Child Indicators Research (2019) 12:1697–1716
https://doi.org/10.1007/s12187-018-9605-9

The Association Between Family Violence in Childhood and Mental Health in Adulthood as Mediated by the Experience of Childhood

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Accepted: 8 October 2018 / Published online: 25 October 2018

Abstract
Family violence in all of its types and forms, suffered directly or witnessed, is detrimental to healthy child development and increases the odds of poor developmental outcomes, such as impaired adult mental health. Very little knowledge is available about the mechanism that links family violence in childhood with outcomes in adult life. This retrospective study used data collected from 618 students in institutions of higher education in northern Israel (72.2% female, 86.9% Jewish, average age of 25) to test a structural model in which the effects of family violence in childhood on adult mental health are mediated by perceived positive childhood experience. The results show that perceived positive childhood experience fully mediates the effects of family violence (interparental and parent-to-child, physical and verbal) on adult mental health. The results also show that a significant proportion of the variance in adult mental health remains unexplained. These results suggest that in order to better understand the mechanism linking family violence in childhood with developmental outcomes in adulthood, additional mediators might need to be identified. These findings also suggest that some professional interventions be focused on enhancing positive childhood experience, in order to attenuate the harmful, lifelong effects of family violence in childhood.

Keywords Family violence · Childhood experience · Developmental outcomes · Mental health

1 Introduction

The family is the most important social context across an individual's lifespan (Eisikovits et al. 1998) and the "natural environment for the growth and well-being" of children (Convention on the Rights of the Child 1989). Family violence is a risk factor that

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challenges the well-being of young, as well as adult human beings (Winstok 2015b; Wolfe et al. 2003). It is a complex phenomenon that includes a variety of distinct types and forms. Family violence is typically categorized into the following types of violence: interparental violence (between intimate partners), parent-to-child violence, sibling violence, and child-to-parent violence. Distinct forms of family violence are often subdivided into physical and non-physical. The latter is sometimes referred to as psychological aggression (for an in-depth discussion on psychological violence, see Winstok and Sowan-Basheer 2015) and often manifests as verbal aggression. Physical interparental and parent-to-child violence (its milder forms are also referred to as corporal punishment) have received the majority of the attention of researchers and practitioners and have usually been treated as distinct, independent phenomena.

The current research tests an explanatory model of the mechanisms that link interparental and parent-to-child physical and verbal violence in childhood with childhood experience (in the past) and adult mental health (at present time). By doing so, it addresses several limitations of the current knowledge in this area and allows for the extension, expansion, and promotion of knowledge in the field toward a better understanding of, and effective intervention in the problem. The next few paragraphs will provide some information on the prevalence of child victimization by family violence and the major short- and long-term effects of such experiences. Then, some of the limitations of the currently available knowledge will be pointed out and the research questions of the present study will be formulated. Finally, an innovative approach for overcoming those limitations and providing answers to the research questions will be presented.

1.1 Theoretical Background

1.1.1 Prevalence of Child Victimization by Family Violence

A nationwide U.S. survey of the prevalence and chronicity of youth exposure to violence within the family reported that 6.6% of the surveyed children had been exposed to violence between parents (or between a parent and that parent's partner) in the past year and 17.9% had been exposed to violence between parents during their lifetime (Hamby et al. 2011). Another U.S. national household survey of caregivers and youth reported that, in the previous year, 12.1% of children (age 0 to 17) had experienced at least one form of maltreatment by a parent or related caretaker. Four percent had experienced physical abuse, 5.6% had experienced emotional abuse, 0.1% had experienced sexual abuse, 4.7% had experienced neglect, and 1.2% had experienced custodial interference. Lifetime estimates were 8.9%, 10.3%, 0.7%, 11.6%, and 4.8% respectively (Finkelhor et al. 2014). Overall, boys elicit more parental violence than do girls (Gershoff 2002; Jouriles and Norwood 1995).

The most common form of physical child abuse is corporal punishment. Corporal punishment is not unanimously rejected and condemned, as are other forms of child abuse or interparental (partner) violence. In many societies, including in the U.S., corporal punishment is even considered acceptable and is still widespread (Gershoff 2010). About half of the parents of American toddlers (Socolar et al. 2007) and a quarter of the parents of American preschoolers (Regalado et al. 2004) use corporal punishment to discipline their children. By the time American children reach middle and high school, 85% have been physically punished by their parents (Bender et al.

2007). Often, corporal punishment is not the only type and form of family violence a child experiences.

Twenty-three percent of the maltreated children experienced two or more types of maltreatment (Finkelhor et al. 2014). The co-occurrence of multiple types and forms of family violence is well documented (Appel and Holden 1998; Finkelhor, Ormrod & Turner, 2007; Herrenkohl and Herrenkohl 2007; Korbin 2014) and much evidence indicates that the presence of any type or form of family violence increases the likelihood that any other type or form of family violence will co-occur (Lyons et al. 2015). Interparental violence turns out to be an especially strong predictor of parent-to-child violence, although the possible reasons for this link are still subject to discussion (Herrenkohl et al. 2008; Winstok 2015b).

