Resilience Following Child Maltreatment: A Review of Protective Factors

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Objective: Child maltreatment is linked with numerous adverse outcomes that can continue throughout the lifespan. However, variability of impairment has been noted following child maltreatment, making it seem that some people are more resilient. Our review includes a brief discussion of how resilience is measured in child maltreatment research; a summary of the evidence for protective factors associated with resilience based on those studies of highest quality; a discussion of how knowledge of protective factors can be applied to promote resilience among people exposed to child maltreatment; and finally, directions for future research.

Method: The databases MEDLINE and PsycINFO were searched for relevant citations up to July 2010 to identify key studies and evidence syntheses.

Results: Although comparability across studies is limited, family-level factors of stable family environment and supportive relationships appear to be consistently linked with resilience across studies. There was also evidence for some individual-level factors, such as personality traits, although proxies of intellect were not as strongly related to resilience following child maltreatment.

Conclusions: Findings from resilience research needs to be applied to determine effective strategies and specific interventions to promote resilience and foster well-being among maltreated children.


Clinical Implications

• Knowledge about protective factors associated with resilience following exposure to child maltreatment can assist clinicians in developing individual treatment plans for patients.

• Such information is important in developing the theoretical basis for interventions aimed at promoting resilience following child maltreatment, but such programs and strategies cannot assume to be protective—evaluation is still required.

Limitations

• Most studies have focused on child maltreatment generally, or one subtype of maltreatment without considering that the association between exposure and resilience may vary depending on the subtype.

• Sex- and gender-based analyses need to be included in considering the link between protective factors resilience following exposure to child maltreatment.

Key Words: child maltreatment, resilience, protective factors

Child maltreatment is a major public health problem, associated with impairment in childhood, adolescence, and extending throughout the lifespan. Specifically, child maltreatment includes physical abuse, sexual abuse, emotional abuse, neglect, and exposure to IPV. It is estimated that every year millions of children are abused and neglected worldwide. Being maltreated as a child can have devastating consequences that create a significant burden of suffering. Child maltreatment contributes to mortality and morbidity and, in particular, is linked to poor academic performance, mental health problems, physical health problems, aggression, crime, violence, suicidal behaviour, and decreased quality of life. Collectively, this literature indicates that child maltreatment is associated with impairment involving multiple domains of competence and health, including physical, behavioural, emotional, cognitive, and social functioning. Fortunately, not all maltreated children experience negative consequences related to this childhood adversity, making it seem that some children are more resilient.
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In the previous In Review article, Dr Helen Herrman and colleagues summarized the variations in definition and conceptualization of resilience generally, as well as methodological and theoretical considerations. In the overall field of resilience, standardized and operational definitions of resilience do not exist. As outlined by Dr Herrman and colleagues, much of the early resilience research focused on childhood adversities, such as exposure to child abuse and neglect. Even within the specific area of resilience research focusing on child maltreatment, the definitions and conceptual frameworks differ. For example, some studies define resilience as high functioning, whereas others consider it to be the absence of poor functioning.

People with a history of child maltreatment may be considered resilient in one area of functioning, but fail to meet criteria for resilience in other areas of functioning. Resilience is not static; it may vary over time and across developmental phases—a person’s resilience status can change from resilience to nonresilience and vice versa.

A growing literature has focused on enhancing our understanding of resilience among people with a history of child maltreatment through the examination of protective factors that are linked to resilience. Focusing on protective factors can provide insight into how to promote resilience and overall health and well-being among maltreated children. Further, it can inform the development of interventions aimed at reducing impairment following exposure to child maltreatment.

The objective of this current review is to examine the protective factors related to resilience following child maltreatment. To achieve this goal we will: briefly discuss how resilience is measured in child maltreatment research; provide a summary of the evidence for protective factors related to resilience among children, adolescents, and adults following child maltreatment based on the studies of highest methodologic quality; consider the clinical application of such knowledge; and, discuss directions for future research in this area.

This review extends the current literature in several important ways. First, a large number of studies have been published in the area of resilience and child maltreatment in the past several years; we include literature identified through searches up to and including July 2010. Second, this review includes all major categories of child maltreatment as listed above. Finally, although, much of the literature in this area has focused on children and adolescents, several studies have addressed these issues in adults. We examine these issues across the lifespan.

