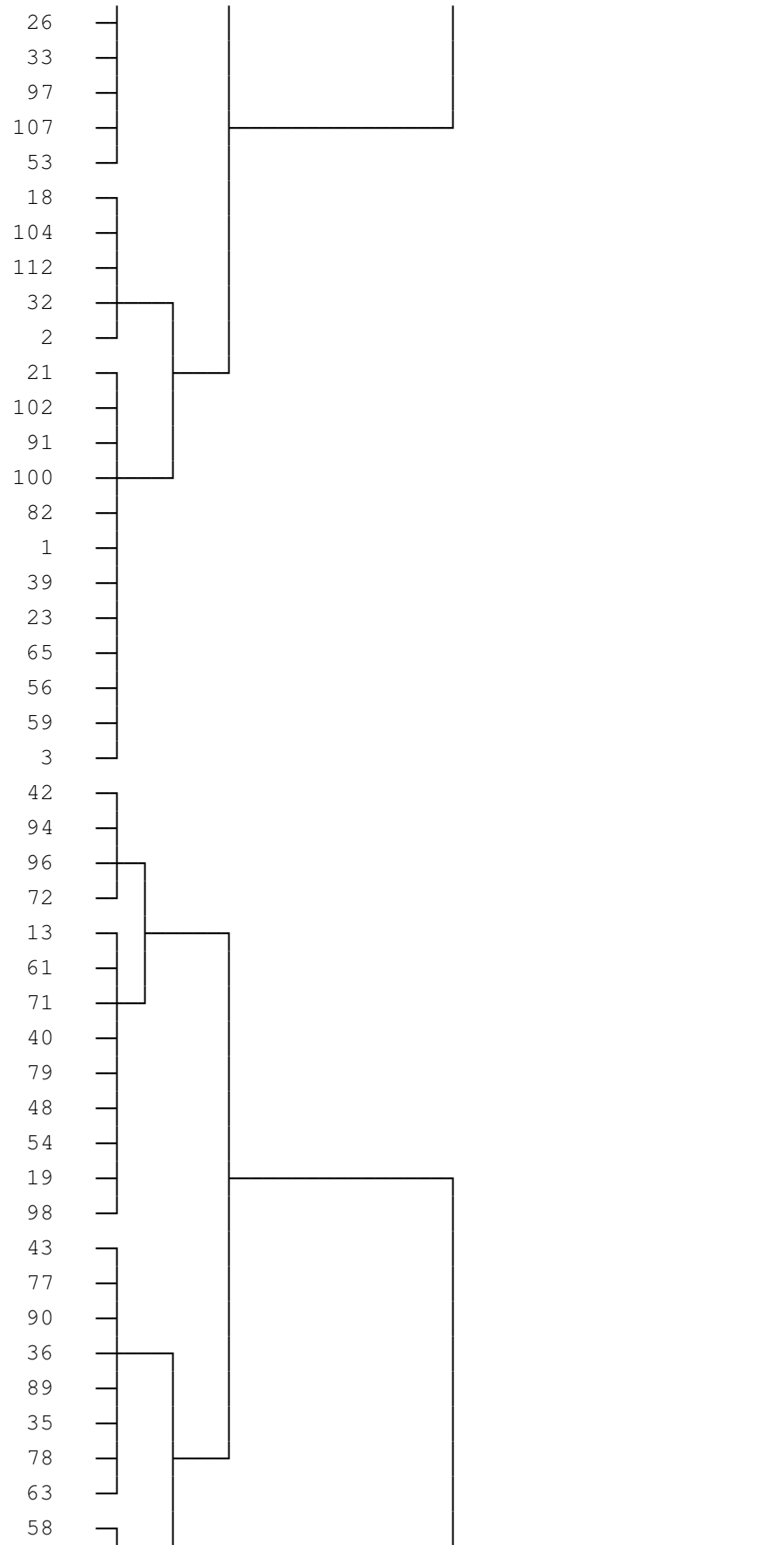
Appendix K

## Appendix K

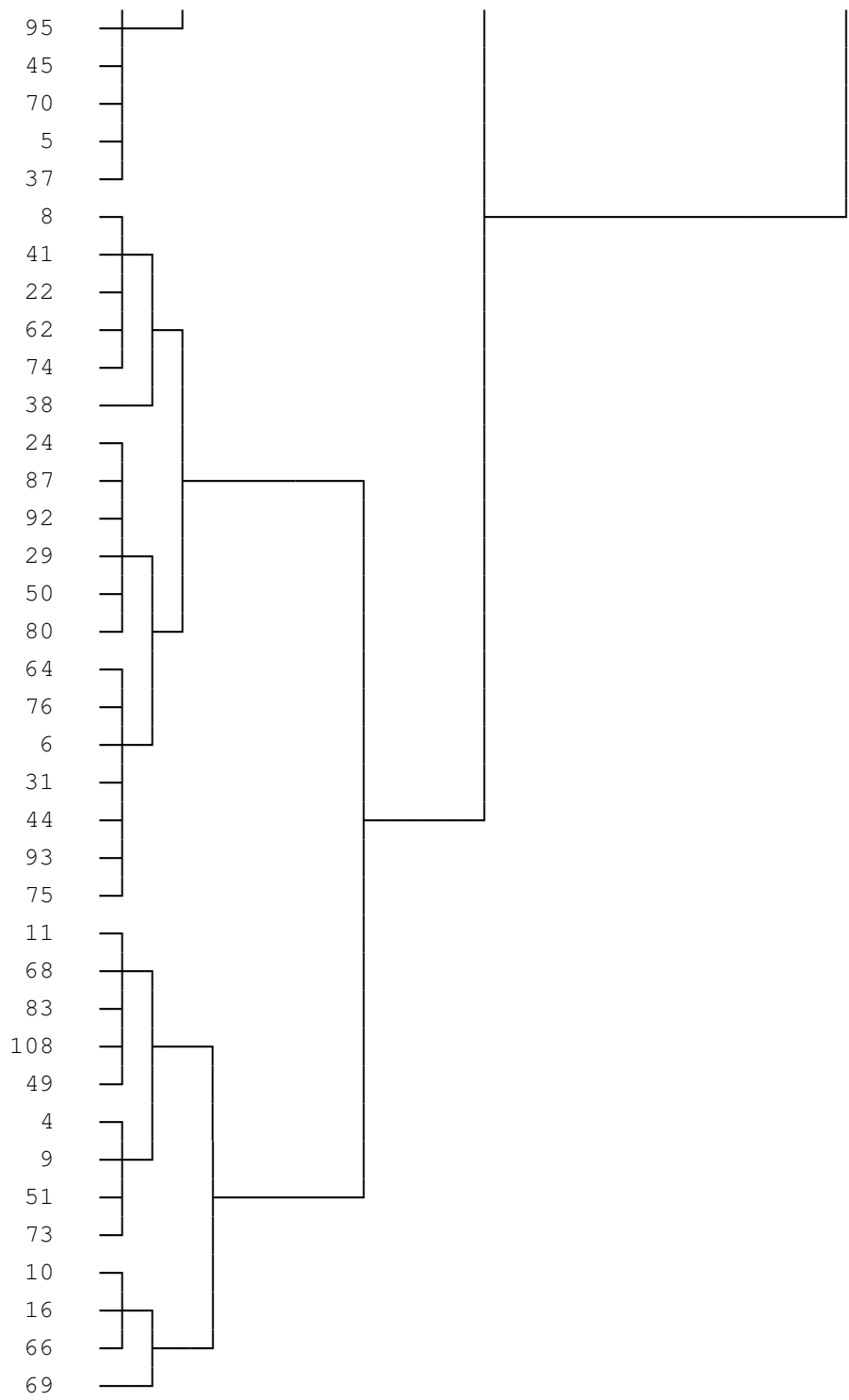
### Hierarchical cluster analysis: Ward dendrogram for 113 adults with history of CSA (5 cluster solution) (Study One)



