RELATIONSHIP BETWEEN CHILDHOOD MALTREATMENT AND WOMEN'S MENTAL HEALTH

Perspectives of Clinicians and Survivors

Don't Ask Φ Don't Tell

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LIST OF PUBLICATIONS

PUBLISHED

Lee, A., Coles, J., Lee, S, & Kulkarni, J. (2012) Women survivors of child abuse: Don't ask, Don't tell. *Australian Family Physician*, 41(11), 903-906.

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UNDER REVIEW

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ABSTRACT

The relationship between child abuse and later mental health issues is complex and is most likely due to a combination of multiple factors. Past research has demonstrated the negative effects of different types of child abuse on mental health; however, multiple types of child abuse were rarely accounted for. There has also been a paucity of research exploring health service use by women survivors of child abuse and health practitioners' practices in identifying and responding to the needs of women survivors.

The aim of this thesis was to investigate the relationship between child abuse and mental illness in women. In addition, the thesis aimed to examine the perceptions and practices of health professionals (specifically, general practitioners and mental health practitioners) in identifying and supporting women survivors. Two studies resulting in four manuscripts were conducted to meet these aims.

Study One explored the perceptions of women survivors of child abuse. Manuscript one examined responses from 108 women survivors of child abuse who completed questions exploring five types of child abuse and current mental health. Results indicated that all women sampled experienced multiple types of child abuse, with 98% having experienced emotional abuse, 94% witnessed family violence and 92% experienced physical abuse. The majority reported at least mild levels of depression (63%), at least mild levels of anxiety (71%) and 46% reported probable diagnosis of post-traumatic stress disorder. After accounting for interactions between different types of child abuse, witnessing family violence, child neglect and child sexual abuse were significant predictors of depression severity, whilst child neglect and witnessing family violence were significant predictors of post-traumatic stress. Witnessing family violence moderated the effects of physical child abuse on depressive and post-traumatic stress symptoms, and emotional child abuse on post-traumatic stress symptoms. Manuscript two examined child abuse disclosures, health service use and women's thoughts on being asked about child abuse experiences by general practitioners in a subsample of 105 women survivors. Findings indicated that 52.8% of women disclosed their child abuse experiences to others including relatives and friends. In addition, 19% of women were asked about their child abuse history by a general practitioner

while 5% of women disclosed to general practitioners without being asked. Of the women who were asked by their general practitioner about their child abuse history, 58% reported feeling hopeful or relieved and none reported feeling offended. A third of women surveyed also sought assistance from mental health practitioners, with 75% reporting that they were asked about child abuse experiences by a mental health practitioner.

Study Two comprising manuscripts three and four explored the perceptions and current practices of various health practitioners with respect to screening and supporting women survivors of child abuse. Specifically, manuscript three examined the responses of 127 psychologists with main findings indicating that self-reported confidence and a belief in the importance of screening predicted actual screening behaviours. Manuscript four examined responses from 186 health practitioners, of which 67.9% were psychologists, 13.9% were general practitioners and 18.2% were other mental health practitioners. Results indicated that the majority of practitioners reported that they saw women survivors of child abuse with mental health issues on a daily or weekly basis (76%), 95.1% agreed or strongly agreed that child abuse is a health issue, and 95.2% indicated that child abuse is a problem for women in their practice. Twelve per cent of general practitioners, 78% of psychologists and 73.3% of other professionals agreed or strongly agreed that they routinely screen women for child abuse experiences. General practitioners were significantly less likely to routinely screen and reported lower levels of confidence and comfort in conducting screening compared to psychologists and other practitioners. The majority of practitioners saw it as psychologists' role to routinely screen; however, 57-82% of practitioners within each group reported they would benefit from further training in areas relating to asking about and supporting survivors.

LIST OF ABBREVIATIONS

ACTH	Adrenalcorticotropic hormone
AEA	Adult emotional
ANOVA	Analysis of variance
AOR	Adjusted odds ratio
APV	Adult physical violence
ASA	Adult sexual abuse
BAI	Beck Anxiety Inventory
BDI-II	Beck Depression Inventory Second Edition
CCMS-A	Comprehensive Child Maltreatment Scale for Adults
CA	Child abuse
CI	Confidence interval
CNeg	Child neglect
CRH	Corticotropic releasing hormone
CSA	Child sexual abuse
DSM	Diagnostic Statistical Manual of Mental Disorders
ECA	Emotional child abuse
EEG	Electroencephalography
GP	General practitioner
HMO	Health Maintenance Organisation
HPA	Hypothalamic-pituitary-adrenal
IPV	Intimate partner violence
MINI 6.0	Mini-International Neuropsychiatric Interview Version 6
NOS	Newcastle-Ottawa Quality Assessment Scale
OR	Odds Ratio
PCA	Physical child abuse
PCL-C	PTSD Checklist-Civilian Version
PHC	Primary health care
PTSD	Post-traumatic Stress Disorder
WMB	Witnessing maternal battering
WFV	Witnessing family violence

TERMINOLOGY

The terms **childhood maltreatment**, **child maltreatment**, **child abuse** and **child abuse and neglect** are used interchangeably throughout this thesis to encompass emotional child abuse, physical child abuse, child sexual abuse, child neglect and witnessing family violence.

The term **women survivors** denote **women survivors of child abuse**.

The terms **clinicians** and **health practitioners** are used interchangeably throughout this thesis to encompass various qualified professionals who work clinically such as general practitioners, psychiatrists, psychologists, psychotherapists, social workers, counsellors, mental health nurses, medical specialists (e.g., obstetricians, oncologists, cardiologists), general nurses and occupational therapists.

GENERAL DECLARATION

In accordance with Monash University Doctorate Regulation 17 the following declarations are made:

I hereby declare that this thesis contains no material which has been accepted for the award of any other degree or diploma at any university or equivalent institution and that, to the best of my knowledge and belief, this thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

This thesis includes three original manuscripts published in peer reviewed journals and two manuscripts submitted for publications. The core theme of the thesis is childhood maltreatment and women's mental health explored from the perspectives of survivors and clinicians. The ideas, development and writing up of all the papers in the thesis were the principal responsibility of me, the candidate, working within the School of Psychology and Psychiatry under the primary supervision of Professor Jayashri Kulkarni, associate supervision of Associate Professor Jan Coles and Dr. Stuart Lee.

The inclusion of co-authors reflects the fact that the work came from active collaboration between researchers and acknowledges input into team-based research.

In the case of Chapters Two, Three, Four, Five and Six, I contributed 85% of the work, which involved formulation of the entire project inclusive of key ideas, study and questionnaire design, review of appropriate literature, review of materials, securing ethics approval, recruitment of participants, interviewing all participants, data analyses and writing of manuscripts. Supervisors provided input into completed manuscript drafts.

Thesis chapter	Publication title	Publication status	Nature and extent of candidate's contribution
Two	Rates of Child Abuse Experience in Women Accessing Primary Health Care Services: A systematic review.	Submitted	As above
Four	Child Abuse and Women's Mental Health: Moderating Processes	Submitted	As above
Five	Women Survivors of Child Abuse: Don't Ask, Don't Tell	Published	As above
Six	Psychologists' current practice, beliefs and attitudes towards supporting women survivors of childhood maltreatment.	Published	As above
Seven	Primary health care practitioners' screening practices and attitudes towards women survivors of child abuse	In Press	As above

I have renumbered sections of submitted or published papers in order to generate a consistent presentation within the thesis.

Signed: [redacted]

Date: 11th November 2012

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DEDICATION

I dedicate this thesis to the memory of my mother Ong Kwee Kim (1947-1992). She was a tower of strength and inspiration to many people even through her ten year battle with cancer. I cherish the ten years I had with her and will remember her many words of wisdom. I would not have been able to accomplish what I have to date without her nurturance and unconditional love in my early years. She taught me to have faith in myself, give generously and to help others in need.

INTRODUCTION

This thesis topic grew out of my clinical practice with women who attended for psychological assistance for various issues. During these clinical assessments, many women endorsed having experienced childhood adversities in particular child maltreatment or abuse. Some of these women reported a link between their childhood experiences and their current presentation. In a more specialised practice, where women and children who were in violent households or had escaped such situations attended for psychological assistance, patterns of behaviours and commonalities in their experiences were uncanny. The women I saw highlighted the lack of opportunity to disclose their experience and felt that they were not given an opportunity to speak of their childhood experiences. Others reported the lack of early identification and intervention services.

Child abuse has been found to have a profound impact on the biological, psychological and social aspect of a person's life. Victims of child abuse have previously been found to have an increased likelihood of various mental illnesses in adulthood, which impacts upon the overall quality of life. The relationship between child abuse and later mental health issues is complex and is most likely due to a combination of multiple factors.

Past research has demonstrated the negative effects of different types of child abuse on mental health; however, in many cases experience of multiple types of child abuse was not accounted for and often utilised one item questions to assess for child abuse experience.

There has also been a paucity of research that explored the rates of primary health care use by women survivors of child abuse. This area of research is of particular importance as it is currently unclear how and what types of health services are sought by women survivors. Similarly, little is known about health practitioners' practices in identifying and responding to the complex needs of women survivors of child abuse. Ascertaining the practices of health practitioners will likely facilitate early identification and intervention for women survivors.

The broad aim of this thesis was to expand on the current understanding of the relationship between child abuse and women's mental health through the use of a semi-structured interview containing assessment of multiple types of child abuse and assessment of mental illness using gold standard severity measures and a clinician administered tool. To address the gap in the existing literature, rates of child abuse experiences in women accessing primary health care services and the views and practices of health practitioners who may come in contact with women survivors were also explored.

Two studies were conducted to address the aims of this thesis. Study One explored the perspectives of women survivors of child abuse, while Study Two explored the perspectives of various health practitioners. Four manuscripts were written to address specific research questions.

Manuscript one from Study One aims to investigate:

- women's current mental health and five types of child abuse experiences (physical, sexual, emotional, neglect and witnessing family violence).
- the extent to which different abuse types are related to current severity of depression, anxiety and post-traumatic stress.
- whether different types of child abuse interacted with other types of abuse experienced when examining women's mental health.

Manuscript two from Study One aims to investigate:

- the types of assistance sought by women survivors from general practitioners.
- the age of first access and frequency of general practitioner service use in the past 12 months.
- whether women were asked by general practitioners about their child abuse experience and their thoughts on being asked about such experiences.

Manuscript three from Study Two aims to investigate:

- psychologists' current practices, attitudes and beliefs on screening women who attend their practice for child abuse experiences.
- whether confidence, belief in the importance and comfort in screening and supporting women survivors predicted of actual screening behaviours.

Manuscript four from Study Two aims to investigate:

- various health practitioners' confidence in screening and supporting women survivors of child abuse.
- the difference between health practitioners' screening practices, attitudes and beliefs regarding child abuse.

This thesis will be presented in the Monash University preferred thesis by publication format, which is a thesis format that includes some chapters consisting of manuscripts submitted or accepted for publication. To provide a consistent thesis presentation, manuscripts have been reformatted where possible. Given the thesis by publication format, there is some unavoidable repetition of content included in the introduction, method and discussion sections of the submitted manuscripts. A preamble precedes the submitted manuscripts for any necessary clarifications and to link each of the chapters. An addendum follows the submitted manuscript to provide updates in literature since manuscript submission.

The overview of the contents of this thesis is as follows:

Chapter One presents a review of the literature on various aspects related to child abuse. This chapter provides a comprehensive background which could not be covered in the manuscripts submitted for publication. It further details research aims of the following chapters in this thesis.

Chapter Two (submitted manuscript) presents a systematic review exploring the rates of child abuse experience in women accessing primary health care services.
Chapter Two Addendum provides updates in the literature since manuscript submission.

Chapter Three presents the expanded methodology of studies conducted within this thesis. This chapter provides the materials and methods section in a comprehensive manner including questionnaires designed and utilised in Study One and Study Two. It further details the recruitment and study completion procedures, which could not be fully covered in the manuscripts submitted for publication.

Chapter Four, manuscript one (submitted manuscript) explores how five types of child abuse (physical child abuse, emotional child abuse, child sexual abuse, child neglect and witnessing family violence) predicted depression, anxiety and post-traumatic stress symptoms in women. It further explores whether moderating interactions occurred between the five child abuse types when examining women's mental health.

Chapter Five, manuscript two (published manuscript) explores the experiences of women survivors' child abuse disclosure, general practitioner service use, whether women were asked by general practitioners about their child abuse experience and women's thoughts on being asked about their child abuse experiences by general practitioners.
Chapter Five Addendum provides additional information on other health services sought by women survivors and their overall thoughts on being screened for child abuse experiences by other health practitioners.

Chapter Six, manuscript three (published manuscript) explores psychologists current practice, attitudes and beliefs regarding screening women for child abuse experiences and whether confidence in screening and supporting women survivors predicted actual screening behaviours.

Chapter Seven, manuscript four (accepted manuscript currently in press) explores various health practitioners' confidence in screening and supporting women survivors of child abuse and whether there are differences between health practitioners' screening practices, attitudes and beliefs regarding child abuse.

Chapter Eight concludes the thesis with an integrative general discussion. This chapter begins with an overview and restatement of aims, followed by the contribution of thesis findings in context of existing literature. The implications of findings, strengths and limitations of studies conducted will then be discussed and suggestions provided for future research.

CHAPTER ONE. CHILDHOOD MALTREATMENT

This chapter presents a review of the literature relevant to various parts of this thesis. It serves as a precursor and provides a comprehensive background including specific research aims of following chapters consisting of accepted/submitted manuscripts in the thesis by publication format.

1.1 Introduction

This chapter will review available literature and cover the issues of childhood maltreatment such as: the definitions of the five types of childhood maltreatment and multiple types of child maltreatment, the prevalence of child maltreatment alongside characteristics of victims and perpetrator, the estimated cost of childhood maltreatment, the overall effects of childhood maltreatment on victims and its impact on mental health. It will also explore the help seeking behaviours of adult survivors and examine the practice, perception and attitudes of primary care practitioners towards adult survivors of child maltreatment. This chapter will also outline the research aims of this thesis and stipulate the variables explored in subsequent chapters of this thesis after each relevant section. A further systematic review exploring the rates of primary health service utilisation by women who have been abused in childhood is presented in Chapter Two.

1.2 Definition of Child Maltreatment or Child Abuse

Currently there is no standard definition of child maltreatment or child abuse as it is used as an 'umbrella' term that covers activities that harm children in some way (Goddard, 1996). As such, different studies define child maltreatment or child abuse in various ways and until recently, most child maltreatment or abuse studies have only focused on sexual and physical child maltreatment or abuse. When studying child maltreatment or abuse type/(s), some studies may have defined each of the maltreatment or abuse types either too broadly or narrowly. For example in Schneider, Baumrind, and Kimerling (2007), participants were asked three broad questions to assess exposure to physical, sexual and emotional child abuse. Whilst in (Newman et al., 2000) only contact sexual abuse was reported on despite other forms of sexual abuse being asked about.

The age of a 'child' has also been defined inconsistently across studies. In some studies, a child was defined as persons under the age of 14 years (Gillespie et al., 2009; Newman et al., 2000) in other studies as persons under the ages of 16 years (Coid et al., 2003; Fergusson, Lynskey, & Horwood, 1996), under 17 years (Carlson, McNutt, & Choi, 2003) or under 18 years (Felitti et al., 1998; Finkelhor, Ormrod, Turner, & Hamsby, 2005; Green et al., 2010).

For the purposes of this thesis the term 'childhood maltreatment', 'child maltreatment', 'child abuse' and 'child abuse and neglect' are used interchangeably to encompass five main

types of abuse: emotional child abuse, physical child abuse, child sexual abuse, child neglect and witnessing family violence as endorsed by the Australian Childhood Foundation (Taylor, Moore, Pezulla, Tucci, Goddard, & De Bortoli, 2008). The definitions of the types of abuse are adapted from Australian Childhood Foundation (Taylor et al., 2008) and from a study by Higgins and McCabe (Higgins & McCabe, 2001), which are presented in Table 1.

Table 1 Definition of Five Main Types of Child Abuse

Type of Abuse	Definition
Physical Child Abuse (PCA)	Parent/ caregiver/ other adult injures a child intentionally by hitting, shaking, smacking, punching, kicking, grabbing as well as severe physical harm requiring medical attention.
Emotional Child Abuse/ Psychological Maltreatment (ECA)	Parent/ caregiver / other adult do not provide an environment where the child receives love, and affection in order to feel good about themselves and develop properly through constantly criticising, yelling, embarrassing, ridiculing, threatening to use cruelty or made the child afraid, guilty or ashamed.
Child Sexual Abuse (CSA)	Parent/ caregiver/ other adult involve a child in any sexual activity.
Child Neglect (CNeg)	Parent/ caregiver do not fulfil basic needs for food, clothing, housing, healthcare, ignoring a child's request for attention, not speaking to the child and/or shutting the child in a room alone for an extended period of time or without adequate supervision.
Witnessing Family Violence (WFV)	Seeing, hearing and being aware of violence in the family (between parents/caregivers/other adults/others in the home).

This thesis will also explore multiple types of abuse, which is defined as a combination of two or more of the above mentioned abuse types and considers a 'child' to be a person under the age of 18 years to coincide with child abuse reporting requirements of the Department of Human Services in Victoria, Australia (Children, Youth and Families Act, 2005).

1.3 Prevalence of Child Abuse, Characteristics of Victims and Perpetrators

In the United States of America Department of Health and Human Services, Administration on Children (2011) report, an estimated 3.6 million reports of child abuse were made between 1st October, 2009 and 30th September, 2010 in 52 states. Six-hundred and ninety five thousand children were estimated to be victims of abuse or neglect. Of these children, 78.3% were victims of neglect, 17.6% suffered physical abuse, 9.2% were sexually abused, 8.1% suffered psychological abuse, 2.4% were medically neglected and 10.3% suffered 'other' abuse such as abandonment, threats of harm to the child or congenital drug addiction. The 'other' abuse type was coded at the discretion of the states when any condition does not fall into one of the main categories: physical abuse, neglect, medical neglect, sexual abuse and psychological and emotional abuse (Administration on Children, 2011).

The majority of abused victims were younger than 4 years of age (34.0%) inclusive of 12.7% who were younger than one year of age. This was followed by 23.4% who were 4-7 years, 18.7% were 8-11 years, 17.3% were 12-15 years, 6.2% were 16-17 years of age and 0.4% had an unknown age. The national estimates of child abuse fatality victims in 51 states were 1560 children with 79.4% younger than of 4 years of age, 47.7% younger than one year, 14.0% one year, 11.6% two years and 6.1% three years of age. Just over half of abused victims were girls (51.2%), White Caucasian (44.8%), African-American (21.9%) and 21.4% were Hispanic. However, the highest rates of victimisation (per 1000 children in the population of the same race or ethnicity) were children of African-American descent (14.6) followed by children of American-Indian or Alaska Native descent (11.0) and children of multiple racial descents (12.7). The majority of perpetrators were the victim's mother (37.0%), 19.1% were maltreated by their father and 18.5% were maltreated by both parents. Whilst 13.4% were maltreated by non-parent perpetrators such as a male relative (2.8%), a male partner of a parent (2.2%) and friends or neighbours (0.3%) (Administration on Children, 2011).

In Australia, based on the State and Territory government Child Protection Agencies data collected between 1st July, 2010 and 30th June, 2011, there were 237, 273 reports or 'notifications' of child abuse. From the notifications, 127,759 investigations were completed with 40,466 'substantiated' cases (i.e. children believed to have been, were being or were likely to have been abused) relating to 31,527 children. Of the substantiated cases, nationally, the most common abuse type was emotional abuse (35.5%), followed by neglect

(28.9%), 22.1% were victims of physical abuse and 13.4% were sexually abused (Australian Institute of Health and Welfare, 2012). Child abuse fatalities were not reported on.

Prevalence rates of child abuse in Australia are best estimated to be between 2-36%.(Price-Robertson, Bromfield, & Vassallo, 2010). Specifically, the prevalence rate of child physical abuse is estimated to be between 5% and 10%; child neglect to be between 2 and 12%, emotional abuse to be 11%; witnessing family violence to be between 12% and 23% and child sexual abuse to be between 4-16% for males and 7-36% for females (Price-Robertson, et al., 2010).

More than half of victims were girls (52.0%) and girls were more likely to be sexually abused compared to males in all jurisdictions, whilst males were slightly more likely to be subjected to neglect. The majority of victims were children aged 5-9 years (26.4%), closely followed by children aged 10-14 years (25.8%),children aged 1-4 years (25.5%), children younger than 1 year (11.3%) and 8.0% of children aged 15-17 years. A further 2.9% (900 cases) were unborn babies, which due to recent legislative reforms Child Protection Agencies in all states and territory now have the capacity to receive reporting of unborn babies. Across Australia, Indigenous children were 7.7 times more likely to be the subject of a substantiated abuse compared to non-Indigenous children (Australian Institute of Health and Welfare, 2012). Other ethnic groups and characteristics of perpetrators were not explored in the report.

Due to different legislative definitions of abuse being used in both reports, an accurate comparison of the types of abuse reported or rates of abuse in both countries cannot be made. Similarly such comparisons will not be accurate even when comparing different states within the same country, which use different legislative definitions. Moreover, the different age brackets used in both reports further hinders accurate comparison in most cases. However, the characteristics of child abuse victims more likely to be girls and that the majority of victims were neglected or emotionally abused, compared to being physically or sexually abused, were similar in both reports. In particular, an overwhelming number of victims were neglected (78.3%) in the United State of America, whereas the majority of child abuse victims in Australia were emotionally abused (35.5%).

1.4 Underestimation of Child Abuse

Given that both the American and Australian reports are based on cases investigated and substantiated by the Child Protective Services, it is highly likely that this number is

underestimated, as there are often many cases that do not come to the attention of government agencies (Taylor et al., 2008). In both reports, there were cases which were not finalised therefore were not able to be included in the reports, thus lowering the number of actual abuse cases that were reported or substantiated in the reported periods. With relevance to Australia, in a report on the cost of child abuse, the incidence and prevalence of child abuse and neglect are stated to be underestimated based on different levels of reporting, referred to as the hierarchy of awareness of child abuse and neglect (Taylor et al., 2008). At the top tier of the hierarchy, child abuse may be reported directly to the Child Protection Authorities. Secondly, abuse may be reported to other professions (teachers, counsellors etc.) but not reported to Child Protection Authorities. Thirdly, family members or friends may be informed or become aware of abuse but not otherwise have it reported. Lastly, there is abuse that occurs in which no one else is aware of or informed (Taylor et al., 2008). This hierarchy no doubt can be applied to other countries to illustrate that the estimated figures of abuse are globally likely to be under-estimated. Given recent legislative reforms in Australian states and territories, Child Protection Agencies now have the capacity to receive notification of unborn babies. It is therefore likely that the new legislation may give rise to an increase in the overall rate of reports received in years to come.

To further illustrate the underestimation of the figures of abuse, the Australian Bureau of Statistic undertook interviews with Australians aged 18 years and above asking if they had experienced sexual or physical abuse prior to the age of 15 years in the Personal Safety Survey in 2005 (Australian Bureau of Statistics, 2005 Reissue). When interviewed, 10% of women reported that they had experienced physical abuse before the age of 15 years and 12% of women reported that they had experienced sexual abuse before the age of 15 years. Looking at the population of Australia in 2011 of 22.3 million of which 4.21 million were under the ages of 15 and 2.05 million were females, to be conservative lets assume that there was no rise in the incidences of abuse since 2005. Using these parameters, it was estimated that in 2011, 205,000 (10%) female children experienced physical abuse and 246,000 (12%) experienced sexual abuse before the age of 15 years. These figures are 9.7 times higher than the number of female children substantiated cases (21,042) reported in Australian Institute of Health and Welfare (2012). It must be further noted that the estimation provided here only accounted for a very conservative rate of physical and sexual abuse of those before the ages of 15, and did not include emotional abuse, witnessing family violence and neglect. Whereas the Australian Institute of Health and Welfare (2012) looked at those before the ages of 18 years and received reports of other form of abuse. The

discrepancy between estimated number of reported abuse and substantiated cases clearly illustrates the underestimation of the number of abuse cases in Australia.

Furthermore, both the American Administration on Children (2011) and Australian Institute of Health and Welfare (2012) reports, witnessing family violence was not specifically identified as a type of abuse, providing a further means by which these reports underestimate the number of children being abused. The legislative definition of 'child at risk' in Tasmania and South Australia of: person with whom the child resides (whether a guardian of the child or not): "has killed, abused or neglected some other child or children and there is a reasonable likelihood of the child in question being killed, abused or neglected by that person" (Australian Institute of Health and Welfare, 2012, pp 91-92), may provide some coverage of witnessing family violence. Similarly, witnessing family violence is defined but categorised as emotional abuse in the Australian Capital Territory. However, without separate specific legal definitions of witnessing family violence as a type of child abuse, it is unlikely that such cases will be reported.

1.5 Cost of Child Abuse

Despite the underestimated rates of child abuse, it remains a significant health burden with substantial implication for societal and health care cost. In 2001, Prevent Child Abuse America released a report documenting that direct (immediate intervention) and indirect (long-term) costs of child abuse and neglect in America was estimated to be $94.1 billion per annum (Froom, 2001) based on data collected by The National Incidence Study (NIS) in 1993 and 1994 (Sedlak & Broadhurst, 1996). In 2007, the cost was re-estimated at $103.8 billion per annum, which consisted of an estimated $33.1 billion on direct costs and $70.7 billion on indirect cost. The largest direct cost per annum was for child welfare services ($25.4 billion), followed by hospitalisation ($6.6 billion), mental health care ($1.1 billion) and law enforcement at $33.3 million. The largest estimated indirect cost was $33 billion annually for the loss of productivity to society as adult survivors are more likely to be affected by unemployment and underemployment in later life. A further $24.1 billion was spent on special education, $27.9 billion spent on adult criminal justice system, $7.2 billion on juvenile delinquency (caring for juvenile offenders in a residential care facility) and $67.9 million on mental health and health care (Wang & Holton, 2007).

However, the estimated cost of child abuse reported by Wang and Holton (2007), in particular direct hospitalisation cost, was criticised for not capturing actual cost of services

and had inconsistencies of reporting annual and lifetime costs (Corso & Fertig, 2010). In light of these critiques, using the same direct and indirect cost categories in by Wang and Holton (2007) with an addition of two new categories (indirect costs of early intervention and emergency/transitional housing), in 2012 Gelles and Perlman (2012) calculated the direct cost of child abuse to be $33.3 billion and indirect cost to be $49.9 billion based on data collected by The National Incidence Study (NIS) in 2005 and 2006 (Sedlak et al., 2010).

In another study specifically looking at only the cost of health care of a sample of 1,225 women attending a health maintenance organisation (HMO), childhood abuse was shown to be associated with a median cost of $97-$245 per person per annum (Walker et al., 1999). Based on an estimated 42.8% of the HMO population with abuse experiences and using the mean annual cost between maltreated and non-maltreated women, Walker et al. (1999) estimated that the total cost associated with abuse to the specific study HMO was at least $8 million dollars in medical costs per year. This cost is likely underestimated due to unreported abuse (Sickel, Noll, Moore, Putnam, & Trickett, 2002). The latest estimated average lifetime cost per child abuse victim was reported to be $210,012 (Fang, Brown, Florence, & Mercy, 2012) which includes $32,648 in child health care cost, $10,530 in adult medical cost, $144,360 in productivity losses, and estimated lifetime economic burden of new cases of child abuse in 2008 estimated to be $124 billion (Fang et al., 2012).

In Australia, based on a report by Taylor et al. (2008), child abuse was estimated to cost between $10.7 billion and as much as $30.1 billion in 2007 based on the estimation that between 177,000 to 666,000 children and young people were abused or neglected annually. The lifetime cost of child abuse of children abused or neglected for the first time in 2007 was projected to be between $13.7 billion to $38.7 billion based on the estimation of between 130,237 children to 490,000 children being abused or neglected. The estimated overall healthcare cost was $383 million, consisting of over a third for hospital costs at $137.6 million (26.2% inpatients and 9.7% outpatients), pharmaceuticals at $73.4 million, followed by aged care homes $60.8 million (15.9%). When looking at the composition of health care costs by condition (disease and injury), depression, panic disorders, alcohol and drug abuse, and post-traumatic stress disorder (PTSD) and suicide attempts were examined. Of these conditions, depression and anxiety (including post-traumatic stress disorder and panic attacks) comprised over two-thirds of the total health system costs with a combined total of $239.8 million, of which, treating depression represented half the health care cost of child abuse. Loss of productivity were best estimated to cost $958 million, cost of crime

including criminal justice system and law enforcement were best estimated at $327 million in 2007. Looking at the Victorian expenditure on sexual assault alone, it was estimated that the total annual cost of counselling services in 2007 was $181.1 million (Taylor et al., 2008).

In spite of some criticisms of cost calculation in the United States of America, it is clear that data from both America and Australia highlight the significant costs to society that stem from child abuse. The treatment of mental illness which is a commonly associated with child abuse, hospitalisations, loss of participation in employment as well as the increased burden on the criminal justice system, all contribute to making child abuse a very costly social burden.

Having presented the above information on definitional issues, prevalence, characteristics of victims and perpetrators of child abuse, costs associated with child abuse and highlighting the underestimation of child abuse cases, the next section will delve into the etiology and ecology of child abuse including exploration of attachment theory, neurobiology and physiological factors.

1.6 Etiology and Ecology of Child Abuse

Many factors and models have been proposed when exploring the etiology of child abuse; however, no one single cause adequately accounts for the etiology of child abuse (Belsky, 1980, 1993). Child Abuse is now widely recognised to be a complex, multi-determined by various factors and transactional processes in the broad ecology of parent-child relations within the context of the family, community and overall culture. It is conceptualised as an interdependent social-psychological phenomenon influenced by: ontogenic development or individual development factors such as the attributes of parents and children, microsystem or family factors such as the functioning of the family as a whole, exosystem or community factors such as community values and attitudes towards child abuse, and macrosystem or cultural values and beliefs such as tolerance of violence (Belsky, 1980, 1993; Bronfenbrenner, 1979).

Cicchetti and Lynch (1993) proposed an ecological-transactional model of child abuse building on the works of Belsky (1978) and Bronfenbrenner (1979). This model posits that each level of the environment contains risk (potentiating) and protective (compensatory) factors for the individual (Cicchetti & Rizley, 1981). The risk of child abuse and its transmission across generations increases when the potentiating factors, which

increases the likelihood of child abuse outweighs the compensatory factors, which decreases the likelihood of child abuse (Cicchetti & Valentino, 2006). These potentiation and compensatory factors were further categorised by Cicchetti and Rizley (1981) into four categories: (i) Enduring vulnerability factors, which may be biological in nature (e.g., child with behavioural difficulties making child rearing unrewarding); historical (e.g., a history of being maltreated as a child); psychological (e.g., personality attributes such as poor frustration tolerance or high trait levels of aggression); sociological/cultural (e.g., culturally determined childrearing or discipline practices) or situations (e.g., poverty, poor employment opportunities, poor physical environment etc.). (ii) Transient challengers such as stressors that confront the individual or family that predisposes parent to abuse his or her child (e.g., loss of finances, physical illness, legal difficulties, marital or family problems etc.). (iii) Enduring protective factors (e.g., history of good parenting, good temperament, high intelligence, flexibility and adaptability, good social and interpersonal skills, good physical health) (iv) Transient buffers (e.g., substantial financial savings, good employment and good social support system).

Studies building on these theories have found that low socioeconomic status (Trickett, Aber, Carlson, & Cicchetti, 1991), violence in the marital relationship (McDonald, Jouriles, Briggs-Gowan, Rosenfield, & Carter, 2007), parental unemployment (Dubowitz, 1999) and lack of social support (Erickson & Egeland, 2011) to be risk factors. The presence of a loving supportive adult during a person's childhood and the presence of a supportive partner at the time of parenting children have been found to be a protective factor against abusing children (Erickson & Egeland, 2011).

In light of child abuse being multi-determined by various factors and transactional processes in the broad ecology of parent-child relations, attachment theory will now be considered to provide a framework when conceptualising the ecology of child abuse and further functioning of adult survivors of child abuse. This will be followed by neurobiological and physiological factors which also impacts on the ontogenic factors influencing ecology of child abuse (Cicchetti & Valentino, 2006).

1.6.1 Child Abuse and Attachment Theory

Attachment as defined within attachment theory specifically refers to the bond or tie based on the need for safety, security and protection between an individual (infant or child) and an attachment figure (the primary caregiver, which is often the mother) (Bowlby, 1969;

Prior & Glaser, 2006). According to Bowlby (1969), the child constructs an internal working model based on repeated experiences of the nature and quality of the attachment between the child and their attachment figures, which informs expectations of how the attachment figure will respond to the child's future needs. This influences the child's development of a working model of the self (e.g., as being loved or unloved, protected or unprotected) and also of others and how they will respond to the child's expressed requests for assistance.

For example, a child who has repeated experiences of an affectionate, responsive and supportive mother will internalise the belief about the likely availability of their mother in future interactions (e.g., that their mother is loving and supportive when the child experiences distress). This in turn complements the child's self-working model of being lovable and of others being available when needed. In contrast, a child who has had inconsistent experiences of their mother being available when needed, may feel more vulnerable and less able to access support when distressed, which in turn may lead the child seeing themselves as unlovable, worthless and of others not being available when needed. From a behavioural perspective, this may result in the child being hyper-vigilant for potential source of distress and not feeling safe to explore their environment, potentially limiting their capacity for social interaction and learning.

Therefore, the child-mother attachment is integral for development of healthy internal working models, which the child draws upon to make prediction about the responsiveness of their attachment figures to their needs as well as perceptions of the self and of others. Over time these internal working models are internalised and encoded as neural pathways in the brain that guide behaviour in interpersonal situations and when responding to stress (Seigel, 2001). Even though internal working models are said to be influenced by new experiences, new experiences are still shaped by existing internal working models (Prior & Glaser, 2006). This highlights the importance of early experiences as they are carried forward (Goldberg, 2000) and have the potential to influence how effectively the child and later the adult manage and respond to stress and distress.

Attachment is often assessed in relation to the child's exploratory behaviour as exploration takes the child away from their attachment figure or secure base (Ainsworth, Blehar, Waters, & Wall, 1978). A secure base (usually the mother) is a base from which a child can leave and return knowing he or she will be welcomed and comforted when distressed (Bowlby, 1969), hence feeling security of attachment. The provision of a secure base is central to Bowlby's (1969) concept of parenting, where the caregiver is available and

responsive when called upon by the child to encourage and assist, but intervenes only when clearly necessary, as exploration fosters autonomy in the child.

Patterns of attachment were identified by Ainsworth et al. (1978) through observational assessments of attachment behaviours of infants (9-18 months) via a one way mirrored experimental room to 'strange situations', which were video-recorded. The strange situations involved a series of three-minute long episodes of increasing stress for the infant. Initially, the mother and infant are introduced to a room filled with toys for the infant to play with for three minutes with the mother being a non-participant. A stranger then enters the room, remains silent for a minute, speaks with the mother for a minute, and in the third minute approaches the infant. At the end of the third minute, the mother leaves the child unobtrusively with the stranger. The mother then returns after three minutes and greets and/or comforts the infant and leaves again but this time saying "bye-bye" to the infant. The infant is then left alone for three minutes and at the end of which, a stranger enters and remains with the infant for three minutes. The mother then returns, greets the infant and picks up the infant while the stranger leaves unobtrusively. The infant's interactions and attachment pattern is coded according to the level of interaction exhibited, distress demonstrated on separation from the mother and the behaviours exhibited upon reunion with the mother.

Through the experiment, three main patterns of attachments were identified. Infants who were distressed upon their mother's departure, but actively sought proximity upon the mother's return and were quickly soothed were classified as securely attached (B). Infants who did not react to separation and ignored or actively avoided proximity upon reunion were classified as having insecure-avoidant attachment (A). Infants who were classified as insecure-resistant/ ambivalent (C) often sought proximity to their mother prior to separation and responded with immediate and intense distress upon separation. However, upon reunion would display resistant behaviours such as anger but would then seek strong proximity and contact and become clingy with their mother, giving the impression of ambivalence. Insecure-disorganised/disoriented-attachment pattern (D) was later identified after re-examination of 200 strange situation videotapes, whereby the children exhibited odd behaviours that lacked any coherent organised strategy to deal with the stress of separation (Main & Solomon, 1986, 1990).

Infants who are securely attached have caregivers who provide a secure base for the infant to develop autonomy whilst knowing they are supported when required and are therefore likely to have a healthy internal working model of the self and of others. In

contrast, infants who have insecure avoidant attachment are likely to have unresponsive and detached caregivers giving rise to internal working models and future expectations of others being unavailable. Thus, these infants who expressed the need for support but did not receive it will likely express frustration as well as anxiety. This may lead these infants to deactivate their attachment need (although still having the need for attachment) and the infant avoiding or not actively seeking help in the future from their caregiver in times of need. Infants with insecure resistant/ambivalent attachment are likely to have inconsistent caregiver responsiveness and tend to display exaggerated behaviours to seek strong proximity with their caregiver to elicit a response from the caregiver. Whilst infants who are insecure-disorganised/disoriented are likely to have inconsistent caregiver responsiveness and may have been exposed to violence or frightening behaviours from their caregivers (Main & Hesse, 1990), and are therefore likely to have negative internal working models of the self and of others.

Children who were abused are more likely to be insecurely attached (Crittenden, 1992). Using the same methodology as the Ainsworth et al.'s (1978) strange situation experiment, with addition of a free play session between child and their siblings, Crittenden (1992) found that children who were adequately parented were the most cooperative and least compulsively compliant, meaning that they were less likely to inhibit appropriate negative responses when warranted. Conversely, children who were abused or abused and neglected were the most compulsively compliant. Children who were abused were the most difficult especially in the first year or compulsively compliant with interactions with their mothers, anxious under stress and aggressive with siblings. Children who were neglected were the most passive, although cooperative in play with the mother and like those who were abused, anxious under stress and aggressive with siblings. Further in examining patterns of attachment, children who were adequately parented were generally securely attached to their mothers in contrast to those who were marginally maltreated and displayed a mixture of secure and anxious/avoidant attachment. Children who were neglected were found to display anxious/avoidant attachment or avoidant/ambivalent patterns of attachment. Children who were abused and those who were abused and neglected generally displayed avoidant/ambivalent attachment patterns (Crittenden, 1992).

The previously reviewed literature provides evidence that a child's early attachment to their caregiver influences the child's development of personality, social relationships and behaviours. There is also evidence that early attachment can impact on adult attachment and behaviours. In adulthood, abused children who are more likely insecurely attached are likely

to develop similar attachment styles with their romantic partner as those in their infant-mother attachment (Hazan & Shaver, 1987). Providing a model to explain how attachment in adulthood can influence mental health, behaviour and social interactions, Bartholomew and Horowitz (1991) identified four attachment styles that have been proposed to influence the adult's self-image and image of others: (i) secure, (ii) dismissive, (iii) preoccupied and (iv) fearful.

Adults with secure attachment have a positive view of themselves and of others, have adequate levels of warmth, self-confidence, involvement in friendship and romantic relationships. Whereas adults with a dismissive attachment have a positive view of themselves with high levels of self-confidence but have a negative view of others, often expecting others to treat or see them negatively. These adults, display low emotional expressiveness, low warmth and in order to preserve their positive self-image, they avoid close relationship as others are seen as threats to their self-worth. In relationships, they exert more control than their friends or romantic partner. In contrast, the preoccupied adults hold a negative view of themselves but a positive view of others. Such adults have low self-worth and strive to gain self-acceptance through acceptance from other. These adults have a tendency to make inappropriate self-disclosures, are highly emotionally expressive, heavily reliant on others and tend to use others as a secure base. Although they rate high on involvement in romantic relationships and friendships, they exert less control than their friends or partner in the relationships. Finally, adults with fearful attachment hold both a negative view of themself and of others. These adults, like those who are preoccupied believe themselves to be unworthy and unlovable and like those who are dismissive see others as untrustworthy and expects other to view them negatively. As such they are likely to avoid having any close relationships for fear of rejection. Accordingly, these adults rated low on self-confidence, self-disclosers, intimacy and level of romantic involvement and may have an inability to rely on others and have a tendency to assume a subservient role in close relationships (Bartholomew & Horowitz, 1991).

In summary, attachment theory provides a framework when conceptualising the ecology of child abuse and how it may impact on the further functioning of adult survivors of child abuse. The child's early attachment with their primary caregiver gives rise to internal working models, which are generalised to other people and influences the view of themselves. These working models are believed to increase in stability over time, given the repetition of experiences or neural pathways (Seigel, 2001) and forms a prototype for relationships outside of the family (Bowlby, 1973) which may be difficult to alter (Bowlby,

1969). The early child attachment carried into adulthood further impacts on adult attachment with romantic partners, friendships and other interpersonal relationships (Bartholomew & Horowitz, 1991) that likely influences one's quality of life.

1.6.2 Neurobiology and Physiology of Child Abuse

Given that a child's early experience with their caregiver forms neuronal pathways which influences how the child and later the adult manage distress and approach social interactions, the neurobiology and physiology of child abuse will now be briefly explored. This will begin with a discussion of the biological systems that underpin the management of emotion regulation and social interaction in healthy children and adults, before highlighting the biological changes associated with child abuse.

The mechanism of neural functioning is beyond the scope of this thesis; however, the basic mechanism as comprehensively described by (Seigel, 2001) is equivalent to a flow of electrical activity (action potential) which passes down the axon where it connects with other neurons at the synapse. The electrical impulses triggers the release of neurotransmitters that flows across the synaptic space to activate (or inhibit) the receiving neuron. The receiving neuron when activated (by release of enough neurotransmitters), sends its electric signal down the axon to release neurotransmitters at its own synaptic connections.

Neuronal pathways can be genetically encoded or can form via neural activation through experiences. Drawing upon attachment theory, the child's early experience of attachment with the primary caregiver triggers the neural activation, shapes the function of the neural activity in that moment, which can potentially shape the continually changing structure of the brain throughout lifespan. However, changes in experiences (or internal working models) relies or builds on existing working models, which is analogous to building or changing existing neuronal pathways. Given the crossover of developmental theory and cognitive neural science, Seigel (1999) termed how the brain gives rise to mental processes shaped by interpersonal experiences as "interpersonal neurobiology".

Alan Schore further held a similar view, whereby attachment theory is seen in essence as a regulatory theory, whereby the secure mother is seen as regulating the infant's shifting arousal levels and by extension the infant's emotional states. As a result the infant is exposed to the mother's regulatory capacities, which expand the infant's adaptive ability to evaluate and react coherently to stressful changes in environment which include novel

events. This provides the capacity for the infant to not only draw on familiar approaches but to tolerate and incorporate new experience in expanding their capacity to learn new information and move towards more complexity (Schore, 2001). “Furthermore, because the maturation of the brain systems that mediate this coping capacity occurs in human infancy, the development of the ability to adaptively cope with stress is directly and significantly influenced by the infant’s early interaction with the primary caregiver.” (Schore, 2001, p.14).