Resilience and Child Maltreatment

Walsh et al provide a comprehensive overview of how resilience has been defined and measured, specifically in child maltreatment research. Briefly, the authors note that resilience among maltreated children is present when children show a normal range of competence across several domains of functioning. Developmental domains of functioning commonly include behavioural competence (for example, patterns of behaviours toward others), emotional competence (for example, mental health), social competence (for example, peer relationships), and academic achievement (for example, school performance).

In studies involving child and adolescent samples, resilience is frequently measured using normative levels of internalizing and externalizing symptoms and competent age-appropriate functioning across several developmental domains. Studies involving adult samples tend to use fewer resilience criteria, which often include absence of psychopathology, psychological well-being, self-esteem, and social functioning. It should be noted that self-report resilience questionnaires measuring concepts such as adaptability have been developed, but these scales are not commonly used in child maltreatment studies. Using multiple indicators to determine resilience is a widely accepted practice because, as previously mentioned, a person may show competence in one domain, but not in another. In studies of people exposed to child maltreatment where only one outcome is measured, a person may be considered resilient simply in the absence of one disorder. While this type of investigation is informative, a single outcome is not adequate when considering overall resilience following maltreatment.

Although resilience is more accurately captured using multiple rather than single indicators, a challenge of measuring resilience with this approach is the substantial variability in specific measures included and selection of their cut-off points. Importantly, variation in definitions and threshold affects the proportion of children considered resilient and makes comparisons across studies difficult. Despite these measurement differences, the use of several indicators of competence and functioning to measure resilience results in a more comprehensive assessment of those who have effectively adapted following exposure to child maltreatment and also has important implications for prevention of subsequent impairment. Consistent with Walsh et al, only studies using more than one subcategory within a domain of functioning to assess resilience will be included in this review.

Search Strategy and Selection Criteria

Although we did not do a formal systematic review, our search strategies were designed to identify original research articles and reviews that evaluated protective factors related to resilience following child maltreatment. The databases MEDLINE and PsycINFO were searched for

Abbreviations

- EEG: electroencephalogram
- IPV: intimate partner violence
relevant citations up to July 2010 to identify key studies and evidence syntheses. Terms used to search databases included resilience, resilient, and resiliency, with child abuse, child maltreatment, physical abuse, sexual abuse, emotional abuse, neglect, exposure to intimate partner violence, and exposure to domestic violence. References from retrieved articles were reviewed for additional relevant citations. We focused on higher levels of evidence, to review studies that met the following criteria: they assessed more than one domain of functioning (cognitive–academic, emotional, social, physical, or behavioural) or more than one subcategory within a domain (for example, internalizing and externalizing symptoms); they examined several indicators of resilience concurrently rather than considered several resilience outcomes individually; and, they were quantitative, with a cross-sectional or longitudinal research design. A wide range of samples were included: community, convenience, court, child protective services, clinical, treatment seeking, and at-risk people. Only a few qualitative studies have been conducted in this area and were not included in our review; implications of important findings from these studies are discussed below. A total of 27 articles were included in the review and are summarized in online eTable 1.

**Protective Factors**

To improve our understanding about how to promote resilience following child maltreatment, it is necessary to study factors that may protect a person from impairment associated with being maltreated. Research on protective factors examine traits that contribute to resilience and those mechanisms that facilitate resilience. A protective factor may influence, modify, ameliorate, or alter how a person responds to the adversity that places them at risk for maladaptive outcomes. Although most of the child maltreatment research has focused on negative outcomes associated with maltreatment, a growing literature has investigated protective factors related to resilience. These factors can be divided into those at the individual, familial, and community level.

**Individual-, Family-, and Community-level Protective Factors Related to Resilience**

Individual-level protective factors are personal characteristics, traits, and resources, such as personality traits, intellect, self-efficacy, coping, appraisal of maltreatment, and life satisfaction. Family-level protective factors include resources and supportive relationships, such as family coherence, stable caregiving, parental relationships, and spousal support. Protective factors at the community level include peer relationships, nonfamily member relationships, nonfamily member social support, and religion, among others. The following section summarizes the evidence for links between protective factors and resilience following child maltreatment, based on longitudinal and cross-sectional research studies.

**Longitudinal Studies Extending From Childhood and Adolescence Into Early Adulthood**

The ideal study design for investigating protective factors associated with resilience following child maltreatment is longitudinal, with prospective data collection over multiple time points, from childhood into adulthood, with a community sample. The following studies have several of these characteristics.