**Appendix K**

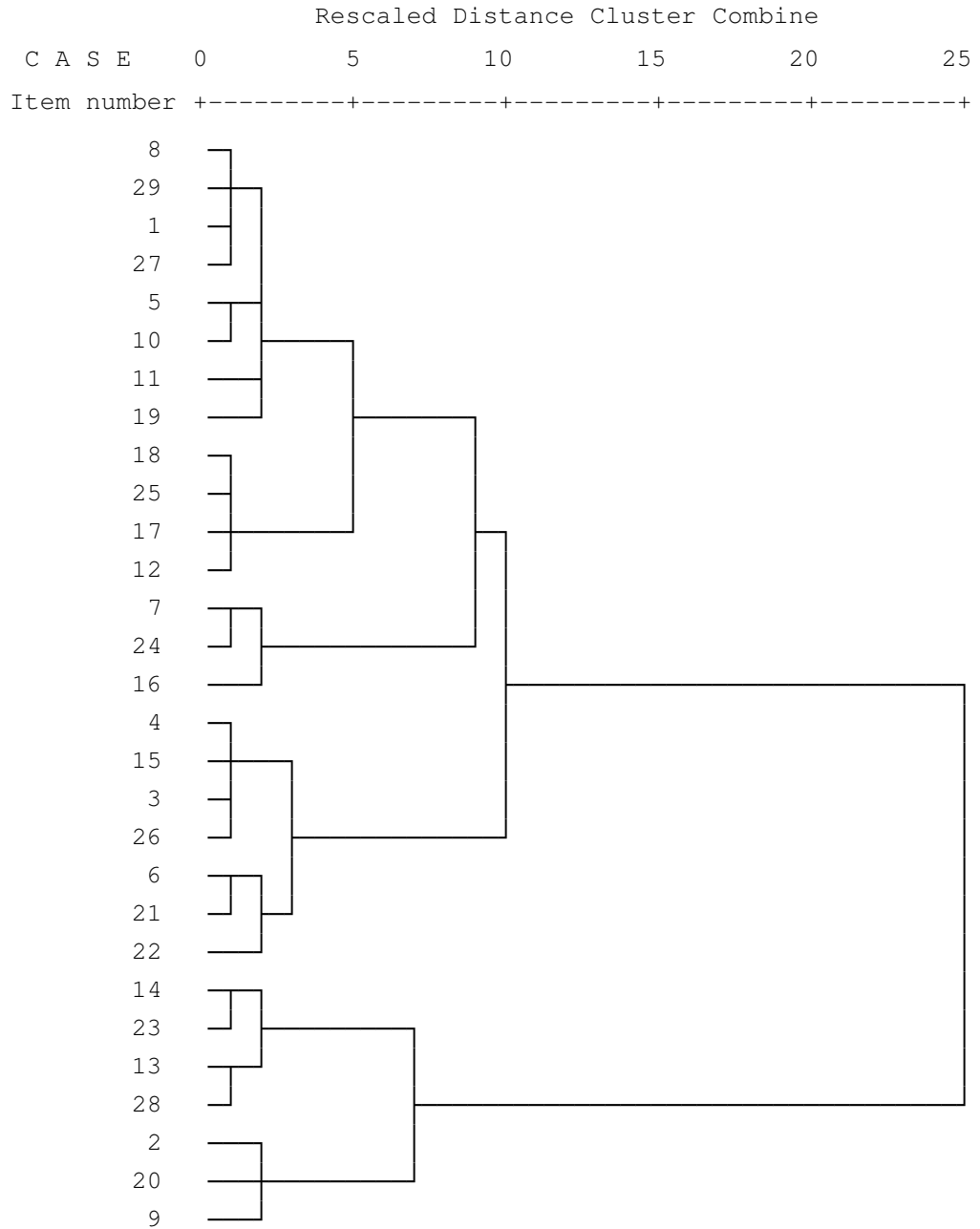


**Appendix K**




# Appendix L

## Ward dendrogram using 29 non-traumatised adults reporting on their general functioning (3 cluster solution) (Study One)



## Appendix M

### Invitation to participate: Priming/ no-prime study (Study Two)



**INTERESTED IN HELPING RESEARCH ON SEXUAL ABUSE?**

Hi, my name is Pia and I am a PhD candidate in the School of Psychology at Massey University. I would like to invite you to participate in a study to improve our understanding of effects following sexual abuse. Interested?

**WE NEED:**

- 60 males and 60 female participants
- Over 18 years with English as a first language
- Who **do not have history of sexual abuse or sexual assault**

<p><b>WHAT WE WOULD ASK YOU TO DO:</b></p> <ul style="list-style-type: none"> <li>● View a short film followed by a general card sorting task</li> <li>● This study is <b><u>not about a personal experience!</u></b></li> </ul>	<p><b>HOW LONG DOES IT TAKE?</b></p> <ul style="list-style-type: none"> <li>● About one to two hours</li> <li>● You will receive <b>\$20</b> for your time and travel.</li> </ul>
--	---

{ Saturday, 02.09. 2006 at 11-1 pm  
 Sunday, 03.09. 2006 at 11-1 pm  
 in the  
**School of Psychology**  
 P 1.13, opposite Social Science lecture block, behind  
 Social Science tower,  
 Turitea Campus, Massey University

Would you like to participate? Do you have any questions? E-mail me:

**[P.Pechtel@massey.ac.nz](mailto:P.Pechtel@massey.ac.nz)**

## Appendix N

### Scripts for cognitive and emotive primes (Study Two)

#### Script of cognitive short film (duration: Seven minutes):

*Lecturer:* “OK, summarising what we know about the consequences of childhood sexual abuse for adults:

- Research on effects following sexual abuse was not established until the late 1970ies. Until then, it was thought that lasting effects following sexual abuse are not common.
- Since 1980ies: Common conclusion that childhood sexual abuse can lead to a great range of effects characterised by varying levels of intensity and frequency of impaired psychological functioning in adulthood.
- What are the specific effects that are more often seen in people who have been abused than in the non-abused population:

#### Depression:

- Often described as most common effect in adults who have been molested as children
- Depressive characteristics are, amongst others, rumination (continuous thinking), hopelessness, feeling sad or empty, worthlessness, reduced interest in previously pleasurable activities

#### Anxiety:

- Consistently reported
- CSA related to tension and anxiety in adulthood
- Signs of anxiety are fearfulness, hypervigilance (tense, edgy), and preoccupation with control (need to be in control all the time)
- Reasons for, e.g., fearfulness can be explained as a learned behavioural strategy resulting from the abuse situation.
- Anxiety and fearfulness is also thought to account for a variety of other dysfunctions such as sexual difficulties or somatic complaints
- Anxiety and depression have an overlap in symptomatology.

#### Posttraumatic-Stress disorder:

- According to the American Association’s (2000) most recent Diagnostic and Statistical Manual of Mental Disorders (4<sup>th</sup> ed.), PTSD is an anxiety disorder.
- It is understood as a lasting response to trauma (according to their definition: sexual abuse is considered a traumatic event).
- To qualify for a PTSD diagnosis, the following three criteria need to persist for longer than a month:



## Appendix N

1. Re-experiencing of event (one of the symptoms listed is required to meet this criterion):
  - Recurrent or intrusive thoughts, images, feelings
  - Distressing dreams
  - Feelings of reliving the experiences
  - Flashbacks or hallucinations
  - Dissociative episodes (depersonalisation, derealization such as out-of-body experiences, feelings of losing contact to real world)
  - Distress or physical reaction caused by something that symbolises or is related to the abuse
2. Avoidance of everything associated with trauma and feeling of numbness: (three effects are required to meet this criterion)
  - Avoids talking, feeling, or thinking about event.
  - Avoids places or people that could trigger to relive the experience
  - Inability to recall certain aspects of trauma
  - Lack of interest in important activities
  - Feelings of detachment
  - Restricted feelings (e.g., feeling unable to love)
  - Negative about the future (does not expect to have a conventional future, e.g. in regards to marriage, having children, career, etc.)
3. Symptoms of increased arousal (two effects are required to meet this criterion):
  - Sleeping difficulties (falling and staying asleep)
  - Irritability, eruption of anger
  - Difficulties concentrating
  - Hypervigilance (nervous, jumpy, stressed)
  - Exaggerated startle-response

OK, this is what we call the trauma model using the Posttraumatic-Stress disorder as a paradigm to explain effects of childhood sexual abuse in adulthood”.

### **Description of Emotive Short Film (Duration: Seven minutes):**

- The film “Crimes of the heart” was directed by Robyn Hughan and Reina Michaelson and published by Video Education Australasia in 2005.
- It is described as a sensitive portrayal of a childhood sexual abuse and is used in tertiary educational settings to raise awareness about the extent of harm caused by such an event. Yet, no specific information on CSA sequelae is provided.
- The film sensitively portrays an intra-familial abuse setting without being overly graphic. The scenes are underlined with music.
- A brief description of a child’s journey from abuse to healing frames the beginning and the end of the short film.

Overall, the film de-stigmatises sexual abuse as a rare event and encourages the audience to speak up and rely on support organisations like sexual violence and rape centres. Contact addresses are provided at the end of the film.

## Appendix O

### Questionnaire to evaluate effectiveness of priming manipulation (Study Two)



I was part of group \_\_\_\_\_

What do you remember from the film?

\_\_\_\_\_

\_\_\_\_\_

How did it make you feel?