The brain is said to develop in stages, specifically the inceptive stage of development is specific to the early maturation of the right brain predominantly in the first three years of life (Schore, 1994) and child abuse has been documented to impact on various parts of the brain. Children who experienced repeated psychological, physical and sexual abuse showed a marked increase in symptoms suggestive of temporal lobe epilepsy as well as Electroencephalography (EEG) abnormalities in the left side of the frontal, temporal, or anterior region of the brain (Ito, Teicher, Glod, & Ackerman, 1998; Ito et al., 1993). Further, adults with experience of child abuse were found to have a reduced hippocampal volume compared to healthy controls (Bremner et al., 1997; Woon & Hedges, 2008). The hipocampus which is located deep inside the temporal lobe, is required for memory and learning. It further works with the cortex, assessing current experience to help determine whther an experience is neutral, positive or negative (van der Kolk et al., 1996). If the situation is deemed to be non-threatening, the hipocampus then sends a signal to the amygdala to turn off the stress response (LeDoux, 1996). When the situation is evaluated as being threatening, a “fight or flight” response is activiated (Cannon, 1914). This leads into the physiology of the stress response that ties in with neurobiology in response to experience of child abuse.

Cannon (1914) introduced the concept of “fight or flight” in response to situations perceived to be stressful. In particular, the emotion of fear is said to be associated with the instinct for flight, whilst the emotion of anger or rage is associated with the instinct to fight. The brain is said to respond to a situation after receiving sensory input, which then sends signals to the cortical and limbic system and is evaluated for threat by the amygdala as described above. The right amygdala then assesses the emotional meaning of the input received and sends it to the right hippocampus and orbitofrontal cortex for further information and memory processing via norepinephrine (a cathocolamine, hormone and neurotransmitter) input from the locus ceruleus (part of the reticular activating system responsible for regulating arousal) and triggers to body to respond (LeDoux, 1996). Input

from the orbitofrontal cortex to the hypothalamus leads to sympathetic arousal (e.g., increased heart rate and blood pressure) via epinephrine (a cathocolamine, hormone and neurotransmitter). Further input from the locus ceruleus activates the hypothalamic-pituitary-adrenal axis (HPA-Axis), which is the physiological system that regulates levels of the stress hormone cortisol (Wilkinson & Goodyear, 2011). The hypothalamus then releases corticotropic releasing hormone (CRH) triggering the release of adrenalcorticotropic hormone (ACTH) in the anterior pituitary, which then triggers the release of cortisol by the adrenal cortex. The effect of cortisol mobilises and immobilises different parts of the body for either a fight or flight response (LeDoux, 1996).

Under conditions of prolonged or overwhelming stress, the parasympathetic systems may also be activated along with the dopamine system which inhibits the influence of cortisol by increasing vagal tone (inhibiting heart beat) decreasing heart rate and blood pressure despite the high levels of cathocolamines (norepinephrine, epinephrine and dopamine) still circulating. These states of sympathetic and parasympathetic arousal results in a state of calm (Perry, 2004) or third 'freeze' response, which initially serves as an adaptive advantage allowing the child to "figure out" how to respond (Perry, Pollard, Blakley, Baker, & Vigilante, 1995). However, if a child is "sufficiently terrorised" the prolonged freeze response may escalate into complete dissociation i.e. "disengaging from the stimuli and attend to their inner world." (Perry et al., 1995, p.280).

It is clear from the exploration of various theories above, that child abuse is complex and multi-determined by various factors and transactional processes in the broad ecology of parent-child relations influenced by ontogenic or individual factors, microsystem or family factors, exosystem or community factors and macrosystem or cultural, which the individual is embedded in (Belsky, 1980, 1993; Bronfenbrenner, 1979). The ecology of child abuse can be further explored using attachment theory by examining the attachment between infant and primary caregivers, which gives rise to internal working models in the child creating their view of themselves and of others that are carried into adulthood (Bowlby, 1969, 1973). These early childhood experiences further influence existing genetically encoded neural pathways and interact with the body's physiological responses that may alter and create new neuronal pathways giving rise to mental processes shaped by interpersonal experiences. The above highlights the need to consider the biological, psychological and social context when looking at the etiology of child abuse.

1.7 Sequelae of Child Abuse

Given the above exploration of the etiology and ecology of child abuse, it is not surprising that child abuse experiences are associated with an increased likelihood of various mental illnesses in adulthood (Edwards, Holden, Felitti, & Anda, 2003; Foa, 2000; Green et al., 2010; Higgins & McCabe, 2000a; McLaughlin et al., 2010; Mullen, Martin, Anderson, Romans, & Herbison, 1996; Schneider et al., 2007). The sequelae of child abuse will now be explored with a general discussion of the relationship between child abuse and mental health as well as physical health. This will be followed by exploration of the impact of different types of child abuse on mental health and a brief discussion of the limitations of the literature. Lastly the impact of multiple types of child abuse on mental health will be discussed before highlighting the gap in the literature.

Experience of child abuse disrupts a person's formation of the concept of self and of others (Briere & Scott, 2006; Prior & Glaser, 2006). This can result in interpersonal difficulties in later life, potentially impairing the ability of the person to regulate their own emotions and to access support from others when experiencing emotional distress (Stalker, Gebotys, & Harper, 2005). Formation of cognitions such as perceptions of helplessness, chronic danger and thoughts relating to poor self-worth or self-efficacy may also stem from child abuse experience predisposing victims to mental illness in adulthood (Briere, 1992). As shown in the preceding two sections, the experience of child abuse can impact on mental and physical health functioning via a number of mechanisms which includes changes to the stress and emotion regulation systems, distortion of one's view of the self and interpersonal cognitive representations through disrupted attachment in childhood.

The presence of these mechanisms have not surprisingly resulted in a large body of research that documented long-term psychological effects associated to child abuse such as depression, anxiety, suicidal and self-injury behaviours, low self-esteem and aggressive tendencies. For example, the Adverse Childhood Experiences (ACE) study conducted in 1999 found that children who suffered abuse and/or are exposed to dysfunction in the home have an increased risk of smoking, obesity, depression, alcoholism, illicit drug use, heart disease, and hepatitis. A National Institute of Justice study estimated that 13% of all adult violence can be linked to earlier child abuse (Miller, Cohen, & Wiersema, 1996). An Australian longitudinal study further found that CSA victims were five times more likely when compared to the general population to be charged with sexual and violence offences as well as females being more likely to be victims of crime of a sexual or violent nature

compared to male victims (Ogloff, Cutajar, Mann, & Mullen, 2012). Similarly, juvenile delinquency is also linked to child abuse experiences (Maas, Herrenkohl, & Sousa, 2008).

Victims of child abuse in particular CSA survivors, have also been posited to suffer long term impact of social death (Taylor, 2004) a termed was used by Goffman (1961) to refer to the stigma experienced by institutionalised patients with mental illness. Victims of CSA are said to suffer "multiple forms of *social death* as a response to and treatment of their abuse by family, community, professionals and the legal system." (Taylor, 2004, p.284). Given the above association of child abuse experiences and various mental illnesses it is likely that the stigma attached and the social death experienced by a CSA victim with mental illness is heightened. The concept of 'social death' is beyond the scope of this thesis; however, it further highlights the need to consider the biological, psychological and social context when looking at the complex and multi-determined sequelae of child abuse.

Child abuse survivors are also documented to have poorer general health and are more likely to suffer irritable bowel syndrome, abdominal pain, headaches and musculoskeletal pain (McCauley et al., 1997; Sickel et al., 2002; Springs & Friedrich, 1992). A six-fold increase in ACTH response to stress was also found in women with a history of child abuse and major depressive disorders when compared to aged matched controls (Heim, Newport, Heit, Graham, Wilcox, Bonsall et al, 2000). Urogynecological and obstetric issues such as pelvic pain, dysmenorrhea, sexual dysfunction, non-menstrual vaginal bleeding and bladder infection are also more common for survivors of child abuse in particular survivors of CSA (Heitkemper et al., 2001; Sickel et al., 2002; Taylor, Pugh, Goodwach, & Coles, 2012). Experiences of CSA have also been associated with increased sexual risk behaviours such as early intercourse, unprotected intercourse and multiple partners (Senn & Carey, 2010).

1.7.1 Exploring the Impact of Different Abuse Types on Mental Health

Studies have found that specific types of child abuse (and its combination) increase the likelihood of different types of problems in adulthood. This section will now explore the impact of different abuse types on mental health before summarising the limitations of the literature.

In a study conducted by Hetzel and McCanne (2005), victims of CSA and victims of CSA and PCA had higher post-traumatic stress symptoms compare to victims of PCA only and those who were not abused in childhood. Similar findings were obtained in a study on

adolescents by Danielson, de Arellano, Kilpatrick, Saunders, & Resnick (2005), where depressive symptoms were also endorsed more frequently by those who experienced both CSA and PCA, compared to those who experienced PCA or those with no abuse history (Danielson et al., 2005). Victims of combined CSA and PCA were also more likely to report sexual and physical victimization in adulthood compared to victims of CSA only and non-abused participant (Hetzel & McCanne, 2005).

In another study, homicidal, depressed male and female outpatients reported higher rates of PCA compared to non-homicidal depressed sample (Rosenbaum & Bennett, 1986). Similarly in a study looking at a sample of 251 university women, PCA was linked to aggression towards others (Briere & Runtz, 1990a). Female inpatients who experienced PCA had higher rates of anxiety, hostility, paranoid-ideation, psychoticism and dissociative experiences as measured by the Symptom Checklist 90 Revised compared to non-abused females (Chu & Dill, 1990). Female inpatients with PCA experiences also reported significantly higher interpersonal sensitivity scores compared to non-abused patients (Chu & Dill, 1990).

PCA experiences was also found to be independently associated with significant risk for frequent mental distress, feeling frequently overwhelmed, frequent anxiety, frequent sadness and PTSD diagnosis (Schneider et al., 2007). In another study, PCA was associated with anxiety, depression, illicit drug use, alcohol problems, para suicide (suicide attempt) and self-harm but not drug or alcohol misuse (Coid et al., 2003).

The most widely researched type of child abuse is CSA. Various research conducted in the area of child sexual abuse proposes that the earlier the onset of CSA, the longer it lasts, and the more intense the contact (e.g., intercourse as oppose to fondling), the greater the effect on the child. Similarly, the prognosis for the child is likely to be much worse if a parent rather than a stranger perpetrates the abuse. For example, in a longitudinal study conducted in New Zealand on children, which resulted in two manuscripts, one exploring prevalence and factors of CSA (Fergusson, Lynskey, et al., 1996) and the other exploring psychiatric outcomes of CSA (Fergusson, Horwood, & Lynskey, 1996), exposure to CSA increased the risk of psychiatric disorders in adulthood. The results of the study by Fergusson, Horwood, et al. (1996) which took into account confounding variables such as social, family and related factors, identified that children who reported CSA with completed intercourse had significantly higher odds (ranging from 3.3-11.8) of developing alcohol abuse/dependence, conduct disorder, anxiety, other substance abuse, depression and suicide attempts. Those who reported non-contact sexual and contact sexual abuse not involving

intercourse also had significantly higher rates of depression and anxiety (Fergusson, Horwood, et al., 1996). Those more likely to be exposed to CSA were girls raised in families with high marital conflict and impaired parenting and in families with parents who have adjustment issues (Fergusson, Lynskey, et al., 1996). Of the 1019 participants interviewed, 10.4% reported exposure to CSA before the ages of 16 years. Females had higher rates of reporting CSA (17.3%) compared to males (3.4%) (Fergusson, Lynskey, et al., 1996).

Other comparisons of women with or without a history of CSA treated as psychiatric inpatients, have also found that depressive symptoms are more severe in women with a history of CSA, and they also have a greater risk of borderline personality styles and adult self-harm risk (Gladstone, Parker, Wilhelm, Mitchell, & Austin, 1999). CSA was also found to be independently associated with significant risk for frequent mental distress, frequently feeling overwhelmed, frequent anxiety, frequent sadness and PTSD diagnosis (Schneider et al., 2007).

Interestingly in another study neither contact or non-contact CSA was associated with anxiety, depression, illicit drug use, alcohol problems, para-suicide (suicide attempt) and self-harm (Coid et al., 2003). However, victims of CSA were five times more likely to be rated to have PTSD (Coid et al., 2003) compared to those with PCA or ECA. This discrepant finding may be due to the broad question use to identify CSA which lacked precise and/or behavioural questions. The authors also noted that they did not carry out clinical interviews to explore the depth of the abuse in place of the broad questioning.

In a recent systematic review, CSA survivors are significantly at risk of developing depression (Maniglio, 2010) but the review did not replicate the associations between CSA and post-traumatic stress of other studies. Further highlighting the variability and complexity of adverse outcomes for survivors of CSA, Green et al. (2010) found associations between CSA and the onset of mood, anxiety, disruptive behaviours and substance abuse disorders that persists throughout lifetime but declined with age.

Emotional child abuse (ECA) was also been found to be independently associated with increased risk for mental health problems such as feeling frequently overwhelmed, frequent anxiety, sadness and PTSD diagnosis (Schneider et al., 2007). Even after controlling for other types of abuse and lifetime trauma, Spertus, Yehuda, Wong, Halliga, and Seremetis (2003) found that ECA and child neglect experiences predicted psychological and physical symptomatology in women.

Another study further categorised the impact of ECA by perpetrator type, whereby ECA perpetrated by victims' father was related to anxiety, depression and dissociation compared to ECA perpetrated by victims' mother which was associated with dissociation (Briere & Runtz, 1990b); however, there has been a paucity of research focussing on the effects of ECA despite it co-occurring with many other types of child abuse (Toch & Cicchetti, 2006).

Childhood neglect (CNeg) is also an area that has been under researched. One explanation may be that the impact of CNeg is not easily examined. For example, many neglected children live in poverty or in dysfunctional families hence making it difficult to ascertain to what extent the child's issues are due to neglect or due to environmental factors (Erickson & Egeland, 2002). Studies that have looked at CNeg documented a significant decline in academic achievement (Kendall-Tackett & Eckenrode, 1996), severe language delays and high teacher ratings on the delinquency scale of the Child Behaviour Checklist, expulsion from school and dropouts (Erickson & Egeland, 2002).

Looking at the impact of witnessing family violence (WFV) on mental health, Rossman et al (Rossman, Hughes, & Rosenberg, 2000) reported that 13% of youth exposed to inter-parental violence met criteria for a formal diagnosis of PTSD, whilst 50% of youth met symptom criteria for intrusive thoughts regarding the events. The co-occurrence between the rates of child abuse and family violence is estimated to be about 40% in clinical samples (Appel & Holden, 1998). There is currently a paucity of research looking at the impact of WFV, as most studies that explored exposure to family violence included other forms of abuse such as physical and/or emotional aggression.

To summarise, the various research studies into child abuse have proposed an increase of deleterious effects associated with various types of child abuse. Determinants of the severity of the effects of child abuse are said to be associated with the type and chronicity of the abuse as well as the relationship of the victim to the perpetrator. However, most research conducted focussed on CSA or CSA and PCA. Little research explored all types of child abuse or a single type of child abuse whilst controlling for other co-occurring abuse types. These types of study methodology are problematic as different child abuse types often co-occur (Dong et al., 2004). Therefore it is unclear from the existing literature whether the associations described are from exposure to a specific type of child abuse or a combination of different types of child abuse experiences. In a study looking at PCA, CSA and ECA, which did look at CSA by controlling for PCA and ECA, provided a slightly better study methodology (Schneider et al., 2007). However limitations identified in the

study was that it did not include CNeg or WFV. The questions used in that study also did not look at the frequency and/or severity of the child abused suffered. A broad definition of the three abuse types examined was applied and the study lacked behavioural questions to facilitate a more accurate account of the abuse type assessed.

1.7.2 Multiple forms of Child Abuse and Mental Health

Drawing on the impact of different abuse types on mental health discussed above, it is also important to consider multiple types of child abuse. This section will now explore the impact of multiple abuse types on mental health before highlighting the gaps in the literature. According to Felitti et al. (1998) there is a 65%-93% (median 80%) probability for a person who experiences a single child abuse type to experience an additional type of abuse, and 40%-74% (median 54.5%) probability of experiencing two or more additional form of abuse. Other studies have also found that people who were exposed to one form of child abuse have a higher likelihood of exposure to another form of child abuse (Ney, Fung, & Wickett, 1994; Higgins & McCabe, 2000a).

Studies on exposure to multiple types of childhood abuse, neglect or adverse childhood experiences found an increased risk of adult mental health problems compared to survivors exposed to only one form of child abuse (Higgins & McCabe, 2000b; Newton & Vandeven, 2009). All abuse types such as CSA, PCA, ECA, CNeg and WFV were strongly associated with each other with the strongest correlation identified between physical abuse and psychological abuse (Higgins & McCabe, 2000a). Exposure to all three types of child abuse, CSA, PCA and ECA in one study showed a 23-fold increase in risk for post-traumatic stress disorder compared to non-abused participants (Schneider et al., 2007).

While previous research has shown that exposure to child abuse increases the risk of mental illness in adulthood, it is still unclear whether different types of abuse are related to specific mental illnesses in adulthood. Studies that did explore different types of abuse did so by looking at a specific abuse type in isolation of other abuse types. ECA, CNeg and WFV have also received little attention compared to CSA and PCA. Efforts to explore the associations between specific types of abuse or a combination of abuse types and mental health outcomes are important to better target appropriate intervention. It may further serve as a flag to health practitioners when they come across adult women with mental illness in their practice.

1.8 Gender as a Vulnerability Factor for Child Abuse and Mental Illness

A gender imbalance in the experience of child abuse exists within the literature. Women have been shown to be more vulnerable than men to experience CSA (Finkelhor et al., 2005). Women also have higher death rates from experiences of CSA when compared to men (Taylor et al., 2008). A meta-analysis looking at prevalence of CSA around the world reported the highest combined prevalence from 217 publications to be in Australia for women compared to men (Stoltenborgh, van IJzendoorn, Euser, & Bakermans-Kranenburg, 2011). Furthermore, when other demographic factors were controlled for, women survivors of child abuse were documented to be more likely than male survivors to acquire a mental illness in adulthood (Thompson, Kingree, & Desai, 2004) with higher prevalence rates for depression, anxiety and post-traumatic stress disorder (PTSD) following sexual violence (World Health Organization, 2011). Women are also more likely to seek psychological support compared to men (World Health Organization, 2011). Given the findings of prior studies indicating that women are more vulnerable than men to CSA, more likely to acquire mental illness in adulthood and are more likely to seek psychological support, this thesis focused on women survivors of child abuse.

Given the above context and review of the literature related to various aspects of child abuse, the following sections present specific research aims alongside further information for specific chapters in this thesis, which consists of manuscripts submitted/accepted for publication in the thesis by publication format.

1.9 Research Aims of Chapter Four

Chapter Four, manuscript one (submitted for publication consideration) entitled ‘Child Abuse and Women’s Mental Health: Moderating Processes’ aims to expand upon and address limitations of the existing literature regarding the association between child abuse experiences and its impact on women’s mental illness. This manuscript focuses on women survivors of child abuse who have been found to have an increased rate of mental illness (Thompson et al., 2004), in particular depression, anxiety and post-traumatic stress disorder. This study aims to explore the extent to which all five types of child abuse (PCA, ECA, CSA, CNeg and WFV) simultaneously predict depression, anxiety and post-traumatic stress symptoms, utilising standardised questionnaires with adequate psychometric

properties. It will further explore the moderating interactions between the five different abuse types in predicting mental illness.

1.10 Health Services Sought by Women Survivors of Child Abuse

As well as the need to characterise in more detail the nature of the relationship between child abuse and mental illness, it is also critical to identifying the health services sought by women survivors of child abuse to inform how to better provide care for these vulnerable women. Palmer, Stalker, Gadbois, and Karper (2004) conducted a 6-week inpatient program to assist people diagnosed with post-traumatic stress disorder as a result of child abuse. When asked in an interview about the components of the program that most contributed to improved outcomes, 77% reported emotional work, 70% found learning skills and techniques for self-help, 63% noted gaining insight and 53% noted gaining information and knowledge on abuse contributed to improved outcomes.

All the aspects that participants found helpful in Palmer et al. (2004) can typically be provided by primary health care practitioners such as General Practitioners (GPs) and allied health practitioner such as psychologists and social workers. It would be a logical assumption that if women had access to these services and were asked in a safe environment about the experiences of child abuse, they may have received early intervention, which may have prevented or mitigated the development of mental illness.

Furthermore, women survivors of child abuse have higher levels of perceived need for treatment (Sareen, William, Cox, Hassard, & Stein, 2005) and a documented increased in health service use such as doctor visits (Hulme, 2000; Newman et al., 2000) and other professional visits (Chartier, Walker, & Naimark, 2007). The introduction of Medicare rebates for psychological treatment with implementation of Better Access in 2006 (Crosbie & Rosenberg, 2007), may facilitate access for emotional health concerns from GPs by women survivors. Therefore an opportunity exists for GPs and other health practitioners to identify survivors who present to their practices and facilitate early intervention by improving case identification.

1.11 Primary Health Care Practitioners' Practice, Attitudes and Beliefs in Screening and Supporting Women Survivors of Child Abuse

Current research shows that primary health care practitioners especially general practitioners (GPs) are normally the first point of contact for women who have a history of child abuse. However, to date there is a paucity of research looking at primary health care practitioners' current practice, confidence, attitudes and beliefs with respect to supporting women survivors of child abuse. It is also unclear whether routine questioning which could facilitate early intervention is practiced.

In a study by Gould et al. (1994), 49% of women patients sampled from a primary health care setting (family medicine practice) reported a history of PCA, CSA or ECA. In another study, 27% of abused women attending general practices were reported to have disclosed child or partner abuse to their doctors (Mazza et al., 1996). Given this frequency of presentation, it is not surprising that health care practitioners are urged to screen women for childhood abuse experiences to increase rates of identification (Havig & Havig, 2008; Mammen & Olsen, 1996; Mazza et al., 1996).

Despite the above study authors' recommendations to screen women for a history of child abuse, only 3% of health professionals (GPs, practice nurses and health visitors) routinely ask women about CSA experience. In stark contrast to the 81% of health professionals who agreed that CSA is a health care issue (Richardson et al., 2001). In a more recent study looking at screening for child abuse experience in primary care, less than one third of GPs screened patients for child abuse experiences and 25% of GPs rarely or never screen female patients. Even when most GPs believe that screening for child abuse is helpful and within their role, many cited barriers such as lack of time and concerns about re-traumatising patients (Weinreb et al., 2010).

Whilst there is a paucity of research exploring women's thoughts on being asked about their child abuse experience by GPs, patients surveyed from those seeking assistance for substance abuse thought it appropriate to be asked about their child abuse experiences (Department of Human Services USA, 2000). Similarly, research has shown that for most women survivors, talking about their experience as part of participation in research decreased intrusive thoughts (Lugendorf & Antoni, 1999) and provided an opportunity to share their adverse experiences (Sikweyiya & Jewkes, 2012).

Drawing from the literature exploring screening of women for intimate partner violence (IPV), a third of women disclosed their experience of IPV to their GPs (Hegarty &

Taft, 2001). Women thought it appropriate to be asked about IPV experiences (Burge, Schneider, Ivy, & Catala, 2005), reported no harm resulted from screening, and agreed with screening or being asked routinely about abuse experiences (Burge, et al., 2005; Feder et al., 2009). In fact, women found screening beneficial in removing stigma, gained a sense of support from the discussion and gave them an opportunity to disclose abuse, which may lead them to seek help (Feder, et al., 2009). However, only 1 in 10 women were asked about IPV by their GPs (Bradley, 2002; Hegarty & Taft, 2001). Two recent systematic review reported insufficient evidence for universal screening for IPV in health-care settings (Feder, et al., 2009; MacMillan et al., 2009). In absence of definitive evidence on universal screening, several national organisations advocate for "diagnostic" or "case finding" approach, which is routine inquiry when signs of abuse are present (U.S. Preventative Services Task Force, 2004; Wathen & MacMillan, 2003). New South Wales Health introduced routine screening for IPV in all area health services, with women who attend antenatal, early childhood, mental health and alcohol/drug services screened as part of a routine assessment (New South Wales Department of Health, 2007). However, no policies were found on current practices in relation to screening women for child abuse in Australia.

In order to understand and promote screening of child abuse, it is important to ascertain the current practices of health practitioners with respect to women survivors of child abuse. Further, there is a need to determine the level of comfort for different health practitioners in asking about different types of abuse. Mental health practitioners, in particular psychologists, who are likely to see women survivors of child abuse with comorbid mental illness.

Further, to date there has been little research exploring primary care practitioners' practices in responding to women survivors of child abuse, and no research to the author's knowledge that specifically explored whether there are differences amongst various health practitioners in relation to their practice in responding to women survivors. Given that women survivors are likely to present for various concerns, it is crucial to identify differences in practitioners' practice and their attitudes and beliefs in screening and supporting women survivors.

1.12 Research Aims of Chapter Five

In order to explore what health services were utilised by women survivors of child abuse, Chapter Five, manuscript two (published manuscript) and Chapter Five Addendum

was conducted to ascertain whether women were screened for child abuse experiences by the health practitioner they sought assistance from, and how women felt when they were asked about their child abuse experiences. If women were not asked about their child abuse experiences when they sought assistance for either general health or mental health issues, a hypothetical question explored how women would feel if they were asked. Specifically, Chapter Five which consists of a manuscript accepted for publication entitled 'Women Survivors of Child Abuse: Don't Ask, Don't Tell' describes whether: women survivors disclosed their child abuse experience; if they disclosed it to a GP, whether women were asked by GPs about their child abuse experiences; and women's thoughts on being asked about child abuse experiences by GPs. Chapter Five Addendum aims to provide additional information on other health services sought by women survivors and their overall thoughts on being screened for child abuse experiences by health practitioners, which could not be fully covered in Chapter Five's manuscript accepted for publication.

1.13 Research Aims of Chapter Six

Given that women survivors are likely to have an increased risk of mental illness, it is important to explore the practices of psychologists in screening adult survivors of child abuse who may present with mental health concerns but may not disclose their child abuse experiences. Chapter Six, manuscript three (published manuscript) entitled 'Australian Psychologists' Current Practice, Beliefs and Attitudes towards Supporting Women Survivors of Childhood Maltreatment' hypothesised that psychologists with a higher belief about their ability or confidence to conduct screening and support identified survivors are more likely to conduct screening, over and above other practice related factors. Beyond a demonstration of predictors of screening behaviour, a further aim of this manuscript was to provide preliminary insights into the current practices, beliefs, attitudes and confidence of community psychologists in screening and supporting women child maltreatment survivors and the perceived training needs of psychologists in this area.

1.14 Research Aims of Chapter Seven

With the variability of services accessed by women survivors of child abuse, Chapter Seven, manuscript four (published manuscript) entitled 'Primary Health Care Practitioners' Screening Practices and Attitudes towards Women Survivors of Child Abuse' explored

whether there are differences in health practitioner groups in relation to their practices in responding to women survivors of child abuse. Specifically this manuscript explored the practices and attitudes of Australian GPs, psychologists and other practitioners such as psychiatrists, social workers, counsellors, psychotherapists, mental health nurses and other specific mental health practitioners. It provides a comparison between the three groups of health practitioners, and presents the differences in the frequency with which each practitioner group encounters adult women survivors of child abuse, and their ratings of importance and confidence in screening for or responding to women survivors of child abuse. This manuscript further aims to explore who practitioners believe should be screening women for child abuse experiences and whether practitioners would benefit from specific training to enhance their capacity to respond to the specific needs of this vulnerable population.

Rates of Child Abuse Experience in Women Accessing Primary Health Care Services

Given the documented increase of health services utilised by women survivors of child abuse, Chapter Two, which consists of a manuscript submitted for publication consideration contains a systematic review of the literature focusing on the rates of child abuse experiences in women accessing primary health care services. Chapter Two addendum provides an update on the literature since publication submission.

1.15 Chapter Summary

This chapter provided a review of the literature relevant to various parts of the thesis including research aims of following chapters consisting of submitted manuscripts or manuscripts accepted for publication in the thesis by publication format. It provided an overview of child abuse with the definition of child abuse as consisting of five types of abuse: emotional child abuse, physical child abuse, child sexual abuse, child neglect and witnessing family violence. Prevalence rates of child abuse have been documented to be 8.1% to 78.3% for various types of child abuse, with the most prevalent type of child abuse being CNeg and ECA. Child abuse types often co-occur with victims of one type of child abuse likely to experience another type of child abuse. Victims of child abuse are often female, less than 4 years old and from ethic minority. Perpetrators of child abuse are often

the victim's mother, father or male relative. Child abuse is grossly underestimated and financially costly to society.

Child Abuse is complex and multi-determined by various factors and transactional processes in the broad ecology of parent-child relations influenced by ontogenic or individual factors, microsystem or family factors, exosystem or community factors and macrosystem or cultural factors. The ecology of child abuse can be further explored using attachment theory by examining the attachment between infant and primary caregivers, which gives rise to internal working models in the child creating their view of themselves and of others that are carried into adulthood. These early childhood experiences further influence existing genetically encoded neural pathways and interact with the body's physiological responses that may alter and create new neuronal pathways giving rise to mental processes shaped by interpersonal experiences within the family, community and cultural systems which the individual is a part of. Each level of the environment is said to contain potentiating (risk) and compensatory (protective) factors. The risk of child abuse and its transmission across generations increases when potentiating factors outweighs the compensatory factors. This highlights the need to consider a person's biological, psychological and social context within the family, community and cultural system when looking at the etiology of child abuse.

Child abuse increases the risk of many negative consequences for survivors in adulthood such as physical and mental health consequences. This thesis which focused on the mental health sequelae of child abuse documented various studies' finding that child abuse increases the likelihood of mental illness, in particular depression, anxiety and PTSD. Disclosure rates of child abuse by women survivors are low. However women survivors have higher doctor visits and visits to other health practitioners. Screening behaviours of various health practitioners are currently unclear. Screening behaviours of GPs are documented to be low despite being urged to at least screen women who present with associated symptoms.

To date few studies explored the extent to which all five types of child abuse simultaneously predict depression, anxiety and post-traumatic stress symptoms, and whether moderating interactions exist between the five different types of child abuse in predicting mental illness. Further, there has been little research specifically exploring women survivors' general and mental health use or primary care practitioners' practices in responding to women survivors of child abuse. There has also been no research to the authors' knowledge that specifically explored women survivor's thoughts of being asked by

health practitioners about their child abuse experience and whether there are differences in various health practitioners' practice in screening and supporting women survivors.

CHAPTER TWO. RATES OF CHILD ABUSE EXPERIENCE IN WOMEN ACCESSING PRIMARY HEALTH CARE SERVICES: A SYSTEMATIC REVIEW

This chapter constitutes a manuscript submitted for publication in Epidemiology Research International.

2.1 Specific Declaration for Thesis Chapter Two

In the case of Chapter Two, the nature and extent of my contribution to the work was the following:

Nature of contribution	Extent of contribution (%)
Key ideas, formulation of study design, literature search, assessed suitability of articles, data abstraction, data analyses, and writing manuscript.	85%

The following co-authors contributed to the work.

Name	Nature of contribution
Prof. Mark Oakley Browne	Consultation in formulation of study design, discussion of ideas expressed in manuscript, assessing suitability of articles abstracted, and critical review of manuscript.
Assoc. Prof Jan Coles	Critical review of manuscript.
Dr. Stuart Lee	Critical review of manuscript.
Prof. Jayashri Kulkarni	Critical review of manuscript.

Candidate's Signature	[redacted]	**Date** 14/05/2012

Declaration by co-authors

The undersigned hereby certify that:

(1) the above declaration correctly reflects the nature and extent of the candidate's contribution to this work, and the nature of the contribution of each of the co-authors.
(2) they meet the criteria for authorship in that they have participated in the conception, execution, or interpretation, of at least that part of the publication in their field of expertise;
(3) they take public responsibility for their part of the publication, except for the responsible author who accepts overall responsibility for the publication;
(4) there are no other authors of the publication according to these criteria;
(5) potential conflicts of interest have been disclosed to (a) granting bodies, (b) the editor or publisher of journals or other publications, and (c) the head of the responsible academic unit; and
(6) the original data are stored at the following location(s) and will be held for at least five years from the date indicated below:

Location(s)	Monash Alfred Psychiatry Research Centre, The Alfred Hospital, Prahran, VIC 3181.

		Date
Signature 1	[redacted]	14/05/2012
Signature 2		14/05/2012
Signature 3		14/05/2012
Signature 4		14/05/2012

2.2 Preamble to manuscript

Given that women survivors of child abuse were demonstrated in the previous chapter to be more likely to access primary health care services, it is also important to identify the rates of child abuse experience in women accessing primary health care services.

In the context of this manuscript primary health care services included general or family practice of medicine, health maintenance organisation (HMO), general internal medicine and community health care centres, as defined by the American medical Association (Vanselow, Donaldson, & Yordy, 1995,). It is noted that this definition may not be consistent with Australian clinical practice; however, given the bulk of research available is based in America this definition was used.

The types of primary health care services accessed will also be important in identifying which health practitioners are likely to come in contact with women survivors of child abuse and best placed to assist with early identification of this vulnerable population.

To explore the rates of child abuse experience in women accessing primary health care a systematic review of the literature was conducted. The review considered studies that included adult women aged 18 years or older who had previously or were currently utilising primary health care services and were asked about their past experiences of child abuse.

Rates of Child Abuse Experience in Women Accessing Primary Health Care Services. A Systematic Review

2.3 Abstract

Objective

Experiences of child abuse or maltreatment have been associated with adverse adult mental and physical health outcomes. This article aims to systematically review and identify existing literature on the rates of child abuse experience in women accessing primary health care services.

Method

A systematic search of five electronic databases was conducted to identify studies that included women who had or were utilising primary health care services and were asked about child abuse experience/(s).

Results

The rates of child abuse experience in women accessing primary health care services in the eight identified studies meeting the inclusion criteria's varied widely from 0.4% to 54.6%. Women with a history of child abuse reported using more primary health services compared to those without a history of child abuse.

Conclusion

Research regarding the rates of child abuse experiences in women accessing primary health care services is very limited. Studies identified used different age cut-offs to define the age of a "child". Types of abuse suffered by victims were also poorly defined utilising a variety of assessments. Further research is required to more accurately determine rates of abuse experience amongst primary care attendees.

Keywords: adult survivors of child abuse, child abuse, primary health care, community health services, mental health

2.4 Introduction

The prevalence of child abuse has been increasingly recognised since 'the battered child syndrome' (Kempe, Silverman, Steele, Droegemuller, & Silver, 1962) was introduced as a term in the 1960s. Many empirical studies since then have documented the effects of child abuse manifesting in adulthood as symptoms of distress (Briere & Runtz, 1990; Bushnell, Wells, & Oakley-Browne, 1992; Carlin, Kemper, Ward, Sowell, & et al., 1994; Carlson, McNutt, & Choi, 2003; Chu & Dill, 1990; Coid et al., 2003; Dalenberg & Palesh, 2004; Danielson, de Arellano, Kilpatrick, Saunders, & Resnick, 2005; Edwards, Holden, Felitti, & Anda, 2003). Other studies have looked at the different ways in which women seek help for their distress (Baumann, 2007; Bushnell, 2004; Carlson, et al., 2003; Chartier, Walker, & Naimark, 2007; Felitti, 1991; Finestone et al., 2000; Gibbons, 1996). Many women present to primary health care practitioners with somatic and physical complaints rather than psychological complaints (Mammen, 1996; Newman et al., 2000). While others seek crisis help from tertiary health care services (Palmer, Stalker, Gadbois, & Karper, 2004).

Few studies have examined the rates of child abuse experience in women accessing primary health care services. Instead, many studies have reported the physical and mental health problems of women from primary health care centres such as counselling centres (Higgins & McCabe, 2000), health maintenance organisations (HMOs) (Edwards, et al., 2003), family practices (Dickinson, deGruy, Dickinson, & Candib, 1998; Hulme & Grove, 1994), agencies specialising in treating survivors of child sexual assault (Fabelo-Alcover & Lipton, 2003), community agencies (Kreidler, 2005), community based private settings (McLean et al., 2006), clinic outpatient settings and medical organisation (Rosenberg et al., 2000), without necessarily also considering child abuse history. In studies that examined health care use by child abuse survivors, more frequent health care utilisation was found in women who experienced child sexual abuse (Felitti et al., 1998; Finestone et al., 1999; Hulme, 2000; Newman, et al., 2000; Sickel, Noll, Moore, Putnam, & Trickett, 2002; Walker et al., 1999). However, the focus of these studies was on women exposed to child sexual abuse without controlling for other types of child abuse.

Women who suffered child abuse have been found to experience various mental health problems such as depression, anxiety and post-traumatic stress disorder (Hill et al., 2000; Molnar, Buka, & Kessler, 2001; Schneider, Baumrind, & Kimerling, 2007). Physical,

sexual and emotional child abuse were each independently associated with significant risk of increased mental distress, feeling frequently overwhelmed, anxious, sad and being diagnosed with PTSD (Schneider, et al., 2007). Exposure to all three types of child abuse was associated with a 23 fold increase in risk of probable post-traumatic stress disorder diagnosis compared to non-exposed participants (Schneider, et al., 2007). Emotional abuse and neglect were also found to predict symptomatology in women even when controlling for other types of abuse and lifetime trauma (Spertus, Yehuda, Wong, Halliga, & Seremetis, 2003).

In Australia, childhood maltreatment was estimated to cost between $10.7 billion and as much as $30.1 billion based on the estimation that between 177,000 to 666,000 children and young people were abused or neglected annually (Taylor et al., 2008). The estimated overall healthcare cost was $383.0 million, consisting of over a third for hospital costs at $137.6 million (26.2% inpatients and 9.7% outpatients) (Taylor, et al., 2008). When looking at the composition of health care cost by condition, depression and anxiety (including post-traumatic stress disorder and panic attacks) comprised over two-thirds of the total health system costs with a combined total of $239.8 million, of which, treating depression represented half the total health care cost of child abuse (Taylor, et al., 2008). Looking at the Victorian expenditure on assisting victims of sexual assault, the total annual cost of counselling services in 2007 was estimated at $181.1 million (Taylor, et al., 2008).

In America, *Prevent Child Abuse America* (an advocacy group) released a report documenting that the direct cost of hospitalisation was estimated at $6.6 billion per year and mental health care was estimated at $1.1 billion per year for survivors of child abuse (Wang & Holton, 2007). Data from America and Australia are therefore suggestive of a marked increase in the costs to society that stem from child abuse. The treatment of mental illness which is a common consequence of child abuse all contribute to making child abuse a very costly social burden.

While a range of systematic reviews have focussed on the efficacy of specific treatment methods and modalities for survivors of child abuse (Barlow, Johnston, Kendrick, Polnay, & Stewart-Brown, 2006; Macdonald, Higgins, & Ramchandani, 2006), the rate of primary care service utilisation has not been systematically analysed. An initial scoping search based on key terms in various databases (Cochrane database of systematic reviews, CINAHL, Medline, PsychInfo and PubMed) revealed that a systematic review on the current rate of primary health care service utilisation by women who have been abused during childhood has not been previously conducted.

The primary aim for this systematic review was to describe the estimated rates of child abuse experience in women obtained from research studies of primary care health services. The types of primary care services accessed by women and the cost of primary care utilisation will also be described. It is hoped that by clarifying how and why women with a history of child abuse access primary health care services in adulthood, that better access to early interventions can be achieved for women survivors of child abuse.

2.5 Methods

Literature search

The literature search strategy utilised for this review was undertaken based on recommendations by the Centre for Reviews and Dissemination at the University of York (Khan, Ter Riet, Glanville, Sowden, & Kleijnen, 2001).

Search strategy, initial keywords/terms.

First and second authors (AL and MOB) screened titles and abstracts of papers in the initial search of five electronic databases (Cochrane database of systematic reviews, CINAHL, Medline, PsychInfo and PubMed) from the period of 1950 to July 2009. One reviewer (AL) independently assessed the retrieval of full-text articles for relevance and inclusion and examined the reference list of all included papers for additional papers and conducted a grey literature search of websites relating to the phenomenon of interest. Both AL and MOB then discussed the suitability for inclusion of the retrieved full-text articles. Keywords or terms and the search dates are available in Appendix/Table 2.3.

Inclusion criteria

Types of participants.

The review considered studies that included adult women aged 18 years or older who had previously or were currently utilising primary health care services and were asked about their past experiences of child abuse.

Primary health care services included general or family practice of medicine, health maintenance organisation (HMO), general internal medicine and community health care centres (Vanselow, Donaldson, & Yordy, 1995).

Rates of child abuse experience in women accessing primary health care services

With regard to rates of child abuse experience in women, data was included from studies examining female participants who have used primary health care services covering any period of time after reaching 18 years of age and who were asked about their experiences of child abuse.

Abuse type.

With regard to the type of abuse, all forms of child abuse were considered. This included but was not limited to child sexual abuse (both contact and non-contact), physical child abuse, emotional abuse, emotional neglect, physical neglect and witnessing family violence. All attempts were made to classify the type of child abused suffered by women survivors to provide an accurate account of primary health care service utilisation by child abuse type.

Types of outcomes.

- Rate of primary care utilisation if reported
- Types of primary care service utilised
- Cost of primary care utilisation if reported

Types of study.

The review focused on quantitative descriptive studies and qualitative studies on women who have experienced child abuse (including but not limited to, designs such as surveys, interview studies, group studies, studies on efficacy of treatment and self-report on experience with professional assistance). Studies were included if they reported results relating to one or more of the outcomes of interest. Discussion papers, reports including government press releases that met the inclusion criteria were also considered.

Exclusion criteria

We excluded papers based in secondary or tertiary care, or which considered primary care for children (under the age of 18 years), or papers which did not ask about women's' exposure to abuse in their childhood. Studies reported in languages other than English were also excluded from the review.

Data abstraction and quality scoring

Data collection.

Questionnaire/survey style data was extracted from papers detailing the number of adult women with experiences of child abuse that utilised primary health care services. The frequency of service utilisation was documented if available.

Data abstraction and synthesis.

First author (AL) reviewed articles meeting the inclusion criteria and abstracted relevant data. Based on variation of data presented, relevant data was highlighted on the respective papers. First and second authors (AL and MOB) discussed and came to a consensus agreement regarding the data extracted.

All rates of child abuse in women accessing primary health care services were extracted by identifying the total number of women who identified a history of child abuse compared with the total of women eligible to participate in the studies. First author (AL) contacted respective study authors where there were ambiguities in the data.