Hyman and Williams investigated protective factors related to resilience in a sample of sexually abused girls interviewed in childhood and later in adulthood. Predictors of resilience in this sample included a stable family, less severe sexual abuse experiences, no history of juvenile arrests, graduation from high school, and no history of sexual re-victimization in adulthood. In another study of sexually abused girls, social connections, life satisfaction, and adaptive coping were related to resilience during a 1-year period in adulthood. In a community sample of abused and nonabused people, Collishaw et al examined the relation between several individual-, familial-, and community-level protective factors; resilience was defined as absence of adult mental health disorders and suicidal ideation and (or) attempts during a 30-year period. Forty-five percent of people who were abused met study criteria for resilience. Low neuroticism, no history of adolescent mental health disorders, perceived good parental care, normal adolescent peer relationships, stable adult relationship history, and good adult friendships were associated with resilience. DuMont et al used a longitudinal study design to examine whether sociodemographic characteristics, cognitive ability, stable living situation, neighbourhood advantage, and supportive partner relationships were associated with resilience measured using multiple domains of successful functioning. The significant findings related to resilience in adolescence included gender (girls) and having stable living situation and in adulthood included gender (women) and having a supportive partner relationship. Interestingly, 50% of abused and neglected people who were resilient in adolescence remained resilient in young adulthood; the majority of those who were not resilient in adolescence remained not resilient in adulthood (89%), with only 11% moving from the nonresilient to resilient category in adulthood.

**Longitudinal Studies Within Childhood and Adolescence**

Several longitudinal studies that included individual- and family-level protective factors have been conducted within childhood and adolescence. The type of protective factors most consistently related to resilience following maltreatment in these studies was at the family level, including supportive caregivers and stable caregiving environments. Herrenkohl et al studied high-functioning children who had been abused or neglected and identified the stable presence of at least one caregiver in childhood as a protective factor related to resilience. In a sample of 147 sexually abused boys and girls, being satisfied with emotional support from caregivers at the time of...
discovery of abuse was related to better teacher- and parent-rated adjustment 1 year later.26 Similarly, in a sample of 86 sexually abused girls aged 11 to 17 years, less conflict with mothers and being trusting of others, in addition to empowerment, adaptive coping strategies, and less drug use were related to stable resilience during a 5-month period.27 In a community-based study of boys and girls, less unilateral parental decision making was protective against externalizing outcomes among abused children, while lower stress in childhood and adolescence and higher hostile attributional bias were considered protective against internalizing outcomes.28 Collectively, the results of these studies suggested that ensuring that the child feels supported in a stable caring family environment may help to promote adaptive functioning following child maltreatment.

At the individual level, longitudinal studies have found some evidence for personality traits (ego resilience and ego overcontrol),29,30 positive self-esteem,29 easy child temperament,31 and daily living skills (personal, domestic, and community adaptive functioning skills)32 as protective factors related to resilience following maltreatment. Simply stated, ego overcontrol is master over impulses and ego resilience is the ability to modify ego control in response to situations. Ego overcontrol and ego resilience characterize a person as having control and being resourceful and flexible, which may help maltreated children become adaptive and highly functioning.33,34 Intelligence as a potential individual-level protective factor related to resilience following child maltreatment has also been studied, but has yielded inconsistent and somewhat weak findings in longitudinal research. For example, of the 23 abused and neglected people identified in the study by Herrenkohl et al35 as highly functioning in childhood, 14 were attending or had graduated from high school later in adolescence and all had an average or above average IQ.25 However, in 2 longitudinal child samples, intelligence as measured using tests of receptive vocabulary was not a predictor of resilience in maltreated children.29,30 Interestingly, in another study of resilience, having a greater commitment to school was a consistent predictor of less violence, delinquency, and status offences until the age of 18 years, both in physically abused and in nonabused children.35

Cross-sectional Studies Involving Child and Adolescent Samples

Similar to the findings of longitudinal studies, supportive family relationships and family environments were identified consistently as protective factors for resilience following child maltreatment exposure in cross-sectional investigations. More specifically, a warm and supporting relationship with a nonoffending parent,26 better parenting performance,37 and family cohesiveness38 were linked with resilience following such exposure. Likewise, in a sample of children exposed to IPV, warm and effective parenting along with less maternal depression distinguished those children who were resilient from those with severe problems and children who were struggling.39 Findings from a study involving an adolescent child welfare sample indicated that relatedness to a caregiver and social skills, but not academic variables, were important latent components of resilience.40