\_\_\_\_\_

\_\_\_\_\_

## Appendix P

### Information sheet, consent forms and hand-outs for participants: Priming/ no-prime study (Study Two)



**Massey University**  
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES  
Te Kura Pūkenga Tangata

SCHOOL OF PSYCHOLOGY  
Te Kura Hinengaro Tangata  
Private Bag 11 222  
Palmerston North 4442  
New Zealand  
T 64 6 356 9099 extn 2040  
F 64 6 350 5673  
www.massey.ac.nz  
http://psychology.massey.ac.nz

#### *Learning about childhood sexual abuse (CSA): Perceptions of effects in adulthood*

##### INFORMATION SHEET

You are warmly invited to participate in a research study to share your perception of the effects following childhood sexual abuse.

##### *Who are the researchers and where can they be contacted?*

Pia Pechtel is conducting this research as a partial fulfillment of her PhD degree in Psychology. Her two relevant supervisors are Prof. Ian Evans and Dr. Shane Harvey. Shane will be present during the whole course of this study. Questions or enquiries should be directed to Pia in the first instance.

##### *What is the purpose of the research?*

The purpose of this research is to develop a better understanding of effects following abuse so we can improve the help available for those with a history of sexual abuse. This study investigates how a short film will influence a participant's perception of the similarity of effects and their relationships to sexual abuse.

##### *What will I be invited to do?*

You will be shown only one of two 8 minute films. Both films are educational and each provides information about child sexual abuse and its effects.

You will then be asked to complete one of two card sorting tasks. A small deck of cards will be given to each participant. Each card has a separate effect printed on it that could follow sexual abuse.

- In the one task, you will be asked to organise the cards into groupings of similar topic clusters. Participants will then identify opposite groupings, sub-divide groupings, and merge groupings. You will not be asked to apply the items to yourself in any way. Instead, groupings are based on semantic-like similarity judgments. Results will be reported on anonymous record sheets.
- The other task involves rating a small sub deck of items according to their relationship to sexual abuse. You will be given a template with the option to sort items into five piles ranging from "likely to be a symptom of sexual abuse" to "unlikely to be a symptom of sexual abuse".

After the completion of the task all participants will have a chance to talk to Shane and Pia about the study. Both of the researchers will be available after the study.

##### *How much time will be involved?*

The estimated time ranges from 60-120 minutes.

##### *What will you get out of it?*

Each participant receives \$20 as reimbursement for travel and time.

##### *Who do we want to participate?*

We will need 60 males and 60 females for this research to improve our understanding of effects following sexual abuse. Participants must be 18 years or older, with English as first language. *Participants should have no prior history of sexual abuse (including rape) nor have accessed ACC sensitive claims services.* It is important that participants do not have a history of sexual abuse as they otherwise may be experiencing discomfort. If you feel

## Appendix P

uncomfortable at any stage during the study, please contact any of the two researchers present. Dr Shane Harvey is an experienced practitioner and is happy to talk to you during and after the study.

***What will happen to the data sheets on the completion of the research?***

Information from the data sheets will be entered onto a password-locked computer and analyzed. Apart from gender, no personal information is collected, and your participation and data will remain anonymous. The original data sheets will be kept in a safe location and secured from unauthorized access. This way any data entry errors may be corrected afterwards. As the data are anonymous, no connection between the recording sheets and you as a participant can be made. After a period of five years, the data sheets and the consent forms will be disposed of.

***How do I agree to participate in this study?***

When you arrive on the day of the study, you will be given a consent form by the researchers who are happy to answer all of your remaining questions. With a signature on the consent form, you are agreeing to participate in this study. Please note that you may ask further questions at any time.

***How can I access a summary of the findings?***

On the consent form, you can also indicate if you like to know about the overall findings of this research. You are invited to leave your e-mail/mail details on the consent form in which case a summary of the group findings will be e-mailed/mailed out to you after the completion of the study. As this study is not obtaining individual results, a personalized summary of the outcomes cannot be handed out.

***What can I expect from the researcher?***

Massey University Human Ethics Committee guidelines are adhered to at all times. You are under no obligation to accept this invitation. If you decide to participate, you have the right to

- decline to participate in any particular task;
- withdraw from the study at any time;
- ask any questions about the study at any time during participation;
- anonymity; no identifying information will be requested;
- access the study's overall findings;
- receive the full reimbursement of participation if you decide to withdraw after coming to the research meeting appointment.

Information obtained will only be used for the purposes of this research topic and publications arising from it. There are no known potential harm or risk effects for participants, the researcher or for Massey University.

In case you have any questions or concerns, please do not hesitate to contact any of the researchers.

Thank you very much for your co-operation,

*Pia Pechtel*

**Pia Pechtel**

06 356 9099 xtn 7678  
P.Pechtel@massey.ac.nz

**Shane Harvey, PhD**

(06) 356 9099 xtn 7171  
S.T.Harvey@massey.ac.nz

Prof. Ian Evans, (chief supervisor), College of Humanities and Social Sciences, School of Psychology, Massey University, Private Bag 11-222, Palmerston North. Telephone: (06) 356 9099 xtn 2070, I.M.Evans@massey.ac.nz

**This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern A, Application 06/33. If you have any concerns about the conduct of this research, please contact Dr John O'Neill, Chair, Massey University Human Ethics Committee: Southern A, telephone 06 350 5799 x 8635, email [humanethicsoutha@massey.ac.nz](mailto:humanethicsoutha@massey.ac.nz).**

## Appendix P



**Massey University**  
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

SCHOOL OF PSYCHOLOGY  
Te Kura Hinengaro Tangata  
Private Bag 11 222  
Palmerston North  
New Zealand  
T 64 6 356 9099 extn 2040  
F 64 6 350 5673  
[www.massey.ac.nz](http://www.massey.ac.nz)  
<http://psychology.massey.ac.nz>

### *Learning about childhood sexual abuse (CSA): Perceptions of effects in adulthood*

#### PARTICIPANT CONSENT FORM

**This consent form will be held for a period of five (5) years**

I have read the Information Sheet and have had the details of the study explained to me. Any questions I have asked have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree to participate in this study under the conditions set out in the Information Sheet.

Yes, I would like to receive a summary of the overall findings of the study. Please e-mail/mail a copy of the findings to the following address (please print clearly):

---

---

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Full Name - printed \_\_\_\_\_



**Massey University**  
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

SCHOOL OF PSYCHOLOGY  
Te Kura Hinengaro Tangata  
Private Bag 11 222  
Palmerston North  
New Zealand  
T 64 6 356 9099 extn 2040  
F 64 6 350 5673  
www.massey.ac.nz  
http://psychology.massey.ac.nz

## *Learning about childhood sexual abuse (CSA): Lay perceptions of effects in adulthood*

### INFORMATION SHEET

You are warmly invited to participate in a research study to share your perception of the effects following childhood sexual abuse.

#### *Who are the researchers and where can they be contacted?*

Pia Pechtel is conducting this research as a partial fulfilment of her PhD degree in Psychology. Her two relevant supervisors are Prof. Ian Evans and Dr. Shane Harvey. Pia will be present during the whole course of this study. Questions or enquiries should be directed to Pia in the first instance.

#### *What is the purpose of the research?*

The purpose of this research is to develop a better understanding of effects following abuse so we can improve the help available for those with a history of sexual abuse. We are interested in your perception on what effects are likely to follow childhood sexual abuse in adulthood.

#### *Who do we want to participate?*

We will need 15 females and 15 males for this research to improve our understanding of effects following sexual abuse. Participants must be 18 years or older, with English as first language. *Participants should have no prior history of sexual abuse (including rape) nor have accessed ACC sensitive claims services. Participants should also not stand in a very close relationship to someone who has been sexually abuse.* It is important that participants do not have a history themselves or are very close to someone who has been sexually abuse as they otherwise may be experiencing discomfort. If you feel uncomfortable at any stage during the study, please contact the researcher. Participants are selected on a first come basis.

#### *What will I be invited to do?*

You will be invited to complete a short card sorting tasks. A small deck of 100 cards will be given to each participant. Each card has a separate effect printed on it that could follow sexual abuse. We would like you to rank each item according to its relationship to sexual abuse. You will be given a template with the option to sort items into five piles ranging from "likely to be a symptom of sexual abuse" to "unlikely to be a symptom of sexual abuse". After the completion of the task you will get the chance to talk to me about the study.

#### *How much time will be involved?*

The estimated time ranges from 30-40 minutes.

#### *What will happen to the data sheets on the completion of the research?*

Information from the data sheets will be entered onto a password-locked computer and analyzed. Apart from gender, no personal information is collected, and your participation and data will remain anonymous. The original data sheets will be kept in a safe location and secured from unauthorized access. This way any data entry errors may be corrected afterwards. As the data are anonymous, no

## Appendix P

connection between the recording sheets and you as a participant can be made. After a period of five years, the data sheets and the consent forms will be disposed of.