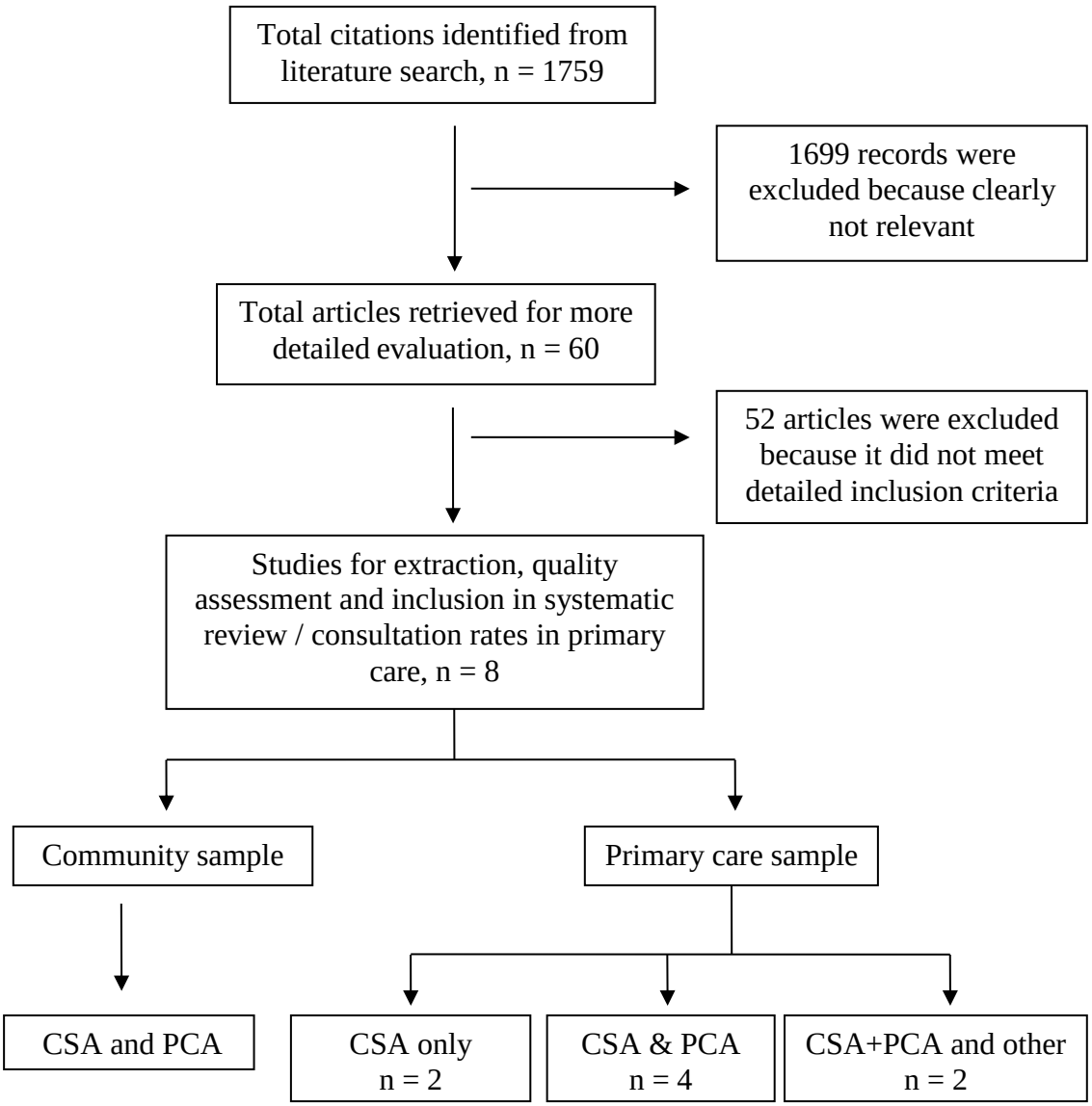
Quantitative data synthesis was not done due to the heterogeneity of study designs and outcome measures employed as well as the variability of study populations and the definitions of participants e.g., definition of the age of a child and types of child abuse. As such, qualitative data syntheses of this review's outcomes of interest are presented in a narrative form (Deeks et al., 2001).

Assessment of methodological quality.

AL and MOB appraised the quality of the papers using the Newcastle-Ottawa Quality Assessment Scale (NOS) for cohort and case-control studies; studies awarded more stars are higher in quality (Wells et al.). This scale was chosen based on the recommendation by the Cochrane Non-Randomized Studies Working Group. Studies with cross sectional designed were assessed using a modified NOS utilised in Ospina, Bond, Karkhaneh et al 2007 (Ospina MB et al., 2007). This modified NOS scale contains the key domains for quality assessment in observational studies recommended by the Agency of Healthcare Research and Quality (West et al., 2002). Quality scoring was done independently by AL and MOB with differences in the main outcome and quality rating resolved via consensus (Khan & Kliejnen, 2001).

One thousand seven hundred and fifty nine papers were initially identified from the database search. Sixty papers were retained following abstract review. Of these 60 papers, 52 were excluded because they did not meet the inclusion criteria (see Figure 2.1). The remaining eight papers were assessed for quality and included in the review. Table 2.1 documents study characteristics of papers included in the review and their respective modified NOS quality scores.

Figure 2.1 Citations Identified From Literature Search



Abbreviation: CSA, child sexual abuse; PCA, physical child abuse.

Where papers addressed more than one question, they have been included in each relevant grouping.

Table 2.1 Study Characteristics

Authors	Country	Study design	Type of abuse	Assessment Used	Outcome Assessed	Number of participants	Quality assessment Newcastle Ottawa Scale (modified)		
							Selection Max = ★★★	Comparability Max = ★★	Outcome Max = ★★
Chartier et al. (2007)	Canada	Questionnaire survey from Ontario Health Survey; data on community sample	PCA CSA No child age defined in paper	PCA- abridged version of Conflict Tactics Scale (7Questions) CSA-items from National Population Survey of Canada (4 Questions)	High general practice use ≥6x/12mths High emergency room use ≥2x/12mths High professional use ≥20x/12mths	Adjusted sample size of 5117* female responses *weighted data	★★	★★	-
Edwards et al. (2003)	USA	Questionnaire survey to health maintenance organization members participated in Medical Outcome Study	CSA, PCA, WMB, WMB&(PCA or CSA), PCA&CSA, WMB&PCA &CSA Intensity of ECA No child age defined in paper	CSA-Questions from adapted from Wyatt (1985). Endorsement of one of any 4 questions	Prevalence of abuse Adult mental health type	8667 data of male and female. From survey 4414 survey of women analysed. 36.6%;1615/4414 abused in childhood	★★	★★	-

Coid et al. (2003)	UK	Questionnaire Survey of women attending 13 HMO in London Borough of Hackney, UK.	CSA (non-contact), CSA contact, PCA Child age defined as under 16 years Domestic violence, rape, SA not rape	6 measures of abusive experience	Prevalence of abuse. Adult mental health.	1207 patients Data returned was different for different items as not all respondents completed all items. 34.5%; 417/1207 abused in childhood	★★	★★	-
Carlson et al. (2003)	USA	Questionnaire survey of women attending a Northwest Community Health Maintenance Organization	7 forms abuse measured -CSA and PCA Child age define under 17 years -3forms of partner abuse; past SA, PA -Recent AEA -Recent ASA -Recent APV	Child abuse-14 Questions modified from Child Maltreatment Interview Schedule (Briere, 1992)	Prevalence of abuse. Adult mental health.	969 surveyed, 557 surveys analysed. 7.2%; 40/557 abused in childhood	★★	★★	-

Newman et al. (2000)	USA	Questionnaire survey of women attending HMO (Kaiser Permanente) in California and cross ref with Objective doctor records over 2 year period for subset	CSA & PCA Age defined under 14 years Only contact CSA labelled as CSA	Brief sexual and physical abuse screen (Drossman et al 1990) Physical item of above was developed by Briere and Runtz, 1990	Adult mental health, Objective Doctor visit For a subset over a 2 week period 1-3visits 4-6visits 7-9visits 10-12 visits >12 visits	608 surveys analysed, 136 subset from 608 cross ref with objective doctor records over 2 year period. 26%; 158/608 abused (contact and non-contact CSA) 34.4%; 207/602 PCA	★★	★★	★
Hulme (2000)	USA	Questionnaire survey, participants randomly selected from large primary care clinic in the Midwest. Chart and info systems review on all returned surveys.	CSA age define under 18	Sgroi, Blick and Porter, 1982	Adult mental health, primary care charges, primary care visits	4199 patients, random sampled 1500 patients. 395 surveys analysed. 23%; 91/395 abused in childhood	★★	-	★★

Walker et al. (1999)	USA	Questionnaire survey, (subset structurally interviewed) participants randomly selected from HMO-Group Health Cooperative of Puget Sound Washington State.	CSA, Non CSA (including emotional abuse, PCA, Emotional neglect, physical neglect) Child age defined before 18	Childhood Trauma Questionnaire	Adult mental health care cost- annual health care cost, primary care and outpatient cost and more frequent ER visits	1963 patients randomly sampled, 1225 surveys analysed Of 1225, 216 structurally interviewed. 1175 had cost data for >1yr. 42.8% abused- CSA 17.8%, 25% other abuse excluding CSA.	★★	-	★
Dickinson et al. (1998)	USA	Structured interview conducted on sub-sample of participants from 3 family practice outpatient clinics who took part in the NIMH Somatization in Primary Care Project.	CSA Age define	14 questions based on Russell 1982 + addition of duration and frequency of abuse, age at onset, no of perpetrator, and relationship of perpetrator to subject.	Adult mental health- depression, somatization, post-traumatic stress disorder, dissociation.	Original somatization sample 252. Of 252, 122 women had significant sexual trauma. Of 122, 99 returned f/up QA. 48.4%; 122/252 39.3%; 99/252 abused in childhood	★★	-	-

Abbreviation: AEA, adult emotional abuse, APV, Adult physical violence; ASA, Adult sexual abuse; CSA, child sexual abuse; ECA, emotional child abuse; PA, physical abuse; PCA, physical child abuse; SA, sexual abuse; WMB, witnessed maternal battering.

Rates and types of child abuse reported by women accessing primary care

Data extracted from the eight identified papers that met inclusion criteria were analysed for the reported rates of primary health care use. Specifically, frequency of participants reporting any history of childhood abuse currently utilising or reported prior use of primary health care service in the respective study period were noted with the frequency of total eligible participants in respective studies also noted. This value then provided a numerator and denominator to allow reporting of percentages.

2.6 Results

The rates of child abuse experience reported by women accessing primary health care services in the eight identified studies meeting the inclusion criteria varied widely from 0.4% to 54.6%. Specific rates are presented in Table 2.2. Studies which reported primary health care use or studies that allowed for extrapolation of rates of child abuse experience reported on only child sexual abuse (Dickinson, et al., 1998; Hulme, 2000) or child sexual abuse and physical child abuse (Carlson, et al., 2003; Chartier,el al.; Coid, et al., 2003; Newman, et al., 2000; Walker, et al., 1999). Only one study included witnessing maternal battering (Edwards, et al., 2003). In Walker et al. (1999) emotional child abuse, emotional child neglect and physical child neglect were surveyed, however, the responses were grouped and analysed as non-child sexual abuse, which also included data from participants reporting a history of physical child abuse (Walker, et al., 1999). Thus it was not possible to compare the prevalence rates among these abuse subtypes.

Table 2.2 Rates of Child Abuse Reported by Women Attending Primary Health Care Services in Identified Studies.

Types of abuse reported	Frequency (%) and *95% confidence intervals* of women participants accessing some form of primary care who reported a history of childhood maltreatment reported in respective studies							
	Chartier et al. (2007) +N= 5177	Edwards et al. (2003) *N=4698	Coid et al. (2003) *N= 2592	Carlson et al. (2003) *N= 1978	Newman et al. (2000) *N= 602	Hulme (2000) *N= 4199	Walker et al. (1999) *N= 1963	Dickinson el al. (1998) *N= 252
Physical Child Abuse(PCA)	1003 (19.4) *18.3-20.5*	476 (10.0) *9.3- 11.0*	112 (4.3) *3.5-5.1*	-	207 (34.4) *30.6-38.2*	-	-	-
Childhood Sexual Abuse (CSA)Contact & Non-contact	605 (11.7) *10.8-12.6*	544 (11.6) *10.7-12.5*	53 (2.0) *1.5-2.6*	-	-	91 (2.2) *1.7-2.6*	209 (10.6 *9.3-12.0*	122 (48.4) *42.2-54.6*
Childhood Contact Sexual Abuse (Contact CSA)	-	-	116 (4.5) *3.7-5.3*	-	112 (18.6) *15.5-21.7*	-	-	-
Childhood Non-Contact Sexual Abuse (Non-Contact CSA)	-	-	88 (3.4) *2.7-4.1*	-	46 (7.6) *5.5-9.8*	-	-	-
Witnessing Maternal Battering (WMB)	-	168 (3.6) *3.0-4.1*	-	-	-	-	-	-
Combined PCA & CSA	-	289 (6.2) *5.5-6.8*	17 (0.7) *0.4-1.0*	40 (2.0) *1.4-2.6*	-	-	-	-
Combined WMB & (either PCA or CSA)	-	273 (6.0) *5.1-6.5*	-	-	-	-	-	-
Combined PCA, CSA & WMB	-	172 (3.7) *3.12-4.2*	-	-	-	-	-	-
Combined non-sexual abuse (Physical Neglect, Emotional Neglect, Emotional Abuse, Non-sexual physical abuse)	-	-	-	-	-	-	294 (15) *13.4-16.6*	-

*N =total potential participants - includes missing data/participants who did not respond or were not approached to participate in study.
+N = weighted frequency

Types of primary health care service use

Four of the eight included papers discussed some type of primary health care service use by women who had reported prior child abuse experience. However, the data was collected and reported in differing ways across papers. Four studies examined some type of primary health care visits including general practitioner visits (Chartier, et al., 2007; Hulme, 2000; Newman, et al., 2000; Walker, et al., 1999). Three studies reported on emergency department (ED) utilisation (Chartier, et al., 2007; Newman, et al., 2000; Walker, et al., 1999).

In Chartier et al. (2007), respondents were asked questions about the frequency of their health care use and categorised it into different categories of health care use. For example, high general practitioner use was classified as: use of general practitioner services (six or more time in the previous 12 months); high emergency room use (twice or more use of emergency services in the previous 12 months); and high professional use (access of health professional services 20 times or more in the previous 12 months, excluding visits to psychologists, social workers and pharmacist). Results indicated that women survivors with a history of child physical abuse reported a slightly lower percentage of health care use (20.6%) compared to those without child physical abuse experience (21.2%). Similarly women survivors with a history of child sexual abuse also reported a lower percentage of health care use (20.2%) compared to those without child sexual abuse experience (21.2%), although both these comparisons were not statistically significant. However, child physical abuse and child sexual abuse were found to be significantly associated (moderate strength) with high emergency room use and high professional use after controlling for demographic factors including gender. For example, the odds ratio for females with a history of child physical and sexual abuse were, respectively 1.9 and 2.0 for high emergency room use and 1.2 and 1.4 for high professional use compared to those without a history of abuse.

Three studies reported participants' primary health care service use via patient's self-report and retrieval of objective reports from respective HMO computer records (Newman, et al., 2000), patient chart reviews (Hulme, 2000) and extrapolated primary health care use data via cost-accounting system of the HMO (Walker, et al., 1999). In Newman et al. (Newman, et al., 2000) participant's medical utilisation records (objective and self-report) in the two years prior to the study period was categorised into outpatient and inpatient visits. Outpatient visits included ear, nose and throat (ENT), gynaecology, internal medicine, surgery and ED visits excluding psychology/psychiatry but included data of patients refereed to physicians outside of the Kaiser HMO. Inpatient visits included gynaecology,

internal medicine, ophthalmology and surgery. Data were also separately analysed by visit type where possible. Based on objective reports, multivariate analyses found that women with a history of child sexual abuse had higher total outpatient doctor visits; $F(8,126) = 3.10$, $p < .005$. Post-hoc univariate analyses found significantly greater number of total medical doctor visits, total internal medicine visits and total outpatient surgical visits for women with a history of child sexual abuse compared to those without a history of child abuse. However, no significant difference was found between women with a history of child sexual abuse and those without a history of abuse on the number of ED, ENT gynaecology, or psychology/psychiatry visits. Results from Hulme (2000) indicated that patients with a history of child sexual abuse reported a higher (mean=4.9, *SD*=5.5) number of primary care visits during the 2 years prior to the study period compared to those without a history of abuse (mean=3.6, *SD*=3.5).

Walker et al. (1999) found that women with any history of child abuse were no more likely to visit the ED during the five year period prior to the study compared to women who reported below threshold abuse. However, women with a history of child sexual abuse were two times more likely to visit the ED compared to those reporting below threshold abuse, suggesting that the impact on primary health care use may depend type of child abuse experienced rather than simply having experienced child abuse. Women with a history of child sexual abuse was also more likely to visit EDs than those who reported only physical child abuse or child neglect. Women with a history of child sexual abuse and nonsexual abuse were two times more likely to visit mental health professions during the previous five years compared to women reporting below threshold abuse.

Health care cost

Only two studies (Hulme, 2000; Walker et al., 1999) discussed health care cost related to primary health care service utilisation by women who had a history of child abuse. The first study focussed on cost of health care for adult women survivors of child abuse and was conducted in the Puget Sound area of Seattle, Washington State, America based on cost data determined by the automated cost-accounting system of the participating HMO. Total health care cost included inpatient and outpatient (both medical and psychiatric) costs incurred by the patient for a five year-period. Results of the first study showed that women with any type of child abuse reported a median total health care cost of $97 (95% CI, $0.47 - $188.26) more than those without a history of child abuse. Women with a history of child sexual abuse had a median total health care cost of $245 (95% CI, $132.32 - $381.93) more

than women without a history of child abuse. When mental health cost was removed, the median health care cost was $55 (95% CI, -$17.87 to $135.86) and $119 (95% CI, -$1.83 to $239.68) greater for women who experienced any type of child abuse and those who reported child sexual abuse compared to those without history of abuse, respectively (Walker, et al., 1999), meaning that the group difference was no longer significant suggesting that the primary cost difference between groups may be driven by mental health care costs.

The second study was also based in America, using a cost-data determined information system review of the participating academic family practice clinic in the Midwest (Hulme, 2000). The cost data in this study focussed on the total dollar amount incurred from patients' primary care charges, which included cost of visit to physician, physician assistant, laboratory bills excluding maternal care charges in a one year period. Results of the second study showed a significant increase in primary charges for patients with a history of child sexual abuse (Mean = $372.90, *SD* = $545.27) compared to those without a history of child abuse (Mean = $222.09, *SD* = $237.34), $t = 2.50$, $p < .05$.

2.7 Discussion

A systematic review was conducted to investigate the rates of child abuse experiences in women accessing primary health care services. Aspects of primary health care services accessed such as type of service and cost of service provision were explored. Much of the research was limited to HMOs in the United States of America. Of women accessing primary health care services, 0.4%-54.6% reported experiencing child abuse.

Studies demonstrated that women with a history of child abuse had more ED visits (Chartier, et al., 2007; Newman, et al., 2000; Walker, et al., 1999), more visits to health professionals (Chartier, et al., 2007), more outpatient visits (Newman, et al., 2000), higher total medical doctor visits (Hulme, 2000; Newman, et al., 2000) and incurred higher primary care costs (Hulme, 2000; Walker, et al., 1999) compared to women without a history of child abuse. In studies that surveyed patients' health status, women with a history of child abuse had lower levels of physical health (Chartier, et al., 2007; Hulme, 2000; Newman, et al., 2000) and lower levels of mental health (Carlson, et al., 2003; Coid, et al., 2003; Dickinson, et al., 1998; Edwards, et al., 2003). Women with a history of child abuse were also more likely to have symptoms of PTSD (Coid, et al., 2003; Dickinson, et al., 1998), depression and anxiety (Carlson, et al., 2003; Coid, et al., 2003; Dickinson, et al., 1998),

substance abuse (Coid, et al., 2003; Hulme, 2000) and make suicide attempts (Coid, et al., 2003; Hulme, 2000) compared to women without a history of child abuse. However, these mental health outcomes were beyond the scope of this review and other reviews (Beitchman et al., 1992; Maniglio, 2010; Putnam, 2003) have explored this issue in greater detail.

Based on the results of this review, up to half of women accessing primary health care services have experienced child abuse and appear to use a variety of primary care services at a higher frequency when compared to those without child abuse experiences. Primary health care practitioners are often the first point of contact for these women, and are therefore in the prime position to identify and support these women. However, the best method to identify women with such experiences is currently debated in the literature, with some experts recommending screening while others challenging its usefulness (London, 2008). Simple strategies like listening and believing women when they disclose experiences of child abuse, validation of the disclosure as a professional and explaining that child abuse is a crime, unacceptable and not their fault are helpful (London, 2008). Better studies are needed in the future to ascertain the most effective way to identify women survivors of child abuse to provide these vulnerable women with support and treatment options to facilitate better health outcomes. Future studies should explore the perspective of women survivors of child abuse and the perspectives of health practitioners who are likely to come in contact with survivors.

Having conducted the systematic review, comments can be made about the strengths and limitations of the available research exploring the rates of child abuse experience in women accessing primary health care services. All eight included papers had adequate sample size for the statistical analyses conducted with between 252 and 5,177 total participants (Tabachnik & Fidell, 2000) and appeared to apply the appropriate methodology to test the primary aims of the respective studies. However, the majority of the studies explored the impact of child sexual abuse without controlling for other types of child abuse. This is a significant methodological limitation, which meant that although child sexual abuse survivors appear to have worse outcomes in adulthood, we do not know the prognosis for survivors of other types of child type, or if these survivors also suffered other co-occurring types of child abuse, which contributed to worsened outcomes in adulthood. For example in Edwards et al. (2003), emotional child abuse experiences was associated with other types of child abuse resulting in an increased negative mental health outcomes in adulthood. Overall, there was an identified lack of studies of women with a history of emotional child abuse and child neglect, highlighting a clear gap in the literature that must

be addressed in future research to demonstrate whether these abuse types have a different impact on women's health care service use.

In most of the identified studies that measured child abuse, assessments of child abuse were based on existing scales (Carlson, et al., 2003; Chartier, et al., 2007; Dickinson, et al., 1998; Edwards, et al., 2003; Hulme, 2000; Newman, et al., 2000; Walker, et al., 1999); however, one study developed its own questions to derive child abuse data (Coid, et al., 2003). Although there were similarities in items within the scales used to determine exposure to child abuse, all studies utilised different scales and assessments to determine exposure of child abuse within their study sample. Furthermore, there did not appear to be consensus on what age constituted that of a child. The papers identified, defined the age of a child as persons under the age of 14 years (Dickinson, et al., 1998; Newman, et al., 2000), under the age of 16 years (Coid, et al., 2003), under the age of 17 years (Carlson, et al., 2003) or under the age of 18 years (Hulme, 2000; Walker, et al., 1999). Two studies did not define the age of child (Chartier, et al., 2007; Edwards, et al., 2003). The differences in the design of the included studies likely impacted upon the rates of primary health care use reported. Potentially there was an under-reporting of the rates of primary health care use by women survivors from the studies that used narrow definition of abuse and lower age range to define the age of a child. It is therefore important to carefully consider the definition of child abuse when choosing assessments and scales to identify child abuse experiences, and to define the age of a child when conducting research of this nature to not under-represent the experience of child abuse.

Strengths and Limitations of the Conducted Review

To our knowledge there has not been a systematic review looking at rates of child abuse experience in women accessing primary health care services. The literature search strategy used for this review was based on recommendations by Centre for Reviews and Dissemination at the University of York (Khan, et al., 2001). Data abstraction form [Newcastle-Ottawa Quality Assessment Scale (NOS)] contains the key domains for quality assessment in observational studies recommended by the Agency of Healthcare Research and Quality (West et al., 2002) and is recommended by the Cochrane Non-Randomized Studies Working Group. The modified NOS scale for cross-sectional studies was used in a review commissioned by and published Agency of Healthcare Research and Quality. Quality scoring procedures and general suggestions on qualitative narrative data-synthesis were also based on recommendation from the Centre for Reviews and Dissemination at the

University of York (Khan & Kliejnen, 2001). To ensure accuracy of this review, a number of authors of the included studies were contacted to clarify and gain further information.

In this review, every attempt was made to capture articles relevant to the topic; however it is likely that the search strategy conducted like other review searches may have omitted relevant articles. Systematic reviews of observational studies are still not widely conducted, as such there are few guidelines on how to conduct such reviews especially when combining the data presented in the studies. Quantitative data synthesis was not possible in this review, due to heterogeneity of study designs, outcome measures employed, variability of the study population and the definition of participants (e.g., definition of the age of a child and types of child abuse). As such, data interpretation was variable and might be difficult to generalise. A consensus also has not been reached as to which quality rating form is most robust, however broad criteria of what should be included have been published (West, et al., 2002) and used in this review. Due to omission of studies reported in languages other than English there was a possibility of language bias which may mean omission of non-significant results as significant results were more likely published in English language journals (Egges et al., 1997).

In conclusion, the conducted systematic review identified that between 0.4% - 54.6% of women accessing primary health care services reported child abuse. The experience of child abuse can also significantly increase the cost of providing health care to women survivors and increase the complexity of providing care. Women survivors presented with a multitude of physical and mental health complaints to primary care settings. Primary health care practitioners must therefore not only be aware of the possibility that child abuse history may be related to the current presentation, but must also be skilled in identifying and establishing an approach to best meet each individual patient's needs.

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Appendix/Table 2.3 Keywords or Terms for Literature Search

PubMed	
#1	(Survivors, Child Abuse OR Child Abuse, Adult Survivors) AND (Mental health services OR Primary health care OR Counselling)
#2	(Survivors, Child Abuse OR Child Abuse, Adult Survivors) AND (Mental health services)
#3	(Survivors, Child Abuse OR Child Abuse, Adult Survivors) AND (Primary health care)
#4	(Survivors, Child Abuse OR Child Abuse, Adult Survivors) AND (Counselling)
Cumulative Index to Nursing & Allied Health Literature 1982 to July Week 4 2009 (CINAHL)	
#1	Child Abuse Survivors/
#2	ADULT/
#3	#1 and #2
#4	Depression/ or Mental Health Services/ or Health Resource Utilisation/
#5	#3 and #4
#6	RESOURCE UTILISATION GROUP/
#7	Primary Health Care/
#8	#3 and #7
#9	Child Abuse, Sexual/ or Child Maltreatment.mp
#10	#1 or #9
#11	#2 and #10
#12	#4 and #11
#13	#7 and #12
#14	#5 and #6
Ovid MEDLINE(R) 1950 to Present with Daily Update	
#1	Survivors/ or Child Abuse/ or Child Abuse, Sexual/
#2	Violence/
#3	Survivors/ or Adult/
#4	Child Neglect.mp.
#5	#1 or #2 or #4
#6	#3 and #5
#7	Primary Health Care/

#8	Community Health Services/ or Mental Health Services/ or Health Services/
#9	#6 and #7
#10	#6 and #8
#11	utilisation.mp.
#12	#10 and #11
#13	#9 and #11
PsycINFO 1985 to July Week 5 2009	
#1	Emotional Trauma/ or Physical Abuse/ or Trauma/ or Sexual Abuse/ or Incest/ or Survivors/ or Child Abuse/ or Victimization/
#2	Adult.mp.
#3	#1 and #2
#4	SURVIVORS/
#5	#3 and #4
#6	Mental Health Services/ or Health Care Utilisation/
#7	#5 and #6
EBM Reviews - Cochrane Database of Systematic Reviews 2nd Quarter 2009	
#1	Child Abuse Survivors.mp. [mp=title, short title, abstract, full text, keywords, caption text]
#2	Child Abuse.mp. [mp=title, short title, abstract, full text, keywords, caption text]
#3	Health Resource Utilisation.mp. [mp=title, short title, abstract, full text, keywords, caption text]
#4	Primary health care.mp. [mp=title, short title, abstract, full text, keywords, caption text]
#5	#2 and #4

Note: Different keywords were utilised for different database to accommodate for different database idiosyncrasies.

CHAPTER TWO ADDENDUM

Chapter Two provided a systematic review of the literature exploring the rates of child abuse in women accessing primary health care services.

This addendum will provide an update of literature and/or literature missed in the initial search reporting on rates of child abuse experience in women accessing primary health care services since Chapter Two manuscript submission.

This addendum will not be in the format of a systematic review, rather it will be presented in the form of supplementary summary tables to capture studies meeting the inclusion criteria specified in Chapter Two, that were either published after Chapter Two manuscript submission or articles that were identified by author (AL) subsequent to Chapter Two manuscript submission.

This addendum mainly presented in the form of supplementary tables will provide an update of existing literature reporting on child abuse experience in women accessing primary health care services use Chapter Two manuscript submission.

2.9 Introduction

Community epidemiology surveys are common and strong associations have been found between child abuse and mental illness and psychosomatic complaints in victims of child abuse (Kimerling & Calhoun, 1994; Spertus, Yehuda, Wong, Halligan, & Seremetis, 2003). As demonstrated in Chapter Two, the experience of mental illness and psychosomatic complaints resulted in many women survivors of child abuse presenting to and receiving treatment from primary health care (PHC) services at some point in their lifetime. However, many of these women may not have had their abuse histories recognised or related mental illness treated with little emphasis placed on screening. Chapter Two provided a review of the few studies published from which rates of child abuse in women presenting for primary health care services could be extracted.

2.10 Methods

To identify studies that have been published following the conducted systematic review, a further literature search was conducted to provide an update on literature examining women accessing primary health care services that reported the types and rates of PHC services utilised and asked women about experiences of child abuse. The search strategy for data extraction in this addendum replicated the search strategy used in Chapter Two (Appendix/Table 2.3). However, publication dates was limited to year 2000 to year 2012. In line with Chapter Two, studies presented in the supplementary tables included studies that:

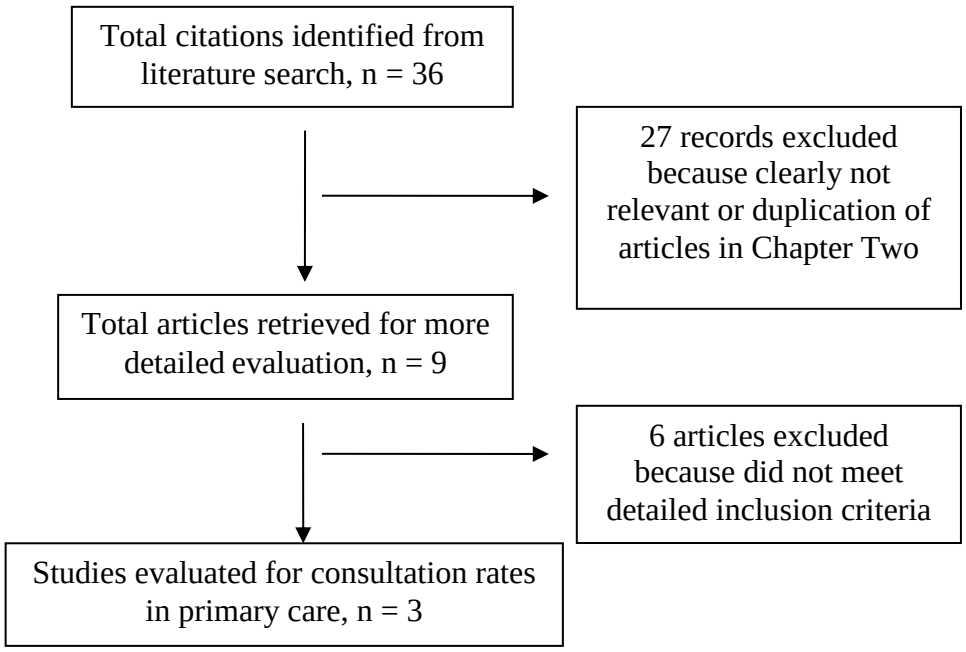
- Had women participants aged 18 years or older who utilised PHC services such as general or family practice of medicine, health medical organization (HMO), general internal medicine and community health care centres covering any period of time after reaching 18 years of age and who had been asked about their experience of child abuse.
- Were asked about their past experience/(s) of all types of child abuse. This included but was not limited to child sexual abuse (both contact and non-contact), physical child abuse (PCA), emotional abuse (ECA), sexual abuse (CSA), physical or emotional neglect (CNeg) and witnessing family violence (WFV). All attempts were made to classify the types of child abuse suffered by women survivors to provide an accurate account of primary health care service utilisation by abuse type.

Studies reported in languages other than English were excluded. Literature exploring secondary or tertiary care, or which considered primary care for children (under the age of 18 years), or studies which did not ask about women's exposure to child abuse were also excluded.

Data Extraction

Similar to results in Chapter Two, few studies that explored child abuse experiences of women who accessed PHC services were identified. Of thirty six studies identified only three studies met the inclusion criteria (see Supplementary Figure 2.1).

Supplementary Figure 2.1 Citations Identified from Literature Search



Details of the three studies that met the inclusion criteria are presented in Supplementary Table 2.1 and Supplementary Table 2.2

2.11 Results

Supplementary Table 2.1 Study Characteristics.

Authors	Country	Study design	Type of abuse	Assessment Used	Outcome Assessed	Number of participants
Spertus, Yehuda, Wong, Halligan, et al. (2003)	USA	Questionnaire survey of women attending hospital-based women's primary care practice in New York.	ECA PCA CSA Emotional Neglect Child age defined as before 18 years	Childhood Trauma Questionnaire (Bernstein, Fink, Handelsman, & Foote, 1994)	Prevalence of ECA, PCA, CSA and Emotional neglect. Adult trauma Adult Mental Illness: Anxiety, Depression and Somatic Complaints.	205women surveyed. Between 24 and 89 women reported at least low levels of PCA, CSA ECA or Emotional Neglect. Categories were not mutually exclusive.
Duran et al. (2004)	USA	Questionnaire survey of American Indian women attending a Community Health Service Hospital in Albuquerque.	ECA PCA CSA CNeg (Physical and Emotional) Child age defined as before 18 years	Childhood Trauma Questionnaire (Bernstein, et al., 1994), modified by combining emotional and physical neglect into a single summary scale.	Prevalence of abuse with women classified into six mutually exclusive categories of: (i) No abuse; (ii) CNeg only; (iii) CSA and PCA with or without CNeg; (iv) CSA without PCA and with or without CNeg; (v) PCA without CSA and with or without CNeg(vi) ECA without CSA, without PCA and with or without CNeg. Various adult mental illness: Mood, Anxiety, PTSD and Substance disorders	34 women surveyed. A total of 179 women (76.5%; 95% CI=70.4 -81.7) reported an abuse history.

Authors	Country	Study design	Type of abuse	Assessment Used	Outcome Assessed	Number of participants
Gillespie, et al. (2009)	USA	Questionnaire survey of African-American men and women attending primary care and obstetrics-gynecology clinicians of an urban public hospital in Atlanta.	PCA CSA Child age defined as before 14 years Also reported CSA with physical force for those aged 14-17 years.	The Traumatic Events Inventory (unpublished scale Rothbaum JO & Richardson JR, 2000) (Schwartz, Bradley, Sexton, Sherry, & Ressler, 2005)	Prevalence of abuse with women classified into three mutually exclusive categories of: (i) PCA; (ii) CSA; (iii) CSA with physical force. Major Depressive Disorder and PTSD.	1600 men and women surveyed. Of 844 women, 146 reported PCA. Of 837 women, 200 reported CSA. Of 834 women, 141 reported CSA with physical force.

Supplementary Table 2.2 Rates of Child Abuse Reported by Women Accessing Primary Health Care Services

Types of abuse reported	Frequency (%) and *95% confidence intervals* of women participants accessing some form of primary care who reported a history of child abuse		
	Spertus, Yehuda, Wong, Halligan, et al. (2003) N= 203-205	Duran, et al. (2004) N= 234	Gillespie, et al. (2009) N= 834-844-
Physical Child Abuse(PCA)	24/205 (11.7) *7.3-16.1*		146/844 (17.3) *14.8-19.9*
Emotional Child Abuse (ECA)	86/205 (42.0) *35.2-48.7*		
Emotional Neglect	89/205 (43.4) *36.6-50.2*		
Child Sexual Abuse (CSA)	41/203 (20.2) *14.7-25.7*		200/837 (23.9) *21.0-26.8*
Child Sexual Abuse with Physical Force			141/834 (16.9) *14.4-19.5*
Emotional and Physical Child Neglect (CNeg)		19 (8.1) **4.6 -11.6*	
CSA and PCA and with or without CNeg		65 (27.8) *22.1-33.5*	
CSA without PCA and with or without CNeg		39 (16.7) *13.3 -20.1*	
PCA without CSA and with or without CNeg		32 (13.7) *11.5 – 16.0*	
ECA without CSA, without PCA with or without CNeg		24 (10.3) *6.4 -14.2*	

Where papers do not report specific Confidence Intervals (CI), 95% CI for population proportion is calculated using the formula: $p \pm Z_{\alpha/2}\sqrt{\frac{p(1-p)}{n}}$

For 95%CI, $Z_{\alpha/2}$ set value = 1.96, *n*= total sample size, *p* = sample endorsing event/*n*

*Calculation example using CNeg from Duran, et al. (2004) are shown below

p=19/234=0.081196581

$$p \pm 1.96\sqrt{\frac{p(1-p)}{234}} = 0.081 \pm 1.96\sqrt{\frac{0.081(1-0.081)}{234}}$$

$$= 0.081 \pm 1.96\,(0.018)$$

$$= 0.081 \pm 0.035$$

Therefore 0.081- 0.035 = 0.046 and 0.081 + 0.035 = 0.116

95%CI for the percentage value will be 4.6% to 11.6%

2.12 Discussion

All three studies additionally identified for this addendum were conducted in America. Similar to findings in Chapter Two, the definition of 'child' used in the identified studies varied between persons under 14 years to under 18 years. Questionnaires used to assess child abuse also varied although did contained questions that assessed different types of child abuse. Two studies (Duran, et al., 2004; Spertus, Yehuda, Wong, Halligan, et al., 2003) used the Childhood Trauma Questionnaire (CTQ) to assess child abuse; however, in both studies the scale was modified and child abuse types were classified differently. In Duran, et al. (2004) abuse categories were mutually exclusive to avoid multiple membership and physical neglect and emotional neglect were combined into one scale. Physical neglect was omitted in Spertus, Yehuda, Wong, Halligan, et al. (2003) and women could endorse more than one abuse type and results were not separated into mutually exclusive groups. As such, rates of PHC use by women survivors reported from Spertus, Yehuda, Wong, Halligan, et al. (2003) need to be interpreted with caution as it will likely overlap with multiple memberships in the different abuse groups.

In line with Chapter Two, studies included in this addendum demonstrated that the rates of child abuse experience reported by women accessing PHC varied markedly. Spertus, Yehuda, Wong, Halligan, et al. (2003) found that the women with emotional neglect and emotional child abuse was associated with the more PHC access. Spertus, Yehuda, Wong, Halligan, et al. (2003) and Gillespie, et al. (2009) identified that between 20-24% of women accessing PHC had experiences of child sexual abuse. Different types of child abuse may therefore result in different consequences for adult women survivors that have implications for PHC access.

A further implication of the combined systematic review (including studies reported in Chapter Two and this addendum) was that only 11 studies meeting the inclusion criteria were identified. This highlights the lack of research measuring the rates of child abuse experience in women accessing PHC. A great deal of variation in methodology between the measures used was also found in all the identified studies. In particular, there were inconsistencies in the definition of 'child' and different measures of child abuse were used across studies with different ways of categorising abuse types. There is therefore a need for further and more comprehensive and coordinated research in this area.

2.13 References

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CHAPTER THREE. EXPANDED METHODS

To investigate the relationship between child abuse and women's mental health as well as the perceptions and practices of health practitioners in screening and supporting women survivors of child abuse, two studies were conducted.

Study One focused on women survivors of child abuse.
Study Two focused on various health practitioners.

This chapter presents the expanded methodology for both studies. It details recruitment, study completion procedures and measures utilised, which could not be fully covered within the manuscripts submitted for publication in the thesis by publication format.

3.1 Expanded Methods Study One: Women Survivors of Child Abuse

3.1.1 Study Aims

- To explore the relationship between women's current mental health and five types of child abuse experiences: physical, sexual, emotional, neglect and witnessing family violence.
- To explore whether experiences of multiple types of abuse (i.e. physical, emotional, sexual, neglect and witnessing family violence) worsen mental health and whether there were interactions between the five different abuse types when examining women's mental health.
- To ascertain the health services sought by women survivors of child abuse, whether women were asked by health practitioners about their child abuse experience and women's thoughts on being asked about such experiences

3.1.2 Study Design

A cross-sectional semi-structured interviewer assisted questionnaire was conducted with 108 women over the ages of 18 years with experience/(s) of child abuse between January 2010 to April 2012.

3.1.3 Participants and Recruitment

Inclusion Criteria

- Women aged 18-years or above with experience/(s) of childhood maltreatment or abuse.

Exclusion Criteria

- Women under the ages of 18
- Women who is not proficient in English language.
- Women who are deemed too unwell to participate by treating clinician

To capture data from both clinical and community samples, women were recruited using several methods and a wide variety of sources such as:

1. Advertisement in hospitals, medical and community health centres.

Flyer about the study (Appendix 1), including the type of participant sought and a brief lay person description of the nature and purpose of the study were displayed in public areas and waiting rooms after permission from each medical and community health centre was obtained.

2. Open advertisement in the general print and online media.

Advertisement detailing the type of participants required, and a brief lay person statement about the purpose and nature of the study were placed in both print and online media such as the Local Leader in the Monash and Bayside area, The Herald Sun, websites such as Beyond Blue, Centre Against Sexual Assault, General Practice Victoria, Australian Psychological Society and Monash Memo.

3. By referral from GPs and other health practitioners

GPs and other relevant health professionals were asked to verbally inform female patients who they thought appropriate and who met the study inclusion and exclusion criteria of the project. Interested patients were provided with initial study information and contact details of author (AL).

4. Adult psychiatric inpatients

Study information was presented to treating practitioners at the Alfred Adult Inpatient Psychiatric Unit. Appropriate patients nominated were approached to discuss their suitability for participation. Once participants who appeared suitable were identified and approached, interested participants were invited to discuss the study either in person or via the telephone and provided with a verbal and written explanation in the form of a plain language statement (Appendix 2) of the study. During this initial meeting potential participants were given the opportunity to ask questions about the research and the requirements of participation. Participants could then choose to participate, decline participation or contact the author (AL) should they wish to participate at a later date.

A consent form was initially included but due to the sensitive nature of the study, it was withdrawn after the first five recruited participants expressed concerns of having their names on the consent form and kept on record. Consequently, to further protect participants' anonymity, participants were provided with a study identification number with all identifying information deleted once study questionnaire and interview were completed. Ethical approval was sought and obtained for this amendment. Completion of the study questionnaires and interview implied consent to participate; however, consent can be withdrawn after completion by providing the study identification number

3.1.4 Measures

The study questionnaire consisted of two parts.

Part 1 (Appendix 3), which takes approximately 40 minutes to 90 minutes to complete was designed to collect:

1. *Demographic information:* Age, marital status, living situation, residential area, level of education, employment status and income.
2. *Current mental health status*:
   - Post-traumatic stress symptoms were investigated using the PTSD checklist-civilian version (*PCL-C*) (Weathers, Huska, & Keane, 1991). The PCL-C is a 17-item self-report measure, which was used to assess both the frequency and severity of post-traumatic stress symptoms that fall into three symptom clusters: re-experiencing, avoidance or numbing, and arousal following non-combat related traumas. Items are measured on a five-point Likert scale (1 = not at all to 5 = extremely) with scores ranging from 17 to 85 (Weathers, et al., 1991). Higher scores indicated greater pathology; a score of 44 and above is considered posttraumatic stress disorder (PTSD) positive (Blanchard, Jones-Alexander, Buckley, & Forneris, 1996). It has sound psychometric properties, with internal consistency Cronbach's alpha (α) of .97 and test-retest reliability *r* =.96. It has sensitivity of .82 and specificity of .83 and concurrent validity with moderate to strong correlations (*r* =.75) with the Clinician Administered PTSD Scale. (Committee on Treatment of Posttraumatic Stress Disorder Institute of Medicine, 2008). Cronbach's α calculated for this sample was .93
   - Beck-Depression Inventory Second Edition (BDI- II) (Beck, Brown, & Steer, 1996) The BDI-II is a self-administered 21 item self-report scale measuring the severity of core depression symptomatology in line with the depression criteria of the *Diagnostic and Statistical Manual of Mental Disorder Fourth Edition* (DSM–IV) (American Psychiatric Asssociation, 2000). Scores range from 0 to 63; higher scores indicated greater depression. Scores of 13, 19, 28 and 63 are cut-points for minimal, mild, moderate and severe depression respectively. It takes approximately 10 minutes to complete and has sound psychometric properties of internal consistency Cronbach's α = 92, test-retest reliability of *r* =.93 with moderate to strong correlation (.71) with the Hamilton Rating Scale for Depression-Revised (Beck, et al., 1996). Cronbach's α calculated for this sample was .92.
   - Beck-Anxiety Inventory (BAI) (Beck & Steer, 1993) The BAI is a self-administered 21 item self-report scale measuring the severity of core anxiety symptomatology in line with the anxiety criteria of the DSM–IV (American Psychiatric Asssociation, 2000) with scores ranging from 0 to 63; higher scores indicated greater anxiety. Scores of 7, 15, 25 and 63 are cut-points for minimal, mild, moderate and severe

anxiety respectively. It takes approximately10 minutes to complete and has sound psychometric properties of internal consistency Cronbach's α =.92 and test-retest reliability *r* =.75 with moderate correlations with the trait (.58) and state (.47) subscales of the State-Trait Anxiety Inventory (Beck & Steer, 1993). Cronbach's α calculated for this sample was .91.