1.1.2 Short- and Long-Term Effects of Family Violence on Children

UNICEF (2014) stated that "violence is detrimental to all aspects of a child's growth, including physical, psychological and social development and functioning, with sometimes lifelong repercussions".

Exposure to interparental violence has been shown to negatively affect children's well-being (Kitzmann et al. 2003; O'Brien et al. 2013) and to cause a broad range of symptoms in various areas of child development and functioning (Lang and Stover 2008). In the case of parental violence against children, research findings draw an even more alarming picture. For U.S. toddlers, child abuse was the third leading cause of death in 2009 (Kodner and Wetherton 2013) and family violence frequently causes physical injury to children that requires medical treatment (Christian et al. 1997). Beyond those extreme cases, there is broad agreement that parental violence does harm to children's functioning and various developmental outcomes (Krug et al. 2002). Even mild parent-to-child violence (e.g., moderate corporal punishment) "puts children at risk for both short- and long-term negative effects" (Gershoff 2010).

It is safe to conclude that both types of family violence mentioned above have serious adverse short- and long-term effects on the child. The most underrated short-term effect of family violence on children is the most noticeable: Family violence hurts. Violent behavior may have multiple reasons (e.g., mental illness, intoxication, the desire to gain power over somebody else or to achieve a certain goal), but the commonality of all violent behavior is that it hurts (Straus et al. 2006; Winstok 2016). This is obvious when a child receives corporal punishment from his or her parent, but also holds true in less obvious situations. Children may observe incidents of violent behavior between their parents directly, as eyewitnesses, or indirectly (Eisikovits et al. 1998), for example, by overhearing arguments or by spotting physical evidence of the violence after the fact. In any of these cases, the immediate effect of the exposure to family violence is the emotional distress the child experiences. Edelson (1999) enumerated several emotional and behavioral symptoms in children that are related to emotional distress caused by recent exposure to family violence, including depression, dissociation, anxiety and low self-esteem, poor adjustment and problem-solving capabilities, aggression, and violent behavior. Other short-term effects can include disturbed sleeping, disturbed eating, compromised learning capabilities, somatic complaints, and improper social behavior (Gershoff 2002; Holt et al. 2008; Huth-Bocks et al. 2001; Kitzmann et al. 2003). Another immediate effect of family violence

for the child is the disruptive impact it has on family dynamics. This effect may be even more conspicuous in interparental violence than in parent-to-child violence.

Maltreating families have been identified as pathogenic relational environments, in which benevolent interactions are partially displaced by malignant patterns (Cicchetti and Toth 2005). Violent parents, for example, may turn into inappropriate relational objects for a child in need of proper parenting as an important interpersonal resource for coping with everyday tasks (Bancroft et al. 2012; Howe et al. 1999). Alliances alongside the intrafamilial split, often caused by uninhibited conflicts that have escalated to violence, may limit the child's chances of receiving appropriate responses to his or her needs from other family members – even if those other family members are not directly involved in the violent conflict. Overall, adaptive family functioning suffers greatly when family dynamics turn violent, which leaves the child without the resources that he or she desperately needs. Simply put, family violence heightens the child's need for a beneficial family climate and family support, while at the same time diminishing his or her chances of having those needs met. Hence, in addition to emotional distress and its pathogenic short-term effects mentioned above, family violence deeply poisons the familial environment, which is usually the central arena for most childhood experiences.

In the long term, accumulated negative childhood experiences and a violent, hostile family atmosphere will result in a negative image of one's own childhood (Bellis et al. 2013). While favorable impressions of childhood are associated with improved welfare and overall functioning (Batcho et al. 2011; Bellis et al. 2013), unfavorable childhood experiences are associated with unfavorable outcomes in adult life (Freeman et al. 1999; Giovanelli et al. 2016; Hughes et al. 2016; Lyons et al. 2015; Saha and Deb 2014; Siltala 2014). Nevertheless, the long-term effects of family violence are far more than just the chronification of the short-term effects. Family violence will affect child development in multiple ways: by weakening the child's coping capabilities, by disturbing parental functioning, by interfering with adaptive family dynamics, and by impeding access to resources. Hence, developmental outcomes, which largely determine the future life course, are likely to be poorer for children exposed to family violence than for children who have not been exposed to family violence. Research findings indicate adverse long-term effects of family violence in many areas, including emotion processing (Young and Widom 2014), personality formation (Fergusson et al. 2008), mental health (Bender et al. 2007; Nanni et al. 2012; Peltonen et al. 2010; Sugaya et al. 2012), trauma symptoms (Wright et al. 2009), physical health and health-related behavior (Brown et al. 2009; Dube et al. 2003a, b; Miller and Chen 2010; Springer et al. 2007; Wegman and Stetler 2009), social behavior and interpersonal relations (Moylan et al. 2010; Sousa et al. 2011), and substance abuse and self-injurious behavior (Dube et al. 2001; Dube et al. 2003a, b; Fergusson et al. 2008). Furthermore, childhood exposure to family violence was also found to be positively correlated with re-victimization in adult life (Renner and Slack 2006; Widom et al. 2008), as well as the odds of becoming a perpetrator of violence oneself (Heyman and Smith Slep 2002; Pears and Capaldi 2001; Renner and Slack 2006; Schelbe and Geiger 2017). While there is much controversy among scholars on the particularities of how family violence in childhood affects later life, the significance of its effect is widely accepted. Yet, there are limitations to the current knowledge, which lead to the research questions that will guide the present study.