### *How do I agree to participate in this study?*

After reading through the information sheet, you will spend some time with the researcher who is happy to answer all of your remaining questions. With a signature on the consent form, you are agreeing to participate in this study. Please note that you may ask further questions at any time.

### *How can I access a summary of the findings?*

On the consent form, you can also indicate if you would like to know about the overall findings of this research. You are invited to leave your e-mail/mail details on the consent form in which case a summary of the group findings will be e-mailed/mailed out to you after the completion of the study. As this study is not obtaining individual results, a personalized summary of the outcomes cannot be handed out.

### *What can I expect from the researcher?*

Massey University Human Ethics Committee guidelines are adhered to at all times. You are under no obligation to accept this invitation. If you decide to participate, you have the right to

- decline to participate in any particular task;
- withdraw from the study at any time;
- ask any questions about the study at any time during participation;
- anonymity; no identifying information will be requested;
- access the study's overall findings.

Information obtained will only be used for the purposes of this research topic and publications arising from it. There are no known potential harm or risk effects for participants, the researcher or for Massey University.

In case you have any questions or concerns, please do not hesitate to contact any of the researchers.

Thank you very much for your co-operation,

*Pia Pechtel*

**Pia Pechtel**

06 356 9099 xtn 7678  
P.Pechtel@massey.ac.nz

**Shane Harvey, PhD**

(06) 356 9099 xtn 7171  
S.T.Harvey@massey.ac.nz

Prof. Ian Evans, (chief supervisor), College of Humanities and Social Sciences, School of Psychology, Massey University, Private Bag 11-222, Palmerston North. Telephone: (06) 356 9099 xtn 2070, I.M.Evans@massey.ac.nz

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 06/54. If you have any concerns about the conduct of this research, please contact Dr Karl Pajo, Chair, Massey University Human Ethics Committee: Southern B, telephone 04 801 5799 x 6929, email humanethicsouthb@massey.ac.nz



**Massey University**  
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

SCHOOL OF PSYCHOLOGY  
Te Kura Hinengaro Tangata  
Private Bag 11 222  
Palmerston North  
New Zealand  
T 64 6 356 9099 extn 2040  
F 64 6 350 5673  
[www.massey.ac.nz](http://www.massey.ac.nz)  
<http://psychology.massey.ac.nz>

*Learning about childhood sexual abuse (CSA):  
Lay perceptions of effects in adulthood*

**PARTICIPANT CONSENT FORM**

This consent form will be held for a period of five (5) years

I have read the Information Sheet and have had the details of the study explained to me. Any questions I have asked have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree to participate in this study under the conditions set out in the Information Sheet.

Yes, I would like to receive a summary of the overall findings of the study. Please e-mail/mail a copy of the findings to the following address (please print clearly):

\_\_\_\_\_

\_\_\_\_\_

**Signature:**

**Date:**

.....

**Full Name - printed**

.....



## Appendix P



### List of regional service providers and help lines:

#### *Manawatu Rape and Sexual Abuse Centre*

PH: (06) 356 5868

Fax: (06) 355 9088

E-mail: [rape.crisis.hurt-to-heal@xtra.co.nz](mailto:rape.crisis.hurt-to-heal@xtra.co.nz)

53 Waldegrave St PO Box 673 Palmerston North

#### *Levin Sexual Abuse Centre*

PH: (06) 368 2233

Fax: (06) 367 9111

112 Winchester St Levin

#### *Wanganui Sexual Abuse Centre*

PH: (06) 345 4744

Fax: (06) 347 1977

E-mail: [SexualAbuseHealing@xtra.co.nz](mailto:SexualAbuseHealing@xtra.co.nz)

level 2 53a Ridgeway St PO Box 546 Wanganui

#### *Wellington Independent Rape Crisis*

PH: (04) 473 5358 (business) (04) 473 5357 (crisis)

E-mail: [wirc@xtra.co.nz](mailto:wirc@xtra.co.nz)

56 Victoria Street PO Box 6487 Te Aro Wellington

WIRC provides free counselling, support, information and advocacy for women survivors of rape and sexual abuse and their families and friends.

#### *Wellington Sexual Abuse HELP Foundation*

Address: Level 3, 35 Victoria Street, PO Box 11160, Wellington

Ph: (04) 499 7532

Fax: (04) 499 7533

email: [wgtnhelp@paradise.net.nz](mailto:wgtnhelp@paradise.net.nz)

Wellington Sexual Abuse HELP Foundation provide a 24 hour phone service, support and information, a callout service for police interview, forensic and non-forensic medical, ACC counselling (including a Māori counsellor) and psychotherapy and education.

## Appendix Q

### **MOSS (Method of Successive Sort) template and record sheet for non-abused participants (Study Two)**

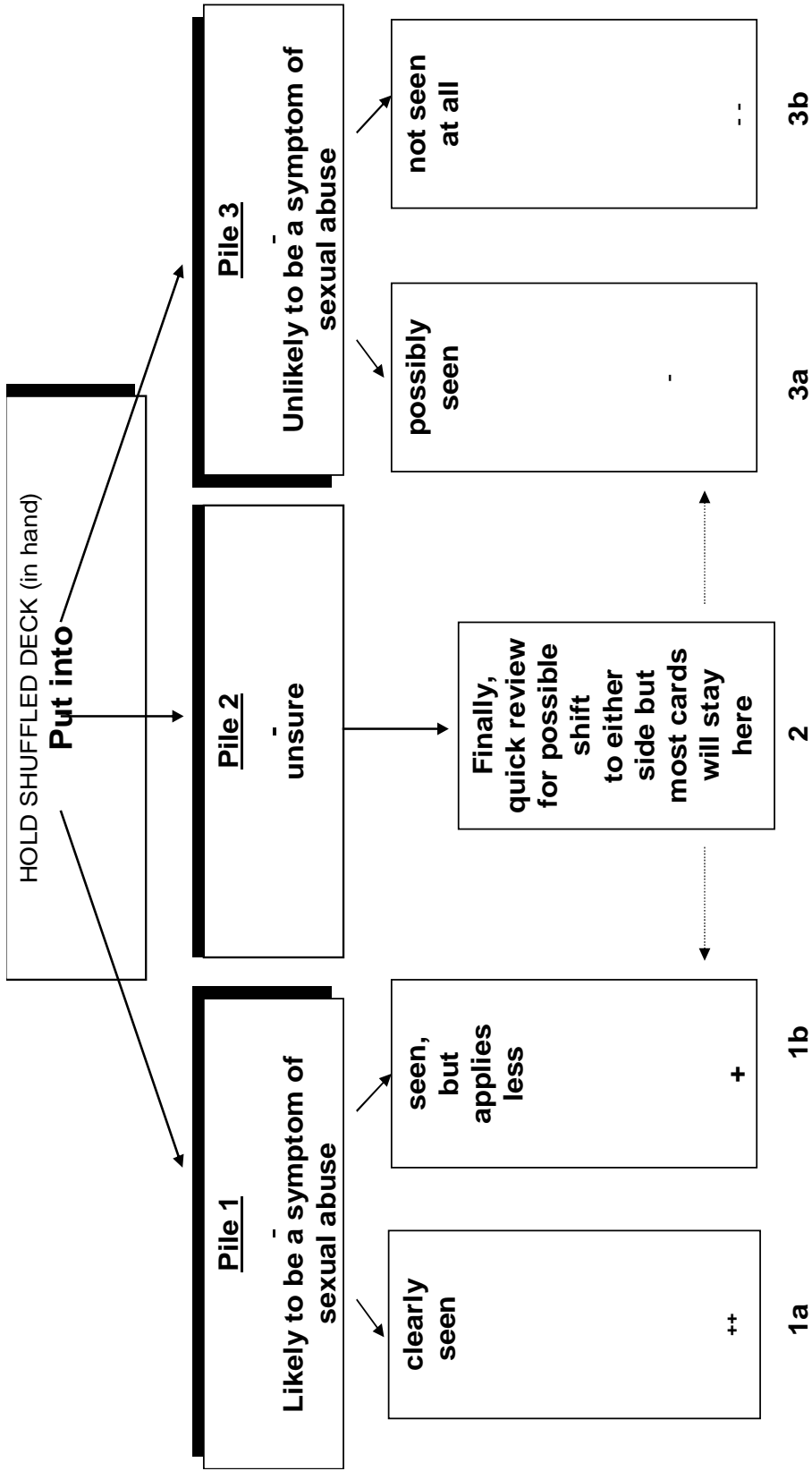
You will be given a deck of around 100 cards. Each card contains a number and a statement that describes different effects that might follow sexual abuse. We want you to make a judgement about which symptoms you think is a consequence or a symptom of sexual abuse. Please remember that there are no right or wrong answers.