3. Exposure to childhood abuse was investigated using the Comprehensive Child Maltreatment Scale for Adults (CCMS-A). The CCMS-A is a 22-item self-report instrument, which requires participants to retrospectively report on their caregivers' behaviours on a 5-point Likert scale before participants were 18 years of age. It contains five subscales. Eleven items assessed CSA with scale anchors of 0=never to 5=more than 20 times. PCA, ECA and CNeg were each assessed with three items whilst two items assessed WFV all with anchors of 0=never or almost never to 4=very frequently. A total score can be calculated by summing all the subscales (Higgins & McCabe, 2001). Responses can be dichotomised, with participants reporting their caregivers at least occasionally engaged in the behaviour listed within the subscales as having experienced the corresponding type of abuse, whilst participants who indicated their caregivers never or almost never engaged in the behaviours listed within the subscale categorised as not having experienced the corresponding type of abuse (Senn & Carey, 2010). Alternatively mean scores for each abuse type is calculated based on the sample and those scoring above the mean can be classified as experiencing the corresponding abuse type (Higgins, 2011). The CCMS-A has sound psychometric properties. The internal consistency Cronbach's α has been shown to be .93 for the total score and α=.66 to .88 for the subscales. Test-retest reliability was found to be *r* =.75 with moderate to strong correlations with the Child Abuse and Trauma Scale (Higgins & McCabe, 2001). Cronbach's α calculated for this sample was: CSA (.87), PCA (.70), ECA (.70), Cneg (.74), WFV (.83) and total score (.84).
4. Prior health service use which included the types of services utilised, if women were asked about their child abuse experiences by health practitioners and how they felt when asked about such experiences. Women who were not asked by health practitioner about their child abuse experiences were given a hypothetical question on how they would feel if asked about their child abuse experiences by a health professional.
5. Child abuse disclosures to authorities or others, whether the person/(s) they disclosed to was helpful and two open ended questions on what women found helpful in coping with

their experience and what women thought are the major issues associated with child abuse was also collected.

Part 2 consisted of the clinician administered Mini International Neuropsychiatric Interview version 6.0 (MINI) (Sheehan et al., 2009), which takes approximately 30 minutes to 60 minutes to complete. The MINI is an abbreviated clinician/researcher administered structured interview, which corresponds to the mental illness diagnostic criteria of the DSM-IV (American Psychiatric Asssociation, 2000) in which the clinician/researcher asks set questions regarding the presence of symptoms and participants are generally required to answer either "yes" or "no". The disorders assessed by the MINI are: major depressive episode, suicidality, manic episode, major depressive disorder, hypomanic episode, bipolar I disorder, bipolar II disorder, bipolar not otherwise specified, panic disorder, agoraphobia, social phobia (social anxiety disorder), obsessive-compulsive disorder, post-traumatic stress disorder, generalised anxiety disorder, alcohol abuse and dependence, non-alcohol substance abuse and dependence, psychotic disorders, mood disorders with psychotic features, anorexia nervosa, bulimia nervosa and antisocial personality disorder. An assessment of suicide risk in the past month is also provided with a score of 1-8, 9-16 and more than 16 categorised as low, moderate and high risk respectively (Sheehan, et al., 2009). The scope of this thesis was on Axis I disorders, which excluded antisocial personality disorder. The MINI has adequate kappa coefficient, sensitivity and specificity against the Composite International Diagnostic Interview (Lecrubier et al., 1997) and the Structured Clinical Interview for DSM Disorders (Sheehan et al., 1997).

3.1.5 Study Completion

Participants were given the option to complete the entire study questionnaire at their respective centres where they are receiving either psychiatric care or counselling services or other medical services, or to complete the interview at the Monash Alfred Psychiatry Research Centre or at various Monash University locations.

Participants who were not comfortable with a face-to-face meeting, living in rural and remote or interstate locations were also provided the opportunity to complete the entire questionnaire/interview over the telephone or to be mailed out part 1 of the questionnaire and complete part 2 of the interview over the telephone.

Given the sensitive nature of the study, author (AL) who is a registered psychologist trained in trauma counselling with experience working with women who have experienced trauma, conducted all interviews with participants. This is to further ensure that should an

unforeseen or adverse event arise during completion of the questionnaire, participants will have immediate clinical care. However author (AL) was not be involved in the ongoing clinical care of participants.

Upon completion of study questionnaire and interview, all participants were provided with options to access psychological support and a list of local government mental health services. A small card with contact details of author (AL), other relevant agencies and 24 hours telephone counselling services should an unforeseen or adverse event arise after completion of the questionnaire was also provided (Appendix 4).

3.2 Expanded Methods Study Two: Health Practitioners

3.2.1 Study Aims

To explore various health practitioners' practice, attitude and beliefs on child abuse and its impact on women as well as practitioners' confidence and comfort levels in screening and supporting women survivors of child abuse.

3.2.2 Study Design

A cross-sectional questionnaire survey was conducted with 186 health practitioners such as GPs, psychiatrists, psychologists, social workers, counsellors, psychotherapist and mental health nurse and other specific mental health practitioners.

3.2.3 Participants and Recruitment

Inclusion Criteria

- Health practitioners who are qualified and may provide services to women survivors of child abuse such as psychiatrists, psychologists, general practitioners, social workers, psychotherapists, counsellors, mental health nurses and occupational therapists.

Exclusion Criteria

- Health practitioners who are not proficient in English language.

To capture data from a wide range of health practitioners from different fields, health practitioners were recruited using several methods:

1. Advertisement in hospitals, medical and community health centres.

Practice managers of various medical centres and community health centres were approached. Study flyer (Appendix 5) including the type of health practitioner sough and a

brief lay person description of the nature and purpose of the study with a link to the online survey were provided to practice managers to distribute to health practitioners and left at medical and community health centres staff rooms.

2. Open advertisement in the general print and online media.

Advertisement detailing the type of health practitioner sought, and a brief lay person statement about the purpose and nature of the study and link to the online survey were placed in both print and online media such beyond blue, Centre Against Sexual Assault, General Practice Victoria, various local Division of General Practice Newsletters, Australian Psychological Society and Monash Memo.

Health practitioners completed the questionnaire by accessing the survey link provided on the flyer or advertisement or by contacting author (AL) via telephone to receive an electronic or hard-copy questionnaire. Study information (Appendix 6) was presented when health practitioners accessed the online link or it was mailed out with the hard copy questionnaire and a reply paid envelope. Practitioners' consent to participate is implied via completion and submission of the electronic survey or return of the anonymous hard-copy survey.

3.2.4 Measures

The cross questionnaire (Appendix 7) collected information on:

1. *Demographic information:* Age, gender, profession and years of practice.
2. *Workplace characteristics:* location and type of practice.
3. Attitudes, beliefs, confidence and current practice with women survivors of childhood abuse.
4. Training needs and an open ended question on barriers to screening survivors of child abuse.

   To the author's knowledge, there were no established questionnaires to ascertain the characteristics of practice, attitudes, beliefs and confidence of health practitioners in assisting women survivors. To allow assessment of these characteristics, the Clinician Feedback Questionnaire (CFQ) was developed. The CFQ consists of a total of 41 items which included six items adapted from a British survey (Richardson, et al., 2001) that looked at health professionals' attitudes and clinical practice with women who experience domestic violence and survivors of child sexual abuse. To develop the remaining CFQ items, a set of domains relating to key aspects of clinical practice relating to treatment of adult child abuse survivors were

identified from a review of the literature. These included: prevalence of clients with the comorbidity; attitudes and beliefs; confidence and perceived importance of aspects of practice; comfort with screening for abuse sub-types; perceived training needs and beliefs about screening. A pool of potential items were developed for each domain and refined in consultation amongst the study authors to develop the final survey.

As a final phase of validation, pre-testing was conducted with a sample of health practitioners including a general practitioner, a psychiatrist, a neuropsychologist and three clinical psychologists to ensure face validity, and appropriateness of items and format. Comments received were incorporated into the finalised questionnaire.

As the survey was exploratory in nature, formal psychometric testing of reliability or validity was not performed.

The final CFQ consists of 41 items:

- Six items (13a, b, d, f, I &j) were adapted from a British survey (Richardson, et al., 2001) which looked at health professionals' attitudes and clinical practice with women who experience domestic violence and survivors of childhood sexual abuse. The term 'domestic violence/child sexual abuse' was replaced with 'child maltreatment'. Original scale anchors of 'agree, uncertain or disagree' and 'yes/no' were changed to scale anchors which ranged from 1 'strongly disagree' through to 5 'strongly agree'.
- A further four items (questions 13c, e, g & h) were added asking about clinicians' attitude and beliefs using the same scale anchors.
- Fourteen items explored clinicians' demographics (questions 1-3& 5) and current practice (questions 4, 6, 7-12).
- Eleven items (questions 14a-16e) explored the importance, confidence and comfort level in dealing with issues surrounding screening, supporting and referring survivors; scale anchors ranged from 1 'not important' through 4 'very important', 1 'not confident' through 4 'very confident', 1 'not comfortable' through 4 'very comfortable' respectively.
- The remaining items asked about: the need for further training in responding to adult women survivors of child maltreatment (question 17a-d); who clinicians believe should be screening survivors (question 18); and perceived barriers to screening for experiences of childhood maltreatment in their practice (question 19).

3.3 Research Ethics Committee Approvals

The protocol for both studies (Appendix 8-10) was approved by Alfred Research Ethics Committee (304/09), Monash University Human Research Ethics Committee (CF09/2776 – 2009001597) and Latrobe Regional Hospital Human Research Ethics Committee (2010-04).

CHAPTER FOUR. CHILD ABUSE AND WOMEN'S MENTAL HEALTH: MODERATING PROCESSES

MANUSCRIPT ONE

Study One

This chapter constitutes a manuscript submitted for publication in Child Abuse & Neglect.

4.1 Specific Declaration for Thesis Chapter Four

In the case of Chapter Four, the nature and extent of my contribution to the work was the following:

Nature of contribution	**Extent of contribution (%)**
Key ideas, formulation of study design, review of appropriate literature, securing ethics approval, recruitment of participants, creating study questions, data analyses, and writing of manuscript.	85%

The following co-authors contributed to the work.

Name	**Nature of contribution**
Dr. Stuart Lee	Critical review of study questions created and manuscript.
Assoc. Prof Jan Coles	Critical review of study questions created and manuscript.
Prof. Jayashri Kulkarni	Critical review of study questions created and manuscript.

Candidate's Signature	[redacted]	**Date** 21/08/2012

Declaration by co-authors

The undersigned hereby certify that:

(1) the above declaration correctly reflects the nature and extent of the candidate's contribution to this work, and the nature of the contribution of each of the co-authors.
(2) they meet the criteria for authorship in that they have participated in the conception, execution, or interpretation, of at least that part of the publication in their field of expertise;
(3) they take public responsibility for their part of the publication, except for the responsible author who accepts overall responsibility for the publication;
(4) there are no other authors of the publication according to these criteria;
(5) potential conflicts of interest have been disclosed to (a) granting bodies, (b) the editor or publisher of journals or other publications, and (c) the head of the responsible academic unit; and
(6) the original data are stored at the following location(s) and will be held for at least five years from the date indicated below:

Location(s)	Monash Alfred Psychiatry Research Centre, The Alfred Hospital, Prahran, VIC 3181.

		Date
Signature 1	[redacted]	21/08/2012
Signature 2		21/08/2012
Signature 3		21/08/2012

4.2 Preamble to manuscript

Women survivors of child abuse have been documented to have poorer mental health; however, many studies exploring the impact of child abuse have focussed solely on either one type of child abuse or a combination of child abuse types. Few studies explored the impact of all five types of child abuse (physical child abuse, emotional child abuse, child sexual abuse, child neglect and witnessing family violence) on women's mental health and fewer still accounted for the interaction between abuse types.

To expand on the existing literature, this manuscript aims to explore the impact of all five types of child abuse and the moderating interactions amongst the five abuse types on women's mental health with a focus on depression, anxiety and post-traumatic stress utilising standardised instruments.

Child Abuse and Women's Mental Health: Moderating Processes

4.3 Abstract

Objectives

Child abuse has previously been found to be related to mental illness in adulthood. This study explored how five types of child abuse: physical child abuse, emotional child abuse, child sexual abuse, child neglect and witnessing family violence predicted depression, anxiety and post-traumatic stress symptoms in women. It further explored the moderating interactions between the five abuse types.

Methods

A cross-sectional interviewer-assisted questionnaire was conducted with 108 women survivors of child abuse. Women were recruited from multiple sources. The questionnaire consisted of standardised assessments collecting information on: five different types of child abuse experience prior to the age of 18 years, depression, anxiety and post-traumatic stress symptom severity and mental illness diagnosis via a clinician administered assessment tool.

Results

All participants experienced at least two types of abuse, most reported at least mild levels of depression and anxiety, and endorsed symptoms of post-traumatic stress. Previous suicide attempt was reported by 46% of participants and 24% reported at least one psychiatric admission in their lifetime. After accounting for all types of abuse and interactions between abuse types, witnessing family violence, child neglect and child sexual abuse were found to be significant predictors of depression severity, whilst child neglect and witnessing family violence were significant predictors of post-traumatic stress. Witnessing family violence was found to moderate the effects of physical abuse on depressive and post-traumatic stress symptoms, and emotional abuse on post-traumatic stress symptoms.

Conclusions

Mental illness complicated by suicide risk and psychiatric hospitalisation was experienced by many women survivors in this sample. Child neglect in particular was associated with an increased risk of depression and post-traumatic stress symptoms in adulthood. Of further clinical significance, all women sampled experienced multiple types of abuse highlighting

the need for clinicians to assess for and address multiple issues faced by this vulnerable population, to minimise the potential for adverse outcomes. Further research in this area should consider all types of child abuse and the interaction between abuse types when examining mental health outcomes as it affects the strength and direction of the relationship between abuse experiences and mental illness.

Keywords: Child Abuse, Mental Illness, Depression, Anxiety, Post-Traumatic Stress, Moderation

4.4 Introduction

Experiences of child abuse have been consistently shown to increase the likelihood of various mental illnesses in adulthood (Edwards, et al., 2003; Foa, 2000; Green, et al., 2010; Higgins & McCabe, 2000b; McLaughlin, et al., 2010; Mullen, et al., 1996; Schneider, et al., 2007). Childhood ecology theories espoused that child abuse can be highly traumatising and disruptive to psychological, social, cognitive and physiological development that may persist into later life. For example, attachment theory posits that the bidirectional parent-child attachment, which is critical for the formation of the concept of self and of others, is disrupted by experience of child abuse (Briere & Scott, 2006; Prior & Glaser, 2006). This can result in interpersonal difficulties in later life, potentially impairing the ability of the person to regulate their own emotions and to access support from others when experiencing emotional distress (Stalker, et al., 2005). Formation of cognitions such as perceptions of helplessness, chronic danger and thoughts relating to poor self-worth or self-efficacy may also stem from child abuse experience predisposing victims to mental illness in adulthood (Briere, 1992a). A physiological explanation has also been proposed, whereby exposure to abuse affects brain development (Bremner, Randall, Vermetten, Staid, et al., 1997) and long term dysregulation of the hypothalamic–pituitary–adrenal axis (HPA-Axis), which is the physiological system that regulates levels of the stress hormone cortisol (Wilkinson & Goodyear, 2011). This may reduce immune system capacity and impair ability to cope with stress (Bremner, Randall, Vermetten, Staid, et al., 1997; Briere & Scott, 2006; van der Kolk, 1994), increasing the likelihood of various mental illness.

A number of studies have found that specific types of child abuse (and its combination) are associated with different problems in adulthood. For example in a study conducted by Hetzel and McCane (2005), victims of child sexual abuse (CSA) and CSA combined with physical child abuse (PCA) had higher post-traumatic stress symptoms compared to victims of PCA only and those who were not abused in childhood. Similarly, depressive symptoms were experienced more frequently by adolescents exposed to both CSA and PCA, compared to those who experienced PCA or had no abuse history (Danielson, et al., 2005).

Most previous studies have examined one specific type of child abuse experience such as sexual abuse only (Molnar, et al., 2001) or a limited combination of abuse types: such as physical, sexual and emotional abuse (Mullen, et al., 1996; Schneider, et al., 2007); or physical, sexual, neglect and family violence (McLaughlin, et al., 2010); or physical,

sexual and witnessing family violence (Edwards, et al., 2003). Given that victims of one type of abuse are more likely to also experience other types of abuse (Dong, Anda, Felitti, Dube, Williamson, Thompson, et al., 2004; Higgins & McCabe, 2000a), this method of exploration may give rise to misleading conclusions on the specific abuse type or a combination of abuse types if studied in isolation to other abuse types. Therefore, there is a particular need to identify and assess for the experience of all five types of child abuse: PCA, emotional child abuse (ECA), CSA, child neglect (CNeg) and witnessing family violence (WFV).

The potential for interactions between abuse types in influencing adult mental illness or adjustment can only be rigorously investigated when all five types of abuse experiences are assessed. In a community sample study conducted by Higgins, McCabe, and Ricciardelli (2003), moderating interactions were found between five pairs of abuse types (CSA and WFV; CSA and PCA; PCA and WFV; PCA and ECA; and ECA and CNeg) when predicting trauma symptomatology. This indicates that the impact of a particular type of child abuse on trauma symptomatology may depend on the level of another child abuse type. Further moderating interactions were found between PCA and ECA when predicting self-depreciation. However, the impact of the moderating effects of the different types of abuse was not explored for mental illnesses such as depression and anxiety, which has documented to be prevalent amongst women survivors of child abuse (World Health Organization, 2011).

Other limitations of prior studies include utilisation of one question dichotomous (yes or no) items to ascertain prior child abuse experiences (Schneider, et al., 2007). These dichotomous one question items do not account for frequency or severity of the abuse experienced, that have been shown to be related to mental health outcomes (Briere & Scott, 2006). Instead, utilising a continuous scale or measuring abuse on a continuum is recommended to allow for examination of the degree of abuse experienced (Higgins & McCabe, 2001)

While prior studies provided useful information regarding the association of child abuse experiences and its impact on adult adjustment or mental illness in adulthood, this present study aims to expand upon and address limitations of the existing literature regarding the association of child abuse experiences and its impact on mental illness. This study focuses on women survivors of child abuse who have been found to have an increased rate of mental illness in adulthood (Thompson, et al., 2004), in particular depression, anxiety and post-traumatic stress disorder. This study further aims to explore the extent to

which all five types of child abuse (PCA, ECA, CSA, CNeg and WFV) simultaneously predict depression, anxiety and post-traumatic stress symptoms, utilizing standardised questionnaires with adequate psychometric properties. It will further explore the moderating interactions between the five different abuse types in predicting mental illness.

4.5 Methods

Participants

A total of 108 women survivors of child abuse participated in this study. Data for one participant was removed due to extreme scores (Tabachnik & Fidell, 2000), yielding a final sample size of 107. Participants were recruited between the periods of January 2010 to April 2012 using the following approaches: (a) flyers placed in various community health centres, hospital, specialist counselling service and university, (b) newspaper advertisement, (c) advertising about the project on mental health websites, (d) word of mouth. Participants were included in the study if they endorsed having had child abuse experience/(s) before the age of 18 years, were female, at least 18 years of age, proficient in English language and capable of providing informed consent.

Measures

To assist in characterising the sample the following demographic information was collected: age, marital status, living situation, and residential area, level of education, employment status and income.

The following provides an overview of the standardised tools completed by participants.

- Comprehensive Child Maltreatment Scale for Adults (CCMS-A).

The CCMS-A is a 22-item self-report instrument, which requires participants to retrospectively report on their caregivers' behaviours on a 5-point Likert scale before participants were 18 years of age. It contains five subscales. Eleven items assessed CSA with scale anchors of 0 = never to 5 = more than 20 times. PCA, ECA and CNeg were each assessed with three items whilst two items assessed WFV all with anchors of 0=never or almost never to 4=very frequently. A total score can be calculated by summing all the subscales (Higgins & McCabe, 2001). Responses can be dichotomised, with participants reporting their caregivers at least 'occasionally' engaged in the behaviour listed within the subscales as having experienced the corresponding type of abuse, whilst participants who indicated their caregivers never or almost never engaged in the behaviours listed within the

subscale categorised as not having experienced the corresponding type of abuse (Senn & Carey, 2010). The CCMS-A has sound psychometric properties. Internal consistency has been shown to be α =.93 for the total score and α =.66 to .88 for the subscales. Test-retest reliability was found to be *r* =.75 and moderate to strong correlations with the Child Abuse and Trauma Scale (Higgins & McCabe, 2001). Cronbach's alpha calculated for this sample was: CSA (.87), PCA (.70), ECA (.70), CNeg (.74), WFV (.83) and total score (.84).

- PTSD checklist-civilian version (PCL-C)

The PCL-C is a 17-item self-report measure which was used to assess both the frequency and severity of post-traumatic stress symptoms that fall into three symptom clusters: re-experiencing, avoidance or numbing, and arousal following non-combat related traumas. Items are measured on a five-point Likert scale (1 = not at all to 5 = extremely) with scores ranging from 17 to 85 (Weathers, et al., 1991). Higher scores indicated greater pathology; a score of 44 and above is considered post-traumatic stress disorder (PTSD) positive (Blanchard, et al., 1996). It has sound psychometric properties. Internal consistency has been found to be α = .97 with test-retest reliability *r* = .96. It has sensitivity of .82 and specificity of .83 and concurrent validity with moderate to strong correlations (*r* =.75) with the Clinician Administered PTSD Scale (Committee on Treatment of Post-traumatic Stress Disorder Institute of Medicine, 2008). Cronbach's alpha calculated for this sample was .93.

- Beck-Depression Inventory Second Edition (BDI- II)

The BDI-II is a self-administered 21-item self-report scale measuring the severity of core depression symptomatology. Scores range from 0 to 63; higher scores indicated greater depression. Scores of 13, 19, 28 and 63 are cut-points for minimal, mild, moderate and severe depression respectively. It has sound psychometric properties. Internal consistency was found to be α = .92, with test-retest reliability *r* = *.93* and concurrent validity of moderate to strong correlation (*r* = .71) with the Hamilton Rating Scale for Depression-Revised (Beck, et al., 1996). Cronbach's alpha calculated for this sample was .92.

- Beck-Anxiety Inventory (BAI)

The BAI is a self-administered 21-item self-report scale measuring the severity of core anxiety symptomatology with scores ranging from 0 to 63; higher scores indicated greater anxiety. Scores of 7, 15, 25 and 63 are cut-points for minimal, mild, moderate and severe

anxiety respectively (Beck & Steer, 1993). It has sound psychometric properties. Internal consistency has been found to be $\alpha = .92$ with test-retest reliability $r = .75$ and concurrent validity of moderate correlations with the trait ($r = .58$) and state ($r = .47$) subscales of the State-Trait Anxiety Inventory (Beck & Steer, 1993). Cronbach's alpha calculated for this sample was .91.

- Mini International Neuropsychiatric Interview version 6.0 (M.I.N.I.).

The MINI consists of an abbreviated structured interview which corresponds to Axis I, clinical disorders of the Diagnostic Statistical Manual of Mental Disorders (American Psychiatric Asssociation, 2000) in which the researcher asks set questions regarding the presence of symptoms to which participants answer either "yes" or "no". An assessment of suicide risk in the past month is also provided with a score of 1-8, 9-16 and more than 16 categorised as low, moderate and high risk respectively (Sheehan, et al., 2009).

Procedure

The study procedure for this research project was approved by Alfred Research Ethics Committee (304/09), Monash University Human Research Ethics Committee (CF09/2776 – 2009001597) and Latrobe Regional Hospital Human Research Ethics Committee (2010-04). Interested participants were invited to contact first author AL via email or telephone. A brief explanatory statement and a screener question were then presented to interested participants on whether they have experienced abuse in childhood. A full explanatory statement was then emailed or posted out to interested participants who had experienced child abuse.

Due to the sensitive nature of the study and to protect participant's anonymity, participants were provided with a study identification number with all identifying information deleted once participants completed the study questionnaire and interview. Completion of the study questionnaires and interview implied consent to participate; however, consent could be withdrawn after completion by providing a study identification number.

The survey consisted of two parts. Part 1 contained questionnaires which participants could choose to complete in person, on their own or via telephone, which took approximately 40- 90 minutes to complete. Part 2 consisted of an interviewer administered questionnaire which could be completed in person or via the telephone, which took approximately 30- 60 minutes to complete. These options were provided to enhance the

diversity of sample and to not exclude people who could not travel or felt uncomfortable in face to face meetings. First author AL conducted all interviews and is a registered psychologist with clinical experience in working with trauma survivors. All study participants were asked at the end of the interview if they wished for further psychological support with relevant information provided and information of 24-hour crisis telephone help lines were also provided to all participants. Those who travelled were compensated $20.

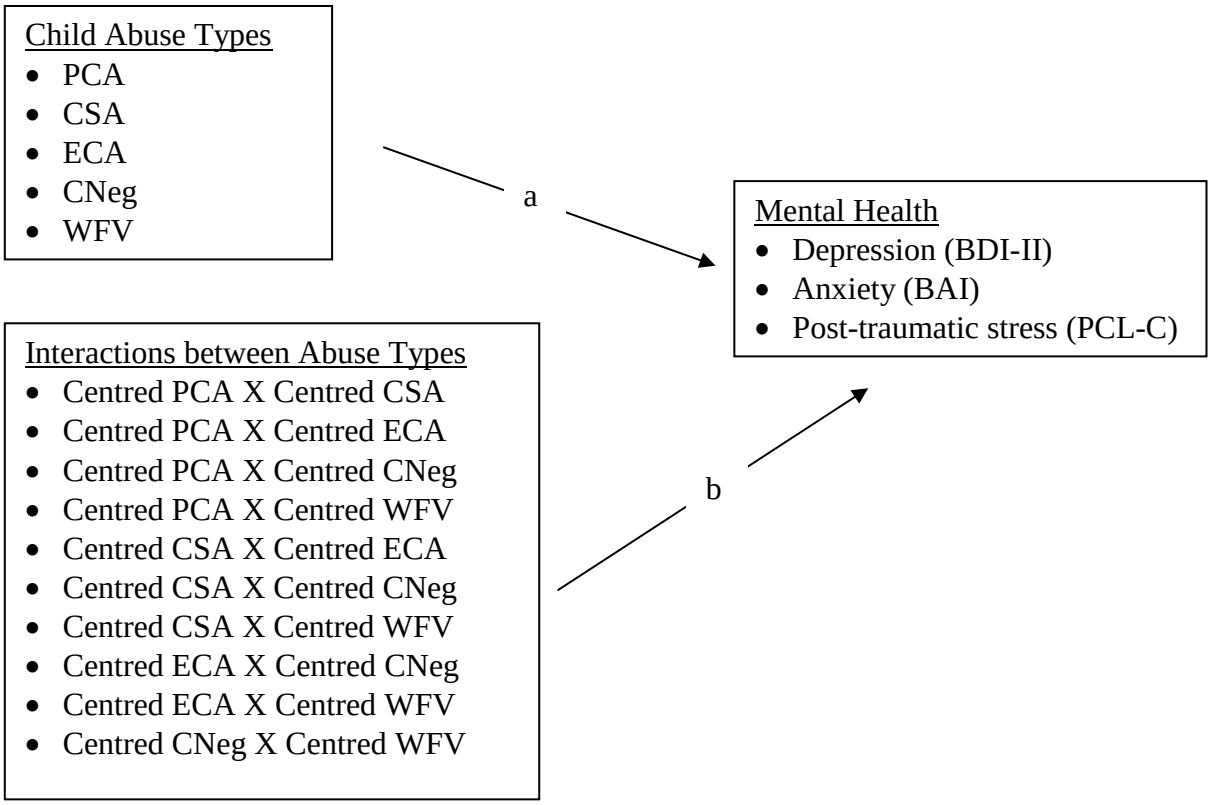
Analytic strategy

Data analyses were conducted utilising IBM SPSS Statistics version 20 (IBM Corp, 2011). Descriptive analyses such as percentages and means was utilised to demonstrate cumulative responses of women survivors. Pearson's correlation analyses were utilised to identify correlated socio-demographic (age, years lived in community, marital status, living situation and income) and study variables, as well as to explore the extent to which different abuse types are related to current severity of depression, anxiety and post-traumatic stress.

Hierarchical multiple linear regression analyses were utilised to explore the extent to which the different maltreatment and abuse subtypes from the CCMS-A predict the severity of depression, anxiety and post-traumatic stress symptoms. Socio-demographic variables that were significantly correlated with study variables were included in the model as step one of the analysis.

To assess for additional contributions of moderator-interactions (depicted in Figure 4.1) among abuse types on severity of depression, anxiety and post-traumatic stress disorder, hierarchical multiple linear regression analyses was utilised based on steps outlined by Baron and Kenny (1986) and Aiken and West (1991). The five child abuse scores were entered in the first step of the model. To avoid multicolinearity in the interaction terms, each variable was centred by obtaining the mean score of each of the abuse type and then subtracting it from the respective score. The centred scores were then multiplied to obtain an interaction term. The ten different possible two-way interactions between abuse types were then entered in to the last step of the model (Aiken & West, 1991; Baron & Kenny, 1986).

Figure 4.1 Model Showing Direct Effects of Abuse Scores (path a) and Moderating Effects of Other Abuse Types (path b) on the Relationship with Mental Health.



To understand the moderating relationship between abuse types on mental health, plots and post-hoc probing of significant interactions between abuse types was conducted based on procedures described by Aiken and West (1991). Predicted values were estimated using the mean of the variables in the interaction terms. All variables are centred and for significant interaction terms, the simple slopes of the regression were then probed at one standard deviation above and below the centred variables (Aiken & West, 1991; Cohen & Cohen, 1983).

4.6 Results

Sample Characteristics

Demographic information is presented in Table 4.1. Participants in the present study had a mean age of 40.7 (SD = 12.9). A large proportion of participants were single or never married (42.1%), lived alone/with unrelated other (35.5%), had completed a university degree (43.9%), were part-time employed (28.0%) and had an annual income over $12000 (86.8%).

Table 4.1. Participant Demographics

	Frequency	%
Years lived in Community (N=107)		
All my life	13	12.1
More than 5 years	49	45.8
1-5 years	31	29.0
Less than 1 year	14	13.1
Marital Status (N = 107)		
Married/defacto	39	36.4
Divorced/separated	21	19.6
Widowed	2	1.9
Single/never married	45	42.1
Living Situation (N =107)		
Alone/with unrelated others	38	35.5
Spouse/partner no children	31	29.0
Spouse/partner with children	15	14.0
Sole parent with children	8	7.5
Living with parents	12	11.2
Other	3	2.8
Education (N=107)		
Part of high school	10	9.3
High school completed	8	7.5
Part of Trade/TAFE* certificate	4	3.7
Trade/TAFE* certificate completed	11	10.3
University partially completed	27	25.2
University degree completed	47	43.9
Employment (N=107)		
Full-time	24	22.4
Part-time	30	28.0
Self-employed	4	3.7
Student	21	19.6
Disability/sickness benefits	14	13.1
Home duties or Unemployed	14	13.1
Income (N=106)		
Less than $12000	14	13.2
$12001-$40000	41	38.7
$40001-$60000	19	17.9
$60001-$80000	9	8.5
$80001+	23	21.7

**Note:* In Australia, TAFE or technical and further education provides vocational tertiary educational that is usually below that of a Bachelor degree.

Types of Abuse

The mean severity score of each abuse type, proportion of participants having experienced the specific types of abuse and frequency of co-occurring abuse types are presented in Table 4.2. ECA was the most commonly experienced abuse type with CSA the least commonly experienced. Highlighting the high level of co-occurring abuse types, none of the participants in this sample experienced only one abuse type. The majority of participants (43.9%) experienced four abuse types, 41.1% participants experienced all five abuse types, 13.1% experienced three abuse types and 1.9% experienced two abuse types. The most commonly co-occurring abuse types were ECA and WFV (92.5%).

Table 4.2 Childhood Abuse Experiences of Participants (*N*=107)

CCMS-A	Mean (SD)	Frequency endorsing abuse subtype (%)
ECA	13.81 (7.3)	105 (98.1)
PCA	5.66 (5.7)	98 (91.6)
WFV	4.60 (2.4)	101 (94.4)
CNeg	5.1 (5.3)	83 (77.6)
CSA	10.92 (14.5)	67 (62.6)
Total Score	40.01 (20.71)	
Co-occurring abuse		Frequency (%)
ECA and CSA		66 (61.7)
PCA and CSA		62 (57.9)
WFV and CSA		63 (58.9)
CNeg and CSA		49 (45.8)
ECA and CNeg		82 (76.6)
PCA and CNeg		77 (72.0)
WFV and CNeg		78 (72.9)
ECA and WFV		99 (92.5)
PCA and WFV		93 (86.9)
ECA and PCA		98 (91.6)

Mental Illness Severity and Diagnoses

As shown in Table 4.3, the mean scores on the BDI-II, BAI and PLC-C indicated at least mild levels of depression for 62.6% of participants, at least mild levels of anxiety for 71.0% and a probable diagnosis of PTSD for 45.5% respectively. A total of 101 participants completed the MINI to provide an indication of current and prior mental illness diagnoses. The mean number of lifetime major depressive episodes was 8.2. Forty-six participants (45.5%) reported making a suicide attempt in their lifetime and sample mean ratings of current suicide risk was in the moderate range. Current psychiatric diagnoses included:

Major Depressive Disorder (19.8%), Bipolar Disorder (1.0%), Generalised Anxiety Disorder (17.8%), Social Anxiety (16.9%), Agoraphobia (39.6%), PTSD (17.8%) and alcohol and substance dependence (18.9%) Lifetime mental illness diagnoses included: past Major Depressive Disorder (36.6%), past Bipolar Disorder (17.6%) and Psychotic disorder including mood disorders with psychotic features (23.8%). Twenty-four participants (23.8%) reported at least one voluntary or involuntary psychiatric admission in their lifetime.

Table 4.3. Participants' Mental Illness Characteristics

Mental Health Severity (N=107)	Mean (SD)	Frequency (%)
BDI	19.27 (12.1)	
Minimal		40 (37.4)
Mild		17 (15.9)
Moderate		25 (23.4)
Severe		25 (23.4)
BAI	15.00 (9.9)	
Minimal		31 (29.0)
Mild		28 (26.2)
Moderate		32 (28.8)
Severe		16 (15.0)
PCL-C	43.00 (16.0)	
No Probable PTSD		54 (50.5)
Probable PTSD		53 (49.5)
MINI 6.0 (*N*= 101)		
No. of Major Depressive Episode Lifetime	8.17 (14.4)	
Major Depressive Disorder Past or Recurrent		57 (56.4)
Lifetime Suicide Attempt		46 (45.5)
Suicide Past Month	9.52 (14.7)	
Bipolar I , II or NOS past		14 (13.9)
Bipolar current		1 (1.0)
Mood with psychotic features lifetime		13 (12.9)
Mood with psychotic features recurrent and current		4 (4.0)
Panic Lifetime		40 (11.9)
Panic Past Month		12 (1.0)
Agoraphobia		23 (39.6)
Social Anxiety (Generalised and Non-Generalised)		17 (16.8)
Obsessive Compulsive Disorder Current past month		9 (8.9)
PTSD Past Month		18 (17.8)
Generalised Anxiety Disorder current (past 6 months)		19 (17.8)
Alcohol and Substance Abuse and Dependence		20 (19.8)
Psychotic Disorder Lifetime and Recurrent		8 (7.9)
Eating Disorder- Bulimia Current		10 (9.3)

Child Abuse and Relationship with Mental Illness

To provide the basis for exploring the extent to which different types of abuse predict the current severity of depressive, anxiety and post-traumatic stress severity (measured using the BDI-II, BAI, and PCL-C respectively), Table 4.4 presents the inter-correlations among these mental illness severity measures and ratings on the five abuse subscales. The number of co-occurring types of abuse was also included. Depression severity was significantly positively correlated with CNeg and CSA. Anxiety severity was only significantly positively correlated with CNeg. Post-traumatic stress severity was significantly positively correlated with CNeg and number of abuse types. The strength of the correlations between number of abuse types and the ratings on the five abuse subscales varied from r = .21 for WFV to .38 for PCA and CSA. This suggested that participants with higher numbers of co-occurring abuse types scored consistently higher on PCA and CSA, whereas the relationship was less consistent for WFV.

Table 4.4 Correlations of Abuse Types and Mental Illness Severity (N=107)

	1	2	3	4	5	6	7	8	9
1. BDI	-	.64**	.74**	.08	.12	-.13	.27**	.24*	.17
2. BAI		-	.72**	.10	.11	-.15	.22*	.09	.16
3. PCL-C			-	.15	.15	-.08	.30**	.16	.20*
4. ECA				-	.65**	.35**	.41**	-.06	.34**
5 PCA					-	.40**	.38**	.02	.38**
6. WFV						-	.21*	-.039	.21*
7. CNeg							-	-.04	.33**
8. CSA								-	.38**
9. No. of Abuse									-

Note: Of socio-demographic variables only age was significantly correlated to PCL-C (r=.20*) and years living in current location correlated to No of Abuse (r=.20*).
*p <.05, **p < 0.01

Predicting Depression

None of the socio- demographic variables correlated significantly with depression or the abuse variables, as such were not included in the model. Total variance explained by the model at step one was 17.5%, F (5, 101) = 4.29, p = .001 (see Table 4.5). Higher CNeg (β = .30, p = .004), CSA scale (β=.24, p = .010) and lower WFV scores (β=-.21, p = .035) were significantly predictive of higher depression severity. The addition of the ten interaction

terms at step two explained an additional 14% of variance with the variance explained by the significant model as a whole 31.4%, F (15, 91) = 2.78, p = .001. In this final model, the interaction between the PCA and WFV subscales (β = -.51, p =.003) as well as the interaction between the ECA and WFV subscales (β = .31, p =.029) was significant, WFV (β = -.28, p =.007), CNeg (β =.37, p =.001) and CSA (β = .25, p =.007) remained significant. To further explore the nature of the interaction between PCA and WFV, and ECA and WFV, interaction plots (see Figure 2) and post hoc probing was conducted. Findings indicated that when family violence was witnessed infrequently, higher levels of PCA were related to higher levels of depression (B = 1.751, t = 2.90, p = .005), but PCA and depression were not significantly related when there was an average or frequent witnessing of family violence. Although a significant interaction was found between ECA and WFV scales on predicting depression, post hoc probing of the relationship between ECA and WFV were not statistically significant when there was an average or frequent witnessing of family violence. However, a trend was found between ECA and depression when family violence was witnessed infrequently (B = -.33, t=-1.73, p=.09).

Predicting Anxiety

None of the socio- demographic variables correlated significantly with anxiety or abuse variables, as such were not included in the model. Total variance in anxiety severity explained by the model at step one was 10.5%, F (5, 101) = 2.37, p = .045 (see Table 4.5). Two abuse subscales, WFV (β= -.24, p = .024) and CNeg (β=.22, p = .038) were significant predictors of anxiety. The addition of the ten interaction terms at step two explained a further 8.1% of variance; however, the final model was not significant in explaining the variance in anxiety severity F (15, 91) = 1.38, p = .173. None of the interaction terms were significant predictors. Previously statistically significant CNeg scale at step one was no longer significantly significant but WFV remained as a significant predictor in the final model (β = -.27, p = .018).

Predicting Post-traumatic Stress

As age was significantly positively correlated with post-traumatic stress r (107) = .20, p = .041, it was entered in step one, explaining 4% of the variance in post-traumatic stress. The five abuse subtype scales were then entered at step two explaining an additional 13.3 % of variance, F (6, 100) = 3.47, p = .004 (see Table 4.5). In this model, age was no

longer a significant predictor whilst CNeg was a significant predictor of post-traumatic stress (β= .29, *p* = .006). The addition of all ten interaction terms in step three, explained an additional 11% of variance, with the total variance explained by the significant model as a whole, *F* (16, 90) = 2.20, *p* = .010. WFV became statistically significant after adding the ten interaction terms (β = -.24, *p* = .024), with CNeg remaining as a significant predictor (β = .34, *p* = .005). Interactions between PCA and WFV scales (β = -.50, *p* = .005) as well as between ECA and WFV scales (β = .33, *p* = .025) were also found to be significant.

To further explore the nature of the interaction between PCA and WFV and ECA and WFV, interaction plots (see Figure 4.2) and post hoc probing was conducted. This found that when family violence was witnessed infrequently, higher PCA was significantly associated with higher post-traumatic stress (B = 2.05, *t* = 2.57, *p* = .016) but this relationship was not evident when there was an average or frequent witnessing of family violence.