1.2 Limitations of the Current Knowledge and Research Questions for the Present Study

Empirical evidence that has accumulated over recent decades indicates that the various types and forms of family violence, specifically physical interparental and physical parent-to-child violence, negatively affect child development in the short and long term. Although the impact of distinct types and forms of family violence on the development of children has been the focus of significant research attention for decades, the current understanding of this complex phenomenon remains simplistic and incomplete. For example, most studies have focused on only one type and one form of family violence, ignoring type- and form-specific differences in the effects of family violence on child development, as well as any interactional effects of those experiences. Hence, the first research question of the current study is: How do interparental and parent-to-child verbal and physical violence affect one another, and how do they together affect child development? Another limitation of the current knowledge results from the tendency of most studies to offer predictions (what will happen to children in violent families) rather than empirically based explanations (why this is happening to them) for the negative implications of family violence on the development of children. Therefore, the second research question is: What mechanism links family violence in childhood with outcomes in adult life? Following those questions and drawing upon the available knowledge, the following hypotheses were formulated.

1.3 Hypotheses

1.3.1 Direct Effects

- The first hypothesis of the current research is that there is a positive correlation between the types and forms of family violence in childhood: The higher the frequency of incidents of one type and form of family violence, the higher the frequency of incidents of other types and forms of family violence.
- The second hypothesis is that family violence in childhood has a negative effect on the positive outlook of the respondent on his or her childhood (perceived childhood experience): The higher the frequency of family violence incidents, of any type or form, the less positive will be the perception of childhood experience.
- The third hypothesis is that perceived positive childhood experience has a positive effect on mental health in adult life: The more positive an individual's perceived childhood experience, the better his or her mental health as an adult.

1.3.2 Mediated Effects

- The fourth hypothesis is that perceived childhood experience fully mediates the association between family violence in childhood and the respondent's mental health as an adult. In this context, full mediation means that the impact of family violence in childhood on mental health in adult life is entirely indirect.

Those four hypotheses examine the relationship between family violence in childhood, perceived childhood experience and mental health in adulthood. To examine other factors that might affect the likelihood of a child being exposed to family violence, adult mental health and/or the relationship between those two factors, three additional variables were used in further analysis: gender, economic pressure on the family during the respondents' childhood, and economic pressure on the respondent at present. The following hypotheses investigate the impact of those variables.

1.3.3 Other Factors

- The fifth hypothesis is that gender affects the family-violence variables. Previous research has indicated that parents expect different behaviors from sons and daughters and, consequently, react differently to the same behavior depending on whether it is exhibited by a boy or by a girl (Huston 1983). In addition, boys may exhibit more aggressive behavior and may be harder to discipline than girls, which might increase their parents' willingness to use harsher methods of discipline, especially corporal punishment (Maccoby and Jacklin 1978; Parke and Slaby 1983; for further details, see Gershoff 2002). Therefore, the frequency of incidents of parent-to-child physical violence is expected to be higher for male than for female respondents.
- The sixth hypothesis is that past economic pressure will have a positive effect only on physical family violence and not on other variables, especially not on mental health in adult life: The greater the economic pressure during childhood, the higher the frequency of incidents of physical family violence.
- The seventh hypothesis is that economic pressure at the time of data collection will have an effect solely on mental health in adult life: The greater the economic pressure in adulthood, the worse the respondent's mental health will be.

If the data do not support the last two hypotheses, it shows that the present state of the respondents might tint perceptions of past experiences. If the data do support the last two hypotheses, this indicates that the respondents' reports of experiences during their childhood is not significantly distorted by their state at time of data collection.

2 Method

2.1 Sample and Population

A sample of 618 students from various departments in institutions of higher education in northern Israel was used in this study. The sample consisted of 27.3% men and 72.7% women. The average age of the participants was 25 years ($SD = 5.57$). Most of the participants were single (85.3%). The majority were natives of Israel (86.9%). The religious identities of the participants were as follows: 61.3% were Jewish, 18.2% were Muslim, 9.1% were Christian, and 11.4% self-identified as "Other". Regarding economic status, 19.2% of the research participants reported below average economic status, 70.1% reported average economic status, and 10.7% reported above-average economic status. This sample is representative of a young adult, educated, middle-class population.