The sorting of the cards should be made directly on the boxes indicated on the instruction sheet (demonstrate).

1. Follow the instruction by sorting all cards into three piles of “likely to be a symptom of sexual abuse” (Pile 1), to “unsure” (Pile 2), to “unlikely to be a symptom of sexual abuse” (Pile 3). After sorting these three piles, at least 10 cards should be in each end pile.
2. Then pick up all cards in Pile 1 and split them into two further piles of “clearly seen” (Pile 1a) and “seen, but applies less” (Pile 1b).
3. Afterwards, please pick up Pile 2 and check if you want to shift any of the cards into either side piles. Note that cards can be shifted between piles at any time during this task.
4. Finally, split Pile 3 into two further pile of “possibly seen” (Pile 3a) and symptoms “not seen at all” (Pile 3b).

Please record the item number of each of the final five piles (1a, 1b, 2a, 3a, and 3b) and your gender on these record sheets (demonstrate). Please note that no other personal information is collected and that the data sheets cannot be traced back to you.

Appendix Q



When making the first three piles put at least 10 in each end pile (i.e. Pile 1 and Pile 3). Cards may be shifted between piles at any time. Final 5 piles may have an uneven number of cards in them.



## Appendix R

## Appendix R

## Dimensional clusters for prime/no-prime conditions

<u>Similarity sort: Cognitive prime/Lay</u>	<u>Similarity sort: Emotional prime/Lay</u>
<p><b>D1+risk-taking/impulsive</b></p> <p>20. Drink regularly  <u>77.</u> Experiment with drugs  <u>35.</u> Drink and drive  <u>97.</u> Do things for a kick (e.g. reckless driving)  <u>88.</u> Daring  13. Engage in unsafe activities (e.g. invite strangers into house, walk alone at night)  <u>44.</u> Act on the spur of the moment</p>	<p><b>D1+ impulsive/risk-taking</b></p> <p><u>77.</u> Experiment with drugs  <u>35.</u> Drink and drive  13. Engage in unsafe activities (e.g., invite strangers into house, walk alone at night)  <u>88.</u> Daring  <u>97.</u> Do things for a kick (e.g. reckless driving)  <u>44.</u> Act on the spur of the moment</p>
<p><b>D1-avoidant/ withdrawn</b></p> <p>43. Enjoy being alone  3. Perfectionist  76. Distance myself from others  37. Avoid socializing or mixing with people  7. Cautious  89. Do not talk about myself or my own feelings  <u>26.</u> Avoid busy place (public transportation, mall)</p>	<p><b>D1- avoidant/ withdrawn</b></p> <p>43. Enjoy being alone  74. Avoid certain places or activities  <u>26.</u> Avoid busy places (public transportation, mall)  76. Distance myself from others  54. Worry about a lot of things  14. Fear others will leave (e.g., partner)  37. Avoid socializing or mixing with people</p>
<p><b>D2+ guilty/attachment problems</b></p> <p>6. Find myself in relationships with the wrong people  14. Fear others will leave (e.g., partner)  <u>40.</u> Guilty  47. Ashamed about my own sexual behaviour  16. Feel humiliated  79. Ashamed of self  9. Sexually unsatisfied  36. Have a lot of sex without really enjoying it</p>	<p><b>D2+ guilty/ashamed</b></p> <p><u>40.</u> Guilty  6. Find myself in relationships with the wrong people  47. Ashamed about my own sexual behaviour  79. Ashamed of self</p>
<p><b>D2- arousal</b></p> <p><u>80.</u> Lack of energy  93. On edge  <u>8.</u> Trouble concentrating  51. Threatened</p>	<p><b>D2- low arousal</b></p> <p><u>80.</u> Lack of energy  87. Numb  <u>8.</u> Trouble concentrating</p>

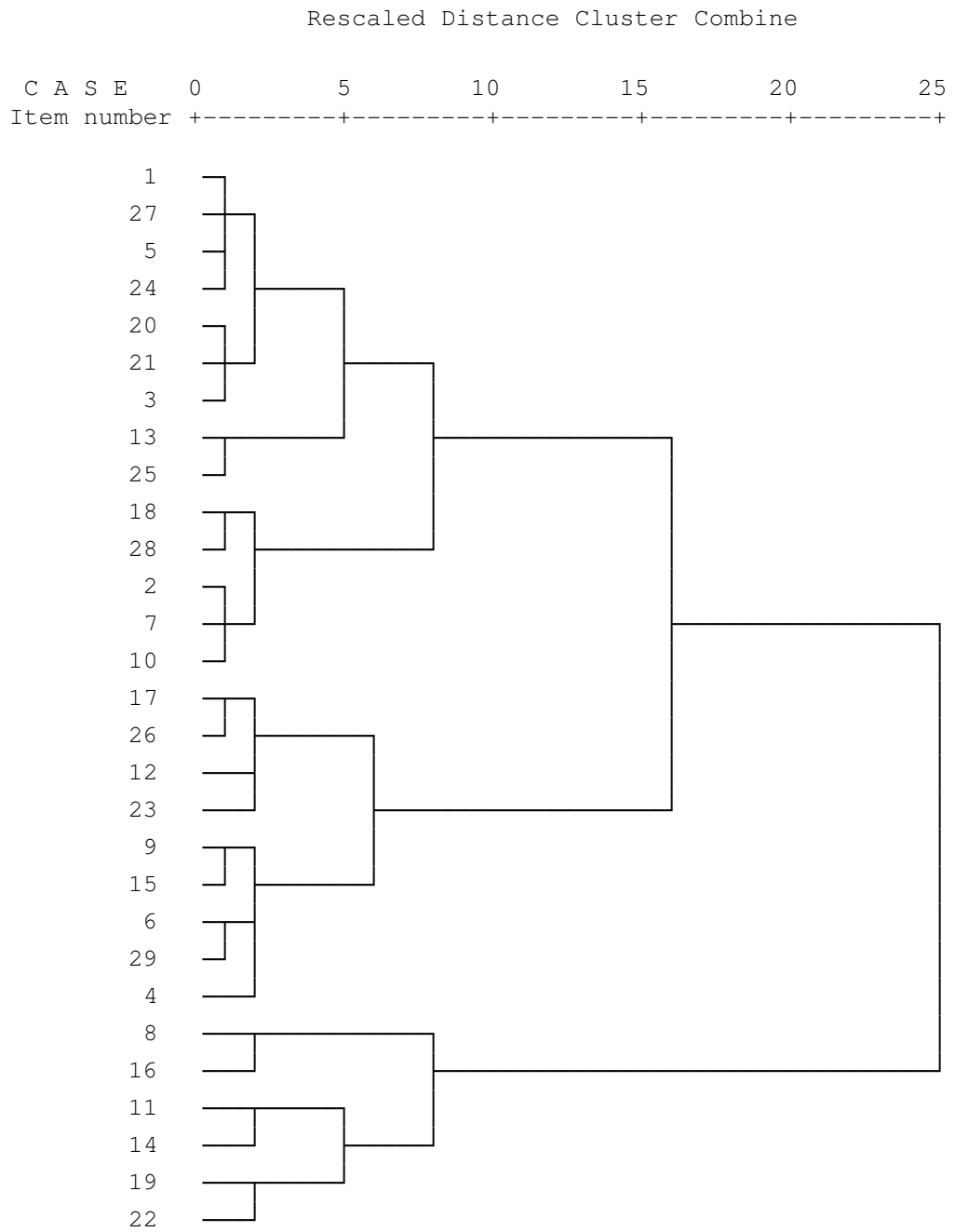
## Appendix R

<p><b>D3+ external locus</b></p> <p>69. Gaps in childhood memories</p> <p>45. <i>Feelings of pregnancy despite negative testing</i></p> <p>59. <i>Burning sensations in genitals (not during intercourse)</i></p> <p>100. Push uncomfortable thoughts out of mind</p> <p>42. <i>Often have the urge to wash or bath myself</i></p>	<p><b>D3+ external locus</b></p> <p>45. <i>Feelings of pregnancy despite negative testing</i></p> <p>42. <i>Often have the urge to wash or bath myself</i></p> <p>59. <i>Burning sensations in genitals (not during intercourse)</i></p> <p>3. Perfectionist</p> <p>63. Neat and tidy</p>
<p><b>D3-self-harm/pessimistic (internal locus)</b></p> <p>52. Attempted to take my own life</p> <p>27. <i>Thoughts about ending my own life</i></p> <p>96. <i>Pessimistic about the future</i></p> <p>87. Numb</p> <p>82. Blue</p> <p>73. Hurt myself on purpose (e.g. cutting, burning)</p>	<p><b>D3- pessimistic/dissociative (internal locus)</b></p> <p>96. <i>Pessimistic about the future</i></p> <p>39. Life often seems unreal</p> <p>27. <i>Thoughts about ending my own life</i></p> <p>25. Hear things that others don't believe are there</p> <p>58. Can view self from the outside</p> <p>91. Push hard to get things done</p>

*Note.* Items occurring in both columns (emotional prime and cognitive prime) are italicised. Items emerging in both prime and control groups are undelined.