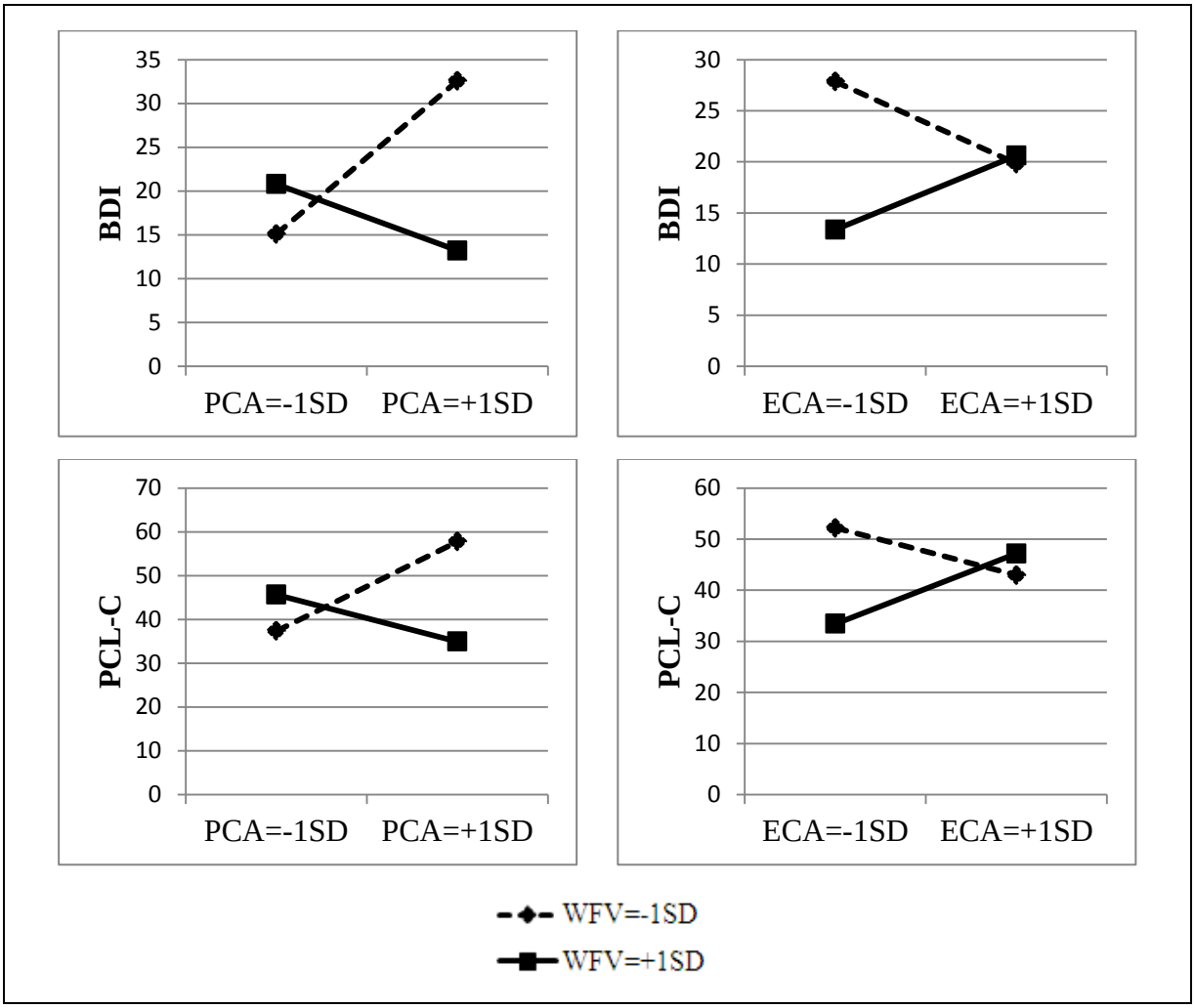
Conversely, higher ECA was significantly associated with higher post-traumatic stress (B= .94, *t* = 2.14, *p* = .035) when family violence was witnessed frequently but not when there was an average or infrequent witnessing of family violence.

Table 4.5 Summary of Hierarchical Multiple Regression Analyses to Test Whether Abuse Subtypes Moderate the Relationship of Other Abuse Types to BDI, BAI and PCL-C

	BDI			BAI			PCL-C		
	Adj. R^2	R^2 Change	β	Adj. R^2	R^2 Change	β	Adj. R^2	R^2 Change	β
Step 1									
CCMS-A Scales	.13**	.18**		.06*	.11*		.12*	.13*	
ECA			-.10			.05			.06
PCA			.10			.09			.06
WFV			-.21*			-.24*			-.20
CNeg			.30**			.22*			.28**
CSA			.24*			.09			.14
Step 2									
CCMS-A Scales	.20	.14		.05	.08		.15	.11	
ECA			-.02			.09			.09
PCA			.20			.19			.15
WFV			-.28**			-.27*			-.24*
CNeg			.37**			.23			.34**
CSA			.25**			.08			.12
Maltreatment Scale Interactions									
PCAxCSA			-.02			-.02			-.00
PCAxECA			.14			-.11			.11
PCAxCNeg			-.08			.14			.03
PCAxWFV			-.51**			-.31			-.50**
CSAxECA			-.02			-.08			-.14
CSAxCNeg			-.04			-.09			-.02
CSAxWFV			.10			.14			.11
ECAxCNeg			-.18			-.16			-.16
ECAxWFV			.31*			.30			.33*
CNegxWFV			-.09			.02			.08

Note: Socio demographic Age was significantly correlated to PCL-C, therefore was entered in step of the PCL-C model. Age was only significant in the first step. $*p < .05$ $**p < .01$ $***p < .001$

Figure 4.2 Plots of Significant Interactions



4.7 Discussion

In the current sample of women survivors of child abuse, 63% reported at least mild levels of depression, 71% at least mild levels of anxiety and 46% a probable diagnosis of PTSD. Highlighting the consequences of mental illness for many in this sample, 24% reported at least one psychiatric hospital admission in their lifetime, 46% had made at least one suicide attempt in their lifetime and the sample mean suicide risk for the past month was in the moderate range. The current study also found that 98% of women survivors reported having experienced ECA, 94% witnessed family violence and 92% experienced PCA. All women survivors in this study experienced multiple types of abuse demonstrating the need to consider multiple types of abuse in research and clinical practice.

The finding that women survivors reported high levels of depression, anxiety and post-traumatic stress symptoms (Schneider, et al., 2007) as well as the presence of multiple

co-occurring abuse types is consistent with previous research (Dong, Anda, Felitti, Dube, Williamson, Thompson, et al., 2004; Edwards, et al., 2003; Higgins & McCabe, 2000b). However findings of this study indicating CNeg significantly predicted post-traumatic stress were different from Higgins and McCabe (2000b) which found ECA and CSA to predict trauma symptomatology and self-deprecation. The discrepancy of findings is likely due to the difference in recruitment strategy, this study called for women respondents with an abuse history, whereas Higgins and McCabe (2000b) conducted a community study on both males and females. This highlights the potential differences in outcomes for women survivors compared to a community sample, which needs to be further examined on a larger scale.

CNeg was associated with an increased level of depression, anxiety and trauma and remained as a significant predictor of depression and trauma after accounting for other abuse types and the interactions between abuse types. CNeg has previously been understudied and when examined was found to be the most damaging form of child abuse (Ney, Fung, & Wickett, 1994). Drawing on attachment theory, CNeg, which can be viewed as an extreme form of low caregiver availability, is associated with insecure attachment (Cassidy & Berlin, 1994). Given that the primary determinant of the quality of attachment is the caregivers' responsiveness to the child, it is not surprising that neglected children are likely to develop insecure attachment styles. Neglected children have been shown to have wide range developmental issues such as inattention, aggression and other behaviours considered to be indicators of psychopathology (Erickson & Egeland, 2011). Given that a recent study, showing that CNeg was significantly associated with onset of mood, anxiety, disruptive behaviour and substance use disorders that persisted throughout life course (Green, et al., 2010), it is no surprise that findings of this study found CNeg to be a significant predictor for depression and post-traumatic stress after controlling for other types of abuse and the interaction between abuse types.

CSA was found to be a significant predictor of depression on its own and remained after accounting for interactions between abuse types but not when examining anxiety and post-traumatic stress. This finding is consistent with a systematic review that indicated that CSA survivors are significantly at risk of developing depression (Maniglio, 2010) but it did not replicate the associations between CSA and post-traumatic stress of other studies. Further highlighting the variability and complexity of adverse outcomes for CSA survivors, Green, et al. (2010) found associations between CSA and the onset of mood, anxiety,

disruptive behaviours and substance abuse disorders that persists throughout lifetime but declined with age.

After accounting for interactions between abuse types, increased levels of WFV was found to significantly predict a lower severity of depression, anxiety and post-traumatic stress. WFV was also found to interact with PCA in significantly predicting depression and similar to findings of Higgins, et al. (2003) predicting post-traumatic stress. Higher levels of physical abuse were found to be associated with higher levels of depression and post-traumatic stress only when family violence was witnessed infrequently. This finding suggests that those who experienced high levels of PCA and infrequently witnessed family violence are likely to have higher levels of depression and post-traumatic stress. Witnessing violence towards others may potentially normalise the violence frequently perpetrated or experienced by the victim and buffer the level of trauma experienced. A recent longitudinal study found that children who witnessed violence in the home regard it as normal behaviour and WFV predicted increase in aggressive behaviours towards others (Orue et al., 2011). Hence this normalisation of the witnessed violence likely reduces the level of internalisation such as self-blame, depression and post-traumatic stress as the level of externalisation such as aggressive acts increases. Victims with similar experiences within the same household may also function as a source of support for each other due to the shared adverse event potentially protecting against the onset of mental illness.

The direction of the moderating effects was reversed for the interaction between ECA and WFV. When family violence was frequently witnessed, higher levels of ECA were associated with higher levels of post-traumatic stress. This finding is supported by the dose-response theory, whereby experience of more types of abuse is associated with poorer mental health outcomes (Higgins & McCabe, 2000a; Schneider, et al., 2007). It is likely that when high levels of emotional abuse are experienced coupled by high levels of witnessing of family violence, the victim's level of hopelessness and helplessness may increase, increasing the level of post-traumatic stress. This interaction finding, however, was different in direction of that found between PCA and WFV, which may lead one to speculate that the experience of physical abuse and emotional abuse are different or may have different mechanisms associated with differing outcomes. Given the high co-occurrence of WFV along with ECA and or PCA in this sample, which is consistent with the estimated 40% co-occurrence of WFV with other types of child abuse in clinical samples (Appel & Holden, 1998), clinical assessment of co-occurring abuse types in women

survivors is important to develop an accurate clinical formulation of presenting mental illness symptoms.

PCA and ECA were not significant predictors of depression, anxiety and post-traumatic stress when other abuse types were simultaneously examined in this study sample. The impact of PCA and ECA only occurred when its interaction was examined with WFV. These findings indicate that PCA and ECA are likely to co-occur with WFV and the interaction effects impacts upon levels of depression and trauma.

Clinical Implications

Given the high prevalence of depression, anxiety and post-traumatic stress in women survivors of child abuse, primary care and mental health clinicians are likely to come in contact with survivors of child abuse in their practice. Highlighting a further complexity, depression, anxiety and post-traumatic stress that are highly comorbid disorders for child abuse survivors have diagnostic symptoms in common such as insomnia, psychomotor agitation and decreased ability to concentrate. Therefore, clinicians working with women survivors of child abuse must be mindful of the need to address co-occurring mental illness that are associated with multiple types of child abuse. With a number of studies documenting the negative impact of different types of abuse and their potential links to mental illness in adulthood, a comprehensive trauma assessment is needed to ensure accurate formulation to inform appropriate clinical intervention.

A further point of consideration when working clinically with survivors of child abuse is that victims may not report their abuse experiences when presenting for assistance especially if they are not asked (Briere, 1992b) and are more likely to present with physical or mood complaints (Briere & Scott, 2006). Clinicians need to be vigilant and consider case finding by taking a comprehensive assessment which includes a trauma assessment. When conducting such assessments, clinicians should consider the types of abuse experienced by patients and the needs to gain a holistic picture of the patient's trauma history, environmental and support systems available to the victim at the time of abuse. The capacity of clinicians to support women survivors should be developed through education on the impact of child trauma, the associated outcomes and the methods of assessments. This will enable clinicians to more effectively identify, support and engage with survivors, enhancing clinicians' capacity to provide pathways to care and manage the mental health consequences of child abuse.

Strengths and Limitations of Study

The strengths of this study include the utilisation of standardised assessment measures with sound psychometric properties including a clinician administered assessment of psychiatric diagnoses and a child abuse assessment that accounted for all types of child abuse. This study also explored both the multivariate relationship between abuse types and mental illness symptoms severity as well as the interactions between types of abuse. The nature of the interviewer assisted questionnaire also minimised missing data ensuring that data was not biased by incomplete responses.

The limitations of this study include the cross-sectional nature of research whereby associations found cannot imply causation. The sample size was also relatively small due to nature of semi-structured interview, although contained a similar sized sample of women survivors as reported in Higgins, et al. (2003) addressing similar issues supporting the robustness of study findings. The recruitment sites, including hospital counselling services and mental health websites may have affected results. The requirement for retrospective assessment of child abuse experience may also be a limitation. However in absence of prospectively collected assessment of abuse type and severity, which are unlikely to be available in many cases due to unidentified or unreported abuse, retrospectively completed data as used in this study may provide the most accurate data available for research.

Conclusion

Complex relationships were found between child abuse and depression, anxiety and post-traumatic stress. Child neglect was the strongest predictor of depression and trauma symptoms in adulthood, child sexual abuse was a significant multivariate predictor of depression severity and witnessing family violence was a significant predictor of depression, anxiety and post-traumatic stress severity. Interaction effects among abuse types were also found, with witnessing family violence found to moderate the relationship between physical child abuse on both depression and posttraumatic stress severity. The results of this study further supports and highlights that abuse types do not occur in isolation, and that the specific combinations of abuse experiences may have important implications and associations with mental illness. Clinicians may have contact with survivors of child abuse presenting with mood disorders who don’t disclose abuse histories. As such, clinicians should consider taking a comprehensive history including a trauma assessment.

It is important that further research considers all forms of child abuse and account for interactions between abuse types when examining adjustment or mental health outcomes to ensure that the influence of co-occurring abuse histories are adequately captured. Standardised assessments that measure the experience of five types of abuse experiences with adequate psychometric properties are available and should be utilised to promote better methodology in evaluating the impacts of child abuse.

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CHAPTER FIVE. WOMEN SURVIVORS OF CHILD ABUSE: DON'T ASK, DON'T TELL

MANUSCRIPT TWO

Study One

This chapter constitutes a manuscript published in Australian Family Physician in 2012, Volume 41, Issue 11, pp. 903-906.

5.1 Specific Declaration for Thesis Chapter Five

In the case of Chapter Five, the nature and extent of my contribution to the work was the following:

Nature of contribution	**Extent of contribution (%)**
Key ideas, formulation of study design, review of appropriate literature, securing ethics approval, recruitment of participants, creating study questionnaires, data analyses, and writing of manuscript.	85%

The following co-authors contributed to the work.

Name	**Nature of contribution**
Assoc. Prof Jan Coles	Critical review of questionnaire designed and manuscript.
Dr. Stuart Lee	Critical review of questionnaire designed and manuscript.
Prof. Jayashri Kulkarni	Critical review of questionnaire designed and manuscript

Candidate's Signature	[redacted]	**Date** 30/07/2012

Declaration by co-authors

The undersigned hereby certify that:

(1) the above declaration correctly reflects the nature and extent of the candidate's contribution to this work, and the nature of the contribution of each of the co-authors.
(2) they meet the criteria for authorship in that they have participated in the conception, execution, or interpretation, of at least that part of the publication in their field of expertise;
(3) they take public responsibility for their part of the publication, except for the responsible author who accepts overall responsibility for the publication;
(4) there are no other authors of the publication according to these criteria;
(5) potential conflicts of interest have been disclosed to (a) granting bodies, (b) the editor or publisher of journals or other publications, and (c) the head of the responsible academic unit; and
(6) the original data are stored at the following location(s) and will be held for at least five years from the date indicated below:

Location(s)	Monash Alfred Psychiatry Research Centre, The Alfred Hospital, Prahran, VIC 3181.

		Date
Signature 1	[redacted]	30/07/2012
Signature 2		30/07/2012
Signature 3		30/07/2012

5.2 Preamble to manuscript

Having identified the relationship between different types of child abuse and the impact on women's mental health in the previous chapter, this manuscript aims to explore women's child abuse disclosure and the types of health care services sought from general practitioners. This manuscript also aims to ascertain if women were ever asked about their child abuse by general practitioners and women's thoughts on being asked about such experiences. Given the low reported rates of screening by general practitioners (Weinreb, et al., 2010), this manuscript further posed a hypothetical question to women who have never been asked about their child abuse experiences about how they would have felt if they were asked about their child abuse experiences.

Women Survivors of Child Abuse: Don't Ask, Don't Tell

5.3 Abstract

Background

Rates of disclosure of child abuse by women survivors are low and general practitioners (GPs) seldom ask women about such histories. This study explored the experiences of women survivors': child abuse disclosure; GP service use and thoughts on being asked about their abuse experiences.

Methods

A cross-sectional study containing quantitative and qualitative questions was conducted with 108 women child abuse survivors.

Results

Only 5% of women disclosed their child abuse to GPs and 19% were asked about their child abuse history. More than half of women (58%) asked reported feeling hopeful or relieved and none reported feeling offended.

Discussion

Rates of child abuse inquiry by GPs and disclosures by women survivors remain low. With the majority of women survivors reporting feeling relieved and none offended when asked about their child abuse experiences, GPs should consider asking women who present to their practice about such experiences to facilitate early intervention.

Keywords: Child Abuse, Service Use, Screening, Abuse Disclosure

5.4 Introduction

Experiences of child abuse (CA) have been associated with poorer general health, gastrointestinal and gynaecological issues (Heitkemper et al., 2001; Sickel, Noll, Moore, Putnam, & Trickett, 2002; Taylor, Pugh, Goodwach, & Coles, 2012), an increased risk of depression, post-traumatic stress and anxiety (Lang et al., 2008; McLaughlin et al., 2010; Schneider, Baumrind, & Kimerling, 2007; Taylor, et al., 2012). Women survivors of CA have higher: levels of perceived need for treatment (Sareen, William, Cox, Hassard, & Stein, 2005); median annual healthcare cost (Walker et al., 1999); medical doctor visits (Newman et al., 2000) and other professional visits (Chartier, Walker, & Naimark, 2007).

The health care cost associated with CA victims in Australia were estimated to be between $91-1399.7 million and documented to be the highest for those aged 25 to 64 years (Taylor et al., 2008). Low rates and often delayed disclosure by survivors of child sexual abuse (Fleming, 1997; Hebert, Tourigny, Cyr, McDuff, & Joly, 2009) further contributes to delays in help seeking by victims.

A recent study looking at screening for CA in primary care indicated less than one third of GPs screen patients for CA experiences and 25% of GPs rarely or never screen female patients. Even when most GPs believe that screening for CA is helpful and within their role, many cited barriers such as lack of time and concerns about re-traumatising patients (Weinreb et al., 2010).

Whilst there is a paucity of research exploring women's thoughts on being asked about their CA experience by GPs, patients surveyed from those seeking assistance for substance abuse thought it appropriate to be asked about their CA experience (Department of Human Services USA, 2000). Similarly, research has shown that for most women survivors, talking about their experience as part of participation in research decreased intrusive thoughts (Lugendorf & Antoni, 1999) and provided an opportunity to share their adverse experience (Sikweyiya & Jewkes, 2012).

Given the increase in health service use and doctor visits by women survivors, opportunity exists for GPs to identify survivors who present to their practices and facilitate early intervention by improving case identification. This study explored a sample of Australian women survivors of CA and describes whether women survivors disclosed their CA, if they disclosed it to GPs, whether women were asked by GPs about their CA experience and their thoughts on being asked about CA experiences by GPs.

5.5 Methods

Participants

One-hundred and eight women with CA experience/(s) before 18 years of age participated in this cross-sectional study containing quantitative and qualitative questions. Participants were recruited via flyers placed at community health centres, hospitals and universities between January 2010 and April 2012

Procedures

Interested participants contacted first author AL and those who reported child abuse experience before the age of 18 years were provided an explanatory statement. Study completion consisted of either face-to-face interviews or telephone and mail participation to accommodate women who could not travel or felt uncomfortable with face-to-face meetings. All interviews were conducted by first author (AL). Completion of study questionnaire implied consent.

Participants were provided with 24-hour crisis telephone helplines and further information for psychological support if interested. Participants who travelled were compensated $20.

Measures

The key study questions collected:

- Demographic information
- Exposure to CA investigated using the Comprehensive Child Maltreatment Scale for Adults (CCMS-A).

The CCMS-A is a self-report instrument, which requires participants to report CA experiences retrospectively. It contains five subscales: sexual abuse, physical abuse, psychological maltreatment, neglect and witnessing family violence and a total score. It has adequate psychometric properties with internal consistency shown to be α =.93 for the total score and α =.66 to .88 for the subscales. Test-retest reliability was found to be r =.75 and moderate to strong correlations with the Child Abuse and Trauma Scale (Higgins & McCabe, 2001). Participants reporting their caregivers at least ‘occasionally’ engaged in the behaviour listed within the subscales are classified as having experienced the corresponding type of abuse (Senn & Carey, 2010).

- Information on disclosure of CA either to official authorities or ‘other’ was also collected. Participants provided a free response if they selected ‘other’.
- Information on general and emotional health services accessed from GPs including age of first access by themselves to explore opportunity for GP to ask about CA history and frequency of visits in the past year.
- Opinions on being asked about CA by GPs

Women were asked if their GPs ever inquired about their CA experience and how they felt about being asked about CA. If women were never asked about their CA, a hypothetical question asked about how they would have felt if they were asked. Participants could select ‘offended’, ‘indifferent’, ‘hopeful’, ‘worried’, ‘relieved’ or ‘other’ to provide a free response.

Statistical Analyses

Data analyses were conducted utilising IBM SPSS Statistics version 20 (IBM Corp., 2011). Descriptive analyses such as percentages and means were utilised to demonstrate cumulative responses. Participants provided free responses if they selected ‘other’ as an answer to questions on CA disclosure or opinions on being asked about CA by GPs. These responses were then thematically coded.

Ethics Approval

The study procedure was approved by Alfred (304/09); Monash University (CF09/2776 – 2009001597); and Latrobe Regional Hospital (2010-04) Human Research Ethics Committees.

5.6 Results

Participant Characteristics

One-hundred and eight women who reported CA experiences with the mean age of 41 years participated in this study. Table 5.1 summarises participants' demographics and CCMS-A scores.

Table 5.1 Participants' Characteristics

	Mean	SD	Frequency	%
Marital Status (*N*=108)				
Married/defacto			39	36.1
Divorced/separated/widowed			23	21.3
Single/never married			46	42.6
Living Situation (*N*=108)				
Alone/with unrelated others			39	36.1
Spouse/partner no children			31	28.7
Spouse/partner with children			15	13.9
Sole parent with children			8	7.4
Living with parents/other			15	13.9
Education (*N*=108)				
Part of high school			10	9.3
High school completed			8	7.4
Part of Trade/TAFE certificate			4	3.7
Trade/TAFE certificate completed			11	10.2
University partially completed			27	25.0
University degree completed			48	44.4
Employment (*N*=108)				
Full-time			24	22.2
Part-time			30	27.8
Student			21	19.4
Self-employed/home duties			11	10.2
Disability/sickness benefits			15	13.9
Aged pension/Unemployed			7	6.5
Income (*N*=107)				
Less than $12000			14	13.1
$12001-$40000			42	39.3
$40001-$60000			19	17.8
$60001-$80000			9	8.4
$80001+			23	21.5
CCMS-A (*N*=108)	Mean	SD	Frequency endorsing abuse	%
Emotional Child Abuse	14.02	7.59	106	98.1
Physical Child Abuse	5.91	5.57	98	90.7
Witnessing Family Violence	4.64	2.46	102	94.4
Child Neglect	5.39	6.04	84	77.8
Child Sexual Abuse	12.16	19.34	68	64.8
Total Score	42.02	29.34	-	-

Abuse Disclosure

Of 105 women who provided a valid response, 62 women (59.8%) self-disclosed or had their abuse reported including 18 women (16.7%) who had their abuse experiences reported to authorities such as police or child protection agencies. Of the 18 women, four women made direct reports to the authorities, whilst one disclosed abuse to a family member who brought her to the authorities. Fifty-seven women (52.8%) disclosed their abuse to others such as relatives, friends, a priest, teachers and health practitioners such nurses, psychiatrists, psychologists, counsellors and five disclosures made to GPs.

Emotional and General Health Service Accessed from GPs

Women sampled accessed GPs for both emotional and general health concerns (see Table 5.2)

Table 5.2 Emotional and General Health Services Accessed from GPs *N*=108

	Frequency of Access (%)	Mean Age First Accessed (SD)	Mean Visits in Past Year (SD)
Emotional Health	67 (62)	27.0 (11.4)	4.7 (6.0)
General Health	104 (97.2)	13.4 (8.3)	6.7 (7.5)

Thoughts on Being Asked About Abuse Experience by GPs

Of the 104 women who sought assistance from GPs, only 20 (19.2%) reported being asked by GPs about whether they had experienced CA. Response of how women felt when asked are presented in Table 5.3. One woman could not recall. None reported being offended with the majority (57.9%) feeling “hopeful” or “relieved”. Qualitative responses from six women who answered “other” were: “validated”, “understood”, “ashamed”, “embarrassed”, “uncomfortable” and “sad”.

Eighty-four women who had seen GPs but were not asked about their CA experience were asked a hypothetical question about how they would have felt if they were asked (see Table 5.3). Five did not provide a valid response. Again, the majority (44.1%) reported that they would have felt “hopeful” or “relieved”. Qualitative responses of those who reported ‘other’ ranged from: “grateful”, ”pleased”, “unsure”, “uncomfortable”, “stressed but will still tell what happened”, “surprised as GP often only deal with the immediate presenting physical issues” and “shocked because wouldn’t expect GP to ask but I wish maybe they did”.

Table 5.3 Participants' Thoughts on Being Asked about Child Abuse Experience by GPs

	Actually Asked (*N*=19) Frequency (%)	Hypothetical (Had GP Asked) (*N*=79) Frequency (%)
Offended	0 (0.0)	4 (5.1)
Indifferent	1 (5.3)	13 (16.5)
Hopeful	4 (21.1)	11 (13.9)
Relieved	7 (36.8)	23 (30.2)
Worried	1 (5.3)	10 (29.1)
Other	6 (31.6)	18 (21.4)

5.7 Discussion

Results from this study indicated that few women in this sample reported CA experienced to authorities, disclosed CA to GPs or were asked about CA history by their GP. The CA disclosure rate of 54% by women survivors was consistent with prior literature (Fleming, 1997; Hebert, et al., 2009; Smith et al., 2000). However, CA disclosure rate to authorities and GPs in this study sample was higher than the 10% reported by Fleming (1997) may likely due to the sample consisting of women survivors of various types of CA and not solely child sexual abuse.

Almost all women in this study have sought assistance from GPs for general health concerns with more than half were also seeking assistance for emotional health. The variability in services accessed and required by women survivors from GPs is not surprising given that GPs are the first point of call (Australian Bureau of Statistics, 2011) and the recent reported increased in 'general and unspecified' and 'psychological' problems encountered by GPs in Australia (Britt et al., 2011). Further, the introduction of Medicare rebates for psychological treatment with implementation of *Better Access* in 2006 (Crosbie & Rosenberg, 2007), may also explain this high rate of access for emotional health concerns from GPs.

Despite 29% of GPs reporting usually or always screening women patients for CA history (Weinreb, et al., 2010), only 19% of women in this study sample reported being asked by a GP about their CA experience. This low rate of inquiry is likely due to perceived barriers such as lack of time, not seeing it as part of GPs' role to ask such questions and a fear of re-traumatising patients (Weinreb, et al., 2010).

Of women asked by GPs regarding their CA history, the majority reported feeling "hopeful" or "relieved" and none reported feeling "offended". Similarly, of women who were not asked, the majority noted that if they were asked about their CA history, they would feel "hopeful" or "relieved". This is a clear message from this sample of women survivors, which should allay GPs' concerns of offending or re-traumatising patients if they ask about patients' CA history. Although GPs may not see it as their role to ask about patients' CA history, and to some extent patients may not expect to be asked, a case finding approach is warranted. As one woman said it, if her GP asked about her CA history, she would be "shocked because wouldn't expect GP to ask but I wish maybe they did".

Based on the results of this study, we recommend that GPs consider asking patients about CA history if they present with related symptoms such as depression, anxiety, post-traumatic stress, poor general health or gastrointestinal and gynaecological issues. This could be the first step to providing CA survivors with the opportunity to access appropriate intervention for long standing issues related to their experiences.

Strengths and Limitations of Study

This is the first study to the authors' knowledge that explored CA abuse disclosure, GP service use and thoughts of women survivors of various types of CA on being asked by GPs about their CA history utilising behaviourally specific questions that explored the different types of services accessed from GPs alongside the frequency of visits.

Due to the focus on a self-selecting sample of women survivors of CA, results cannot be generalised. Recollection bias may have also resulted in collection of retrospective data, which is unavoidable in this type of research. The sample size was also relatively small due to the nature and length of the interview.

Conclusion

Insights into the disclosure of CA by this sample of Australian women survivors of various types of CA alongside their patterns of emotional and general health GP service use provides further understanding of the needs of women CA survivors. Especially with the variability in presentations to GPs and high rates of GP service use by women CA survivors, GPs are well placed to identify and facilitate early intervention for this vulnerable population. Results of this study indicating that most women CA survivors were not

offended and felt hopeful or relieved when asked about their CA history can be used to guide recommendations for best practice. GPs should not be fearful and consider asking patients about their CA history. To provide an accurate picture of the health service needs of CA survivors, further research that considers various types of CA when assessing service use is required. Much research is still needed to understand and reduce the barriers to screening women for CA histories.

Key points

- GPs are likely to come in contact with women CA survivors who present with either general or emotional health concerns.
- Most women CA survivors will not be offended if asked about their CA histories. As such, GPs should not be fearful and consider asking women patients about their CA history.
- A minimum of case finding approach for screening women CA survivors is recommended
- GPs are best placed to provide early identification and facilitate early intervention for women CA survivors.

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CHAPTER FIVE ADDENDUM

Chapter Five explored women survivors': child abuse disclosures, General Practitioner service use and thoughts on being asked about their abuse experiences by General Practitioners. This addendum will now provide the broader context of service use by women survivors not covered within Chapter Five.

This addendum provides additional information on other health services sought by women survivors and their overall thoughts on being screened for child abuse experiences by health practitioners, which could not be fully covered within the Chapter Five manuscript submitted for publication.

5.9 Introduction

Chapter Five presented information specific to general practitioner (GP) visits by women survivors of child abuse and women's thoughts on being asked about their abuse experiences by GPs. Aside from the documented high doctor visits in Chapter Five, women survivors of child abuse also have a greater number of professional visits to nurses, dentists, chiropractors, physiotherapists, and other medical specialists when compared to women without an abuse history (Chartier, et al., 2007).

5.10 Methods

To gain a comprehensive understanding of health service use by women survivors of child abuse, the 108 women survivors who were asked about their general and emotional health services accessed from GPs, were also asked whether they had accessed these services from other health practitioners such as: (i) psychiatrists, (ii) psychologists, (iii) psychotherapists, social workers or counsellors, (iv) mental health nurses, (v) religious or spiritual advisors like a minister, priest, imam or rabbi (vi) medical specialists (e.g. obstetrician, oncologist, cardiologist), (vii) general nurses or occupational therapists, and (viii) alternative or complementary health professions (e.g. herbalist, chiropractor or naturopath).

Women were also asked for their opinions on being asked about child abuse history by other health practitioners they saw for general health concerns and about how they felt when asked. If women were never asked about their child abuse experience, a hypothetical question asked about how they would have felt if they were asked.

5.11 Results

The following presents additional results exploring emotional and general health services sought from a variety of health practitioners, women survivors' age of first access and frequency of access in the past 12 months. It further presents overall data on abuse disclosures to various health practitioners and women survivors' thoughts on being asked about child abuse experiences by various health practitioners.

Abuse Disclosures

Fifty-seven women (52.8%) disclosed their abuse to ‘others’ such as relatives, friends, a priest and teachers and/or health practitioners (e.g., GPs, nurses, psychiatrists, psychologists and counsellors). Eleven disclosures were made solely to health practitioners, and another 11 disclosures were made to a combination of health practitioners and others. Of the 57 of women who disclosed their child abuse experiences, 31 women (54.4%) noted that the person they disclosed their child abuse to was helpful whilst 18 women (31.6%) noted the person they disclosed to was unhelpful. Eight women (14%) who disclosed their child abuse experiences to multiple people reported some parties as being helpful and others as being unhelpful.

General Health Services Accessed

Women were also asked if they have sought assistance for general health issues (see Supplementary Table 5.1) from other health practitioners. A third of women sampled reported seeking assistance for general health concerns from psychologists, psychotherapists, social workers or counsellors citing issues such as migraines and other somatic complaints, with a majority of those women (75%) reported being asked about child abuse experiences by the mental health practitioner.

Supplementary Table 5.1. Other Health Professionals Sought for General Health, Whether Professional Asked about Abuse Experience, Mean Age First Accessed and Frequency of Access in the Past 12 Months

	Ever Saw Frequency (%)	Asked About Abuse Experience Frequency (%)	Age First Accessed Mean (SD)	Frequency of Access in Past 12 Months Mean (SD)
Psychiatrists (*N*=108)	19 (17.6)	14 (73.7)	26.5 (11.7)	13.6 (20.0)
Psychologists, psychotherapist, social worker or counsellor (*N*=108)	36 (33.3)	27 (75)	23.8 (11.3)	9.3 (14.4)
Mental health nurse (*N*=108)	6 (5.6)	4 (66.7)	29.8 (16.4)	3.3 (7.2)
Religious or spiritual advisor like a minister, priest, imam or rabbi (*N*=108)	14 (13.0)	5 (35.7)	24.6 (16.4)	5.1 (14.8)
Medical specialist (*N*=108)	50 (46.3)	3 (6.0)	28.8 (12.9)	1.0 (1.7)
General nurse or occupational therapist (*N*=108)	16 (14.8)	3 (2.8)	27.0 (14.3)	3.6 (5.4)
Alternative or complementary health profession (e.g. herbalist, chiropractor or naturopath (*N*=108)	36 (33.3)	9 (25)	24.6 (12.4)	4.9 (10.3)

Thoughts on Being Asked About Abuse Experience

Forty-seven women who were actually asked by health practitioners about whether they had experienced abuse in childhood were asked to report how they felt when they were asked (see Supplementary Table 5.2). The majority reported feeling relieved (40.4%) and only 8.5% reported feeling worried about being asked. Qualitative responses of those who reported ‘other’ ranged from: “validated”, “understood”, “ashamed”, “embarrassed”, “guilty”, “sad” and “frightened that they wouldn’t believe me”. Ninety-six women who had seen health practitioners but were not asked about whether they had experienced abuse in childhood were asked a hypothetical question of had they been asked, how they would have felt. The majority reported that they would have felt relieved (30.2%) with qualitative responses of those who reported ‘other’ ranged from: “grateful”, “pleased”, “unsure”, “uncomfortable”, “stressed but will still tell what happened”.

Supplementary Table 5.2 Women's Thoughts on Being Asked about Child Abuse Experience by Health Practitioners

	Actually Asked (*N*=47) Frequency (%)	Hypothetical (Had Professional Asked) (*N*=96) Frequency (%)
Offended	0 (0.0)	4 (4.2)
Indifferent	4 (8.5)	18 (18.8)
Hopeful	7 (14.9)	14 (14.6)
Relieved	19 (40.4)	29 (30.2)
Worried	4 (8.5)	10 (10.4)
Other	13 (27.7)	21 (21.9)

Emotional Health Services Accessed

Women survivors saw a variety of health practitioners for emotional health concerns (see Supplementary Table 5.3) with the majority (85.2%) seeking such assistance from a psychologist, psychotherapist, social worker or counsellor at the mean age of 26 years old.

Supplementary Table 5.3. Other Health Professionals Sought for Emotional Health, Mean Age First Accessed and Frequency of Access in the Past 12 Months (*N*=108)

	Ever Saw Frequency (%)	Age First Accessed Mean (SD)	Frequency of Access in Past 12 months Mean (SD)
Psychiatrists	55 (50.9)	27.5 (11.3)	10.1 (17.2)
Psychologists, psychotherapist, social worker or counsellor	92 (85.2)	26.4 (12.1)	8.4 (12.2)
Mental health nurse	19 (17.6)	29.2 (13.4)	4.3 (9.3)
Religious or spiritual advisor like a minister, priest, imam or rabbi	19 (17.6)	27.3 (13.8)	3.4 (11.9)
Medical specialist	18 (16.7)	31.6 (14.3)	1.1 (1.4)
General nurse or occupational therapist	10 (9.3)	35.9 (18.3)	3.9 (6.5)
Alternative or complementary health profession (e.g. herbalist, chiropractor or naturopath	34 (31.5)	29.0 (11.9)	3.2 (6.9)

5.12 Discussion

More than 85% of women in this study sample accessed emotional health issues from a psychologist, psychotherapist, social worker or counsellor, with almost a third

seeking assistance from alternative or complementary health professionals. The frequency of services accessed from psychiatrists, psychologists, social workers or counsellors of eight to ten times in the past 12 months and from GPs of five to seven times in the past 12 months for emotional health issues and general health problems respectively, highlights the variability in services accessed and required by women survivors of child abuse.

The mean age of first access for emotional health issues by women survivors of 27 years further highlights a delay in accessing services. Given that Chapter Four showed that many women in this sample have significant mental health issues, this demonstrates a missed opportunity for health practitioners to identify and provide early intervention to mitigate the mental health consequences of child abuse for this sample of women.

Despite the high level of emotional and general health service use by women in this sample, only 19% of women who ever saw a GP were asked by a GP about their abuse experience. Whereas more than 70% of women who saw a psychiatrist, psychologist, social worker or counsellor for general health concerns were asked about their history of child abuse by the mental health practitioner. This rate of screening by mental health practitioners reported by women survivors approximates the screening rate of 78% reported by psychologists who were asked if they routinely asked patients about child abuse experience (Lee, Lee, Coles, & Kulkarni, 2012) These congruent results are promising as it indicates the similarities of screening rates encountered by women survivors and actual screening rates reported by mental health practitioners.

Of women who were asked by any health practitioner regarding their abuse history none reported being offended with the majority reported feeling relieved and a minority reported feeling worried or apprehensive. The majority of women also noted that hypothetically if they were asked about their child abuse history, they would be relieved. Therefore, health practitioners should not be fearful of offending or re-traumatising patients, which was cited by health professionals as a barrier to screening women for child abuse experiences (Weinreb, et al., 2010). Rather health practitioners should view it as an opportunity to identify and facilitate early intervention for this vulnerable population.

5.13 References

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CHAPTER SIX. AUSTRALIAN PSYCHOLOGISTS' CURRENT PRACTICE, BELIEFS AND ATTITUDES TOWARDS SUPPORTING WOMEN SURVIVORS OF CHILDHOOD MALTREATMENT

MANUSCRIPT THREE

Study Two

This chapter constitutes a manuscript accepted for publication in Australian Community Psychologist in 2012, Volume 24, Issue 2, pp. 150-163

6.1 Specific Declaration for Thesis Chapter Six

In the case of Chapter Six, the nature and extent of my contribution to the work was the following:

Nature of contribution	**Extent of contribution (%)**
Key ideas, formulation of study design, review of appropriate literature, securing ethics approval, recruitment of participants, creating study questionnaires, data analyses, and writing of manuscript.	85%

The following co-authors contributed to the work.

Name	**Nature of contribution**
Dr. Stuart Lee	Critical review of questionnaire designed and manuscript.
Assoc. Prof Jan Coles	Critical review of questionnaire designed and manuscript.
Prof. Jayashri Kulkarni	Critical review of questionnaire designed and manuscript.

Candidate's Signature	[redacted]	**Date** 02/04/2012

Declaration by co-authors

The undersigned hereby certify that:

(1) the above declaration correctly reflects the nature and extent of the candidate's contribution to this work, and the nature of the contribution of each of the co-authors.
(2) they meet the criteria for authorship in that they have participated in the conception, execution, or interpretation, of at least that part of the publication in their field of expertise;
(3) they take public responsibility for their part of the publication, except for the responsible author who accepts overall responsibility for the publication;
(4) there are no other authors of the publication according to these criteria;
(5) potential conflicts of interest have been disclosed to (a) granting bodies, (b) the editor or publisher of journals or other publications, and (c) the head of the responsible academic unit; and
(6) the original data are stored at the following location(s) and will be held for at least five years from the date indicated below:

Location(s)	Monash Alfred Psychiatry Research Centre, The Alfred Hospital, Prahran, VIC 3181.

		Date
Signature 1	[redacted]	02/04/2012
Signature 2		02/04/2012
Signature 3		02/04/2012

6.2 Preamble to manuscript

While there is a plethora of literature on the impact of child abuse on adult mental health, there is a paucity of research exploring health practitioner's practices, attitude and beliefs toward supporting and screening women survivors for child abuse experiences. Given the findings in the previous chapter highlighted that women survivors of child abuse access a variety of health services for general and emotional health concerns, it is imperative to understand the current practices of health practitioners in screening and supporting this vulnerable population.

Women survivors of child abuse have been documented to have poorer mental health and are also more likely to present for psychological assistance. In this study sample of women survivors of child abuse, an overwhelming 92% of women have sought psychological assistance from a psychologist, psychotherapist, social worker or counsellor. Furthermore the majority were not averse to being asked about their child abuse experiences.

In the field of psychology, identification of early trauma experiences which impact on development is crucial and the first step to understanding the patient's presenting concerns. Conducting a holistic assessment including a trauma assessment will go a long way towards designing and implementing appropriate clinical intervention for patients.

With limited literature focussing on health practitioners, specifically psychologists' practice in supporting women survivors, this manuscript aims to explore Australian psychologists' practices, attitudes and beliefs in supporting and screening women survivors of child abuse. It further aims to ascertain whether self-reported confidence and a belief in the importance and comfort in conducting screening and supporting women survivors predicted actual screening behaviours.

Australian Psychologists' current practice, beliefs and attitudes towards supporting women survivors of childhood maltreatment.

6.3 Abstract

Child maltreatment survivors have an increased risk of developing various mental illnesses in adulthood, which may lead survivors to access psychological services. This study explored the frequency with which psychologists in the Australian community encounter child maltreatment survivors in their clinical practice and their attitudes and beliefs about routine screening and supporting survivors. The results showed that 81.1% of psychologists surveyed saw clients with comorbid mental illness and child maltreatment experience on a daily or weekly basis. The majority of psychologists: believed that child maltreatment was a health care issue which impacts upon mental health, routinely asked about child maltreatment experiences and believed that screening and supporting survivors was very important. Self-reported confidence and a belief in the importance of screening and supporting survivors for child maltreatment experiences were shown to predict actual screening behaviours, whilst comfort in screening did not. Highlighting the complexity of supporting survivors, 75.4% 'agreed' or 'strongly agreed' that they would benefit from further training in screening and supporting survivors despite reporting high levels of confidence and comfort in this area. Further education to better equip psychologists to screen and respond to survivors, may therefore facilitate early intervention and provision of appropriate psychological services to survivors.

Keywords: Child Maltreatment- Mental Illness- Comorbidity- Screening- Survivors- Psychologists

6.4 Introduction

In Australia, 339,454 reports were made to local child protective agencies in 2009 regarding possible or actual child maltreatment (Australian Institute of Health and Welfare, 2010). Child maltreatment comprises of five different forms: physical abuse, sexual abuse, emotional abuse, neglect and witnessing violence (Taylor, Moore, Pezulla, Tucci, Goddard, & De Bortoli, 2008) and studies have found that specific types of child maltreatment (and its combination) are associated with different problems in adulthood. For example victims of child sexual abuse (CSA) and victims of CSA and physical child abuse (PCA) had higher posttraumatic stress symptoms compare to victims of PCA only and those who were not abused in childhood (Hetzel & McCanne, 2005). In a study on adolescents depressive symptoms were experienced more frequently by those who were exposed to both CSA and PCA, compared to those who experience PCA only and those with no abuse history (Danielson, de Arellano, Kilpatrick, Saunders, & Resnick, 2005).

Child maltreatment survivors have also been documented to have a higher number of medical conditions (Chartier, Walker, & Naimark, 2007) and an increased prevalence of various mental illnesses (McLaughlin, Green, Gruber, Sampson, Zaslavsky, & Kessler, 2010) such as depression (Banyard, 1999; Bifulco & Moran, 1998; Miller, Wolff, & Scott, 2000), anxiety (Miller, et al., 2000) and post-traumatic stress disorder (Foa, 2000; Miller, et al., 2000).

