

#### Article

# Marital Quality as a Mechanism Linking Childhood Abuse to Mental Health

Journal of Family Issues 2023, Vol. 44(6) 1488–1507 © The Author(s) 2022 Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/0192513X211059831 journals.sagepub.com/home/jfi



Michael Fitzgerald, PhD o and Jacob A. Esplin, PhD o

#### **Abstract**

Childhood abuse has been widely associated with mental health problems in adulthood and marital quality may be one possible mediator. We examine marital quality as a mediator linking childhood abuse to positive affect, negative affect, emotionally reactivity, and aggression. Using data from Midlife Development in the United States (MIDUS), results of structural equation modeling indicate that the indirect effects from childhood abuse to each of the mental health outcomes were significant. Marital quality may be a source of resilience among adults who were abused in childhood and could be a point of intervention for clinicians.

## **Keywords**

childhood abuse, marital quality, affective symptoms, aggression, emotional reactivity

# Marital Quality as a Mechanism Linking Childhood Abuse to Mental Health in Midlife Adults

Childhood abuse, defined by physical, emotional, and sexual abuse, is common within the United States and has been positively associated with

#### **Corresponding Author:**

Michael Fitzgerald, 207 Joseph Greene Hall, 118 N College Drive, Box #5035, Hattiesburg MS, 39406, USA.

Email: Michael.C.Fitzgerald@usm.edu

<sup>&</sup>lt;sup>1</sup>University of Southern Mississippi, Hattiesburg, MS, USA

mental, physical, and relational health problems across the life-course. A recent meta-analysis found roughly 24% of adults reported childhood physical abuse, 36.5% reported emotional abuse, and 20.1% of women and 8% of men report childhood sexual abuse (Stoltenborgh et al., 2015). Further, experiencing one form of childhood abuse dramatically increases the likelihood of experiencing another (Finkelhor et al., 2007). Childhood abuse has been linked to mental health problems in adulthood (DiLillo et al., 2007; Kong et al., 2018; Nelson et al., 2017) as well as physical health issues and early mortality (Lee & White, 2012; Widom et al., 2015). Due to the detrimental consequences, it is important to identify pathways and points of intervention to reduce health problems associated with childhood abuse.

Adult relationships with family members, friends, romantic partners, and general social support may mediate the association between childhood abuse and adult mental health (Kong, 2017). Intimate relationships are particularly important because of more frequent interactions and a greater level of interdependence compared to other interpersonal relationships. Marriage quality is consistently linked with mental health problems (Whisman & Baucom, 2012) and may serve as a mediator linking childhood abuse to adult mental health. Childhood abuse is an interpersonal act that causes physical and/or emotional harm, creating negative internal representations of relationships that can lead to relationship problems and psychopathology (Godbout et al., 2009). The extent to which adults have a quality intimate relationship may explain the association between childhood abuse and psychopathology (Author Citation). If adults abused in childhood can find an intimate partner offering support, nurturance, and companionship, they are likely to report fewer mental health problems, whereas adults in violent, strained, or conflictual intimate relationships are likely to experience mental health problems. Few studies, however, have considered relationship quality as a possible pathway by which childhood abuse is associated with adult mental health. The purpose of this study was to examine marital quality as a mechanism linking childhood abuse to mental health problems frequently associated with childhood abuse including aggression, emotional reactivity, positive affect, and negative affect in a sample of midlife adults.

# **Theoretical Background**

The traumagenic model (Finkelhor & Browne, 1985) provides insight into the relationship between childhood abuse and adult mental health, and proffers there are four dynamics occurring during abuse: betrayal, traumatic sexualization, stigmatization, and powerlessness. Although the original model was proposed for survivors of sexual abuse, the dynamics also occur in emotional and physical abuse (DiLillo et al., 2009). The traumagenic model suggests abuse creates low self-worth, shame, guilt, mistrust, and distorts children's

view of relationships. These dynamics are often carried into adulthood and manifest in marriage. For example, abuse is frequently perpetrated by caregivers responsible for the child's well-being, and this betrayal may lead to trust issues in marriage, because, like the parent-child relationship, marriages are interdependent relationships characterized by intimacy, closeness, trust, and mutual influence (DiLilio & Long, 1999; DiLillo et al., 2009). Traumatic sexualization may impact adults' ability to have emotional and physical intimacy in relationships (DiLillo et al., 2007). Abused children often experience stigmatization, creating feelings of worthlessness and shame. This can result in detachment from partners, reassurance seeking, and conflict. Last of the traumagenic dynamics is powerlessness, where children are simultaneously dependent on caregivers for nurturance while also recognizing they are sources of pain, stress, and terror. In adulthood, powerlessness may impair decision making, identifying needs, and being open and honest with partners (DiLillo et al., 2009; DiLilio & Long, 1999; Finkelhor & Browne, 1985). Thus, the traumagenic dynamics may leave adults at risk for poorer quality relationships.