### Appendix S

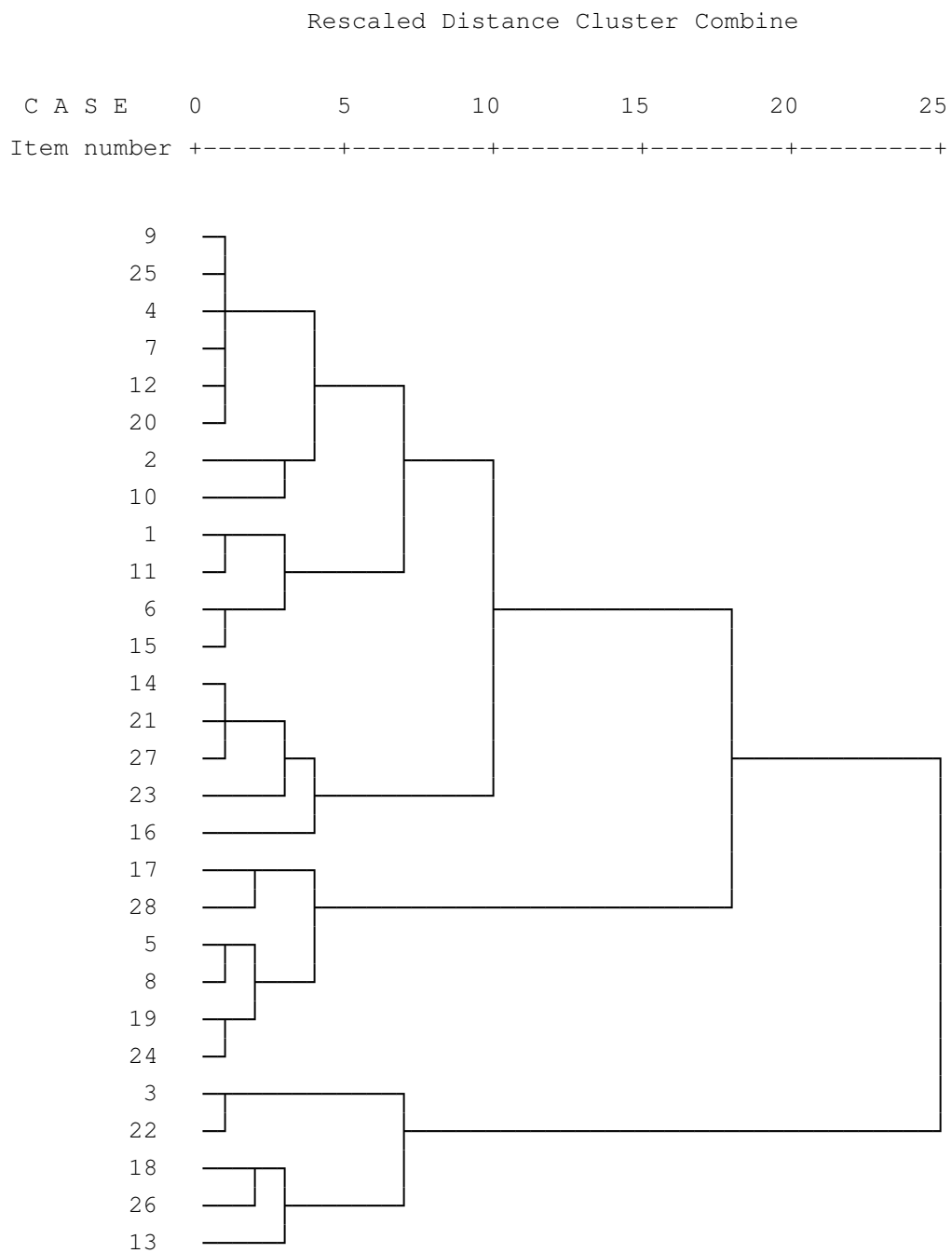
#### Ward dendrogram 29 non-abused lay responses on CSA sequelae after cognitive prime (3 cluster solution)