The reason for this higher prevalence of mental illness in adult survivors of child maltreatment may be due to multiple disruptions to normal child development that can occur as a result of child maltreatment. Child maltreatment experiences can disrupt a person's early attachment (Bowlby, 1973; Stien & Kendall, 2004). This may disrupt the formation of the sense of self, others and the world (Bowlby, 1973; Stern, 1985; Stien & Kendall, 2004), potentially resulting in the child viewing themselves as unloved or unworthy of others' attention or disrupting the development of interpersonal skills necessary to draw on social support to help in resolving emotional distress. Neurological development as well as physical growth can also be disrupted (van der Kolk, 2003; van der Kolk, et al., 1996). These factors may reduce the person's ability to cope in later life, affecting trust in others, induce feelings of self-blame and predisposing them to mental illness (Sanderson, 2006).

The importance of intervening early with child maltreatment survivors has been previously demonstrated. As a group they have higher access of primary and tertiary healthcare services (Hulme, 2000) and psychological services (Walker, Unutzer, et al.,

1999), resulting in higher healthcare costs. However, most maltreatment survivors do not seek assistance until adulthood (Sanderson, 2006), so the onus is often on clinicians to be sensitive to early signs of child maltreatment-related distress.

Research further indicates that women are more vulnerable than men to experience CSA (Finkelhor, et al., 2005) and was shown to have higher death rates from CSA (Taylor, et al., 2008). A meta-analysis looking at prevalence of CSA around the world reported the highest combined prevalence from 217 publications to be in Australia for women compared to men (Stoltenborgh, et al., 2011). When other demographic factors were controlled for, women survivors were documented to be more likely than men to acquire a mental illness in adulthood (Thompson, et al., 2004) with higher prevalence rates for depression, anxiety and post-traumatic stress disorder (PTSD) following sexual violence in women (World Health Organization, 2011) compared to men. Women are also more likely to seek psychological support compared to men (World Health Organization, 2011). Given the findings of prior studies indicating that women are more vulnerable than men to CSA and are both more likely to acquire mental illness in adulthood and more likely to seek psychological support, this study focused on psychologists' contact with women survivors.

Despite survivors' increased risk of developing mental illnesses in adulthood and their potential increased access of psychological services, there is a paucity of research into Australian psychologists' current practice, attitudes and belief in screening and supporting women survivors. There is also a lack of research exploring whether confidence in screening and supporting survivors has any predictive capacity to actual screening of clients. Past research investigating psychologists' professional practice in the area of child maltreatment often focused on the issues of mandated reporting, in particular professional ethical constraints (Walters, 1995), barriers to reporting (Beck & Ogloff, 1995) and practitioner characteristics that facilitate reporting (Renninger, Veach, & Bagdade, 2002; Waldecker, 2010) rather than exploring psychologists actual practice with survivors. This study redresses this gap by exploring the current practices, attitude and beliefs of psychologists in working with and supporting adult survivors who present for psychological services. Assessing childhood maltreatment experience of clients is extremely important for a holistic understanding of the client and for the implementation of appropriate management and therapies. Overlooking this complex issue may result in delivery of inappropriate psychological interventions that treat symptoms rather than address the underlying cause.

In addition to exploring the practices of psychologists in screening adult survivors of child maltreatment, determining why some psychologists ask and assess for childhood

maltreatment experience while others do not is also important, as this may help in developing education resources to promote better management of child maltreatment survivors. Bandura's self-efficacy theory may provide a framework for understanding psychologists' screening behaviour. The theory posits that the beliefs one holds about their ability influences the way in which they will behave (Bandura, 1986). Within the context of screening behaviour, psychologists with a higher belief about their ability to conduct screening and support identified survivors are expected to be more likely to conduct screening. It is therefore hypothesised that higher levels of confidence in conducting screening will predict actual screening behaviour, over and above other practice related factors. Beyond a demonstration of predictors of screening behaviour, a further aim of this study was to provide a preliminary insight into the current practice, beliefs, attitudes and confidence of psychologists in screening and supporting women child maltreatment survivors. A final aim was to explore the perceived training needs of psychologists.

6.5 Method

Participants and Procedure

A total of 127 psychologists participated in this study by completing an electronic survey from January 2010 to June 2011. Psychologists were recruited from a recurring advert placed on the Australian Psychological Society (the professional body representing psychologists in Australia) webpage. Psychologists interested in participating were given the option to contact the first author (AL) or click on the link listed on the advertisement, which took them to the secured survey hosted by Survey Methods (an online survey delivery tool). Opportunistic sampling was utilised as only those who wished to take part would have proceeded to complete the survey. Responses were collected automatically by the online survey software. The first author (AL) collated all responses at the end of recruitment period and transferred all responses into a statistical package for analyses.

The protocol for this research project was approved by Alfred Research Ethics Committee (304/09), Monash University Human Research Ethics Committee (CF09/2776 – 2009001597) and Latrobe Regional Hospital Human Research Ethics Committee (2010-04).

The majority of respondents were female (89%) and the average age of respondents was 45.8 years (SD=11.4). All respondents reported an interest in mental health and 85% of respondents had undertaken additional training in mental health. More than half were

private practitioners (55.1%) and most had gained their psychology training in Australia (92.4%).

Questionnaire

To our knowledge, there were no established questionnaires to ascertain the characteristics of practice, attitudes, beliefs and confidence of health practitioners in assisting women survivors. To allow assessment of these characteristics, the Clinician Feedback Questionnaire (CFQ) was developed. The CFQ consists of a total of 41 items which included six items adapted from a British survey (Richardson, et al., 2001) that looked at health professionals' attitudes and clinical practice with women who experience domestic violence and survivors of childhood sexual abuse. To develop the remaining CFQ items, a set of domains relating to key aspects of psychologist practice relating to treatment of adult child abuse survivors were identified from a review of the literature. These included: prevalence of clients with the comorbidity; attitudes and beliefs; confidence and perceived importance of aspects of practice; comfort with screening for abuse sub-types; perceived training needs and beliefs about screening. A pool of potential items were developed for each domain and refined in consultation amongst the study authors to develop the final survey. As a final phase of validation, pre-testing was conducted with a sample of clinicians including a general practitioner, a psychiatrist, a neuropsychologist and three clinical psychologists to ensure face validity, and appropriateness of items and format. Comments received were incorporated into the finalised questionnaire. As the survey was exploratory in nature, formal psychometric testing of reliability or validity was not performed.

The final CFQ consists of 41 items:

- Six items were adapted from a British survey (Richardson, et al., 2001) which looked at health professionals' attitudes and clinical practice with women who experience domestic violence and survivors of childhood sexual abuse. The term 'domestic violence/child sexual abuse' was replaced with 'child maltreatment'. Original scale anchors of 'agree, uncertain or disagree' and 'yes/no' were changed to scale anchors which ranged from 1 'strongly disagree' through to 5 'strongly agree'.
- A further four items were added asking about clinicians' attitude and beliefs using the same scale anchors
- Fourteen items explored clinicians' demographics and current practice.

- Eleven items explored the importance, confidence and comfort level in dealing with issues surrounding screening, supporting and referring survivors; scale anchors ranged from 1 'not important' through 4 'very important', 1 'not confident' through 4 'very confident', 1 'not comfortable' through 4 'very comfortable' respectively.
- The remaining items asked about: the need for further training in responding to adult women survivors of child maltreatment; who clinicians believe should be screening survivors; and perceived barriers to screening for experiences of childhood maltreatment in their practice.

Analyses

Data analyses were conducted utilising IBM SPSS Statistics version 19 (IBM Corp, 2010). Descriptive analyses such as percentages and means was utilised to demonstrate cumulative responses of psychologists. To explore whether psychologists' current beliefs about importance, confidence and comfort in screening and supporting survivors predicted self-reported screening behaviour, logistic regression was used due to the skewed distribution of the dependent variable (self-reported screening behaviour).

6.6 Results

Approximately 81.1% of surveyed psychologists reported seeing women survivors with mental health issues and comorbid childhood maltreatment experiences on a daily or weekly basis (see Table 6.1). The majority of psychologists (66.1%) provided ongoing treatment within their practice for women survivors of childhood maltreatment hence did not need to refer clients for ongoing treatment. Practice characteristics, attitudes and beliefs of psychologists in relation to responding to the adult consequences of child maltreatment are summarised in Table 6.1. The total number of psychologists responding to each variable ranged from 121 to 127 as some participants did not answer some of the questions.

Table 6.1 Psychologists' Practice Characteristics, Attitudes and Beliefs in Supporting Women survivors

How often do you …	Frequency (%)			
	Daily	Weekly	Monthly	Yearly
see adult female clients with mental health issues who has had childhood maltreatment experience (*n* = 127)	42 (33.1)	61 (48.0)	18 (14.2)	6 (4.7)
see adult female clients with childhood maltreatment experience who has mental health issues (*n* = 121)	37 (29.1)	57 (47.1)	19 (15.0)	8 (6.6)
refer a client with childhood maltreatment experience for ongoing treatment * (*n* = 127)	2 (1.6)	6 (4.7)	24 (18.9)	11 (8.7)

To what extent do you agree with the following:	Frequency (%)				
	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
Child maltreatment is a health issue (*n* = 127)	2 (1.6)	3 (2.4)	3 (2.4)	38 (29.9)	81 (63.8)
Child maltreatment **is not** a problem for women in my practice population (*n* = 126)	91 (72.2)	31 (24.6)	2 (1.6)	1 (0.8)	1 (0.8)
I believe that women should be routinely screened for childhood maltreatment experience/(s) (*n* = 127)	3 (2.4)	18 (14.2)	40 (31.5)	41 (32.3)	25 (19.7)
I put off talking about childhood maltreatment experience/(s) because it takes too much time (*n* = 127)	92 (72.4)	31 (24.4)	3 (2.4)	0 (0.0)	1 (0.8)
I **do not** talk about childhood maltreatment experience/(s) because I do not know what to do (*n* = 127)	90 (70.9)	33 (26.0)	1 (0.8)	1 (0.8)	2 (1.6)
When women disclose child maltreatment experience/(s) I give information about help available (*n* = 127)	3 (2.4)	2 (1.6)	8 (6.3)	57 (44.9)	57 (44.9)
Experience/(s) of childhood maltreatment impacts on mental health (*n* = 126)	1 (0.8)	0 (0.0)	0 (0.0)	25 (19.8)	100 (79.4)
I routinely ask all women about their mental health (*n* = 125)	3 (2.4)	2 (1.6)	2 (1.6)	29 (23.2)	89 (71.2)
I routinely ask all women about their childhood maltreatment experience/(s) (*n* = 127)	4 (3.1)	16 (12.6)	8 (6.3)	47 (37.0)	52 (40.9)
I would like specific training on child maltreatment and how to treat women survivors(*n* = 126)	6 (4.8)	8 (6.3)	17 (13.5)	62 (49.2)	33 (26.2)

*Not applicable, n = 84 (66.1%)

Ninety-four per cent of the sample ‘agreed’ or ‘strongly agreed’ that child maltreatment is a health care issue. Almost all respondents (96.8%) ‘agreed’ or ‘strongly agreed’ that child maltreatment was an issue for their clients and discussed the issues of childhood maltreatment with their clients. The majority (94.4%) also routinely asked clients about mental health issues. All except one respondent (99.2%) ‘agreed’ or ‘strongly agreed’ that the experience of childhood maltreatment impacts upon mental health, however, only 77.9% routinely asked clients about childhood maltreatment experience.

The majority of respondents believed that screening, supporting and referring clients with childhood maltreatment experiences was ‘very important’ (Figure 6.1) and were ‘very confident’ in screening and referring when necessary, and moderately confident in supporting women survivors (Figure 6.2). Most were also ‘very comfortable’ with screening clients for all five types of childhood maltreatment (Figure 6.3).

Figure 6.1 Importance of Screening, Supporting and Referring Women Survivors

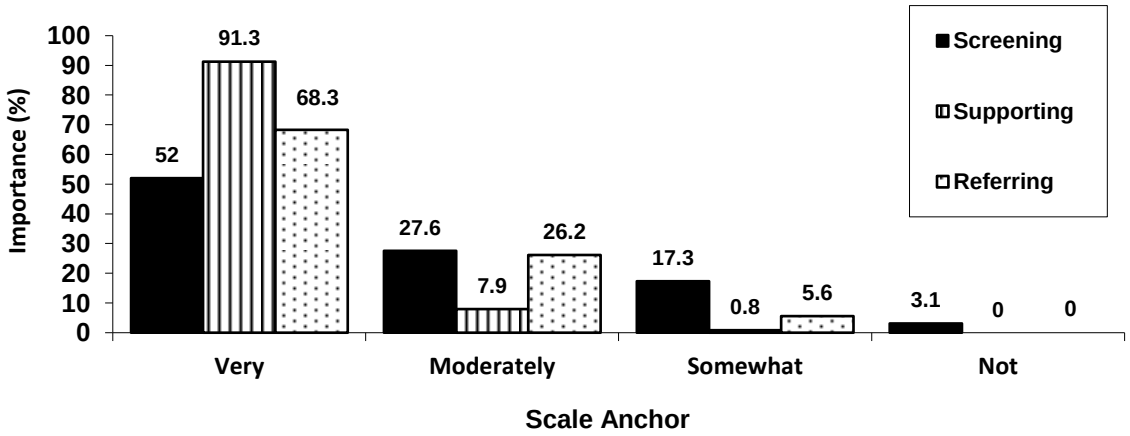


Figure 6.2 Confidence in Screening, Supporting and Referring Women Survivors

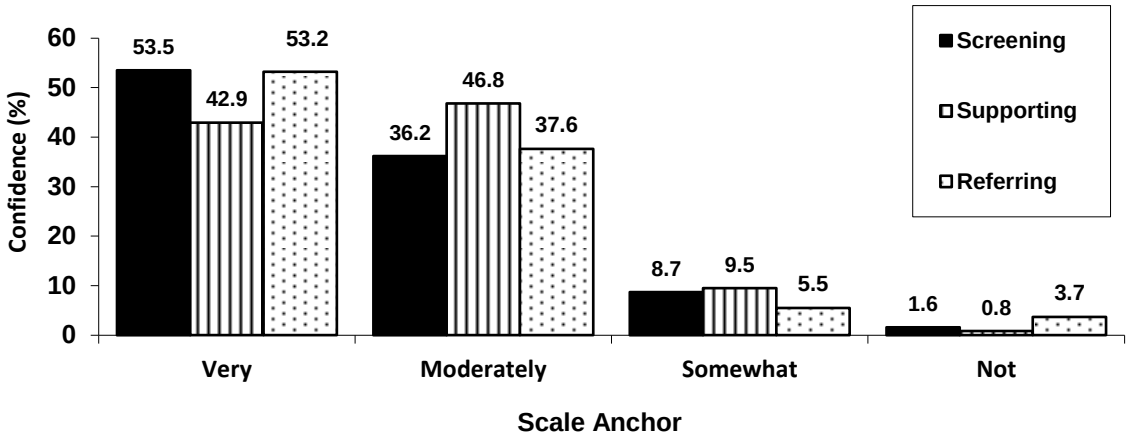
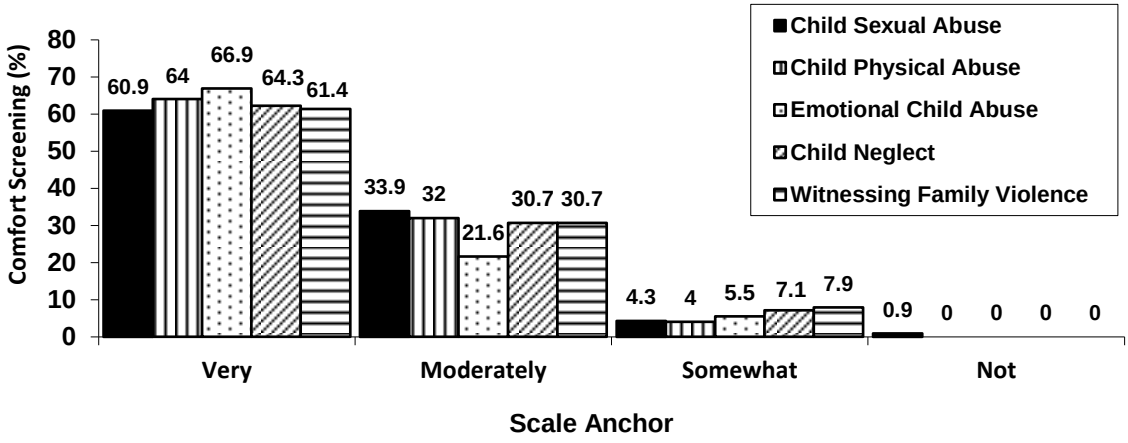
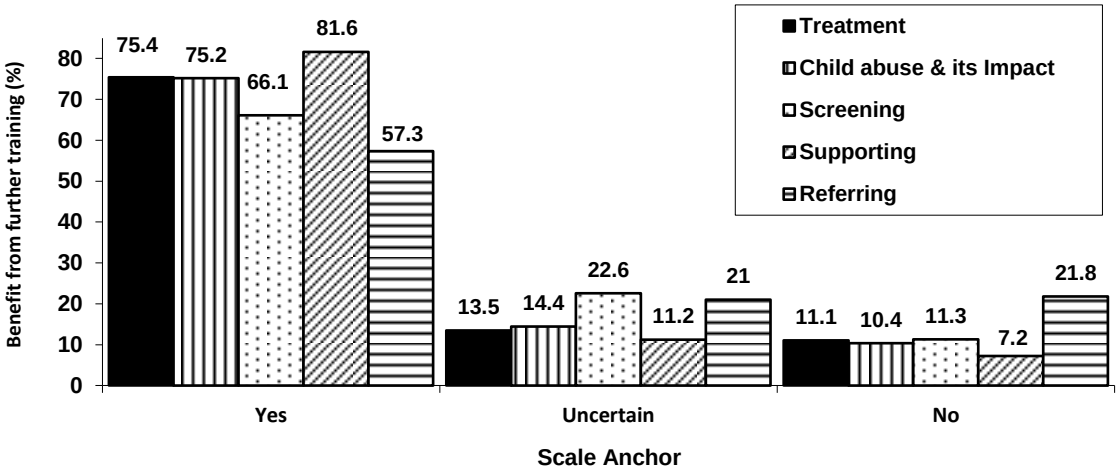


Figure 6.3 Comfort Screening for Different Types of Maltreatment



Despite feeling confident and comfortable with screening, supporting and referring women survivors when necessary, the majority of respondents would still like further training (Figure 6.4) on child maltreatment and its impact (75.2%), how to treat (75.4%), screen (66.1%), support (81.6%) and refer women survivors to appropriate services (57.3%).

Figure 6.4. Further Training



Logistic regression was used to assess whether psychologists' current beliefs about importance, confidence and comfort in screening and supporting survivors impacted upon the likelihood of self-reported screening behaviour, after controlling for other predictors in the model. The choice of analysis technique was influenced by the dependent variable (self-reported screening behaviour) being significantly skewed or not normally distributed, related to the majority of participants responding that they 'agreed' or 'strongly agreed' that

they routinely screened clients. To adjust for the potential impact of this skewed dependent variable it was dichotomised into ‘Not Agree’ (for those who responded ‘strongly disagree’, ‘disagree’ and ‘uncertain) and ‘Agree’ (for those who responded ‘agree’ and ‘strongly’ agree. Given the similarity of psychologists’ responses on their comfort in screening for the five different types of child maltreatment experiences, a composite variable *Comfort Screening for Abuse* were formed from five questions to prevent colinearity between predictors biasing the regression model (Pallant, 2007a). All logistic regression assumptions of sample size (minimum ratio of valid cases to independent variables of 10 to 1) (University of Texas, 2006), multicolinearity, outliers and independence of errors (Tabacnick & Fidell, 2001) were fulfilled.

The regression model contained eight independent variables: age, gender, practice length, importance screening and supporting women survivors, confidence screening and supporting survivors and comfort screening women survivors. The full model containing all predictors was statistically significant, $\chi 2$ (8, N = 121) = 52.86, p <.001, indicating that the model was able to distinguish between those who ‘did not agree’ and those who ‘agreed’ that they routinely asked women about childhood maltreatment experience. The model as a whole explained between 35.4% (Cox and Snell R square) and 53.5% (Nagelkerke R square) of the variance in self-reported screening behaviour, and correctly classified 86% of cases. As shown in Table 6.2, only age, importance and confidence screening women for childhood maltreatment experience made a unique statistically significant contribution to the final model, with confidence screening being the strongest predictor.

Table 6.2 Summary of Direct Logistic Regression Analysis for Variables Predicting Psychologists Screening Behaviours

Predictor	*B*	*SE B*	Wald	*df*	e^B (Odds Ratio)	95% C.I. for e^B Lower	Upper
Age	-.07*	.03	4.99	1	.93	.87	.99
Gender	.55	.98	.31	1	1.73	.25	11.85
Practice Length	.06	.04	1.85	1	1.06	.98	1.15
Importance screening women for childhood maltreatment experience/(s)	1.22**	.35	11.91	1	3.39	1.70	6.78
Importance supporting women with childhood maltreatment experience/(s)	-.45	.76	.35	1	.64	.14	2.82
Confidence screening women for childhood maltreatment experience/(s)	1.70**	.61	7.71	1	5.45	1.65	18.06
Confidence supporting women with childhood maltreatment experience/(s)	.48	.66	.55	1	1.62	.45	5.82
Comfort screening women for childhood maltreatment experience/(s)	.28	.60	.22	1	1.32	.41	4.26
Constant	-6.87	3.28	4.40	1	.00		

Note: C.I = Confidence Interval
Importance and confidence screening and supporting women for childhood maltreatment experience/(s) scored from 1 for ‘not important’ or ‘not confident’ to 4 for ‘very important’ or ‘very confident’.
Comfort screening women for childhood maltreatment experience/(s) scored from 1 for ‘not comfortable’ to 4 ‘very comfortable’.
Did not agree to routinely ask women about childhood maltreatment experience/(s) is the reference category.
*$p < .05$ **$p < .01$ ***$p < .001$

6.7 Discussion

This paper explored current practices of psychologists in screening and supporting women survivors of child maltreatment. Key findings revealed that 81% per cent of

psychologists saw clients who presented with mental health issues and a comorbid child maltreatment experience on a daily or weekly basis. Most respondents agreed that child maltreatment was an issue for their clients and that it impacts upon client's mental health. Despite high levels of self-reported confidence and comfort in screening and assessing clients, most respondents wanted further training on the impact of child maltreatment and how to screen for and support survivors of child maltreatment.

The finding that 81% of psychologists saw clients with comorbid mental illness and child maltreatment experiences on a daily or weekly basis is consistent with the literature highlighting the significant prevalence of mental illness in child maltreatment survivors (Briere & Runtz, 1990b; Chartier, et al., 2007; Freeman, Collier, Parillo, & Nova Research Co, 2002; McLaughlin, et al., 2010; Miller, et al., 2000). This also highlighted that psychologists regularly provide care to child maltreatment survivors, and as a result must be equipped to identify and assist in treating the presenting concerns of survivors.

To help guide the development of future training, logistic regression analysis found that psychologists were more likely to routinely screen for childhood maltreatment experiences if they were more confident in conducting screening, rated the importance of screening more highly and were younger. Clinical experience alone is not sufficient to increase the likelihood of screening for maltreatment history. Comfort in screening clients for different forms of maltreatment experiences also did not significantly predict actual screening behaviour, which may indicate that psychologists who may not be comfortable screening clients for maltreatment experiences can still do so.

Despite the majority of psychologists reporting high levels of confidence and comfort in screening for and supporting survivors, most still expressed a desire for more training in this area. Given that training received by psychologists may differ, targeted and continual education and training for Australian psychologists in the area of screening and supporting survivors is warranted. This will hopefully improve screening for childhood maltreatment experiences which may contribute to current presenting problems, allowing for better treatment.

The finding that self-confidence in conducting screening was the strongest predictor of actual screening behaviour was expected on the basis of Bandura's self-efficacy theory which proposes that a person's belief in their self-competence influences whether they perform a particular task (Bandura, 1982, 1986). Provided education must therefore aim at building confidence and belief in clinicians in their ability to effectively identify and provide appropriate support to maltreatment survivors. Enhancing clinician belief about the

importance of conducting screening was also suggested by study findings as a possible means of enhancing the conduct of screening. To achieve both aims, ongoing education should detail the mechanisms by which maltreatment experiences may increase the risk of and contribute to adult mental illness; how to screen (e.g., standardised measures or common screening questions); how to provide treatment for symptoms related to child maltreatment experiences; and how to refer on patients for specialist support if necessary. Psychology training programs may also wish to include screening and supporting survivors as part of core content of their training programs to equip new practitioners with the knowledge to ask and support survivors, given the prevalence of prior maltreatment experience in clients who present with mental health concerns.

Whereas the effect of self-confidence was expected, the effect of age on screening behaviour was not expected. One previous study did, however, find that younger physicians and nurses were more likely to initiate the topic of intimate partner violence with their patients (Gutmanis, Beynon, Tutty, Wathen, & MacMillan, 2007), but they did not explore the link between age and screening behaviour specifically. A recent study that conducted interviews with staff in the context of a program looking to enhance screening of women for partner abuse, found that a number of personal barriers to questioning were reported, including: discomfort with the question / lack of confidence to ask, fear of offending the women and forgetting to ask (Wills, Ritchie, & Wilson, 2008). It could be speculated that with the recently increased awareness of the importance of early intervention to prevent the negative consequences of child maltreatment, training programs that younger psychologists have participated in may have provided greater coverage of how to conduct screening, resulting in higher levels of screening in younger psychologists. However, further research is required to explore this finding.

A potential limitation of this study was that 89% of respondents were female. However, the high number of female respondents in this study sample reflects the higher number of female registered psychologist (78%) in the Australian workforce during the study period (Psychology Board of Australia, 2011). Given that only 11% of respondents were male, it was not statistically meaningful to conduct a gender analysis on attitudes, beliefs and practice in relation to this issue. Future research may wish to explore gender differences on practice by utilising matched sample of female and male psychologists. The recruitment of respondents mainly via advertisement through the Australian Psychological Society website may be a potential limitation. While this allowed for psychologists Australia wide to participate, it is likely that many psychologists did not see the

advertisement or chose not to participate. There is also the possibility of selection bias against psychologists who do not access the Australian Psychological Society website which could not be avoided. It is likely that psychologists who responded may have an interest in this area, which may have contributed to the high reported rates of confidence in screening and supporting survivors, so the extent to which this finding is reflective of the whole psychologist population in Australia is unclear. The nature of the questionnaire utilised may also be a potential limitation. Due to a lack of any previous published measures of relevance to addressing the studies' research questions, a questionnaire was developed by first author based on practice experience and a review of the available literature and refined in consultation with other study authors. Although the final questionnaire was sent out to various practitioners to determine the face validity of the questions, it could not be tested for reliability and consistency due to the nature of the questions.

Strengths of this study were that the findings provided an insight into the current practices of 127 psychologists around Australia in screening, assessing and supporting clients who may be survivors, which has not been looked at previously. This provided information on practices of psychologists, which at times due to confidentiality and privacy may not be open knowledge to other practitioners. It also provided information on the perceived training needs of Australian psychologists in this area, which may contribute to assisting women child maltreatment survivors.

Future research is still much required to identify the reason for the discrepancies found in this study between psychologists reported confidence in conducting screening and their perceived training needs. In particular qualitative research exploring the factors that contribute to psychologists' level of confidence in supporting survivors of child maltreatment, specific training topics which psychologists might be interested in and how these specific training topics would increase their confidence levels may be helpful. Further studies may also wish to consider asking psychologists about their own childhood experience to explore whether it influence screening behaviours and to identify psychologists' views on support, treatment options and beliefs about the various types of child maltreatment.

In summary, findings confirmed that not only do Australian psychologists regularly provide care to clients with comorbid mental illness and child maltreatment experiences, but that confidence and belief about the importance of screening for child maltreatment experiences were the strongest predictors of actual screening behaviour. Psychologists are also reporting that they want further training in the area of screening and supporting women

who were maltreated as children. By providing further ongoing education in this area, psychologists are likely to be better equipped to identify early and provide more appropriate and holistic intervention to child maltreatment survivors.

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CHAPTER SEVEN. PRIMARY HEALTH CARE PRACTITIONERS' SCREENING PRACTICES AND ATTITUDES TOWARDS WOMEN SURVIVORS OF CHILD ABUSE

MANUSCRIPT FOUR

Study Two

This chapter constitutes a manuscript accepted for publication in Mental Health in Family Medicine, in press, Volume 9, Issue 3.

7.1 Specific Declaration for Thesis Chapter Seven

In the case of Chapter Seven, the nature and extent of my contribution to the work was the following:

Nature of contribution	**Extent of contribution (%)**
Key ideas, formulation of study design, review of appropriate literature, securing ethics approval, recruitment of participants, creating study questionnaires, data analyses, and writing of manuscript.	85%

The following co-authors contributed to the work.

Name	**Nature of contribution**
Assoc. Prof Jan Coles	Critical review of questionnaire designed and manuscript.
Dr. Stuart Lee	Critical review of questionnaire designed and manuscript.
Prof. Jayashri Kulkarni	Critical review of questionnaire designed and manuscript.

Candidate's Signature	[redacted]	**Date** 21/05/2012

Declaration by co-authors

The undersigned hereby certify that:

(1) the above declaration correctly reflects the nature and extent of the candidate's contribution to this work, and the nature of the contribution of each of the co-authors.
(2) they meet the criteria for authorship in that they have participated in the conception, execution, or interpretation, of at least that part of the publication in their field of expertise;
(3) they take public responsibility for their part of the publication, except for the responsible author who accepts overall responsibility for the publication;
(4) there are no other authors of the publication according to these criteria;
(5) potential conflicts of interest have been disclosed to (a) granting bodies, (b) the editor or publisher of journals or other publications, and (c) the head of the responsible academic unit; and
(6) the original data are stored at the following location(s) and will be held for at least five years from the date indicated below:

Location(s)	Monash Alfred Psychiatry Research Centre, The Alfred Hospital, Prahran, VIC 3181.

		Date
Signature 1	[redacted]	21/05/2012
Signature 2		21/05/2012
Signature 3		21/05/2012

7.2 Preamble to manuscript

Women survivors of child abuse have been documented to have a higher rate of primary health care access, which places them in contact with various health care practitioners. In order to facilitate identification of survivors and provide early intervention, health practitioners need to be vigilant that their patients may have a history of child abuse and should consider asking women about such experiences.

There is currently a lack of research into the screening practices of health practitioners with women survivors of child abuse. However, there has been literature looking into the screening practices of health practitioners of women survivors of intimate partner violence. Given the literature indicating that women survivors of child abuse are more likely to experience intimate partner violence in adulthood, where appropriate, the screening literature of health practitioners with women survivors of intimate partner violence are drawn on.

This manuscript aims to explore the differences in health practitioners' practices and attitudes in screening and supporting women survivors of child abuse. With findings from the previous chapter indicating that confidence and importance placed on screening women survivors of child abuse predicted actual screening behaviour in psychologists, this study investigates whether the findings hold true for other health practitioners. It also provides an insight into the frequency with which different health practitioners encounter women survivors of child abuse in their practice.

Note: The category of 'other practitioner' was collapsed due to the limited sample size within the different practitioner group such as psychiatrists (N=2), social workers (N=7), counsellors (N=8), psychotherapists (N=2), mental health nurses (N=5), community support worker (N=2) and an 'other' category for participants to list their profession if not listed consisted of psychology student on placement (N=1), physiotherapist (N=1), nurse (N=1), child protection practitioner (N=1), ambulance officer (N=1) and 2 participant did not provide a valid response.

Primary health care practitioners' screening practices and attitudes towards women survivors of child abuse

7.3 Abstract

Background

Child abuse survivors have an increased risk of developing various mental illnesses in adulthood, which may lead survivors to access primary health care services, in particular primary care mental health services.

Aim

To determine the frequency with which different primary care mental health practitioners encounter child abuse survivors in their practice and the differences in their views about routine screening, level of importance, confidence and comfort in screening and supporting survivors, a cross-sectional study was conducted with 186 practitioners.

Method

The sample consisted of general practitioners (13.9%), psychologists (67.9%) and other professions such as psychiatrists, social workers, counsellors, psychotherapists, mental health nurses and other specific mental health practitioners (18.2%).

Results

Over 91% of practitioners reported that child abuse was a health care issue and was a problem for women in their practice. However, only 51.4% believed that women should be routinely screened for child abuse experiences. Significant differences among practitioner groups were found in aspects of screening and responding to survivor. General practitioners were significantly less likely to routinely screen and reported lower levels of confidence and comfort in conducting screening of survivors when compared to psychologists and other practitioners. The majority of practitioners saw it as psychologists' role to routinely screen; however, 57-82% of practitioners within each group reported they would benefit from further training in areas relating to asking about and supporting survivors.

Conclusion

Findings therefore highlighted further education as a potential area of need to enhance the knowledge and capacity of different practitioner groups in responding to adult women survivors of child abuse.

Keywords: Child Abuse Survivors, Primary Care Practitioners, Screening

7.4 Introduction

Prevalence rates of child abuse in Australia are best estimated to be between 2-36%.(Price-Robertson, Bromfield, & Vassallo, 2010). Specifically, the prevalence rate of child physical abuse is estimated to be between 5% and 10%; child neglect to be between 2 and 12%, emotional abuse to be 11%; witnessing family violence to be between 12% and 23% and child sexual abuse to be between 4-16% for males and 7-36% for females (Price-Robertson, et al., 2010).

A gender imbalance in the experience of some forms of child abuse (e.g., sexual abuse) has also been identified (Stoltenborgh, van IJzendoorn, Euser, & Bakermans-Kranenburg, 2011), making women in particular vulnerable to experiencing negative consequences stemming from child abuse. One potential negative consequence that has been identified is an increased rate of mental illness in adulthood for women survivors (Thompson, Kingree, & Desai, 2004), in particular depression, anxiety and post-traumatic stress disorder (World Health Organization, 2011)

Child abuse survivors may have difficulty expressing their feelings and needs because these were ignored during their abuse (Sanderson, 2006). Survivors may also find it difficult to trust professionals; as such many do not seek help until adulthood. (Sanderson, 2006) This can result in survivors only seeking help when the symptoms of mental illness worsen, or otherwise seeking help only to address somatic symptoms due to not recognising the need to address the underlying psychological symptoms or not wanting to discuss them. Women are more likely to seek help from and disclose mental health problems to primary care practitioners when compared to men (World Health Organization, 2011).

With 43% per cent of women in primary care settings reporting childhood abuse and neglect histories (Walker et al., 1999), primary care practitioners such as general practitioners (GPs), psychologists and other mental health practitioners (such as psychiatrist, social workers, counsellors, psychotherapist, mental health nurses and other specific mental health practitioners) who work in primary care practices in their respective fields are likely to come in contact with women survivors. As the first step to facilitate early intervention, this research aims to explore practitioners' views, current practices and confidence in screening and supporting women survivors of child abuse. It further aims to assess whether there are differences among practitioners from different disciplines when responding to women survivors of child abuse.

To date, there has been little research exploring primary care practitioners' practices in responding to women survivors of child abuse, and no research to the authors' knowledge that specifically explored whether there are differences in primary care practitioner groups in relation to their practice in responding to women survivors. Existing literature primarily focused on the practices and beliefs of family physicians or GPs. For example, Weinreb (2007) conducted a focus group and Weinreb et al. (2010) a cross-sectional study in America explored GPs' practices in responding to women survivors of child abuse. Results indicated that GPs' tend to not screen for child abuse and fewer perceived barriers increased the likelihood of screening (Weinreb, 2007; Weinreb et al., 2010). In the cross-sectional survey of 313 GPs, 28.6% reported usually or always screening women patients despite 79% believing it was their role to conduct screening citing reasons such as lack of time to ask about child abuse. GPs who reported being confident and comfortable conducting screening and those who felt screening was useful were more likely to screen patients. Years of practice did not relate to frequency of screening and almost 40% of respondent reported no formal training in screening patients for child abuse experiences (Weinreb, et al., 2010).

In a study conducted in United Kingdom looking at GPs, practice nurses and health visitors' attitudes and clinical practice with women survivors of child sexual abuse and domestic violence, only 10% of respondents agreed that GPs, practice nurses or health visitors should routinely ask women about child sexual abuse experience despite respondents considering that the adult sequelae of child sexual abuse was a health care issue. Most practitioners did not wish to screen for such experiences, but wanted to receive training about these issues (Richardson et al., 2001).

In another study looking at victims of child abuse and comorbid substance issues, counsellors "often simply fail to ask" about child abuse experience. Organisational issues such as not instructing staff to ask about child abuse and the lack of available comprehensive screening and assessment measures was reported to hinder screening (Department of Human Services USA, 2000).

Given the paucity of research on screening for child abuse experience in adult survivors, authors draw on the literature exploring screening women for intimate partner violence (IPV). The rationale for drawing on the screening literature on IPV is that child abuse in particular child sexual abuse and intimate partner abuse are forms of gendered violence with victims being predominately female (United Nation Population Fund). Women survivors of child abuse have an increased risk of experiencing IPV (Friesen, Woodward, Horwood, & Fergusson, 2010; McKinney, Caetano, Ramisetty-Mikler, &

Nelson, 2009), demonstrating the complex and often intertwined nature of gendered violence.

Looking at the screening literature for women survivors, a third of women disclosed their experience of IPV to their GPs (Hegarty & Taft, 2001). Women thought it appropriate to be asked about child abuse or IPV experiences (Burge, Schneider, Ivy, & Catala, 2005; Department of Human Services USA, 2000), reported no harm resulted from screening, and agreed with screening or being asked routinely about abuse experiences (Burge, et al., 2005; Feder et al., 2009). In fact, women found screening beneficial in removing stigma, gained a sense of support from the discussion and gave them an opportunity to disclose abuse, which may lead them to seek help (Feder, et al., 2009). However, only 1 in 10 women were asked about IPV by their GPs (Bradley, 2002; Hegarty & Taft, 2001).

Factors such as lack of time, education and training on screening survivors, lack of follow-up effective interventions and insufficient evidence to support the effectiveness of routine screening were identified to hinder routine screening in primary care practice (Gutmanis, Beynon, Tutty, Wathen, & MacMillan, 2007; Hegarty & Taft, 2001). Others feared causing offence if patients were asked prior to a confidential relationship being established (Stenson, Sidenvall, & Heimer, 2005). Whereas self-reported preparedness was found to increase the likelihood of routine screening by practitioners and disclosure rates (Gutmanis, et al., 2007). When clients and patients were asked directly about their child abuse experiences, disclosure rates increased (Burge, et al., 2005; Hegarty & Taft, 2001).

A systematic review of 20 quantitative studies looking at various health care practitioners' screening attitudes found that the majority do not agree with screening programs but a proportion, which ranged between 15% and 95% thought it to be acceptable (Feder, et al., 2009). It further concluded that there is insufficient evidence for universal screening in health-care settings (Feder, et al., 2009; MacMillan et al., 2009). However, these conclusions were reached because of the lack of evidence to support improved morbidity and mortality from universal screening programs. Feder et al., 2009 further concluded that IPV "is potentially an appropriate condition for screening" (Feder, et al., 2009 p xii). Other authors urged caution in interpreting the conclusions drawn from systematic reviews due to methodological issues (Jayatilleke & Poudel, 2009). In absence of definitive evidence on universal screening, several national organisations advocate for "diagnostic" or "case finding" approach, which is routine inquiry when signs of abuse are present (U.S. Preventative Services Task Force, 2004; Wathen & MacMillan, 2003). Regardless of universal screening or case finding approach to screening, rates of routine

inquiry by health care practitioners remain low (5-10%) (Elliott, Nerney, Jones, & Friedmann, 2002; Thompson et al., 2000). Even when practitioners thought it appropriate to screen, some thought that other professional groups should be conducting the screening (Feder, et al., 2009).

Given the current lack of research assessing different primary care practitioners' practices with women survivors of child abuse and that many of these practitioners will encounter survivors, this current study will explore these practice issues in Australian GPs, psychologists and other practitioners such as psychiatrists, social workers, counsellors, psychotherapists, mental health nurses and other specific mental health practitioners. This will enable a comparison of whether there are differences in the frequency with which each practitioner group encounters adult women survivors of child abuse, and their ratings of importance and confidence in screening for or responding to women identified as having a child abuse experience. A final aim of this study will be to explore who practitioners believe should be screening women for child abuse experiences and whether practitioners would benefit from specific training to enhance their capacity to respond to the specific needs of this vulnerable population.

7.5 Method

Participants and Procedure

A total of 186 practitioners participated in this study by completing an electronic survey from January and June 2011. Participants were recruited from advertisements placed on various professional newsletters and webpages such the Division of General Practice and Australian Psychological Society and flyers in various community health centres.

Practitioners interested to participate were given the option to contact the first author (AL) or click on the link listed on the advertisement, which took them to the secured survey hosted by Survey Methods (an online survey delivery tool). Opportunistic sampling was utilised as only those who wished to take part would have proceeded to complete the survey. Responses were collected automatically by the online survey software. Author AL collated all responses at the end of recruitment period and transferred all responses into a statistical package for analyses.

The respondents consisted of GPs (13.9%), psychologist (67.9%) followed by other practitioners such as psychiatrist, social workers, counsellors, psychotherapist and mental health nurse and other specific mental health practitioners (18.2%). The majority of

respondents were female (84.9%) and the average age was 46.9 years (SD=11.1). Mean years of practice for GPs was 20.7 (SD=2.1), psychologists was 11.4 (SD=.74) and other practitioners was 11.7 (SD=1.7). More than half were working in the private sector (54.9%) and most gained their qualification in Australia (93.5%). Table 1 summarises the demographics and characteristics of different practitioner groups.

Questionnaire

To our knowledge, there were no established questionnaires to examine different practitioners' practices with women survivors. The Clinician Feedback Questionnaire (CFQ) was developed by first author to explore these characteristics. The items on the questionnaire, which consists of a set of domains relating to key aspects of women survivors, were identified from a review of the literature. These included: the prevalence of clients with mental health and child abuse experience co-morbidity; attitudes and beliefs; confidence and perceived importance of aspects of practice; comfort with screening for abuse sub-types; perceived training needs and beliefs about screening. A pool of potential items were developed for each domain and refined in consultation amongst the study authors to develop the final survey. A sample of practitioners including a general practitioner, a psychiatrist, a neuropsychologist and three clinical psychologists were approached to review the face validity, appropriateness of items and format of the CFQ. Comments received were incorporated into the finalised questionnaire. As the survey was exploratory in nature, formal psychometric testing of reliability or validity was not performed.

The final CFQ consists of 41 items:

- Six items were adapted from a British survey (Richardson, et al., 2001) which looked at health professionals' attitudes and clinical practice with women who experience domestic violence and survivors of child sexual abuse. The term 'domestic violence/child sexual abuse' was replaced with 'child abuse'. Original scale anchors of 'agree, uncertain or disagree' and 'yes/no' were changed to scale anchors which ranged from 0 'strongly disagree' through to 4 'strongly agree'. A further four items asking about practitioners' attitude and beliefs using the same scale anchors
- Fourteen items explored practitioners' demographics and current practice
- Eleven items explored the importance, confidence and comfort level in dealing with issues surrounding screening, supporting and referring survivors; scale anchors

ranged from 0 ‘not important’ through 3 ‘very important’, 0 ‘not confident’ through 3 ‘very confident’, 0 ‘not comfortable’ through 3 ‘very comfortable’ respectively.

- The remaining items asked about: the need for further training in responding to adult women survivors of child abuse; who practitioners believe should be screening survivors; and perceived barriers to screening for experiences of child abuse in their practice.