Of note, not all studies have found evidence for a link between family support and resilience. One study, which involved a sample of sexually abused girls in foster care, did not find evidence for an association between family support and resilience.41 However, the authors aptly concluded that the nonexistence of this relationship may be because this was a foster care sample. Peer influences, certainty of school plans, and positive future orientation were related to resilience, suggesting that adolescent girls in care may rely more on support outside of the family.41 Likewise, another study found a positive association with another type of nonfamily member support—relationships with camp counsellors—and resilience.42

Cicchetti and colleagues (Cicchetti et al,33 Flores et al,42 Cicchetti and Rogosch,43 Curtis and Cicchetti,44 and Kim and Cicchetti45) have made several important contributions to our knowledge of individual-level protective factors related to resilience; their findings have been mainly based on cross-sectional data comparisons of maltreated and nonmaltreated children from low-income families attending summer camp.33,42-45 These studies are informative because data were collected from multiple sources, including the child, peers, school records, and camp counsellors. Results consistently showed that the personality dimensions of ego resilience and ego overcontrol were associated with resilience among maltreated children.33,42,43 Positive self-esteem is another individual-level protective factor that has been associated with resilience in cross-sectional studies from Cicchetti’s group.33

Cross-sectional Studies Involving Adult Samples

A small number of cross-sectional studies involving adult samples have explored factors associated with resilience among people with child maltreatment histories. Several individual-level protective factors associated with resilience across these studies have been identified, including: internal locus of control or personal control,46-48 optimism about the future,46 less self-destruction,47 less self-blame,47 and less trauma-related beliefs (self-blame, betrayal, and powerlessness).49 At the family level, less family stress has been associated with greater resilience.47 In addition, in a sample of mothers with a history of sexual abuse, spousal support was related to resilience.50 In one study involving a representative community sample of men and women, emotional and instrumental support were not found to be related to resilience in this study.48

Discussion

Owing to wide variation in study designs and samples, it is difficult to compare findings across studies of protective factors associated with resilience following exposure to child maltreatment. However, the family-level factors of stable family environment and supportive relationships...
appear to show a consistent association with resilience across studies. The research to date supports an observation by Egeland et al\(^5\) made almost 2 decades ago: “the capacity for resilience develops over time in the context of environmental support.”\(^5\)\(^1\)

There was also evidence for some individual-level factors, such as personality traits, although proxies of intellect were not as strongly related to resilience following child maltreatment. This was consistent with findings from a study involving an adolescent child welfare sample: relatedness to a caregiver and social skills, but not academic variables, were important latent components of resilience.\(^4\)

Clearly one important goal of future research should be to determine ways that these findings can be applied in developing specific interventions to reduce impairment associated with exposure to child maltreatment; that is, to promote resilience. It is equally important to consider the current clinical implications of these findings for our patients—children, adolescents, and adults—presenting with a history of exposure to maltreatment. Knowledge of protective factors associated with resilience can assist clinicians in taking a history to identify those factors specific to an individual patient that might assist him or her in coping with exposure to maltreatment. Some factors are amenable to change—for example, involvement of supportive family members, whereas this is much more difficult for other factors—for example, personality traits. Given the paucity of effective interventions to prevent impairment following exposure to child maltreatment, it is important for the clinician to identify factors that potentially promote resilience as part of any treatment plan. For example, determining the stability of the family situation should be included in the overall assessment of a child and family following his or her exposure to one or more types of child maltreatment. Graham-Bermann et al\(^9\) emphasize that interventions for children exposed to IPV (although this extends to all types of child maltreatment) should be “tailored to the specific needs of the child” rather than assuming “a one-size-fits-all approach.”\(^6\)\(^5\)\(^9\)

Although we are highlighting the relevance to clinicians of knowledge about protective factors associated with resilience following maltreatment, it is important to keep the limitations of this information in perspective. Although it provides some theoretical basis on which to formulate a treatment plan, such information is not a substitute for theoretically based interventions evaluated in controlled trials regarding their effectiveness in promoting resilience. Too often there is the assumption that information about increasing protective (and lowering risk) factors translates into definitive evidence for the effectiveness of an intervention; such programs or strategies need to undergo appropriate evaluation.