Decreased ability to form safe, secure relationships places adults at enhanced risk for poorer psychological adjustment. Underlying feelings of shame, guilt, worthlessness, and powerlessness are likely to potentiate a wide array of mental health problems (Dunlop et al., 2015; Kong et al., 2018). The extent to which adults report mental health problems may be partially explained by how safe and secure they feel in their marriage. For many, romantic relationships are a source of healing where a high-quality relationship attenuates the impact of traumagenic dynamics. Feeling comfort, companionship, support, and a sense they matter to their partner, provides a corrective experience that can attenuate mental health problems (Flett et al., 2016; Goff et al., 2006). Adults with a partner as a secure base have an interpersonal source of emotional regulation and experience greater positive effect and fewer negative affective symptoms (Thoits, 2011). Additionally, adults with a high-quality and secure relationship are better able to navigate conflict and strain. Walker and colleagues (2009) found childhood abuse was associated with greater emotional dysregulation during conflict, potentially leaving adults more vulnerable to aggressive behavior and intimate partner violence (IPV) whereas a secure relationship reduces the risk of violence (Spencer et al., 2020).

## Childhood Abuse and Adult Mental and Relational Health

Mental health problems are common among adults who were abused in childhood. Abused children often feel powerless, worthless, shame, guilt, and unsupported and unimportant to caregivers (Finkelhor & Browne, 1985; Flett et al., 2016). These internalized beliefs often lead to mental health problems in

adulthood. Additionally, childhood abuse can impair the ability to emotionally and physiologically self-regulate, a risk factor for long-term mental health problems (Coates & Messman-Moore, 2014). Consistent with these propositions, adults abused as children were found to have greater emotional reactivity and dysregulation (Dvir et al., 2014), less positive and more negative affect (Kong, 2017), somatic complaints (Zink et al., 2009), substance use (Dube et al., 2005), anger (Maldonado et al., 2015), and aggression (Chen et al., 2012). Using a nationally representative sample, Taillieu et al. (2016) found adults emotionally abused as children had an increased risk for developing numerous disorders including major depression, dysthymia, post-traumatic stress disorder, generalized anxiety disorder, social phobia, panic disorder, drug and alcohol dependence disorders, and personality disorders. Similarly, Afifi et al. (2017) found physical abuse was associated with increased odds of depression, suicide attempts, moderate to heavy drinking, and lifetime drug use.

A significant body of research found a negative association between childhood abuse and marital quality and indicators within marriage. Because abuse is an interpersonal betrayal that impairs psychosocial development, these capacities may not fully develop in childhood, resulting in effects seen in adult relationships. The association between childhood abuse and more negative and fewer positive interactions is consistently documented (Whisman, 2014). Specifically, abuse in childhood is associated with greater conflict (author citation), more volatile conflict resolution strategies (Knapp et al., 2017), poorer communication (Banford-Witting & Busby, 2019), and providing less emotional support to partners (author citation). Whisman (2014) found adults physically abused as children were perceived by their partner to engage in fewer positive and more negative interactions, and in turn perceived their partner to engage in more negative and fewer positive interactions. Childhood abuse is likely to negatively impact the overall quality of marriage through increasing the negative dimensions while decreasing the positive. The association between childhood abuse and lower quality relationships has been found for young adults (Riggs et al., 2011), newlyweds (DiLillo et al., 2009), midlife adults (Whisman, 2006), and older adults (Whisman, 2014).

# Marital Quality and Adult Mental Health

Marital quality is an exceedingly complex concept (for reviews see Bradbury et al., 2000; Fincham & Rogge, 2010). Marital quality assessment strategies differ, as some argue there are too many domains to measure (Norton, 1983), some argue for the measurement of specific indicators of discrete domains (i.e., trust; DiLillo et al., 2009), while others advocate for implicit measures (Fincham & Rogge, 2010). Aspects frequently examined include communication,

intimacy, emotional support, strain, conflict, and emotional distance (Bryant et al., 2016; Fletcher et al., 2000; Ledermann et al., 2010). Following this model, the current study conceptualizes marital quality as a multidimensional construct consisting of marital support, strain, and disagreement. This approach provides information researchers and clinicians can use to understand the intricacies of marriage in the context of childhood abuse and adult mental health (DiLillo et al., 2009). Global and implicit measures cannot provide nuanced information as clinically informative.

The relationship between marital quality and adult mental health has interested clinicians, researchers, and policy makers alike. Researchers have postulated that marriages are either a source of positive (e.g., joy) or negative (e.g., emotional reactivity) mental health. Approximately 30 years ago, Beach and colleagues proposed the marital discord model of depression (Beach et al., 1990), which posits marriages can be both sources of support (e.g., cohesion, support, and intimacy) and stress (e.g., discord, aggression, and relationship instability). Adults experiencing greater marital discord and stress, coupled with less support and intimacy, are at risk for developing depressive symptoms. Indeed, studies have found support for the marital discord model (e.g., Hollist et al., 2007; Miller et al., 2013). Despite an initial focus on depression, more contemporary research found empirical support for other mental health problems (Priest, 2013). For example, using a nationally representative sample, Whisman (2007) found marital problems were associated with enhanced likelihood of meeting criteria for mood, anxiety, and substance use disorders. In review, Whisman and Baucom (2012) noted both cross-sectional and longitudinal studies found associations between the quality of marriage and mental health problems. Supplementing these findings, the quality of marriage may also increase positive mental well-being (i.e., positive affect). Proulx et al. (2007) conducted a meta-analysis investigating the association between marriage and positive mental well-being and found marital quality was associated with greater mental well-being.