## Appendix T

### Ward dendrogram 28 non-abused lay responses on CSA sequelae after emotive prime (3 cluster solution)

Dendrogram using Ward Method

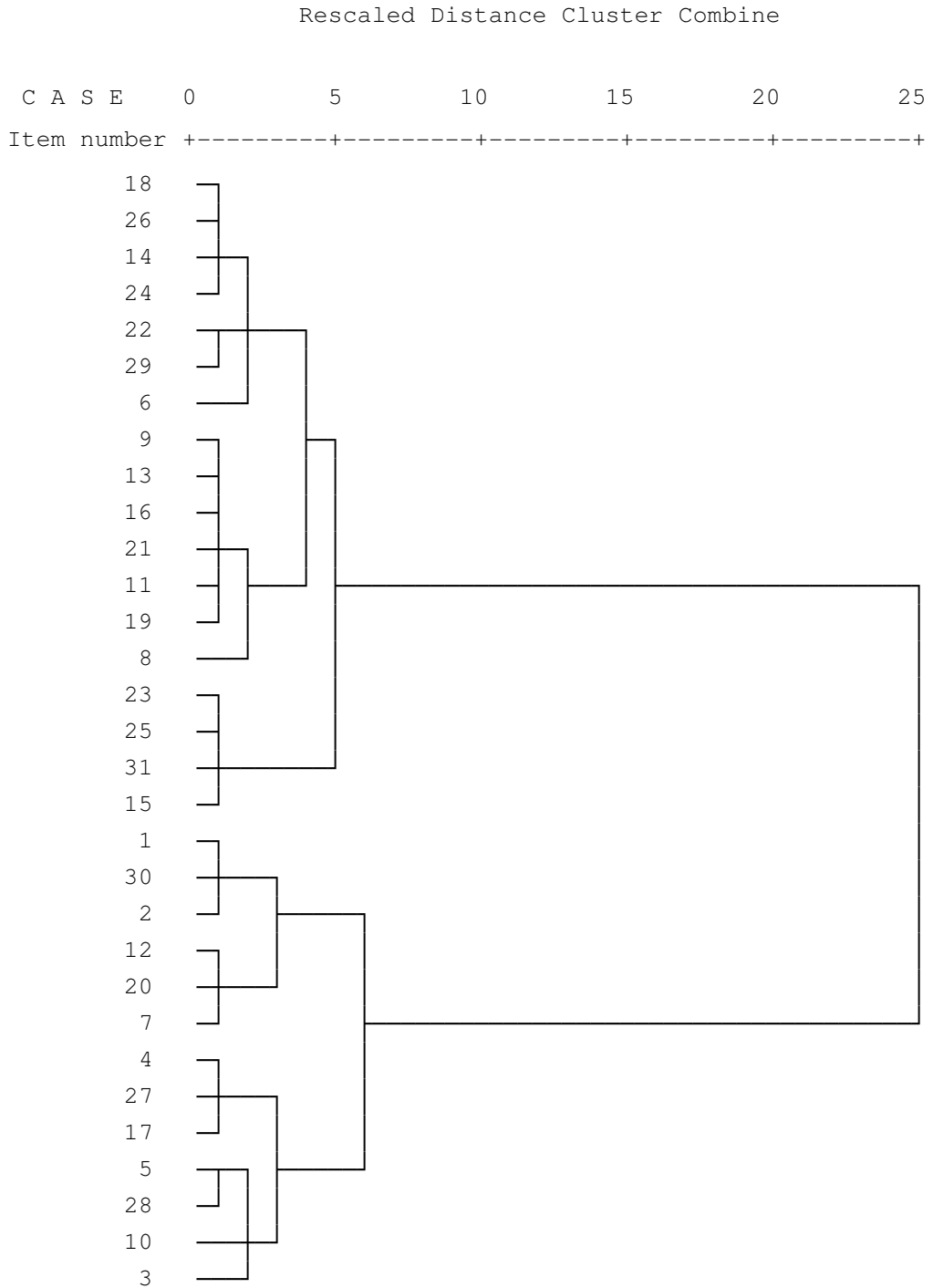




Appendix U

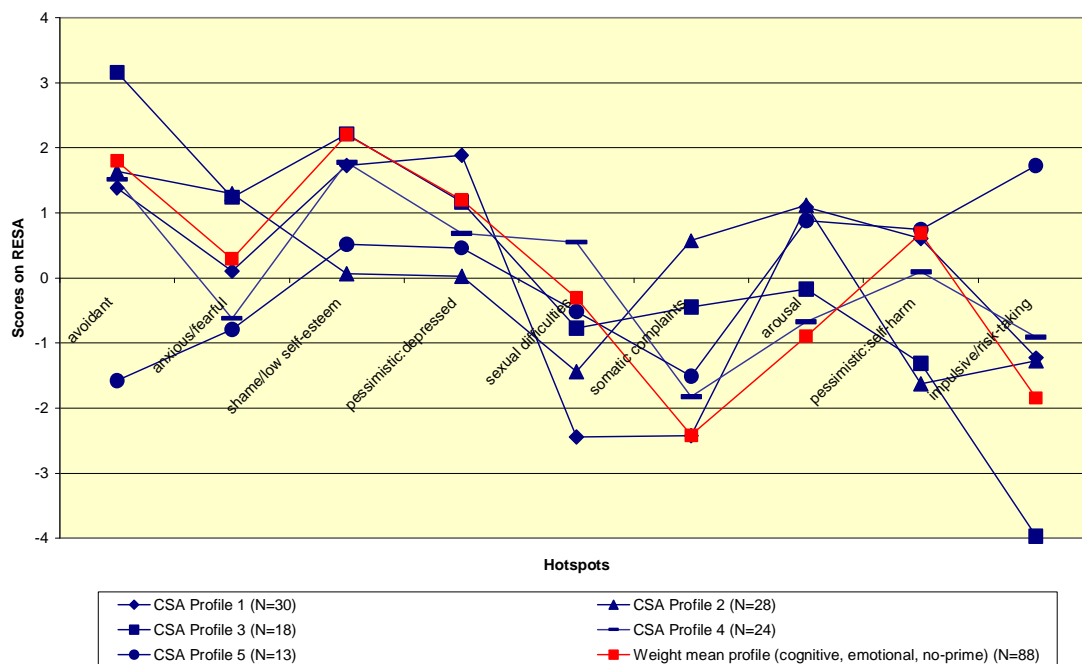
### Appendix U

### Dendrogram using Ward Method of 31 non-abused, non-primed lay responses on CSA sequelae (2 cluster solution)



## Appendix V

### Comparing lay perceptions on CSA sequelae to self-reports of adults with a history of CSA



**Figure V-1.** Visual overlap of CSA sequelae hypothesised by primed/no-prime participants compared to self-reports of those who experienced CSA. A weighted mean profile was calculated to summarise the cognitive, emotional, and no-prime responses provided by non-abused participants. All samples used RESA items and empirically-derived hotspots to describe CSA outcomes.

## Appendix W

### Information sheet and consent form: Practitioners' perceptions (Study Three)



**Massey University**  
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

SCHOOL OF PSYCHOLOGY  
Te Kura Hinengaro Tangata  
Private Bag 11 222  
Palmerston North  
New Zealand  
T 64 6 356 9099 extn 2040  
F 64 6 350 5673  
www.massey.ac.nz  
http://psychology.massey.ac.nz

#### *Learning about childhood sexual abuse (CSA): Practitioner's perceptions of effects and coping in adulthood*

##### INFORMATION SHEET (electronic version)

You are warmly invited to participate in a research study to share your perception of the effects following childhood sexual abuse.

##### *Who are the researchers and where can they be contacted?*

Pia Pechtel is conducting this research as a partial fulfilment of her PhD degree in Psychology. Her two relevant supervisors are Prof. Ian Evans and Dr. Shane Harvey. Questions or enquiries should be directed to Pia in the first instance.

##### *What is the purpose of the research?*

The purpose of the research is to improve our understanding on what are, on a very general basis, effects and coping strategies seen in adult clients with a history of childhood sexual abuse in Aotearoa/New Zealand.

From our previous research, we know that there are many different effects that are closely related to sexual abuse as well as consequences also linked to other life-experiences. Although research states that there are no clear indicators of sexual abuse, we are determined to learn from you as a practitioner which behaviours are *more likely to less likely be directly related* to abuse. In this study, we will include a variety of descriptors of behaviour, emotion, cognition, and physiological processes that are not limited to a certain theoretical approach or nosological system in order to gain this information based on your own experiences.

We are also trying to newly explore *if* and *how* there is a relationship between effects and coping strategies in your expert opinion. Most importantly, we are committed to collect this information from a variety of professional disciplines and to directly feed the findings back to you as a practitioner.

##### *Who do we want to participate?*

We will need at least 30 practitioners who are either currently working with or have previously worked with clients with a history of childhood sexual abuse. Practitioners do not need to be currently registered through ACC Sensitive Claims Services. Please feel free to circulate the letter of invitation and the information materials to other colleagues that working with this client group.

##### *What will I be invited to do?*

A set of 75 descriptors of behaviour, cognition, and emotion will be randomly displayed on your computer screen. Each statement will at some point be followed by two 6-point rating scales. We would like you to rate each item these scales depending on the likelihood of being a

- ❖ direct *effect* of childhood sexual abuse
- ❖ known *coping strategy* of dealing with the CSA regardless of whether it was helpful or not

##### *How much time will be involved?*

The estimated time ranges from 30-45 minutes.

***What will happen to the data sheets on the completion of the research?***

Your participation as well as the information provided by you remains completely anonymous. Apart from gender and a general indication of your professional discipline, no personal information is collected. The anonymous data files cannot be traced back to you as an individual participant and will remain on a password-locked computer at all times.

***How do I agree to participate in this study?***

If you are interested in participating please click the "Next" button at the end of this information sheet. The next page will show you a consent form with a link "agree to participate" in the bottom left corner. Here you can agree to be part of the study based on the conditions outline in this information sheet. You will then directly start with the study.

***How can I access a summary of the findings?***

At the end of the task, you are invited to leave your e-mail address if you like to know more about the overall findings of this research. A summary of the group findings will be e-mailed out to you after the completion of the study. As this study is not obtaining individual results, a personalized summary of the outcomes cannot be handed out.

***What can I expect from the researcher?***

Massey University Human Ethics Committee guidelines are adhered to at all times. You are under no obligation to accept this invitation. If you decide to participate, you have the right to

- decline to participate in any particular task;
- withdraw from the study at any time;
- ask any questions about the study at any time during participation (the researcher's contact details are provided at the end of this information sheet)
- anonymity; no identifying information will be requested;
- access the study's overall findings;

Information obtained will only be used for the purposes of this research topic and publications arising from it. There are no known potential harm or risk effects for participants, the researcher or for Massey University.

In case you have any questions or concerns, please do not hesitate to contact any of the researchers.

Thank you very much for your co-operation,

*Pia Pechtel*

School of Psychology, Massey University, Private Bag 11-222, Palmerston North  
06 356 9099 xtn 7678  
P.Pechtel@massey.ac.nz

Prof. Ian Evans, (chief supervisor), College of Humanities and Social Sciences, School of Psychology, Massey University, Private Bag 11-222, Palmerston North. Telephone: (06) 356 9099 xtn 2070, [I.M.Evans@massey.ac.nz](mailto:I.M.Evans@massey.ac.nz)

Shane Harvey, PhD (co-supervisor), College of Humanities and Social Sciences, School of Psychology, Massey University, Private Bag 11-222, Palmerston North. Telephone: (06) 356 9099 xtn 7171, [S.T.Harvey@massey.ac.nz](mailto:S.T.Harvey@massey.ac.nz)

**This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 06/55. If you have any concerns about the conduct of this research, please contact Dr Karl Pajo, Chair, Massey University Human Ethics Committee: Southern B, telephone 04 801 5799 x 6929, email [humanethicsouthb@massey.ac.nz](mailto:humanethicsouthb@massey.ac.nz).**

## Appendix W



**Massey University**  
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

SCHOOL OF PSYCHOLOGY  
Te Kura Hinengaro Tangata  
Private Bag 11 222  
Palmerston North  
New Zealand  
T 64 6 356 9099 extn 2040  
F 64 6 350 5673  
www.massey.ac.nz  
http://psychology.massey.ac.nz

*Learning about childhood sexual abuse (CSA): Practitioner's  
perceptions of effects and coping in adulthood*

**PARTICIPANT CONSENT FORM**

This is an online consent form and will not be stored.

I have read the Information Sheet and I am clear about the details of the study. Any questions I wanted to ask have been answered to my satisfaction, and I understand that I may contact the researcher for further questions at any time.

I agree to participate in this study under the conditions set out in the Information Sheet.

Agree to participate

Click link to proceed with the study.