In moving toward development of specific interventions based on our knowledge of protective factors, it is useful to review some of the research gaps in the existing literature. First, many studies only investigate child maltreatment broadly defined without examining the potential differential relations between subtypes of maltreatment and resilience. Although some studies have investigated individual subtypes of child maltreatment, mainly physical and sexual abuse, other forms of child maltreatment, such as neglect and exposure to IPV, need to be more thoroughly investigated. As well, as many children are exposed to more than one type of child maltreatment,\(^9\) it is necessary to understand how co-occurring types of maltreatment relate to resilience.

Second, more detailed analysis of the association between protective factors and resilience needs to be conducted separately among boys and girls and men and women. Most studies either use a combined sample or only included girls or women. Only a few studies have compared sex or gender differences to investigate if sex or gender is a protective factor or if the relation between protective factors and resilience varies according to sex or gender. For example, in a longitudinal study investigating resilience following child maltreatment, but not protective factors, women, compared with men, were more likely to meet criteria for resilience.\(^3\)\(^3\) With regard to IPV, Incal and colleagues\(^3\) reported a consistent pattern of lower IPV-related resilience in their 88% sample of women compared with men. In another longitudinal sample, females were more likely to be resilient in adolescence and early adulthood.\(^2\)\(^4\) We need greater availability of datasets that would provide sufficient statistical power to conduct more detailed sex- and gender-based analyses.

Third, only a few studies have investigated the important relation between potential biological and genetic protective factors related to resilience following child maltreatment. One study examined emotion regulation and genetic protection factors in relation to resilience and found significant biological differences in EEG asymmetry across central cortical regions distinguishing between maltreated and nonmaltreated children.\(^4\) In addition, Cicchetti and Rogosch\(^4\) investigated resilience in relation to stress-responsive adrenal steroid hormones and personality constructs and found that hormones and personality were able to predict resilience in maltreated and nonmaltreated low-income children. Additional research examining biological and genetic protective factors is necessary, including the use of twin study and molecular genetics designs to investigate the resilience outcomes.

Fourth, although some longitudinal studies\(^2\)\(^4\)\(^5\)\(^7\)\(^9\) have investigated changes in resilience over time, further research should be conducted to understand resilience trajectories. The most informative study designs will be those that measure the co-occurrence and interaction of multiple protective factors in relation to resilience, and how the course of such resilience and its relations with protective factors change over time.

Finally, many individual- and family-level protective factors have been studied, but there has been less focus on community-level variables. It is important to identify...
understudied protective factors at the individual, family, and community levels and include them in future research. Qualitative research would serve as an excellent method to identify new protective factors that could be included in future quantitative studies.

**Conclusion**

High competence and functioning following child maltreatment are indicators of resilience. Studying protective factors related to resilience following child maltreatment allows for a more in-depth investigation of the context in which resilience can be established. Stable family environment and supportive relationships were identified as 2 family-level factors that have been linked consistently to more adaptive functioning. Findings from this area of research need to be applied to determine effective strategies and specific interventions to promote resilience and foster well-being among maltreated children.

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**References**


Résumé : La résilience après la maltraitance dans l’enfance : une revue des facteurs protecteurs

Objectif : La maltraitance des enfants est liée à de nombreux résultats indésirables qui peuvent persister toute la vie. Cependant, la variabilité de la déficience a été notée à la suite de la maltraitance des enfants, et il semble que certaines personnes sont plus résilientes. Notre revue comporte une brève discussion de la manière dont la résilience est mesurée dans la recherche sur la maltraitance des enfants; un résumé des données probantes sur les facteurs protecteurs associés à la résilience d’après les études de qualité supérieure; une discussion de la façon d’appliquer les connaissances sur les facteurs protecteurs à la promotion de la résilience auprès des personnes exposées à la maltraitance dans l’enfance; et enfin, des directions pour la future recherche.

Méthode : Des recherches de citations pertinentes ont été effectuées dans les bases de données MEDLINE et PsycINFO jusqu’à juillet 2010 afin de repérer les études clés et les synthèses de données probantes.

Résultats : Bien que la comparabilité entre études soit limitée, les facteurs de niveau familial d’un environnement familial stable et de relations de soutien semblent être uniformément liés à la résilience dans les études. Il y avait aussi des données probantes sur les facteurs de niveau individuel, comme les traits de personnalité, même si les indicateurs de l’intellect n’étaient pas aussi fortement liés à la résilience à la suite de maltraitance dans l’enfance.

Conclusions : Les résultats de la recherche sur la résilience doivent être appliqués pour déterminer les stratégies efficaces et les interventions spécifiques visant à promouvoir la résilience et à favoriser le bien-être chez les enfants maltraités.