2.2 Research Instruments

Research data were collected using questionnaires that addressed family violence, perceived childhood experience of parental care, and positive mental state.

2.2.1 Instrument for Measuring Family Violence

The instrument used to measure family violence was based on CTS principles (Conflict Tactics Scales: Straus et al. 1996, 1998). This means that the instrument focused solely on behavioral data (conflict tactics) and measured the frequency of the incidence of the use of such tactics, while deliberately excluding attitudes, emotions, and cognitive appraisal of behaviors (Straus 2007). The measure was previously implemented successfully among student populations in Israel (Winstok 2015b, a). It consists of 28 items measuring the incidence of distinct types of verbal violence (e.g., yelling and swearing) and physical violence (e.g., shoving and slapping) by the father and the mother, separately, toward each other (interparental violence) and toward their child (parent-to-child violence). The questionnaire addressed research participants' elementary-school years (age 6 to 12). The response options for each aggressive behavior item were: (1) *the behavior was never used*; (2) *the behavior was not used during the specified period, but was used at other times*; (3) *the behavior was rarely used during the specified period*; and (4) *the behavior was often used during the specified period*.

The verbal-interparental-violence measure consisted of six items. Reliability, in terms of internal consistency, was tested and yielded good results (Cronbach's α coefficient = .89). The physical-interparental-violence measure consisted of eight items. Reliability, in terms of internal consistency, was tested and yielded good results (Cronbach's α coefficient = .92). The measure of parent-to-child verbal violence consisted of eight items. Reliability, in terms of internal consistency, was tested and yielded good results (Cronbach's α coefficient = .83). The measure of parent-to-child physical violence consisted of six items. Reliability, in terms of internal consistency, was tested and yielded good results (Cronbach's α coefficient = .86). The scores for the four research variables were calculated by averaging the scores assigned to the different items.

2.2.2 Instrument for Measuring Perceived Childhood Experience

The measure of positive childhood experience conveyed the research participants' perceptions of the care they had received in childhood from their parents. The measuring instrument consisted of nine positive and negative statements. The four positive statements were: *"During my childhood, most of the time, I was happier than other kids;" "During my childhood, I was given a great deal of love by my father;" "During my childhood, I was given a great deal of love by my mother;"* and *"In general, my parents provided me with a good childhood experience."*

The five negative statements were: *"My childhood was not as good as that of other children;" "During my childhood, my father was mean to me;" "During my childhood, my mother was mean to me;" "During my childhood, my father was not as good a parent as the parents of other children;"* and *"During my childhood, my mother was not as good a parent as the parents of other children."*

The research participants were asked to rate their agreement with each statement as follows: (1) *absolutely disagree (wrong)*; (2) *disagree (somewhat wrong)*; (3) *agree (somewhat true)*; and (4) *absolutely agree (true)*.

First, factor analysis was performed (Extraction Method: Principal Component Analysis; Rotation Method: Varimax with Kaiser Normalization, Eigenvalues >1). As expected, that analysis yielded two factors. One factor consisted of all five negative statements (factor loadings > .67) and the other of all four positive statements (factor loadings > .65). Then, reliability, in terms of internal consistency, was tested and found to be good for the five negative statements (Cronbach's α coefficient = .85) and for the four positive statements (Cronbach's α coefficient = .82). Based on these results, the scores for two research variables were calculated based on item averages. Positive childhood experience and negative childhood experience served together as indicators of a latent factor representing the perceived positive childhood experience (described further below). The correlation between the average positive and negative experience items was examined. As expected, a strong significant negative correlation was found ($rp = -.63$).

2.2.3 The Positive Mental State: Self-Esteem and Depression

In this work, assessment of mental state was based on two indicators: self-esteem and depression. Unlike the measures described so far, which referred to the childhood of research participants, mental state refers to the present.

The measure used to evaluate self-esteem was based on Rosenberg's (1965) Self-Esteem Scale, which has been in widespread use for many years. In previous research among Israeli young adults, the reliability (internal consistency) of a Hebrew version of the measure was been found to be acceptable (Winstok 2015a, b; Winstok and Enosh 2004). The measure consisted of 10 statements (items), half of which were positive (e.g., *"I feel that I'm a person of worth, at least on an equal plane with others"*) and the other half of which were negative (e.g., *"I certainly feel useless at times"*). The response options were: (1) *strongly disagree*; (2) *disagree*; (3) *agree*; and (4) *strongly agree*. In this study, measurement reliability was found to be acceptable (Cronbach's α coefficient = .84). Based on these results, the score for the research variable was calculated based on the average score for the positive statements and the inverse of the average score for the negative statements.