## Appendix X

### Instructions (presented electronically): Practitioners' perceptions (Study Three)



**Massey University**

*Thank you* for deciding to take part in this research.

Please base all your answers on your overall experiences with **adult clients** who experienced their first incidents of **sexual abuse in childhood** (multiple incidences could have followed later in life).

Although we certainly acknowledge that consequences vary depending on individual and contextual factors, the statements in this task are formulated intentionally general. Instead of highlighting individual characteristics of a specific client, please share your overall perception on what is likely to be a consequence of sexual abuse (Scale 1) and how clients try to cope with the abuse and its effects (Scale 2).

#### Let's Get Started:

In the first task 48 item statements that describe possible consequences of sexual abuse will be automatically shown on your screen in a random order. You will be asked, from your point of view, about the likelihood that the named descriptor is a **consequence** of the sexual abuse experience and to rate your answer on a 6-point scale from "likely to be a direct consequence" to "Unlikely to be a direct consequence".

[START>>](#)

Example Task 1:

#### Frightened to be alone

Likely to be a consequence of CSA       1    2    3    4    5    6      Unlikely to be a consequence of CSA

Please use your mouse to click on your preferred position on the above scale which will mark your response (black dot). To change your answer, click on an alternative position on the scale and the black dot will change. Once you have selected your answer a 'Next' Button will appear so you can advance to the next question.

Next >>

## Appendix X



Part one complete

Great! Now, for the last part another round of 48 statements will be displayed.

*Please note that both parts are precursor to the successful outcome to the study.*

This time we would like you to rate the likelihood that the shown descriptor is a client's **way of coping** or dealing with the abuse. Please note that these 'coping strategies' do not necessarily have to be constructive or successful but rather being used by the clients to deal with their situation ('survival strategy').

CONTINUE>>

---

Example Task 2:

### Irregular eating habits (eat a lot and then nothing)

Likely to be  
a way of coping  
with CSA

1  2  3  4  5  6

Unlikely to be  
a way of  
coping  
with CSA

Next >>

---

## Appendix Y

### Noise items (non-related to CSA)

- 1) 201. Self-conscious (e.g., dislike being photographed)
- 2) 202. Low pain threshold
- 3) 203. Diabetic
- 4) 204. *Agreeable*
- 5) 205. Lack of empathy
- 6) 206. Feelings of guilt when experiencing happiness
- 7) 207. *Strong religious beliefs*
- 8) 208. *Used to have an imaginary friend*
- 9) 209. *Gambling*
- 10) 210. *Dictatorial (need to be in control)*
- 11) 211. *Perceive own self as "bullet proof"*
- 12) 212. *Work in a "helping" profession (e.g., nursing)*
- 13) 213. Fear of large animals
- 14) 214. Reading difficulties
- 15) 215. Often feel cold/freeze
- 16) 216. Superstitious
- 17) 217. Argumentative
- 18) 218. Skin problems (acne)
- 19) 219. Inappropriate responses (e.g., giggles in sad moments)
- 20) 220. *Exercise daily (sport)*
- 21) 221. *Fond of science-fiction books/movies*
- 22) 222. *Avoid liquid foods (e.g., milk, soup)*
- 23) 223. *Heavy consumption of caffeine/"uppers" (coffee, energy drinks)*
- 24) 224. Postnatal depression

*Note.* All coping strategies are italicised.



## Appendix Z

## Appendix Z

## Practitioners' perceptions on sexual abuse sequelae in Signal detection task in percentage(%) (Study Three)

Task 1 - Signals : Correctly identified as consequence of sexual abuse**<90%**

- 29. Feeling unsafe (95%)
- 94. *Sexual problems (e.g., cannot get aroused)* (95%)
- 16. Feel humiliated (94%)
- 93. On edge (94%)
- 8. Trouble concentrating (93%)
- 37. *Avoid socializing or mixing with people* (92%)

**81-90%**

- 27. *Thoughts about ending own life* (89%)
- 62. *Stare into space* (89%)
- 100. *Push uncomfortable thoughts out of mind* (89%)
- 96. Pessimistic about the future (88%)
- 20. *Drink regularly* (85%)

**71-80%**

- 92. Frightened to be alone (80%)
- 3. *Perfectionist* (79%)
- 10. Lack of interest (79%)
- 80. Lack of energy (78%)
- 85. Clingy (75%)
- 97. *Do things for a kick (e.g., reckless driving)* (74%)
- 18. *Fantasies about hurting others* (71%)
- 53. Easily disgusted (71%)

**61-70%**

- 86. Irregular or severe menstrual periods (67%)

**51-60%**

- 25. *Hear things that others don't believe are there* (59%)
- 33. *Vomiting* (52%)

**>50%**

- 45. *Feelings of pregnancy despite negative testing* (32%)
- 19. *Had sex with someone of the same gender* (40%)

Note. All coping strategies are italicised.

Task 1 - Noise: Incorrectly identified as consequence of sexual abuse**<90%**

201. Self-conscious (e.g., dislike being photographed) (94%)

**81-90%**

206. Feelings of guilt when experiencing happiness (89%)

**71-80%**

219. Inappropriate responses (e.g., giggles in sad moments) (80%)

210. Dictatorial (*need to be in control*) (76%)

204. Agreeable (75%)

209. Gambling (74%)

**61-70%**

224. Postnatal depression (67%)

215. Often feel cold/freeze (65%)

212. Work in a "helping" profession (e.g., nursing) (64%)

223. Heavy consumption of caffeine/"uppers" (coffee, energy drinks) (64%)

**51-60%**

216. Superstitious (58%)

217. Argumentative (58%)

214. Reading difficulties (53%)

**>50%**

205. Lack of empathy (48%)

222. Avoid liquid foods (e.g., milk, soup) (42%)

208. Used to have an imaginary friend (42%)

202. Low pain threshold (40%)

211. Perceive own self as "bullet proof" (39%)

207. Strong religious beliefs (31%)

218. Skin problems (acne) (29%)

220. Exercise daily (sport) (21%)

221. Fond of science-fiction books/movies (21%)

213. Fear of large animals (21%)

203. Diabetic (16%)

*Note.* All coping strategies are italicised.

**Appendix Z**Task 2 - Signals: Correctly identified as coping with sexual abuse**<90%**

- 37. Avoid socializing or mixing with people (96%)
- 28. Trouble trusting others (e.g., friends, partner) (98%)
- 100. Push uncomfortable thoughts out of mind (95%)
- 42. Often have the urge to wash or bath myself (94%)
- 73. Hurt myself on purpose (e.g., cutting, burning) (94%)
- 31. Have sex with someone hardly known (94%)
- 94. Sexual problems (e.g., cannot get aroused) (94%)
- 49. Engage in unsafe sex (93%)
- 77. Experiment with drugs (92%)
- 3. Perfectionist (92%)
- 27. Thoughts about ending own life (91%)

**81-90%**

- 22. Irregular eating habits (eat a lot and then nothing) (89%)
- 20. Drink regularly (88%)
- 62. Stare into space (86%)
- 13. Engage in unsafe activities (e.g. invite strangers into house, walk alone at night) (84%)
- 15. Refuse to eat (81%)

**71-80%**

- 44. Act on the spur of the moment (80%)
- 65. Engage in sex activity to make things go my way (76%)
- 18. Fantasies about hurting others (76%)
- 38. Check things at least twice (e.g., locked doors, light switches) (76%)

**61-70%**

- 97. Do things for a kick (e.g., reckless driving) (67%)

**51-60%**

- 33. Vomiting (60%)
- 86. Irregular or severe menstrual periods (53%)

**>50%**

- 19. Had sex with someone of the same gender (49%)

Task 2 - Noise: Incorrectly identified as coping with sexual abuse**<90%**

- 79. Ashamed of self (95%)
- 90. Angry (95%)
- 93. On edge (95%)
- 29. Feeling unsafe (94%)
- 5. Not in control of own life (94%)
- 40. Guilty (94%)
- 54. Worry about a lot of things (93%)
- 34. Feel worthless (93%)
- 87. Numb (93%)
- 96. Pessimistic about the future (92%)
- 16. Feel humiliated (91%)
- 8. Trouble concentrating (91%)
- 30. Afraid of what other people think about me (91%)

**81-90%**

- 24. Sudden 'popping up' of unpleasant images (89%)
- 85. Clingy (87%)
- 7. Cautious (87%)
- 92. Frightened to be alone (87%)
- 80. Lack of energy (86%)
- 68. Indecisive (82%)

**71-80%**

- 10. Lack of interest (76%)
- 41. Easily frustrated (78%)

**61-70%**

- 46. Cry easily (66%)
- 25. Hear things that others don't believe are there (64%)

**51-60%**

-

**>50%**

- 45. Feelings of pregnancy despite negative testing (36%)