Analyses

Data analyses were conducted utilising IBM SPSS Statistics version 19 (IBM Corp., 2010). Descriptive analyses such as percentages and means was utilised to demonstrate cumulative responses of practitioners. Non-parametric statistics were utilised due to the skewed distribution of our sample and the ordinal scale data (Pallant, 2007). Kruskal-Wallis Test was conducted to explore between group differences amongst GPs, psychologists and other health practitioners on different outcome variables such as importance and confidence with screening and supporting survivors of child abuse. Follow-up Mann-Whitney U Tests and effect size calculations were conducted on statistically significant results from Kruskal Wallis Test to evaluate pairwise differences among the three groups, controlling for Type I error across tests by using the Bonferroni correction (Pallant, 2007).

7.6 Results

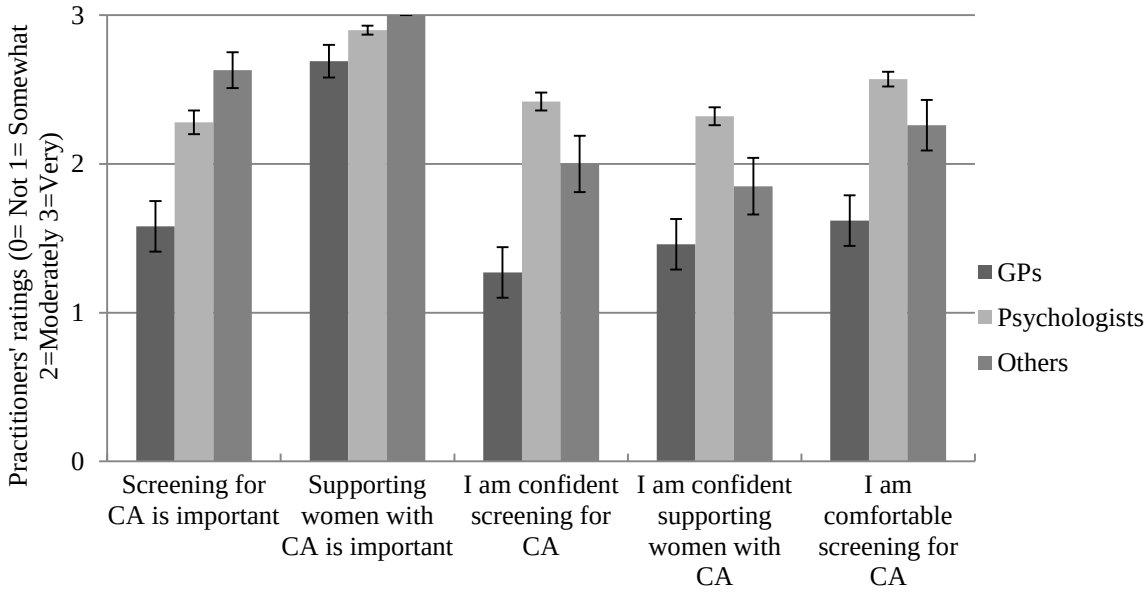
The frequencies of responses from the three practitioner groups are displayed in Table 7.1. Across all surveyed practitioners, 76% reported seeing women survivors with mental health issues and comorbid child abuse experiences on a daily or weekly basis. The majority of practitioners (95.1%) surveyed ‘agreed’ or ‘strongly agreed’ that child abuse is a health issue, 95.2% of respondents indicated that child abuse is a problem for women in their practice and 67.8% are routinely screening women. Twelve precent of GPs, 78% of psychologist and 73.3% of other professionals ‘agreed’ or ‘strongly agreed’ that they routinely screened women with child abuse experiences.

Table 7.1 Demographics and Participant Characteristic by Practitioner Group *n* (%)

	GPs	Psychologists	Other
Gender			
Male	11 (42.3)	13 (10.3)	4 (11.8)
Female	15 (57.7)	113 (89.7)	30 (88.2)
Undertaken additional training in mental health			
Yes	17 (65.4)	115 (90.6)	31 (94)
No	9 (34.6)	12 (9.4)	2 (6)
Current practice			
Public hospital and community health centres	3 (11.5)	23(18.3)	14 (41.2)
Private hospital and private practice	22 (84.6)	73 (57.9)	7 (5.6)
Non-government/ Not for profit organization	0	13 (10.3)	9 (7.1)
Other (specialist services and government organization)	1 (3.8)	17 (13.5)	4 (3.2)
Frequency of encounter with women with comorbid mental health issues and child abuse			
Daily	6 (23.1)	42 (33.1)	10 (31.3)
Weekly	8 (30.8)	61 (48)	13 (40.6)
Month	9 (34.6)	18 (14.2)	7 (21.9)
Yearly	3 (11.5)	6 (4.7)	2 (6.3)
Child abuse is a health issue			
Strongly agree/Agree	24 (96)	119 (93.7)	34 (100)
Uncertain	0	3 (2.4)	0
Disagree/Strongly disagree	1 (4)	5 (4)	0
Child abuse is a problem for women in my practice			
Strongly agree/Agree	24 (92.3)	122 (96.8)	31 (91.2)
Uncertain	1 (3.8)	2 (1.6)	3 (8.8)
Disagree/Strongly disagree	1 (3.8)	2 (1.6)	0 (8.)
Believed in routine screening for child abuse			
Strongly agree/Agree	7 (28)	66 (52)	22 (66.7)
Uncertain	14 (56)	40 (31.5)	10 (30.3)
Disagree/Strongly disagree	4 (16)	21 (16.6)	1 (3)
Routinely screen for child abuse			
Strongly agree/Agree	3 (11.5)	99 (77.9)	22 (73.3)
Uncertain	1 (3.8)	8 (6.3)	3 (10)
Disagree/Strongly disagree	22 (84.6)	20 (15.7)	5 (16.6)

Figure 7.1, compares the mean ratings for the three practitioner groups on the importance of screening and supporting women survivors, confidence screening and supporting women survivors and comfort screening women for child abuse experiences.

Figure 7.1 Practitioners' Ratings on Importance, Confidence and Comfort Screening and Supporting Women with Child Abuse Experience/(s) with one standard error bars.



CA=Child abuse experience/(s)

Kruskal Wallis tests revealed statistically significant difference among the three practitioner group across all six variables. The following details the Bonferroni corrected pair-wise Mann-Whitney U-test differences for each variable. For conducting routine screening, GPs were significantly less likely to agree than psychologists ($p<.001$, $r = .52$) and other practitioners ($p<.001$, $r = .66$). For importance of screening, GPs rated significantly lower than psychologists ($p<.001$, $r = .29$) and other practitioners ($p<.001$, $r = .58$). For importance of supporting women survivors, GPs rated significantly lower than psychologists ($p=.009$, $r = .21$) *and* other practitioners ($p=.002$, $r = .41$). For confidence in conducting screening, GPs were significantly less confident than psychologists ($p<.001$, $r = .46$) *and* other practitioners ($p=.005$, $r = .37$). For confidence in supporting women, GPs were significantly less confident in supporting women survivors compared to psychologists ($p<.001$, $r = .38$) but not when compared to other practitioners ($p=.103$, $r = .21$). Lastly,

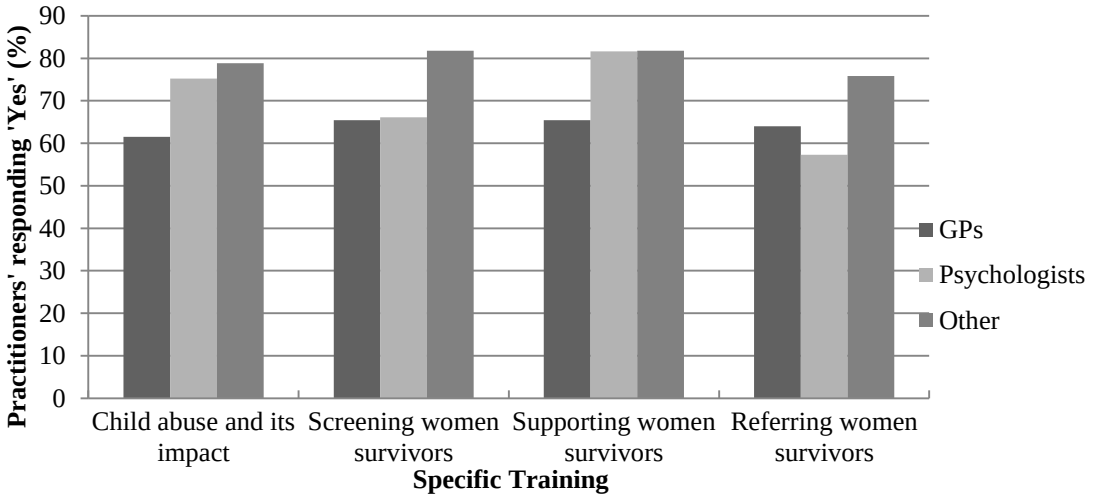
GPs reported significantly less comfort than to psychologists (*p<.001, r* = .44) and other practitioners (*p =.005, r* = .47). Psychologists' and other practitioners' ratings on four of the six variables were not statistically significantly different. Compared to psychologists, other practitioners reported less confidence in screening (*p=.046, r* = .16) and less confidence in supporting women survivors (*p=.027, r* = .18).

All practitioners were asked to identify the health practitioners who should screen for child abuse and whether they thought they would benefit from further training in the area. Specific questions about training on child abuse and its impact upon women, the screening of women survivors, how to support women survivors and the referral of women survivors to appropriate services were asked. Table 7.2 and Figure 7.2 summarised responses from respective practitioner groups.

Table 7.2 Perceptions of which Practitioner/(s) Should Screen Women for Child Abuse Experience *n* (%)

Practitioners	GPs (n=26)	Psychologists (n=127)	Other (n=34)
Psychiatrist	21 (80.8)	117 (92.1)	29 (85.3)
GPs	12 (46.2)	78 (61.4)	25 (73.5)
Psychologist	22 (84.6)	122 (96.1)	29 (85.3)
Social Worker	12 (46.2)	102 (80.3)	29 (85.3)
Psychotherapist	18 (69.2)	101 (79.5)	27 (79.4)
Counsellors	19 (73.1)	97 (76.4)	28 (82.4)
Mental health nurse	17 (65.4)	97 (76.4)	29 (85.3)

Figure 7.2 Perception of Further Training on Screening, Supporting and Referring Women Survivors as Well as Impact of Child Abuse on Women *n* (%)



7.7 Discussion

The present study provided a description of different Australian practitioners' (GPs, psychologists and other health practitioners) practices with and views on screening and supporting women survivors. It further highlighted the differences between practitioner groups in their levels of belief of importance, confidence in and comfort with screening and supporting women survivors. The study also provided preliminary data on who the different practitioner groups thought should be conducting screening and whether practitioner saw benefit in further specific training in the area.

Consistent with past literature, we found that more than most practitioners in all three groups (above 93%) strongly agreed or agreed that child abuse is a health issue (Richardson, et al., 2001). Only 12% of GPs reported routinely screening women for child abuse experience followed by 73% of other practitioners and 78 % of psychologists. This low rate of screening for child abuse experiences by Australian GPs is consistent with past research exploring family GPs' screening of child abuse and IPV (Elliott, et al., 2002; Hegarty & Taft, 2001; Richardson, et al., 2001; Thompson, et al., 2000). An additional finding of interest was that 28% of GPs believed that routine screening of child abuse should occur, highlighting dissociation between belief and practice for a number of GPs.

Previous research in a GP sample has shown that fewer perceived barriers (e.g., beliefs about patients as likely victims, time limitations, and discomfort with screening) to screening for child abuse was associated with an increased likelihood of screening (Weinreb, 2007; Weinreb, et al., 2010). Drawing on the screening literature of IPV, formal training and professional experience with abuse disclosure can also increase self-confidence, preparedness to screen and increase in comfort initiating discussions (Gutmanis, et al., 2007). Higher levels of confidence, less discomfort and those who felt that screening was useful were also more likely to screen patients (Weinreb, et al., 2010). It is not surprising then, that when exploring the level of perceived importance, confidence and comfort in screening and supporting women survivors, GPs were found to have less perceived importance, confidence and comfort in screening and supporting survivors when compared to psychologist and other practitioners.

The differences found between responses from GPs and psychologists and other practitioners may be attributed to the differences in education pathways leading to the different professions. Psychologists may be more likely to be trained or encouraged to assess for child abuse experience of their clients, as "most psychotherapeutic approaches

currently in practice carry the assumption that it is important and even essential to gather a comprehensive trauma history in order to plan treatment" (p. 4).(International Society for Traumatic Stress Studies, 1993). Different practitioner groups may also have distinct perceived responsibilities and face practice pressures unique their profession. For example, a general consultation time for a GP is approximately 15 minutes and often related to a specific medical presenting concern. In contrast, consultation appointment with a psychologist or other mental health practitioner is likely to be in excess of 45 minutes and may allow for more detailed exploration of factors underpinning the presenting issues. Considering practitioners reported barriers in screening for child abuse experience such as lack of training and follow-up services (Weinreb, 2007; Weinreb, et al., 2010), fear of offending clients and wanting to establish a confidential relationship prior to asking (Stenson, et al., 2005), the nature of consultation duration and frequency of contact with patients for mental health practitioners may facilitate screening.

The similarities between responses from psychologists and other practitioners, which consists of mental health professionals are likely due to the similar session length and emphasise on psychotherapeutic approaches, which places importance on gathering a comprehensive trauma history. However, significant differences of confidence in screening and supporting women survivors were found between other practitioners and psychologists; whereby other practitioners reported less confidence than psychologists. This difference may be due to our sample of psychologists who reported seeing more survivors on a regular basis compared to other practitioners, are exposed to more potential disclosures, which may increase confidence in screening and supporting survivors (Gutmanis, et al., 2007).

When exploring which professionals should be routinely screening for child abuse experiences, the fewest practitioners in all three groups stated that GPs should conduct screening for abuse experience. Whereas psychologists and psychiatrists were most commonly rated by all three practitioner groups as being preferred to conduct screening. The professional groups perceptions of which profession should be screening were consistent with the differences found in actual reported screening behaviours. This may indicate that if routine screening is to be encouraged, attitudes and perceptions of practitioners regarding their role in screening survivors will need to be enhanced.

Finally, drawing on prior literature speculating that level of confidence, perceived importance and exposure to specific training and experience in hearing disclosures are important factors in encouraging screening behaviours (Gutmanis, et al., 2007), specific education on practitioners' role in screening and in supporting women survivors are likely

beneficial. Given that the results indicated that more than 55% of all practitioner groups noted that they would benefit from further training, introducing modules on practitioner's role in screening and in supporting women survivors and on the impacts of child abuse upon women as continuing education in respective profession group may be welcomed.

There were several potential limitations to this present study. The study was cross-sectional in nature and captured the views of practitioners in Australia mainly via advertisement through professional society website and newsletters. While this allowed for Australia wide practitioners to participate, it is likely that many practitioners did not see the advertisement or chose not to participate. There is also the possibility of selection bias against practitioners who do not access the Australian Psychological Society, GP network newsletters and other websites which the advertisement appeared, which could not be avoided. It is also likely that practitioners, who have an interest in this area, were more likely to complete the survey as demonstrated in the sample size consisting of more psychologists and few GPs. Therefore the extent to which this finding is reflective of the different practitioner groups in Australia is unclear. The nature of the questionnaire utilised may also be a potential limitation. Due to a lack of any previous published measures of relevance to addressing the studies' research questions at the time this research was conducted, a questionnaire was developed by first author based on practice experience and a review of the available literature and then refined in consultation with other study authors. Although the final questionnaire was sent out to various practitioners to determine the face validity of the questions, it was exploratory in nature and not appropriate for formal validity and reliability testing.

Strengths of this study were that the findings provided an insight into the current practices of 186 practitioners around Australia in screening, assessing and supporting clients who may be child abuse survivors, which has not been looked at previously. It also allowed for a comparison of practices of different health practitioners who may come into contact with women survivors. Further, results of this study were consistent with prior screening literature looking at rates of routine screening and extended the literature in looking at other health practitioners screening behaviours of women survivors of child abuse. It also highlighted the complexity in the field of screening.

In conclusion, the present study provided preliminary insights into the screening practices of different health practitioners in an Australian context. It also highlighted the differences in health practitioners' current levels of importance placed, confidence in and comfort with screening and supporting survivors of child abuse. In understanding the

current screening practices of practitioners' further education on how to identify women survivors in their practices, asking about and responding to disclosures of women, will hopefully provide the first step to early identification and appropriate treatment intervention for this vulnerable population.

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CHAPTER EIGHT. GENERAL DISCUSSION

This chapter concludes the thesis with an integrative general discussion of the contributions, implications, strengths and limitations of studies conducted and future research directions. Given the thesis by publication format, there are some unavoidable repetitions of content.

8.1 Overview and Restatement of Aims

This thesis grew out of my clinical practice with women who attended for psychological assistance for various mental health issues. It explored the relationship between child abuse and women's mental health. This thesis aimed to expand and address the gaps in the literature by conducting two separate studies.

Study One focussed on the perspectives of women survivors while Study Two focussed on the perspectives of various health practitioners who may come in contact with women survivors in their clinical practice. This two-pronged approach maximises the potential for identification of women survivors and endeavours to facilitate early intervention by understanding the adversities experienced, health service sought by women survivors and the practices, attitude and beliefs of health practitioners who may come in contact with women survivors.

Chapter One of this thesis provided a comprehensive background by reviewing the existing literature in the area of child abuse. Chapter Two (submitted manuscript) presented a systematic review of the rates of child abuse experience in women accessing primary health care services. Chapters One and Two provided the rationale for the two studies conducted to expand and address the gaps in the existing literature. Chapter Three presented the expanded methodology of the studies conducted. The development of the research protocol of this thesis took into account the two different populations sampled, whilst ensuring that the designed questions allowed for some comparison of perspectives on similar topics. Four manuscripts were written from the two studies conducted to explore specific research questions related to the area of child abuse.

Chapter Four (manuscript one) examined the mental health sequelae of child abuse for women survivors by assessing both the severity of current depressive, anxiety and post-traumatic stress symptoms, and the prevalence of current and lifetime psychiatric diagnoses. This manuscript assessed the relationship between five types of child abuse (ECA, PCA, CSA, CNeg and WFV) and depression, anxiety and PTSD whilst accounting for the moderating impact of different types of abuse on mental illness severity.

Chapter Five (manuscript two) and Chapter Five Addendum explored women survivors' child abuse disclosures, general and emotional health service use, alongside their thoughts on being asked about their child abuse experience when attending for assistance from various health practitioners.

Chapter Six (manuscript three) focused on psychologists' current practice, beliefs and attitudes towards supporting women survivors and also explored predictors of actual screening behaviours.

Chapter Seven (manuscript four) was conducted to identify the differences among different health practitioner groups regarding their practices, attitudes and beliefs in screening and supporting women survivors. It provided a comparison of the frequency with which each practitioner group encountered women survivors of child abuse, who practitioners believe should be screening women for child abuse experiences, and whether practitioners would benefit from specific training to enhance their capacity to respond to the specific needs of this vulnerable population.

The results, implications and limitations of the four manuscripts were discussed in detail in their respective chapters (Chapters Four, Five, Six and Seven). To minimise unnecessary repetition yet provide a context to highlight the contributions of this thesis, an integrative discussion of selected findings in relation to existing literature will now be presented. This will be followed by a presentation of the implications of thesis findings with emphasis on how the findings impact on clinical practice. The strengths and limitations will then be considered and suggestions provided for future research.

8.2 Contributions of Thesis

This thesis is unique in that it collected information from both women survivors of child abuse and from various health practitioners who may come in contact with women survivors of child abuse in their practice. It highlighted that a variety of factors appear to contribute and influence the level of overall wellbeing of women survivors. In considering methods to identify, provide early intervention and potentially prevent further victimisation by women survivors, factors such as the co-occurring types of child abuse experienced, low rates of child abuse disclosures to health practitioners, the higher rate of general health service use compared to emotional health service use by women survivors, and low rates of inquiry of child abuse experiences by health practitioners are all intertwined.

This next section will provide an integrative discussion of the contributions of thesis findings in relation to the existing literature.

8.2.1 Prevalence and Severity of Mental Illness, Relationship between Abuse Types and Severity of Mental Illness

There has been a plethora of studies examining the adverse mental health outcomes of victims of various types and/or combination of child abuse types (Edwards, et al.,2003; Foa, 2000; Green et al., 2010; Higgins & McCabe, 2000a; McLaughlin et al., 2010; Mullen, et al., 1996; Schneider, et al., 2007). However, most of the studies conducted focussed on CSA and/or PCA with few studies examining all five types of child abuse or a single type of child abuse whilst controlling for other co-occurring abuse types (Dong et al., 2004; Higgins & McCabe, 2000b). ECA, CNeg and WFV have also received little attention compared to CSA and PCA (Erickson & Egeland, 2011; Hart, Brassard, Binggeli, & Davidson, 2002; Toch & Cicchetti, 2006). Therefore it is unclear from the existing literature whether the associations described are from exposure to a specific type of child abuse or a combination of different types of child abuse experiences.

Expanding on the existing literature and heeding the methodological advice from existing studies, Chapter Four examined the impact of all five types of child abuse and the interaction between abuse types when exploring women's mental health. Consistent with the findings of Higgins and McCabe (2000a), women survivors of child abuse sampled experienced at least two co-occurring types of child abuse. Almost all women (98%) reported experience of ECA, which is also the most common abuse type amongst substantiated abuse cases in Australia (Australian Institute of Health and Welfare, 2012). WFV was reported by 94% of women and 92% reported experiences of PCA.

Similar to findings of Schneider, et al. (2007), the majority of women suffered from symptoms of depression (63%) and/or anxiety (71%) with 46% having a probable diagnosis of PTSD. The clinician administered MINI further corroborated that 60% of women met criteria for a diagnosis of lifetime and/or current Major Depressive Disorder. Adding to the existing literature and the seriousness of women survivor's experiences, 46% had also reported previous suicide attempts whilst 24% had at least one psychiatric hospital admission in their lifetime.

In line with some of the findings of Higgins and McCabe (2000a) examining the association between child abuse experiences and self-deprecation, results from this study also found that WFV, CNeg and CSA were significant predictors of increased depression severity after accounting for all types of abuse and the interactions between abuse types. WFV was also found to interact with PCA in significantly predicting depression and, similar

to findings of Higgins, McCabe, and Ricciardelli (2003) also predicting post-traumatic stress. However, the study finding that CNeg positively predicted post-traumatic stress was at odds with Higgins and McCabe (2000a) which found ECA and CSA to predict trauma symptomatology. One potential explanation for the discrepancy in findings may lie in the difference in methodology of this study focussing on women survivors compared to Higgins and McCabe (2000a) who surveyed men and women from the community with or without child abuse experiences.

Perhaps the most important contribution of the findings from Chapter Four, which addressed a gap in the existing literature highlighted by Erickson and Egeland (2011) and expanded on the study of Ney, et al. (1994), is the negative impact of CNeg on mental health. CNeg was associated with an increased level of depression, anxiety and post-traumatic stress. It remained as a significant predictor of depression and post-traumatic stress even after accounting for other types of child abuse and the interactions between abuse types. The detrimental impacts of CNeg, which can be viewed as an extreme form of low caregiving based on attachment theory (Cassidy & Berlin, 1994) (as described in Chapters One and Four), are pertinent in the field of child abuse and needs to be given more attention.

8.2.2 Child Abuse Disclosure, Health Service Use and Thoughts on Being Asked About Child Abuse Experiences

New and important contributions further resulted from the findings described in Chapters Five and Chapter Five Addendum as there has been no research to the author's knowledge which specifically examined whether women survivors were asked about their child abuse history by health practitioners and women's thoughts on being asked about child abuse experiences by various health practitioners. It is important to explore the issue of women's thoughts about being asked about their abuse history because the current study and previous research has found low child abuse disclosure rates by women survivors and very low levels of screening for child abuse history by GPs. The examination of the disclosure rates and patterns of health service use by this sample of women survivors of various types of child abuse further expanded on existing literature which has focussed primarily on CSA disclosures (Fleming, 1997), doctor visits by CSA survivors (Newman et al., 2000) and health service use of CSA and PCA survivors (Chartier, et al., 2007). Findings indicated that although 52.8% of women survivors sampled disclosed their child abuse experience, only

5% disclosed to GPs. Similar to existing literature, although not directly comparable (as this study explored all types of child abuse experiences and only focused on women survivors), women survivors reported high rates of service use. Almost all women sought assistance for general health concerns and more than 75% of women also sought assistance for emotional health concerns. However, only 19% of women were asked about their child abuse experiences by GPs demonstrating a potential missed opportunity to identify and offer support to this vulnerable population. Women survivors also saw a variety of health practitioners for emotional health concerns with 85.2% seeking such assistance from psychologists. The majority of women asked by health practitioners about their child abuse experiences reported feeling relieved and hopeful with none reported being offended. This contradicts the perception held by GPs reported in the existing literature that asking women about child abuse experiences would be "offending" or "re-traumatising" (Weinreb et al., 2010). However, 5% of women who were not asked by GPs about their child abuse experience reported that they may hypothetically be offended if they were asked.

In order to promote early intervention for women survivors, it is not only important to understand the views of women survivors but also that of the health practitioners who are likely to come in contact with women survivors. However, there is a lack of research examining health practitioners' practices with screening and supporting women survivors of child abuse. As such, another evident contribution of this thesis is the novel approach of ascertaining the practices, attitudes and beliefs of various health practitioners regarding screening and supporting women survivors of child abuse (as described in Chapters Six and Seven). The next section will focus on contribution of this thesis related to Australian psychologists followed by a section looking at the differences in practices of various health practitioners who may come in contact with survivors of child abuse.

8.2.3 Psychologists' Practices and Predictors of Screening and Supporting Women Survivors

To the author's knowledge there has been no previous research which has specifically focussed on the practices of Australian psychologists with regards to screening and supporting women survivors of child abuse. The findings described in Chapter Six therefore provided much needed preliminary insight into this area. Findings from this manuscript extended those of Chartier, et al. (2007), which documented high professional health service use excluding psychological services by child abuse survivors, by

demonstrating that Australian psychologists have a high frequency of contact with child abuse survivors. Similar to findings by Richardson et al. (2001) that explored attitudes of GPs regarding screening patients for CSA, the majority of psychologists sampled believed that child abuse was a health issue. Surveyed psychologists also believed that child abuse experiences impact on mental health and that screening for and supporting survivors was very important. In line with self-efficacy theory (Bandura, 1982), self-reported confidence in conducting screening was a significant predictor of actual screening behaviours. Belief in the importance of screening for and supporting survivors with child abuse experiences was also a significant predictor, whilst comfort in screening was not.

8.2.4 Health Practitioners' Practices Regarding Screening and Supporting Women Survivors

A further contribution of this thesis was made through examination of the previously unexplored differences in various health practitioners' practices regarding screening and supporting women survivors. This provided a comparison of the frequency with which each practitioner group encountered women survivors of child abuse, and who practitioners believe should be screening women for child abuse experiences. It also found that the majority of health practitioners identified that they would benefit from specific training to enhance their capacity to respond to the needs of this vulnerable population.

Findings described in Chapter Seven provided insight into the significant differences amongst different health practitioners' on various aspects of screening and supporting women survivors of child abuse. Consistent with Weinreb, et al. (2010) indicating few GPs routinely screened clients for child abuse experiences, GPs sampled in this study were significantly less likely to routinely screen and reported lower levels of confidence and comfort in conducting screening of survivors when compared to psychologists and other mental health practitioners. This is despite 23% of GPs reporting that they encountered women with a co-morbid mental health issue and child abuse on a daily basis. The majority of practitioners saw it as psychologists' roles to routinely screen; however, at least half of all health practitioners within each group reported that they would benefit from further training in areas related to screening and supporting survivors. The interest in further training expressed by various health practitioners should be capitalised to encourage identification of women survivors.

8.2.5 Other Contributions of Thesis

On a humanistic note, Study One was conducted by the author who is a psychologist trained in trauma counselling to account for any potential psychological discomfort experienced by women survivors of child abuse when completing sensitive study questions. A serendipitous yet meaningful contribution of this thesis was that it provided a forum for women who had never disclosed their child abuse to do so in a contained space. Counselling options were also discussed with all women who participated in the study, which resulted in a number of women accessing psychological assistance, which they were not aware, was publically available.

8.3 Implications

The findings of this thesis have important implications for women survivors of child abuse and health practitioners who may come in contact with women survivors in their clinical practice. These series of findings also have important implications for policy makers, universities which provide education to various health practitioners, the community and the society at large given the prevalence of child abuse, its associated costs and the long-lasting impact of child abuse.

In order to support or provide any interventions to women survivors of child abuse, women survivors need to disclose their abuse and/or health practitioners need to ask women about their child abuse experience to facilitate disclosure and identification. Primary care and mental health clinicians will likely continue to come in contact with survivors of child abuse in their practice based on findings of Chapters Four and Five, which demonstrated that many women survivors who reported a high prevalence of depression, anxiety and post-traumatic stress sought assistance for general and emotional health from a variety of health practitioners. This is an important point of consideration for health practitioners when working with patients as survivors of child abuse may not disclose their child abuse experiences when presenting for assistance, especially if they are not asked (Briere, 1992b), and will more likely present with physical or mood complaints (Briere & Scott, 2006).

Specifically for mental health clinicians, findings of Chapter Four highlighted the need for thorough assessments, which includes a trauma assessment that considers all types of child abuse experienced by patients. The environment and social supports available to the

victim at the time of abuse, which has been shown by previous research (Cicchetti & Valentino, 2006; Erickson & Egeland, 2011; Trickett, et al., 1991) to influence outcomes for victims, also need to be considered.

Mental health practitioners also need to be mindful of the complexity of presenting symptoms of patients with depression and/or anxiety and/or post-traumatic stress, which are highly comorbid disorders for child abuse survivors. In particular, these three different types of mental illness have similar diagnostic symptoms such as insomnia, psychomotor agitation and decreased ability to concentrate (American Psychiatric Asssociation, 2000). Therefore, mental health practitioners working with women survivors of child abuse need to be proficient in assessing and diagnosing these types of mental illness, consider differential diagnoses and address co-occurring mental illness that are associated with multiple types of child abuse.

The novel approach of gaining information and insight from both women survivors (Study One) and health practitioners (Study Two) regarding screening resulted in findings which demonstrated that women survivors of child abuse are unlikely to be offended and may even feel relieved or hopeful when asked about their child abuse histories. Insight into the predictors and factors that impact on actual screening and the expressed interest in further training by health practitioners in the area of child abuse indicates that clinically more can be done to empower and increase the perceived role of various health practitioners in addressing the consequences of child abuse.

To help increase identification and encourage routine screening of this vulnerable population, attitudes and perceptions of different health practitioners regarding their role in screening survivors needs to be enhanced. This is particularly crucial for GPs who, although are likely to be the first point of contact (Australian Bureau of Statistics, 2011) for most women survivors, may not see it as their role to identify patients with child abuse experiences. Identification of women survivors is the first step to providing them with the opportunity to access appropriate intervention for long standing issues related to their child abuse experiences. At minimum, GPs should consider a case finding approach by asking women who present with associated symptoms such as poor overall general health, depression, anxiety, post-traumatic stress, gastrointestinal and gynaecological issues (Taylor, et al., 2012) about possible child abuse experiences. All health practitioners in general need to be vigilant and start asking patients about their child abuse experiences to promote identification and early intervention.

To better equip health practitioners to identify and provide more appropriate and holistic intervention to child abuse survivors, improvements on the existing curriculum for health practitioners in training, and continuing education for qualified practitioners are needed. Given findings of Chapter Six indicated that self-reported confidence and a belief in the importance of screening and supporting survivors positively predicted actual screening behaviours, further understanding and knowledge in the area of child abuse may enhance health practitioners' belief in the importance of screening for child abuse and increasing the level of confidence to conduct screening. Continuing education and curriculum for all health practitioners' should include education on their specific role in screening patients for child abuse experiences, impacts of childhood trauma and the associated outcomes, methods of assessments and where relevant, referral pathways. This will enable health practitioners to more effectively identify, support and engage with survivors, increasing health practitioners' capacity to provide intervention or pathways to care to manage the mental health consequences of child abuse.

Other pathways to care such as a collaborative model between various health practitioners also needs to be considered and further promoted. A local collaborative model and pathway to care has already been established for patients with mental health concerns through the implementation of *Better Outcomes in Mental Health Care* initiative in 2001, and *Better Access to Mental Health* Care initiative in 2006 (Crosbie & Rosenberg, 2007). Currently in Australia, patients with a Mental Health Care Plan from a GP are able to obtain Medicare rebates for psychological treatment from psychologists or other suitably qualified allied health professionals. This model can be extended for victims of child abuse who are likely to present to GPs with mood complaints, whereby GPs' role could be to identify child abuse survivors and refer them for further assessments and interventions by mental health professionals. This method will likely address the reported perceived barriers of the lack of consultation time (Richardson, et al., 2001; Weinreb, et al., 2010) to address issues of child abuse. This model further allows for a holistic care of victims where GPs predominantly assist with physical complaints of patients and psychologists with the emotional health complaints whilst working together with an understanding that both physical and mental health are inter-related which is further underpinned by the experience of child abuse.

Research findings highlight that there are many women survivors with experiences of different types of child abuse other than CSA and that other abuse types also have deleterious effects. As such, further publically funded services need to be considered for all child abuse victims. For example, Centres Against Sexual Assault are available to support

CSA survivors but no other services are available with specialist expertise in supporting the consequences of other child abuse types. Potentially there could be an establishment of 'Centres Against Violence' with health professionals providing services for victims of various forms of trauma such as different types of child abuse, domestic violence and any other form of adult violence. This will further promote the understanding of the impact of violence and abuse and the potential inter-relationship of different forms of trauma which may all stem from exposure to child abuse that is documented to be highly associated with further adult victimisation (Friesen, Woodward, Horwood, & Fergusson, 2010; McKinney, Caetano, Ramisetty-Mikler, & Nelson, 2009; Ogloff, et al., 2012). Establishing a support centre such as this may further serve to promote community awareness around the issues and impacts of trauma, potentially increasing community involvement and response when they come across victims. It will further bring together professionals who are like minded and pool together expertise which avoid silo practices. The implications for survivors with an establishment of a 'one-stop service' would also reduce the need for survivors to attend multiple locations for the variety of issues which are likely inter-related.

Government department such as Child Protection Agencies which are responsible for investigating cases of reported child abuse need to be further resourced in order to provide timely and efficient responses that consider how potential long-term psychological consequences can be prevented through early intervention. Legislative changes such as the Children, Youth and Families Act (2005) and implementation of new initiatives such as *Child First* (Department of Human Services, 2007) which aims to connect vulnerable families to a variety of services such as parenting advice and support groups are welcomed. Advancements and initiatives such as these needs to be promoted and the existing resources within these agencies enhanced and/or increased to further support children and families in need. The earlier that child abuse can be identified, the earlier appropriate supports and intervention can be provided. With adequate and effective responses, adverse outcomes can be mitigated for these vulnerable children and families. Essential work towards prevention of child abuse must also be continued to increase community awareness and potentially create societal shift in attitudes towards child abuse as the phenomenon of child abuse is multi-determined (Belsky, 1993; Bronfenbrenner, 1979; Cicchetti & Valentino, 2006).

8.4 Strengths of Conducted Studies

Given that the strengths of this thesis in relation to the contribution of findings which expanded and redressed the gap of the literature were presented in the preceding sections, to minimise unnecessary repetition, only the methodological strengths of studies will now be presented.

An important methodological strength of this thesis is in the diverse and rigorous data collection technique used. In particular, the method for Study One allowed for participation by women survivors through various methods such as in person and/or telephone with part mail out options allowed for inclusion of women who could not travel or were uncomfortable meeting face to face. Tailoring how information was collected to the preference of participants maximised their willingness to engage and ensured that collected data had minimal missing information. The use of a clinician administered interview with all participants also preserved the validity of data collected whilst ensuring that the wellbeing of participants when asking often sensitive questions was protected.

The study questions which were collated and created also followed recommendations of existing studies in order to expand on and address the gaps of existing literature. For example, the collection of all five types of child abuse experiences addressed identified gaps in the existing literature citing that the nature of abuse and neglect are often not sufficiently distinguished (Belsky, 1993). This thesis further used psychometrically sound assessments containing behavioural questions when assessing the different types of child abuse. This addressed criticisms that have been raised when one question assessments of child abuse have been used (Schneider, et al., 2007). It further allowed for assessment of the frequency and severity of the different types of child abuse and not simply the presence of an abuse type (Higgins, et al., 2003; Ney, et al., 1994). The use of gold standard severity measures of mental illness as well as a clinician administered mental illness interview tool also allowed for collecting accurate information regarding women's mental health. Recommendations from the literature were also taken into account when designing questions for Study Two to ensure collection of valid and appropriate data from health professionals in the absence of existing psychometrically sound assessments.

Apart from detailed attention being paid to collection of reliable and valid data, data cleaning and all statistical analyses conducted were chosen with special care in order to answer specific research questions whilst fulfilling assumptions to ensue methodological rigour. The analyses conducted for in manuscript one (Chapter Four), which explored both

multivariate relationships between abuse types and mental illness symptoms severity as well as the interactions between types of abuse, fulfilled the required ratio of cases to independent variables for the detection of a medium sized relationship (e.g., $N \geq 50 + 8m$) (Tabacnick & Fidell, 2001). The exploration of interactions between abuse types, data preparation and further statistical probing of the moderated relationships was conducted based on industry standards (Aiken & West, 1991; Baron & Kenny, 1986). Similarly, analyses conducted in manuscripts three and four (Chapters Six and Seven) were also chosen on the basis of the collected data to ensure that assumptions for each chosen analysis were met to maximise the robustness of findings.

Despite much care devoted to the development of research protocol and methodology to maximise the rigour of study findings, limitations of research are unavoidable. The next section present the limitations of studies conduct in context of existing literature.

8.5 Limitations of Conducted Studies

Limitations that commonly impact on studies in the field of child abuse research may also have impacted on the findings of this thesis. In particular, small sample size and sampling bias which has generalisability and statistical power implications are common (Belsky, 1993). The nature and causes of these sampling issues are illustrated by Belsky's quote:

> "It would be a serious error to leave the impression that these methodological difficulties are not appreciated by those doing the primary research in this area or that they are relatively easy to overcome. Many of the problems raised reflect conundrums that are fundamental to the study of child maltreatment. Thus limits of research must be considered in context. This field of inquiry is not concerned with easy-to-recruit, highly motivated, middle-class families with well organised lives… Rather, researchers in this area must rely on the cooperation of community and social welfare agencies, as well as the troubled and often highly defensive, transient and disorganised families that are most at risk of maltreating their offspring." (Belsky, 1993, p.414).

Although the sample size of Study One (N=108) was relatively small for the purposes of conducting regression analyses due to the length and nature of the semi-structured interview and sensitive nature of the topic being discussed, the preceding section demonstrated that it was adequate for the purposes of the main analyses utilised to address

the research question. Larger samples would have been beneficial to enhance the stability of conducted statistical modelling; however, the sample size was comparable to those reported in Higgins, et al. (2003) addressing similar issues supporting the robustness of study findings.

A number of causal mechanisms have been proposed in existing literature exploring the impact of child abuse and mental health consequences such a biological factors (Heim et al., 2000) and child-parent attachment (Fergusson, Lynskey, et al., 1996). It may be possible that different child abuse experiences have different impacts on victims resulting in adult mental illness, but this is not able to be demonstrated through a cross-sectional design. Sampling bias may have resulted from women survivors and various health practitioners self-selecting to participate in the studies. In particular many women survivors who chose to participate in this study had or were currently receiving clinical care, which may limit the generalisability of findings. However, this may also indicate that women survivors inherently require more clinical care due to the negative impact of child abuse as demonstrated by various studies, including association of child abuse experience to the onset (Green, et al., 2010) and persistence (McLaughlin, et al., 2010) of psychiatric disorders, resulting in higher mental health service use documented by Palmer, et al. (2001). The way health practitioners were recruited may also have biased who was aware of the study and who chose to participate. Recruitment occurred via advertisements through professional society websites and newsletters. While this approach enabled the views of health practitioners from around Australia to be captured, it was limited to those who accessed the websites or received the newsletters. It is also likely that health practitioners who have an interest in this area were more likely to complete the survey as demonstrated in the sample consisting of more psychologists and few GPs. Therefore the extent to which these findings are reflective of the whole population of mental health professionals and GPs is somewhat unclear.

A final limitation is the retrospective assessment of child abuse severity used in this study, which may be vulnerable to recollection inaccuracy. However, in the absence of prospectively collected assessment of abuse type and severity, which is unlikely to be available in many cases due to unidentified or unreported abuse, retrospectively completed data as used in this study may provide the most accurate data available for research. The nature of the questionnaire utilised in Study Two may also be a potential limitation. However, due to a lack of any previous published measures of relevance to addressing the studies' research questions at the time this research was conducted, a questionnaire was

developed by the first author (AL) based on clinical experience and thorough review of the available literature. The questionnaire was then refined in consultation with other study authors who are also clinicians with either expertise in psychiatry, psychology and general practice. Due to the questionnaire being exploratory in nature, formal testing of validity and reliability was not conducted. Instead face validity was conducted through a rigorous peer review process to ensure the items in the questionnaire were suitable and robustly assessed the research questions being tested in the respective study.

8.6 Future Research Directions

Despite the abundance of research exploring the impact of child abuse on mental health, there is still a lack of consistency in the methodology within studies conducted, limiting study comparability. To further understand and draw stronger conclusions about the relationship between different types of child abuse experiences and mental health, more prospective longitudinal studies need to be conducted to document the trajectory and other potential protective and risk factors for developing mental illness following child abuse experiences. However, prospective studies in this area of research are difficult to recruit for as there may be difficulties with identifying abused children or gaining consent from guardians to participate in such research. Research with vulnerable population such as child abuse survivors may also be impacted by high drop-out rates and longitudinal studies are expensive to conduct. As such, future cross-sectional studies need to consider findings of this thesis, which echo the recommendations of previous research to account for the different types of abuse and the interaction between abuse types when examining the impacts of child abuse. Standardised assessments that measure the experience of five types of child abuse with adequate psychometric properties are available and should also be utilised to promote better sensitive measurements of the impacts of different types of child abuse. The deleterious effects of child neglect on women's mental health also need to be further explored and accounted for when exploring the impact of child abuse.

With low rates of child abuse disclosures by women survivors found in this thesis, it may be beneficial for future research to ascertain the barriers of abuse disclosure alongside methods that may facilitate disclosures such as health practitioners' enquiry or practitioners' manner of enquiry etc. Conversely, the reasons for the identified low rates of child abuse enquiry by health practitioners also need to be further understood in order to increase identification of adult survivors of child abuse. Future research may wish to consider

exploring ways of enhancing health practitioners' role in conducting screening and supporting women survivors alongside methods to facilitate such enquiry.

Future research is also required to explain the discrepancies found in this thesis between health practitioners' reported confidence in conducting screening and their perceived training need. In particular these factors need to be teased out for the different groups of health practitioners sampled. Qualitative research may be utilised to explore the factors that contribute to health practitioners' level of confidence in supporting survivors of child abuse. This information may be helpful to inform the developers of training programs for these health practitioners to enable delivery of content and training formats that increases health practitioners' confidence and capacity to identify and support adult survivors of child abuse. Further research to explore the specific training topics which different health practitioners might be interested in and how these specific training topics would increase their confidence levels may be helpful. Opinions of different health practitioners may also be collected to identify ways to maximise screening women patients for child abuse experiences. Further studies may also wish to consider asking health practitioners about their own abuse experience which was found by Gutmanis, Beynon, Tutty, Wathen, and MacMillan (2007) to influence screening behaviours. It will also be beneficial for future studies to identify psychologists' views on support, treatment options and beliefs about the various types of child abuse.