The measure used to evaluate depression was the Major Depression Inventory (MDI) that was developed to cover the universe of depressive symptoms in *DSM-IV* major depression, as well as mild, moderate, and severe depression as defined by *ICD-10* (Bech et al. 2001, 2015). This instrument consisted of 12 items that asked the research participants to report how often they had experienced negative emotions (e.g., low mood, guilt, difficulty concentrating, restlessness) within the past 2 weeks. The response options were: (1) *never*; (2) *a little bit of the time*; (3) *some of the time*; (4) *a lot of the time*; (5) *most of the time*; and (6) *all the time*. Measurement reliability in this study was acceptable (Cronbach's α coefficient = .89). The score for each research variable was calculated based on the item average. The correlation between depression and self-esteem items was examined using the average scores. As expected, a strong significant correlation was found ($rp = -.5$).

2.2.4 Background and Control Variables

Data on background characteristics were collected to describe the sample and to serve as control variables in the analysis. These included age, sex, marital status, ethnicity, religiosity, occupation, number of siblings, education of self and parents, and the economic status of the respondent's parents during his or her childhood and that of the respondent today.

2.3 Data-Collection Principles

The population sampled in this study consisted of students from various programs in the departments of humanities, health and welfare, and social sciences in academic institutes in northern Israel. Trained undergraduate students collected the data during classes attended by the participants. They distributed the questionnaires for self-administration to those who consented to participate. The introductory explanations, distribution of the questionnaires, and completion of the questionnaires together took approximately 20 min. The surveyors offered to assist any participants who had difficulties understanding or filling out the questionnaires, but such cases were rare.

2.4 Analytic Strategy

This study examined two structural models using AMOS-20 software. One basic model served to test the research hypotheses. Another model was an extension of the basic model and served to test its validity. The basic model consisted of three parts. The first part included four variables representing family violence experienced in childhood: verbal violence between parents (average score of six items), physical violence between parents (average score of eight items), parental verbal violence toward the research participant (average score of eight items), and parental physical violence toward the research participant (average score of six items). The four variables were represented as independent, correlated variables, affecting the second part of the model, which was based on a latent variable that represented the participants' perceived positive childhood experience. The latent variable consisted of two indicators, one representing positive childhood experience (average score of four items) and the other representing negative childhood experience (mean value of five items). This latent variable mediated between the first part of the model (four violence variables) and the third part, which consisted of another latent variable representing the positive mental state of the participants. This latent variable also consisted of two indicators, research participants' depression levels (average score of 12 items) and their self-esteem (average score of 10 items). Whereas the first and second parts of the model refer to research participants' childhood experiences, the third part addresses their present mental health.

3 Results

The model yielded a significant chi-square statistic ($n = 618$; $\chi 2_{(\mathrm{df}=13)} = 23.23$, $p = .039$). When sample size is large ($n > 400$, as in this study), fit indices can offer a more reasonable estimation of the fit of the model (Kaplan 1990; MacCallum 1990; MacCallum et al. 1996). Based on fit indices, the model was found to fit the data:

NFI = 0.986; *IFI* = .994; *CFI* = .982; *RMSEA* = .036. It is important to emphasize that the effects of all of the correlations not presented in the model were tested and found to be insignificant, and their addition to the model yielded no significant change in $\chi 2$ values. It follows that the model presents only all of the significant correlations and paths between model variables.

The results of our analysis are presented in Fig. 1. As hypothesized, the analysis of the first part of the model (left side of Fig. 1) revealed strong, significant positive correlations between childhood-violence variables. The findings show strong correlations between verbal and physical interparental violence ($r_p = .44$), between parent-to-child verbal and physical violence ($r_p = .67$), and between types of interparental violence and types of parent-to-child violence ($r_{p\_verbal} = .51$; $r_{p\_physical} = .51$).

In the second part of the model, the loadings of the perceived-positive-childhood-experience latent factor were good. The factor loading on the perceived-negative-childhood-experience indicator (factor loading = −.88) was higher than its loading on the perceived-positive-childhood-experience indicator (factor loading = .72). As hypothesized, the effects of the violence variables on the perceived-positive-childhood-experience factor were negative and significant. The negative effect of verbal-violence variables on the perceived-positive-childhood-experience factor was stronger ($\beta_{\_parent\text{-}child\_verbal} = -.32; \beta_{\_inter\text{-}parental\_verbal} = -.25$) than the negative effect of the physical-violence variables ($\beta_{\_parent\text{-}child\_physical} = -.12$; $\beta_{\_inter\text{-}parental\_physical} = -.10$) on that factor. The explained variance of the perceived-positive-childhood-experience factor was high ($R^2 = .40$).