8.7 Conclusion

The findings of this thesis have begun to highlight the significant associations between different child abuse types and women's mental illness. It provided novel findings with respect to health practitioners' practices with screening and supporting women survivors. However, there is still a long way to go before the long term consequences of child abuse on mental health are reliably documented. Much work is still needed to address and prevent the complex and multi-determined phenomenon of child abuse. Emphasising the importance of not only preventing the occurrence of child abuse but also offering early intervention to survivors, this thesis has asserted and provided findings which further documented the negative consequences of child abuse experiences on women's mental health, particularly the high prevalence of depression, anxiety and post-traumatic stress experienced by women survivors. It further highlighted the need to consider all types of child abuse and its interactions when examining associated mental health outcomes. In

particular, the negative impact of child neglect as well as the interactions between witnessing violence and other co-occurring child abuse types needs to be further explored. New findings were also uncovered which documented that women survivors of child abuse have high general and emotional health service use and sought assistance from a variety of health practitioners. This thesis also provided insights into the rates of child abuse disclosure. Women survivors were also found to likely feel hopeful or relieved at the thought of being asked about their child abuse experience by health practitioners, challenging some of the previously reported beliefs held by some health practitioners that asking about child abuse experiences will re-traumatise survivors. Therefore currently there is a missed opportunity for health practitioners to assist in identification of child abuse survivors. Findings related to the practices of various health practitioners regarding screening and supporting women survivors of child abuse further highlighted important differences, which can be used to inform curriculum to better equip health practitioners to identify and provide more appropriate and holistic intervention to child abuse survivors. Implications of findings from this thesis relating to clinical practice, government services, new initiatives to increase identification and provision of early intervention services must all be considered to better support survivors of child abuse in order to address this complex phenomenon.

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Appendix 1. Study One Flyer

Childhood Trauma & Women's Mental Health

The **Monash Alfred Psychiatry research centre (MAPrc)** is conducting a study looking at childhood maltreatment experiences & women's mental health. We are seeking adult women aged 18 years or over who experienced any form of childhood maltreatment (e.g. emotional, physical and sexual abuse, neglect and witnessing violence in the home).

Participation takes between 1-2 hours and involves completing questionnaires asking about:

- Your childhood maltreatment experiences
- Your current mental health
- Prior use of health services

You may choose to complete the questionnaires in one of the below ways:

- At Monash-Alfred Psychiatry Research Centre
- At another location as discussed with the researcher
- Be mailed out most of the questionnaire and complete the remainder questionnaire over the telephone
- Be interviewed over the telephone

You will be reimbursed $20 for your travel costs.

Who can I contact about this study?

The Study Co-ordinator: Ms Adeline Lee
0457 070 275
Adeline.Lee@monash.edu

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Adeline Lee

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Appendix 2. Study One Participant Information

Participant Information and Consent Form

Site: Alfred and Monash University

Full Project Title: The Relationship between Childhood Maltreatment and Current Symptoms of Mental Illness in Women

Principal Researcher: Prof Jayashri Kulkarni

Associate Researcher(s): Ms Adeline Lee, Dr Stuart Lee, Dr. Jan Coles

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1. Introduction

We invite you to take part in this research project looking at the impact of childhood maltreatment experiences on women's current mental health. This participant information and consent form tells you about the research project. It explains what is involved to help you decide if you want to take part.

Please read this information carefully. Ask questions about anything that you don't understand or want to know more about. Before deciding whether or not to take part, you might want to talk about it with a relative, friend, or your local health worker.

Participation in this research is voluntary. If you don't wish to take part, you don't have to.

Any information you provide will be kept strictly confidential. If you decide to take part in this project you will be allocated a code to maintain your confidentiality and your name will not be used on the questionnaires.

You will be given a copy of this Participant Information and Consent Form to keep.

2. What is the purpose of this research project?

This project intends to explore if women who suffered different types of childhood maltreatment or abuse are more likely to experience specific forms of mental illness in adulthood. We are also interested in exploring if and when women with a maltreatment

experience in childhood started to ask for help and the type of people or services that they went to for help. We are hoping this will improve the ability of services to better identify and provide earlier and more appropriate support to potentially vulnerable women.

The results of this research will be used by the researcher Adeline Lee to obtain a Doctorate of Clinical Psychology, but more importantly you will be helping increase our understanding of how childhood maltreatment experiences relates to mental health and what helps women in your situation to cope with these experiences.

3. What does participation in this research project involve?

- Procedures

Participating in this study involves filling out questionnaires asking about your current mental health, experience of maltreatment or abuse before the age of 18 years and if you have previously accessed health care services for any of your experiences. Completion of the questionnaires will take between 1 to 2 hours.

You may choose for the researcher:

a) To meet with you to complete the questionnaires
- at the hospital or clinic which you currently access for support,
- at the Monash Alfred Psychiatry Research Centre,
- at another location as discussed with the researcher.

b) To **mail** out **parts of the questionnaire** for you to complete and return in a reply paid envelope and **telephone** you to complete the remainder of the questionnaire.

c) To interview you over the phone.

- Reimbursement

You will be reimbursed $20 for your travel costs if you complete the questionnaires in person.

4. What are the possible benefits?

We cannot guarantee or promise that you will receive any benefits from this research. However, by participating you will help to increase our understanding of how childhood maltreatment experiences relates to mental health, what helps women in your situation to cope with experiences such as yours, and the best way for health services to support you. The information you will be providing may improve the way in which services can help women who have experienced maltreatment or abuse in childhood.

5. What are the possible risks?

As this study is observational and requires only your completion of a series of questionnaires, there are minimal risks involved. However, you are being asked to provide information about your prior childhood maltreatment experiences and current mental health, and some people may find this distressing.

To minimise any potential discomfort, the researcher meeting/speaking with you will be able to provide immediate support. She is trained in talking about sensitive issues and has experience working with people who have experienced trauma. However, she will not be involved in your ongoing clinical care. If you become upset or distressed as a result of your participation in the research, the researcher is also able to arrange for counselling or other appropriate support. If you are currently accessing clinical services, the researcher with your consent will report any unforeseen or adverse event during and/or after completion of the questionnaire to your counsellor or psychologist to ensure you get the clinical care you may require. If you experience any discomfort when completing the questionnaire mailed out to you, please contact one of the services listed on the attached sheet.

6. Do I have to take part in this research project?

Participation in any research project is voluntary. If you do not wish to take part you are not obliged to. If you decide to take part and later change your mind, you are free to withdraw from the project. If you complete and return the mailed out sections of the questionnaire [as per section (3a) above] you are consenting to being telephoned to complete the remainder of the questionnaire. Your decision whether to take part or not, or to take part and then withdraw, will not affect your relationship with the researchers or Alfred Health.

7. How will I be informed of the final results of this research project?

Should you want a summary of the results, please let the researcher know. The summary of results will be sent out to you when the research project concludes. Alternatively, following completion of the project, you may contact the Chief Investigator Professor Jayashri Kulkarni or the study coordinator Ms Adeline Lee should you wish to receive additional information about project findings.

8. What will happen to information about me?

Information collected will only be disclosed with your permission, except as required by law. All information collected for this study is de-identified and stored in locked filing cabinets within secure offices of the Monash Alfred Psychiatry Research Centre. Records and study information is stored and kept indefinitely after completion of the research project. Only the named researchers will have access to this information.
In any publication and/or presentation, information will be provided in such a way that you cannot be identified, except with your permission. Results will be analysed and presented as a whole, ensuring that any outcomes pertaining to individual participants will not be able to be identified or determined.

9. Can I access research information kept about me?

In accordance with relevant Australian and/or Victorian privacy and other relevant laws, you have the right to access the information collected and stored by the researchers about you. Please contact one of the researchers named at the end of this document if you would like to access your information.

Further, in accordance with regulatory guidelines, the information collected in this research project will be kept indefinitely. You must be aware that the information may become de-identified at some point and access to information about you after this point will not be possible.

10. Is this research project approved?

The ethical aspect of this research project has been approved by the Human Research Ethics Committee of The Alfred and Monash University. This project will be carried out according to the National Statement on Ethical Conduct in Human Research (2007) produced by the National Health and Medical Research Council of Australia. This statement has been developed to protect the interests of people who agree to participate in human research studies.

11. Who can I contact?

The person you may need to contact will depend on the nature of your query. Therefore, please note the following:

For further information or appointments:

If you want any further information concerning this project or if you experience any discomfort which may be related to your involvement in the project, you can contact:

1) The chief investigator: Professor Jayashri Kulkarni by phone on ([redacted]
2) The study coordinator: Ms Adeline Lee by phone on [redacted]

For complaints:

If you have any complaints about any aspect of the project, the way it is being conducted or any questions about being a research participant in general, then you may contact:

At Alfred Health: Manager of the Research and Ethics Unit, Rowan Frew, on (03) 9076 3848 At Monash University: Executive Officer, Human Research Ethics, on (03) 9905 2052

Appendix 3. Study One Consumer Questionnaire (excluding M.I.N.I 6.0)

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CONSUMER SURVEY

▪ GENERAL INFORMATION ▪

1. Year of birth ……....…

2. In what country were you born?

☐ Australia ☐ Other (please specify).....

3. Where do you currently live? Town/Suburb: ……..... Postcode.....…….....…

4. How long have you lived in this community (either your present address or nearby)?

All my life	1	Not all my life, but more than 5 years	2
Between 1 and 5 years	3	Less than 1 year	4

5. What is your marital status?

Married/defacto	1	Divorced/Separated	2
Widowed	3	Single/never married	4

6. What best describes your current living situation?

Living alone (or with unrelated others)	1	Living with your spouse/partner (no children)	2
Living with your spouse/partner and child(ren)	3	Lone parent (yourself and child(ren)	4
Living with your parent(s)	5	Other (please specify)……	

7. What is the highest level of education that you have completed?

Part of high school	1	High school completed	2
Trade/TAFE certificate part completed	3	Trade/TAFE certificate completed	4
University degree partially completed	5	University degree completed	6

8. What is your current employment status (please circle the number that best describes you)?

Full-time employed	1	Part-time employed	2	Self employed	3
Student	4	Home duties	5	Disability/Sickness Benefit	6
Aged Pension	7	Unemployed	8		

9. Which of the following brackets does your household's gross yearly income fall (i.e.: income before tax)?

Less than $12,000	1	$12,001-$40,000	2	$40,001-$60,000	3
$60,001-$80,000	4	$80,001+	5		

BDI®-II

Date:

Name: _____ Marital Status: _____ Age: _____ Sex: _____

Occupation: _____ Education: _____

Instructions: This questionnaire consists of 21 groups of statements. Please read each group of statements carefully, and then pick out the **one statement** in each group that best describes the way you have been feeling during the **past two weeks, including today.** Circle the number beside the statement you have picked. If several statements in the group seem to apply equally well, circle the highest number for that group. Be sure that you do not choose more than one statement for any group, including Item 16 (Changes in Sleeping Pattern) or Item 18 (Changes in Appetite).

1. Sadness
- 0 I do not feel sad.
- 1 I feel sad much of the time.
- 2 I am sad all the time.
- 3 I am so sad or unhappy that I can't stand it.

2. Pessimism
- 0 I am not discouraged about my future.
- 1 I feel more discouraged about my future than I used to be.
- 2 I do not expect things to work out for me.
- 3 I feel my future is hopeless and will only get worse.

3. Past Failure
- 0 I do not feel like a failure.
- 1 I have failed more than I should have.
- 2 As I look back, I see a lot of failures.
- 3 I feel I am a total failure as a person.

4. Loss of Pleasure
- 0 I get as much pleasure as I ever did from the things I enjoy.
- 1 I don't enjoy things as much as I used to.
- 2 I get very little pleasure from the things I used to enjoy.
- 3 I can't get any pleasure from the things I used to enjoy.

5. Guilty Feelings
- 0 I don't feel particularly guilty.
- 1 I feel guilty over many things I have done or should have done.
- 2 I feel quite guilty most of the time.
- 3 I feel guilty all of the time.

6. Punishment Feelings
- 0 I don't feel I am being punished.
- 1 I feel I may be punished.
- 2 I expect to be punished.
- 3 I feel I am being punished.

7. Self-Dislike
- 0 I feel the same about myself as ever.
- 1 I have lost confidence in myself.
- 2 I am disappointed in myself.
- 3 I dislike myself.

8. Self-Criticalness
- 0 I don't criticize or blame myself more than usual.
- 1 I am more critical of myself than I used to be.
- 2 I criticize myself for all of my faults.
- 3 I blame myself for everything bad that happens.

9. Suicidal Thoughts or Wishes
- 0 I don't have any thoughts of killing myself.
- 1 I have thoughts of killing myself, but I would not carry them out.
- 2 I would like to kill myself.
- 3 I would kill myself if I had the chance.

10. Crying
- 0 I don't cry any more than I used to.
- 1 I cry more than I used to.
- 2 I cry over every little thing.
- 3 I feel like crying, but I can't.

_____ Subtotal Page 1

Continued on Back

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11. Agitation

0 I am no more restless or wound up than usual.
1 I feel more restless or wound up than usual.
2 I am so restless or agitated that it's hard to stay still.
3 I am so restless or agitated that I have to keep moving or doing something.

12. Loss of Interest

0 I have not lost interest in other people or activities.
1 I am less interested in other people or things than before.
2 I have lost most of my interest in other people or things.
3 It's hard to get interested in anything.

13. Indecisiveness

0 I make decisions about as well as ever.
1 I find it more difficult to make decisions than usual.
2 I have much greater difficulty in making decisions than I used to.
3 I have trouble making any decisions.

14. Worthlessness

0 I do not feel I am worthless.
1 I don't consider myself as worthwhile and useful as I used to.
2 I feel more worthless as compared to other people.
3 I feel utterly worthless.

15. Loss of Energy

0 I have as much energy as ever.
1 I have less energy than I used to have.
2 I don't have enough energy to do very much.
3 I don't have enough energy to do anything.

16. Changes in Sleeping Pattern

0 I have not experienced any change in my sleeping pattern.

1a I sleep somewhat more than usual.
1b I sleep somewhat less than usual.

2a I sleep a lot more than usual.
2b I sleep a lot less than usual.

3a I sleep most of the day.
3b I wake up 1–2 hours early and can't get back to sleep.

17. Irritability

0 I am no more irritable than usual.
1 I am more irritable than usual.
2 I am much more irritable than usual.
3 I am irritable all the time.

18. Changes in Appetite

0 I have not experienced any change in my appetite.

1a My appetite is somewhat less than usual.
1b My appetite is somewhat greater than usual.

2a My appetite is much less than before.
2b My appetite is much greater than usual.

3a I have no appetite at all.
3b I crave food all the time.

19. Concentration Difficulty

0 I can concentrate as well as ever.
1 I can't concentrate as well as usual.
2 It's hard to keep my mind on anything for very long.
3 I find I can't concentrate on anything.

20. Tiredness or Fatigue

0 I am no more tired or fatigued than usual.
1 I get more tired or fatigued more easily than usual.
2 I am too tired or fatigued to do a lot of the things I used to do.
3 I am too tired or fatigued to do most of the things I used to do.

21. Loss of Interest in Sex

0 I have not noticed any recent change in my interest in sex.
1 I am less interested in sex than I used to be.
2 I am much less interested in sex now.
3 I have lost interest in sex completely.

SAMPLE

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_____ Subtotal Page 2

_____ Subtotal Page 1

_____ Total Score

BAI®

NAME _____ DATE _____

Below is a list of common symptoms of anxiety. Please carefully read each item in the list. Indicate how much you have been bothered by each symptom during the PAST WEEK, INCLUDING TODAY, by placing an X in the corresponding space in the column next to each symptom.

	NOT AT ALL	MILDLY It did not bother me much.	MODERATELY It was very unpleasant, but I could stand it.	SEVERELY I could barely stand it.
1. Numbness or tingling.				
2. Feeling hot.				
3. Wobbliness in legs.				
4. Unable to relax.				
5. Fear of the worst happening.				
6. Dizzy or lightheaded.				
7. Heart pounding or racing.				
8. Unsteady.				
9. Terrified.				
10. Nervous.				
11. Feelings of choking.				
12. Hands trembling.				
13. Shaky.				
14. Fear of losing control.				
15. Difficulty breathing.				
16. Fear of dying.				
17. Scared.				
18. Indigestion or discomfort in abdomen.				
19. Faint.				
20. Face flushed.				
21. Sweating (not due to heat).				

SAMPLE

PEARSON

PsychCorp

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▪ PCL-C ▪

Below is a list of problems and complaints that people sometimes have in response to stressful life experiences. Please read each one carefully, put an X in the box to indicate how much you have been bothered by that problem IN THE PAST MONTH.					
	Not at all	A little bit	Moderately	Quite a bit	Extremely
Repeated, disturbing memories, thoughts, or images of a stressful experience from the past?					
Repeated, disturbing dreams of a stressful experience from the past?					
Suddenly acting or feeling as if a stressful experience were happening again (as if you were reliving it)?					
Feeling very upset when something reminded you of a stressful experience from the past?					
Having physical reactions (e.g., heart pounding, trouble breathing, sweating) when something reminded you of a stressful experience from the past?					
Avoiding thinking about or talking about a stressful experience or avoiding having feelings related to it?					
Avoiding activities or situations because they remind you of a stressful experience from the past?					
Trouble remembering important parts of a stressful experience from the past?					
Loss of interest in things that you used to enjoy?					
Feeling distant or cut off from other people?					
Feeling emotionally numb or being unable to have loving feelings for those close to you?					
Feeling as if your future will somehow be cut short?					
Trouble falling or staying asleep?					
Feeling irritable or having angry outbursts?					
Having difficulty concentrating?					
Being "super-alert" or watchful or on guard?					
Feeling jumpy or easily startled?					

▪ SERVICE USE ▪

Have you ever received help from the following health professionals for emotional or psychological distress? (e.g. intense worry or sadness) (Please ✓ all that apply)				
	No	Yes	If Yes, at what age?	If Yes, how many times in the past 12 months?
Psychiatrist				
Psychologist, psychotherapist, social worker or counsellor				
General Practitioner				
Mental Health Nurse				
A religious or spiritual adviser like a Minister, Priest, Imam or Rabbi				
Medical Specialist (e.g. cardiologist, oncologist, obstetrician) Please specify:				
General nurse or occupational therapist				
Alternative or complementary health professional (e.g. herbalist, chiropractor, naturopath)				
Any other health professional (please specify):				

▪ PAST EXPERIENCES ▪ CCMS-A ▪

1. Before the age of 18, how frequently did you experience any of the following behaviours? Please rate the frequency with which the behaviours were directed toward you by your mother, father, or other adult using the following response scale:

0 (never or almost never) 1 (occasionally) 2 (sometimes) 3 (frequently) 4 (very frequently)

Behaviours directed to you by	your mother	your father	another adult*
a. yelling at you	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4
b. ridiculing, embarrassing, using sarcasm (making you feel guilty, silly or ashamed)	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4
c. provoking, making you afraid, using cruelty	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4

If these behaviours occurred, at what age did it start? _____ years

* (any other older person, such as a step-parent, a relative, family friend, stranger, etc.)

2. Before the age of 18, how frequently did you witness any of these behaviours listed in the previous question directed toward others in the family?

0 (never or almost never) 1 (occasionally) 2 (sometimes) 3 (frequently) 4 (very frequently)

If these behaviours occurred, at what age did it start? _____ years

3.	Before the age of 18, please rate how often you experienced any of the following behaviours directed toward you by your mother, father, or another adult using the following response scale: 0 (never or almost never) 1 (occasionally) 2 (sometimes) 3 (frequently) 4 (very frequently)			
Behaviours directed to you by		your mother	your father	another adult*
a.	Physical punishment for wrongdoing (e.g., smacking, grabbing, shaking)	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4
b.	Other use of violence (e.g., hitting, punching, kicking)	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4
c.	Severely hurting you (requiring medical attention)	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4
If these behaviours occurred, at what age did it start? _____ years				
* (any other older person, such as a step-parent, a relative, family friend, stranger, etc.)				

4.	Before the age of 18, how frequently did you witness any of these behaviours listed in the previous question directed toward others in the family? 0 (never or almost never) 1 (occasionally) 2 (sometimes) 3 (frequently) 4 (very frequently)
If these behaviours occurred, at what age did it start? _____ years	

5.	Before the age of 18, please rate how often you experienced any of the following behaviours directed toward you by your mother, father, or another adult using the following response scale: 0 (never or almost never) 1 (occasionally) 2 (sometimes) 3 (frequently) 4 (very frequently)			
Behaviours directed to you by		your mother	your father	another adult*
a.	Not giving you regular meals or baths, clean clothes, or needed medical attention	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4
b.	Shutting you in a room alone for an extended period of time	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4
c.	Ignoring your requests for attention; not speaking to you for an extended period of time	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4
If these behaviours occurred, at what age did it start? _____ years				
* (any other older person, such as a step-parent, a relative, family friend, stranger, etc.)				

6. Childhood sexual experiences: Many people report having had childhood sexual experiences with other children or with older people. The following questions relate only to sexual activities with older people. These 'older people' include someone who at the time was either: an adolescent (at least 5 years older than you); or an adult (18 years of age or over)

Before you turned 18, did an older person engage in any of the following types of sexual activity with you? Please rate the frequency of each type of sexual activity listed below that was directed toward you by your mother, your father, and other adults or older adolescents.

0 = never 1 = once 2 = twice 3 =3 - 6 times 4 =7 - 20 times 5 =more than 20 times

Sexual Behaviours engaged in by		your mother	your father	another adult*
a.	requested you to do something sexual	0 1 2 3 4 5	0 1 2 3 4 5	0 1 2 3 4 5
b.	forced you to watch others having sex	0 1 2 3 4 5	0 1 2 3 4 5	0 1 2 3 4 5
c.	showed you his erect penis		0 1 2 3 4 5	0 1 2 3 4 5
d.	touched your vagina, or breasts	0 1 2 3 4 5	0 1 2 3 4 5	0 1 2 3 4 5
e.	made you touch his penis or her vagina or breasts	0 1 2 3 4 5	0 1 2 3 4 5	0 1 2 3 4 5
f.	put his/her mouth/tongue on your vagina	0 1 2 3 4 5	0 1 2 3 4 5	0 1 2 3 4 5
g.	made you put your mouth or tongue on his penis/ her vagina	0 1 2 3 4 5	0 1 2 3 4 5	0 1 2 3 4 5
h.	put his penis in your vagina or anus		0 1 2 3 4 5	0 1 2 3 4 5
i.	put a finger in your vagina or anus	0 1 2 3 4 5	0 1 2 3 4 5	0 1 2 3 4 5
j.	put other object in your vagina or anus	0 1 2 3 4 5	0 1 2 3 4 5	0 1 2 3 4 5
K	made you put other object inside a vagina or anus	0 1 2 3 4 5	0 1 2 3 4 5	0 1 2 3 4 5

If these behaviours occurred, at what age did it start? _____ years

* (any other older person, such as a step-parent, a relative, family friend, stranger, etc.)

7. Was any official report of maltreatment or neglect ever made to police or child protection authorities concerning you as a child?

☐ Yes ☐ No (If yes, Please describe) ……

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▪ SERVICE USE ▪

1.After experiencing some form of childhood maltreatment, did you tell anyone or ask for help from anyone?

☐ Yes (Please specify who or which professional, e.g.: friend, relative, doctor etc) ☐ No (go to Q2 below)

.....

Was he or she helpful?

☐ Yes ☐ No (If yes, how were they helpful)

.....

.....

2.After experiencing childhood maltreatment did you visit any of the following health professionals regarding your health in general (include visits that were for check-ups or script repeats)

(Please ✓ all that apply)

	No	Yes	If yes, did they ask you about your childhood maltreatment experience?	If Yes at what age did you first access?	If Yes, how many times in the past 12 months?
Psychiatrist			No ☐ Yes ☐		
Psychologist, psychotherapist, social worker or counsellor			No ☐ Yes ☐		
General Practitioner			No ☐ Yes ☐		
Mental Health Nurse			No ☐ Yes ☐		
A religious or spiritual adviser like a Minister, Priest, Imam or Rabbi			No ☐ Yes ☐		
Other Medical Specialist (e.g. cardiologist, oncologist, obstetrician) Please specify:			No ☐ Yes ☐		
General nurse or occupational therapist			No ☐ Yes ☐		
Alternative or complementary health professional (e.g. herbalist, chiropractor, naturopath)			No ☐ Yes ☐		
Any other health professional (please specify):			No ☐ Yes ☐		
			If ANY Yes ticked in this column go to 3 If not go to 3a		

3. If you were asked about your childhood maltreatment experience by a health professional how did you feel?	3a. If you were not asked, had the health professional asked about your childhood maltreatment experience, would you have been:
☐ offended ☐ indifferent ☐ hopeful ☐ relieved ☐ worried ☐ other (please specify).	☐ offended ☐ indifferent ☐ hopeful ☐ relieved ☐ worried ☐ other (please specify).

▪ YOUR OPINIONS ▪

What has been the most helpful thing for you in coping with having experienced some form of childhood (before the age of 18 years) maltreatment?

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What do you think are the major issues associated with child maltreatment?

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Thank you for your time and cooperation with this research.

Appendix 4. Study One Contact Card

24 Hrs Help lines

Lifeline **13 11 14**
Mental Health Advice Line **1300 280 737**
SuicideLine(VIC) **1300 651 251**
Women's Domestic Violence Crisis Service (VIC) **1800 015 188**
Centre Against Sexual Assault **1800 806 292**
beyondblue info line **1300 224 636**

For specific area mental health psychiatric triage please refer to the information sheet provided.

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Thank You for participating in this research.

For further information on this study, please contact:

Ms. Adeline Lee
Mobile [redacted]
Email: [redacted]

On the back of this card are some 24hr help lines

Appendix 5. Study Two Flyer

Principal Researcher: Professor Jayashri Kulkarni
Associate Researchers: Ms. Adeline Lee, Dr. Jan Coles & Dr. Stuart Lee

HEALTH PRACTITIONERS' PRACTICE CHARACTERISTICS, ATTITUDES & BELIEFS ON CHILDHOOD MALTREAMENT & MENTAL ILLNESS

An invitation to health practitioners to participate in a research project looking at individual and practice characteristics in treatment of women with childhood maltreatment experiences.

The Monash Alfred Psychiatry Research Centre is conducting a study looking at various health practitioners' practice characteristics, attitudes and beliefs about women with experiences of childhood maltreatment and the relationship with mental illness.

We are seeking health practitioners:

■ Psychiatrists ■ General Practitioners ■ Psychologists
■ Social Workers ■ Psychotherapists ■ Counsellors
■ Mental health nurses ■ Occupational therapists

Participation will take around **5 minutes** and you will complete a brief electronic or hard-copy questionnaire asking about:

- Characteristics of your workplace
- Your attitudes and beliefs on the issue of childhood maltreatment and its impact on mental health
- Your current practices with women with childhood maltreatment experiences

If you are interested in participating please access the questionnaire at:
http://www.med.monash.edu.au/spppm/surveys2009/adelinel

If you wish to receive a hard-copy of the questionnaire or want more information on this study, please contact the study coordinator, Ms. Adeline Lee [redacted] or via email: [redacted]

Appendix 6. Study Two Participant Information

Participant Information

Site: Alfred and Monash University

Full Project Title: The Relationship between Childhood Maltreatment in Women and Current Symptoms of Mental Illness- Clinicians' current practice, attitudes and beliefs.

Principal Researcher: Prof Jayashri Kulkarni
Associate Researcher(s): Ms Adeline Lee, Dr Stuart Lee, Dr. Jan Coles

---

You are invited to take part in this research project.

A great deal of research has highlighted that experiencing maltreatment or abuse in childhood is associated with an increased risk of developing mental illness in adulthood. What is far less clear, however, is the extent to which and confidence with which, primary care or mental health practitioners are able to identify and either directly support or refer for support, adult women with a history of childhood maltreatment or abuse who are experiencing psychological distress.

In order to understand and promote early intervention for women with childhood maltreatment experiences, ***we need your help*** to ascertain the current practice and beliefs of health professionals and their thoughts about how to best care for this vulnerable population.

This is part of a larger project looking at women with prior childhood maltreatment experiences and their current mental health, alongside their past help-seeking behaviours and primary health care utilisation.

The results of this research will be used by the researcher Adeline Lee to obtain a Doctorate of Clinical Psychology.
If you would like to give feedback about your beliefs and experiences of caring for women with a childhood maltreatment or abuse history, it will ***take around 5 minutes,*** *and involve completing a* ***Clinician Feedback Questionnaire*****.** The questionnaire asks about your background as a clinician and your attitudes, beliefs and confidence in dealing with women with childhood maltreatment experiences. Completion of the questionnaire is an indication of your consent to participate in this study.

The online questionnaire can be found at:
http://www.med.monash.edu.au/spppm/surveys2009/adelinel
Alternatively a hard-copy of the questionnaire can be mailed out with a reply-paid envelope by contacting the study coordinator.

Participation in this study is ***voluntary and anonymous*** as no identifying information is collected. All information that you provide us will remain strictly private and confidential.

If you would like further information or a summary of results from this study or the larger study, please contact the study coordinator Ms Adeline Lee on [redacted] or via email: [redacted]

If you have any complaints about any aspect of this study, the way it is being conducted or any questions about your rights as a participant, then you can contact:

Ms. Rowan Frew, Ethics Manager, The Alfred Hospital (ph. 03 9076 3848) OR
The Executive Officer, Monash University, Human Research Ethics (ph 03 9905 2052)

Thank you.

Appendix 7. Study Two Clinician Feedback Questionnaire

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Medicine, Nursing and Health Sciences

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CLINICIAN FEEDBACK QUESTIONNAIRE

▪ GENERAL INFORMATION ▪

1. Year of birth……..... 2.Gender: ☐ Male ☐ Female

3. What is your profession?
   ☐ Psychiatrist ☐ General practitioner ☐ Psychologist ☐ Social worker ☐ Psychotherapist
   ☐ Counsellor ☐Mental health nurse ☐ Occupational therapist ☐ Other (please specify)
   .....

4. How long have you been practising clinically? ..... years

5. In what country did you receive your medical/nursing/psychological training?
   ☐ Australia ☐ Other (please specify)…….....…

6. Where is your current place of work/practice Town:.....Postcode.....……

7. What best describes your current place of work/practice?
   ☐ Public Hospital ☐ Community Health Centre ☐ Private Hospital
   ☐ Private Medical Clinic
   ☐ Private Practice (sole practitioner) ☐ Private Practice(2-5 practitioners)
   ☐ Private Practice (6-10 practitioners) ☐ Other (please specify).....

8. Do you have an interest in mental health? Yes ☐ No ☐

9. Have you undertaken additional training in mental health? Yes ☐ No ☐

10. How often do you see an adult female client with:	Daily	Weekly	Monthly	Yearly
Mental health issue/(s) who has had childhood maltreatment experience/(s)?				
With childhood maltreatment experience/(s) who has mental health issue/(s)?				
11. How often do you refer a client who has had childhood maltreatment experience/(s) for ongoing treatment?				

12. To who (discipline or organisation) do you refer these clients?
……

▪ ATTITUDES AND BELIEFS ▪

13. **To what extent do you agree with the following:**	**Strongly disagree**	**Disagree**	**Uncertain**	**Agree**	**Strongly agree**
a. Child maltreatment is a health issue.					
b. Child maltreatment is not a problem for women in my practice population.					
c. I believe that women should be routinely screened for childhood maltreatment experience/(s)					
d. I put off talking about childhood maltreatment experience/(s) because it takes too much time					
e. I do not talk about childhood maltreatment experience/(s) because I do not know what to do					
f. When women disclosed child maltreatment experience/(s) I give information about help available					
g. Experience/(s) of childhood maltreatment impacts on mental health					
h. I routinely ask all women about their mental health					
i. I routinely ask all women about their childhood maltreatment experience/(s)					
j. I would like specific training on child maltreatment and how to treat women survivors.					

14. **How important is:**	**Not important**	**Somewhat important**	**Moderately important**	**Very important**
a. Screening women for childhood maltreatment experience/(s)?				
b. Supporting women with childhood maltreatment experience/(s)?				
c. Referring women with childhood maltreatment experience/(s) for ongoing treatment?				

15. **How confident are you in:**	**Not confident**	**Somewhat confident**	**Moderately confident**	**Very confident**
a. Screening women for childhood maltreatment experience/(s)?				
b. Supporting women with childhood maltreatment experience/(s)?				
c. Referring women with childhood maltreatment experience/(s)? (if you do not provide ongoing treatment)				

16. **How comfortable are you in screening patients for *childhood maltreatment* experience/(s) such as:**	**Not comfortable**	**Somewhat comfortable**	**Moderately comfortable**	**Very comfortable**
a. Sexual abuse?				
b. Physical abuse?				
c. Emotional abuse?				
d. Neglect?				
e. Witnessing family violence?				

17. **Would you benefit from further training on:**	**No**	**Uncertain**	**Yes**
a. Child maltreatment and its impact on women?			
b. Screening women for child maltreatment experience/(s)?			
c. Supporting women with child maltreatment experience/(s)?			
d. Referring women with child maltreatment experiences to appropriate service/(s)?			

18. Who do you think should routinely ask women about their childhood maltreatment experiences?

☐ Psychiatrists ☐ General practitioners ☐ Psychologists ☐ Social workers ☐Psychotherapists

☐ Counsellors ☐Mental health nurses ☐ Occupational therapists ☐ Other (please specify).....

……..

19. What are the barriers to screening for childhood maltreatment in your practice?

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Thank you for your time and cooperation with this research.

Appendix 8. Alfred Research Ethics Committee Certificate of Approval

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ETHICS COMMITTEE CERTIFICATE OF APPROVAL

This is to certify that

Project No: 304/09

Project Title: The Relationship between Childhood Maltreatment and Current Symptoms of Mental Illness in Women.

Principal Researcher: Professor Jayashri Kulkarni

Participant Information and Consent Form version 2.1 dated: 29th-Sep-2009

was considered by the Ethics Committee on ***24-Sep-2009*** *and* ***APPROVED*** *on* **07-Oct-2009**

It is the Principal Researcher's responsibility to ensure that all researchers associated with this project are aware of the conditions of approval and which documents have been approved.

The Principal Researcher is required to notify the Secretary of the Ethics Committee, via amendment or progress report, of

- Any significant change to the project and the reason for that change, including an indication of ethical implications (if any);
- Serious adverse effects on participants and the action taken to address those effects;
- Any other unforeseen events or unexpected developments that merit notification;
- The inability of the Principal Researcher to continue in that role, or any other change in research personnel involved in the project;
- Any expiry of the insurance coverage provided with respect to sponsored clinical trials and proof of re-insurance;
- A delay of more than 12 months in the commencement of the project; and,
- Termination or closure of the project.

Additionally, the Principal Researcher is required to submit

- A Progress Report on the anniversary of approval and on completion of the project *(forms to be provided)*;

The Ethics Committee may conduct an audit at any time.

All research subject to the Alfred Hospital Ethics Committee review must be conducted in accordance with the National Statement on Ethical Conduct in Human Research (2007).

The Alfred Hospital Ethics Committee is a properly constituted Human Research Ethics Committee in accordance with the National Statement on Ethical Conduct in Human Research (2007).

SPECIAL CONDITIONS

None

SIGNED: [redacted]
Chair, Et

R. FREW
SECRETARY
ETHICS COMMITTEE

Please quote Project No and Title in all correspondence

TheAlfred

Ethics Committee

Certificate of Approval of Amendments

This is to certify that amendments to

Project **304/09 The Relationship between Childhood Maltreatment and Current Symptoms of Mental Illness in Women.**

Principal Researcher: **Professor Jayashri Kulkarni**

Amendment includes:
Participant Information & Consent Form **(Clinician) Version 2.2** dated: **06-Jan-2010**
Participant Information & Consent Form **(Consumer) Version 2.2** dated: **06-Jan-2010**

have been approved in accordance with your amendment application dated **06-Jan-2010** on the understanding that you observe the National Statement on Ethical Conduct in Human Research.

It is now your responsibility to ensure that all people associated with this particular research project are made aware of what has actually been approved and any caveats specified in correspondence with the Ethics Committee. Any further change to the application which is likely to have a significant impact on the ethical considerations of this project will require approval from the Ethics Committee.

[redacted]

Chair, Ethics Committee (or delegate) Date: 07-Jan-2010

R. FREW
SECRETARY
ETHICS COMMITTEE

All research subject to Alfred Hospital Ethics Committee review must be conducted in accordance with the National Statement on Ethical Conduct in Human Research (2007).

The Alfred Ethics Committee is a properly constituted Human Research Ethics Committee operating in accordance with the National Statement on Ethical Conduct in Human Research (2007).

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Ethics Committee

Certificate of Approval of Amendments

This is to certify that amendments to

Project **304/09 The Relationship between Childhood Maltreatment and Current Symptoms of Mental Illness in Women**

Principal Researcher: **Professor Jayashri Kulkarni**

Amendment:
Addition of option for mail/phone questionnaire completion; additional advertising; revised recruitment flyer; revisions to Module One
Participant Information & Consent Form **Version 2.3** dated: **9-Mar-2010**

have been approved in accordance with your amendment application dated **18-Feb-2010** on the understanding that you observe the National Statement on Ethical Conduct in Human Research.

It is now your responsibility to ensure that all people associated with this particular research project are made aware of what has actually been approved and any caveats specified in correspondence with the Ethics Committee. Any further change to the application which is likely to have a significant impact on the ethical considerations of this project will require approval from the Ethics Committee.

[redacted]

Chair, Ethics Committee (or delegate) Date: 09-Mar-2010

R. FREW
SECRETARY
ETHICS COMMITTEE

All research subject to Alfred Hospital Ethics Committee review must be conducted in accordance with the National Statement on Ethical Conduct in Human Research (2007).

The Alfred Ethics Committee is a properly constituted Human Research Ethics Committee operating in accordance with the National Statement on Ethical Conduct in Human Research (2007).

Appendix 9. Monash University Human Research Ethics Committee Certificate of Approval

MONASH University

Monash University Human Research Ethics Committee (MUHREC)
Research Office

Human Ethics Certificate of Approval

Date:	**13 October 2009**
Project Number:	**CF09/2776 - 2009001597**
Project Title:	**The relationship between childhood maltreatment and current symptoms of mental illness in women**
Chief Investigator:	**Prof Jayashri Kulkarni**
Approved:	**From: 13 October 2009 to 13 October 2014**

Terms of approval

1. The Chief investigator is responsible for ensuring that permission letters are obtained, if relevant, and a copy forwarded to MUHREC before any data collection can occur at the specified organisation. **Failure to provide permission letters to MUHREC before data collection commences is in breach of the National Statement on Ethical Conduct in Human Research and the Australian Code for the Responsible Conduct of Research**.
2. Approval is only valid whilst you hold a position at Monash University.
3. It is the responsibility of the Chief Investigator to ensure that all investigators are aware of the terms of approval and to ensure the project is conducted as approved by MUHREC.
4. You should notify MUHREC immediately of any serious or unexpected adverse effects on participants or unforeseen events affecting the ethical acceptability of the project.
5. The Explanatory Statement must be on Monash University letterhead and the Monash University complaints clause must contain your project number.
6. **Amendments to the approved project (including changes in personnel):** Requires the submission of a Request for Amendment form to MUHREC and must not begin without written approval from MUHREC. Substantial variations may require a new application.
7. **Future correspondence:** Please quote the project number and project title above in any further correspondence.
8. **Annual reports:** Continued approval of this project is dependent on the submission of an Annual Report. This is determined by the date of your letter of approval.
9. **Final report:** A Final Report should be provided at the conclusion of the project. MUHREC should be notified if the project is discontinued before the expected date of completion.
10. **Monitoring:** Projects may be subject to an audit or any other form of monitoring by MUHREC at any time.
11. **Retention and storage of data:** The Chief Investigator is responsible for the storage and retention of original data pertaining to a project for a minimum period of five years.

[redacted]

Professor Ben Canny
Chair, MUHREC

Cc: Dr Stuart Lee; Dr Jan Coles; Ms Adeline Lee

Postal – Monash University, Vic 3800, Australia
Building 3E, Room 111, Clayton Campus, Wellington Road, Clayton
Telephone +61 3 9905 5490 Facsimile +61 3 9905 3831
Email muhrec@adm.monash.edu.au www.monash.edu/research/ethics/human/index/html
ABN 12 377 614 012 CRICOS Provider #00008C

PLEASE NOTE: To ensure speedy turnaround time, this correspondence is now being sent by email only. MUHREC will endeavour to copy all investigators on correspondence relating to this project, but it is the responsibility of the first-named investigator to ensure that their co-investigators are aware of the content of the correspondence.

Prof Jayashri Kulkarni
School of Psychology and Psychiatry
Faculty of Medicine, Nursing and Health Sciences
Monash Clayton Campus

26 March 2010

CF09/2776 – 2009001597: The relationship between childhood maltreatment and current symptoms of mental illness in women

Dear Researchers,

Thank you for submitting a Request for Amendment to the above named project.
This is to advise that the following amendments have been approved as per the Alfred Ethics Committee Certificate of Approval of Amendments dated 9 March 2010, and the project can proceed according to your approval given on 13 October 2009.
Addition of option for mail/phone questionnaire completion.
Additional advertising.
Revised recruitment flyer.
Revision to Module One Participant Information & Consent Form, Version 2.3 dated 9 March 2010.
Thank you for keeping the Committee informed.
Professor Ben Canny
Chair, MUHREC

cc: Ms. Adeline Lee, Dr Stuart Lee; Dr Jan Coles

Appendix 10. Latrobe Regional Hospital Human Research Ethics Committee Certificate of Approval

Latrobe Regional Hospital

Human Research Ethics Committee
Certificate of Approval

This is to certify that

Project No: 2010-04

Project Title: The Relationship between Childhood Maltreatment and Current Symptoms of Mental Illness in Women.

Principal Researcher: Professor Jayashri Kulkarni

has been given approval by the Human Research Ethics Committee from:

Approval date: 22 June 2010 **Expiry date:** 22 June 2012

It is the Principal Researcher's responsibility to ensure that all researchers associated with this project are aware of the conditions of approval. A copy of the approved ethics application and supporting documents must be kept on your files for audit purposes.

The Principal Researcher is required to notify the Human Research Ethics Committee in relation to the following.

- Any significant changes to the project and the reason for that change, including an indication of ethical implications (Amendment Form on LRH Research website)
- Adverse Event Reports regarding participants;
- Any other unforeseen events or unexpected developments that merit notification;
- The inability of the Principal Researcher to continue in that role, or any other change in research personnel involved in the project;
- Commencement date of the project (form on LRH Research website); and
- Termination or closure of the project.

Additionally, the Principal Researcher is required to submit

- A Progress Report every 12 months for the duration of the project (form are available on the LRH Research website);
- A Request for Extension of the project prior to the expiry date, if applicable; and,
- A detailed Final Report at the conclusion of the project (form are available on the LRH Research website).

The Human Research Ethics Committee may conduct an audit at any time.

All research subject to the Latrobe Regional Hospital Human Research Ethics Committee review must be conducted in accordance with the *National Statement on Ethical Conduct in Human Research (2007).*

The Latrobe Regional Hospital Human Research Ethics Committee is constituted in accordance with the *National Statement on Ethical Conduct in Human Research (2007).*

SPECIAL CONDITIONS
Nil

[redacted]
Chief Executive

Please quote Project No and Title in all correspondence