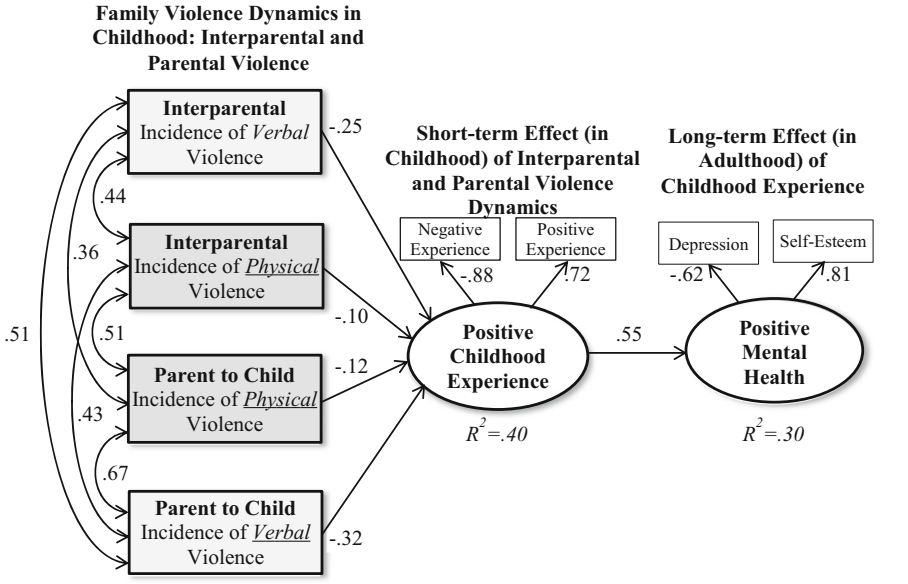

Fig. 1 Basic model: the relationship between family violence, childhood experience and mental health in adulthood

The third part of the model yielded good loadings of the latent factor representing positive mental health. The factor loading on the self-esteem indicator (factor loading = .81) was higher than that on the depression indicator (factor loading = −.62). As hypothesized, the effect of the perceived-positive-childhood-experience factor on the positive-mental-health factor was strong, significant, and positive ($\beta = -.55$). None of the violence variables had any significant direct effect on positive mental health. Hence, the perceived-positive-childhood-experience factor fully mediated the relationship between the violence variables and the positive-mental-health factor.

After the first basic model was used to test the research hypotheses, another model was examined to help test the validity of the first model by expanding it. The first model tested was based on a causal relationship between research variables: family violence during childhood affects mental state in adulthood, fully mediated by the perceived childhood experience. However, cross-sectional data, as used in this model, does not allow for any assumptions regarding causality. It is conceivable, for example, that a respondent whose current mental state is depressed and/or whose current self-esteem is low, will present a negative recollection of his or her childhood not because that childhood was in fact a negative experience, but because, due to his or her current mental state, any memory appears to be a negative one. Thus, the (present) adult mental state might distort the memory of (past) childhood events (family violence and perceived childhood experience). The purpose of the second model is to test and repudiate this argument. The database included two variables that may help with this examination: economic stress in adulthood (present) and economic stress in childhood (past, during the same period for which the research participants reported childhood experience and family violence). As a rule, economic stress can affect family violence (Capaldi et al. 2012; Gershoff 2002), childhood experience (Ridge 2011), and mental health (Reiss 1982). To refute the argument of possibly distorted reports of the past due to present-day conditions, present economic stress should affect only present mental health, but not perceived (past) positive childhood experience or (past) family violence. On the other hand, past economic stress should affect perceived (past) positive childhood experience and (past) family violence, but not present positive mental health. Naturally, there may be a relationship between past and present economic stress. The second model included both stress variables. The second model also examined the effect of the gender of the research participants on the research variables. In this context, it was hypothesized that parent-to-child physical violence would be more frequent toward boys as compared to girls.

The model yielded a significant chi-square statistic ($n = 618$; $\chi 2_{(df=35)} = 60.297$, $p = .005$). Based on fit indices, the model was found to fit the data: $NFI = 0.966$; $IFI = .985$; $CFI = .985$; $RMSEA = .034$. This examination indicates a significant positive relationship between present economic stress and childhood economic stress ($r = .26$). As hypothesized, a significant negative correlation was observed between present economic stress and current positive mental state ($\beta = -.13$). Childhood economic stress had a significant positive correlation only with verbal interparental violence ($\beta = -.08$). In addition, the research participant's gender correlated only with the two parent-to-child violence variables. As hypothesized, the frequency of verbal and physical parent-to-child violence was higher toward boys than toward girls ($r_{\_verbal} = .10$; $r_{\_physical} = .14$). The second model provided additional support for the research hypotheses.

4 Discussion

The current research provides the missing link between exposure to family violence in childhood and mental health in adult life by introducing childhood experience as a concept to fill in the gap left by previous work in this field. In this manner, this research extends the existing knowledge in the field and addresses several of its limitations. The results presented here demonstrate that mental health in adult life is partially explained by perceived childhood experience, which itself is partially explained by exposure to family violence in childhood. While this supports the hypothesis that childhood experience is a key factor in this respect, it also shows that there are still other factors that have yet to be addressed. Family violence, in all of its types and forms, does shape the perception of childhood experience substantially, but not exclusively, and childhood experience does affect mental health in adult life substantially, but not exclusively. Sadly, this research verifies that growing up in a violent family does negatively affect mental health in adulthood. Fortunately, this research also provides evidence that this impact is not deterministic and that additional factors may mitigate the adverse effects of family violence in childhood on adult mental health.

4.1 Family Violence

The results reveal strong, significant positive correlations among all types and forms of family violence (interparental and parent-to-child, verbal and physical). This indicates that when violence is present within a family system, it often is not limited to only one type and one form, but spreads in an infectious manner and symptomizes in manifold ways. Family violence may best be understood as a contagious property that threatens the entire family system afflicted by it. Most family-violence research has limited itself to examining only one type of family violence at a time, and sometimes only one form of violence at a time, which does not allow for the study of its contagious nature. The results of the present study are congruent with the findings of studies that have investigated several types and forms of family violence (e.g., Finkelhor et al. 2007; Hamby et al. 2011).

The attributing of contagious qualities to violence within the family system is an accurate assessment of the process manifested in the results reported here and in previous studies, but does not conclusively explain the strong correlations between the distinct types and forms of family violence. Hence, the first question to ask is: Why are the different forms of violence (verbal and physical) so strongly correlated within each type of violence (interparental or parent-to-child)? One possible answer to this question is that violence is a behavioral expression of an escalatory conflict among family members. In an escalatory conflict, reasonable behaviors appear at first, with the aim of settling the conflict and achieving a desired outcome. If this happens to be unsuccessful, more extreme behaviors will follow. If, for example, normative strategies such as explaining, negotiating, compromising, or conceding fail to end a conflict between partners, moderately violent behavior such as shouting, cursing, or insulting each other is likely to follow. If this moderate violence also fails to end the conflict, more severe violence, like slapping, hitting, or throwing objects, is likely to follow. It is, therefore, the escalatory dynamics of conflict that link verbal and physical violence. The second question to ask is: Why are the distinct types of violence so strongly

correlated with one another? One possible answer to this question is that violence corrupts existing family norms. Once the excessive use of force is established in any family as a common method for dominating conflicts, violence will be seen as a legitimate means of negotiation among all family members. If, for example, violence is a frequent means by which partners settle their conflicts with one another, the use of violent behavior to discipline children may be seen as legitimate as well. The escalatory dynamics of conflict and the corruption of family norms by violence together explain the contagious qualities of family violence.

4.2 The Impact of Family Violence on Childhood Experience

The latent variable of perceived positive childhood experience was significantly and negatively correlated with all four types and forms of family violence. While there are very few studies on this matter that allow for direct comparison, the results of the most comparable ones are congruent with the findings of this study (Herrenkohl et al. 2008).

It is remarkable that both types of verbal violence had a much greater negative impact on the overall perception of childhood experience than the two types of physical violence. Most probably, because verbal violence is considerably more frequent – even in the most violent of families – than physical violence is (Stets 1990; Winstok and Perkis 2009), it overshadows much more of one's entire childhood experience. Furthermore, due to the aforementioned process of escalation, most incidents of physical violence begin with, are accompanied by, and are followed by verbal violence. This increases the concern that children in violent families will associate with any incident of verbal violence. Simply put, whenever a child experiences or witnesses verbal violence, the threat of physical violence is a very realistic expectation, increasing the stress inflicted to the child. It appears that while the threat of physical violence (e.g., verbal violence) causes intimidation and fear, physical violence itself causes mainly anger (Evans et al. 2008; Gershoff 2002; Holt et al. 2008; Nowakowski-Sims and Rowe 2017). Intimidation and fear are negative emotions that are especially severe in children, with injurious effects on their development and long-term effects on their mental health (Perez et al. 2016; Varese et al. 2012; Wong et al. 2018).

Intimidation, fear, the threat of and actual violence are experiences quite contrary to what is generally associated with the term *family* and with the idea of family most human societies strive to convey. The family is supposed to be a safe haven for its members, and especially for its children, who may expect to find within the family the special care and protection that is not guaranteed elsewhere. Family members, and especially parents, are obliged to promote harmony, affection, belonging, mutual care, safety, and security among family members. Family members should be able to trust each other and to expect fairness, respect, and positive regard amongst themselves. When violence becomes part of a family's behavioral patterns, proximity, closeness, and dependency, which should be guarantors of safety and security, become reasons for great concern. Once the basic trust is undermined, wariness, fear, and caution may become very dominant childhood experiences. The phrase *violent family* is almost an oxymoron, a perversion of what families are meant to be. Children facing this vast contrast between expectation and lived reality are forced to cope with an unsolvable contradiction. It is a fair assumption that this results in cognitive and emotional dissonance, which will leave yet another lifelong imprint on their childhood experience.

In addition, family violence may be understood as means to preserve a certain family order. Its presence, therefore, indicates the absence of order – chaos – and the inability of the family system to utilize other, normative means to prevent such chaos. Childhood experience will be shaped by the violence, on the one hand, but also by the chaos and parental incompetence on the other. Altogether, family violence explains about one-third of the variance in perceived childhood experience. This means that beyond family violence, other factors also shape childhood experience. The current study does not address such factors.

4.3 The Impact of Childhood Experience on Adult Mental Health

The latent variable *positive mental health in adulthood* is defined here as the absence of symptoms of depression and the presence of positive self-esteem at the time of data collection. Both of those factors represent different aspects of one's mental health and complement each other. Self-esteem is related to early life experiences, develops over time, and later remains relatively stable. It represents a certain mindset about oneself and is of a more cognitive nature. Depression is a more affective concept and is more reactive to one's present situation. Previous research suggests a significant correlation between both factors, as was also found in the current study, as well as correlation between both factors and previous life experiences (Orth et al. 2016).

In the model presented here, none of the violence variables (in childhood) had any direct significant effect on mental health (present time). The overall effect of the violence variables on positive mental health was mediated by the perceived childhood experience. These results are innovative in the field. They suggest that it is not family violence in childhood itself that harms mental health, but rather that family violence has a damaging impact on childhood experience. Perceived negative childhood experience (e.g., if an adult remembers and evaluates his or her childhood as adverse and harsh) has an impact on both cognitive and affective characteristics, resulting in impaired mental health. Impaired mental health causes suffering; shapes attitudes and beliefs about oneself, others, and interpersonal relationships; influences mental processing; and, ultimately, may interfere with adaptive behavior.

The importance of these results is both theoretical and practical. As mentioned above, research studies have often been limited to the examination of direct links between family violence in childhood and outcomes in adulthood. The current research suggests that there are intrapsychic processes that mediate those relationships. One such process, perceived childhood experience, was tested here. Yet, much of the variance in adult mental health remains unexplained, leaving room for further investigation. An important question to ask is: Do positive experiences in childhood – within and outside the family – add to one's overall positive childhood experience, resulting in improved mental health as an adult? Future research should also continue the search for additional factors that may mediate the relationship between family violence in childhood and adult mental health.

It is undeniable that family violence experienced in childhood cannot be undone. Nevertheless, the perception of one's childhood experience may very well be subject to reevaluation. The results presented here suggest that therapeutic work with individual clients regarding how childhood events are processed may positively influence their current mental health. It may be even more promising to treat children exposed to

family violence with the goal of diminishing the negative effects of their violent experiences on their future mental health. Helping children to cognitively and emotionally process the violent incidents in their families may diminish the adverse effects of family violence on perceived childhood experience, to promote future mental health. Other mediators, yet to be discovered, may serve as additional starting points for professional intervention.

4.4 Limitations of the Current Study

The current study utilized a sample of university students in northern Israel in which the average age was 25 years and in which almost three-quarters of the respondents were female. The sample was somewhat disproportionately young, female, educated, and middle-class.

This study addressed two types of family violence, interparental violence and parent-to-child violence, ignoring other types of family violence (e.g., sibling violence and child-to-parent violence). This study also addressed only two forms of family violence, verbal and physical, ignoring other forms (e.g., sexual violence, economic violence, social violence, neglect, and other forms of coercion).

The current study did not account for individual characteristics of the respondent and his or her family, such as gender, physical health, number of siblings, parental divorce, living arrangements, and the like.

The dependent variable, mental health, is a latent variable based on two indicators: self-esteem and depression. One might argue that mental health is a broader concept that should account for additional indicators, such as anxiety, life satisfaction, cognitive functioning and so on. In addition to mental health, other dependent variables, for example, measures of specific behaviors, might be relevant as well.

Only one potential mediator was tested in this research. The results strongly suggest that other mediating factors remain to be identified.

4.5 Summary and Final Comments

This study introduces two innovative additions to the conceptual framework of family-violence research. First, it proves that the somewhat simplistic linear concept, by which family violence in childhood directly results in diminished adult functioning, is insufficient. The results presented here clearly show that the effects are mediated. This insight calls for further investigation. Second, this study proposes that childhood experience is one of these mediators, accounting for about one-tenth of the entire effect. While this finding is in itself pioneering, the work presented here shows that additional factors remain to be identified and tested. This raises further questions and indicates that different models should be tested in future research.

This study also sets the groundwork for professional interventions based on empirical knowledge. The understanding that the effects of family violence in childhood on adult life are mediated opens further opportunities for interventions with victims of family violence, both during childhood and later in life. In childhood, interventions aimed toward those mediators may prevent further damage. In adulthood, reevaluation and reshaping of these mediators may alleviate symptoms.

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