Adults who report a high-quality marriage are more likely to report less emotional dysregulation and impulsive behavior. In high-quality marriages, with greater support and less strain and disagreement, adults turn to partners for support, believe partners are well intentioned, and make fewer negative attributions about and are less emotionally reactive and aggressive toward their partners. This may be particularly important among adults abused in childhood, as they tend to be trustful of their partners (DiLilio & Long, 1999), but only if they develop a safe and secure relationship.

# The Present Study

Research proposes childhood abuse is linked to mental health problems, and marriage may be one possible mechanism (author citation); however, researchers have yet to investigate this relationship. This omission misses an opportunity to advance our understanding of the process linking childhood abuse to adult mental health and could provide a point of intervention for clinicians working with individuals and couples with mental health problems. The current study examined the indirect effects from childhood abuse to positive affect, negative affect, aggression, and emotional reactivity. It is hypothesized that childhood abuse will be negatively associated with marital quality and positive affect and positively associated with negative affect, emotional reactivity, and aggression. Further, it is hypothesized that marital quality will be negatively associated with negative affect, emotional reactivity, and aggression, and positively associated with positive affect. Finally, it is expected that childhood abuse will be indirectly related to the mental health outcomes through marital quality.

## Method

# Sample

Data are from the Midlife Development in the U.S. (MIDUS), are publicly available, deidentified, and available through Inter-university Consortium for Political and Social Research (https://www.icpsr.umich.edu/web/ICPSR/series/ 203). The original sample (MIDUS 1), contacted in 1995–1996, was a nationally representative sample of 7108 non-institutionalized English-speaking adults that completed a telephone interview and a self-administered questionnaire (SAO). The MIDUS refresher project was designed to supplement the original cohort and recruited a national sample of 3577 adults aged 23–76 years from 2011 to 2014. The current study utilized data from a subset of participants in the MIDUS refresher cohort. To be in the current study, individuals must be married, completed both the telephone interview and SAQ, and reported on childhood abuse variables, resulting in a final sample of 1345 adults. Among the participants included in the study, there were no missing data on any independent, mediating, or dependent variables. Participant demographics are in Table 1. The analytic sample was primarily male, White, and well educated.

## Measures

Childhood abuse. Childhood abuse was measured using an adapted version of the Conflict Tactics Scale and measured emotional and physical abuse from parents, siblings, and others. Physical, severe physical, and emotional abuse items began with the stem, "When you were growing up, how often were any of the things mentioned above done to you by...". Each item was asked about respondents' mothers, fathers, brothers, sisters, and others and options ranged from 1 (Often) to 4 (Never). An example of emotional abuse was "insult or

Table 1. Descriptive Characteristics of the Analytic Sample.

Descriptive characteristics	N (%)/M (SD)					
Race						
White	1259 (87.6%)					
Black	57 (4%)					
Native American	19 (1.3%)					
Asian	17 (1.2%)					
Pacific Islander	I (.1%)					
Other	75 (5.2%)					
Gender						
Male	781 (54.3%)					
Female	656 (45.7%)					
Lived with alcoholic during childhood						
Yes	330 (22.3%)					
No	1117 (77.7%)					
Education						
Less than high school	51 (3.6%)					
High school graduate	199 (13.0%)					
Some college	239 (16.7%)					
2 year degree	170 (11.8%)					
College degree	362 (25.2%)					
Some graduate school	29 (2%)					
Graduate degree	385 (26.8%)					
Age	50.42 (13.66)					
Household Income	\$84,012 (\$70,190					

swore at you" and illustrative items capturing physical and severe physical abuse were "slapped you" and "kicked, bit or hit you with a fist." Only maternal and paternal abuses were used in this study and were averaged across abuse type. In other words, emotional, physical, and severe physical abuses were an average of maternally and paternally perpetrated abuse. Scores ranged from 2 to 8 for each type of abuse. A higher mean score of maternal and paternal emotional abuse, physical abuse, and severe physical abuse indicates greater abuse. Childhood abuse was conceptualized as a latent variable with emotional abuse, physical abuse, and severe physical abuse as indicators.

Support. Perceptions of support from partner were assessed with six items from the MIDUS study. Items measured the frequency of common manifestations of emotional support, including "Does he or she really care about you" and "Can you open up to him or her if you need to talk about your worries." Options ranged from 1 (A Lot) to 4 (Not at All). Items were coded

and a mean score was computed. Higher scores are reflective of higher levels of support. Cronbach alpha = .89.

Strain. Relational strain was assessed with six items tapping how frequently requests from the spouse are strained. Options ranged from 1 (*Often*) to 4 (*Never*). Example items include, "Does he or she make too many demands of you" and "Does he or she make you feel tense." Items were coded and a mean score was computed; higher scores reflect higher levels of strain. Cronbach alpha = .87.

Disagreement. Disagreement was measured by three questions asking participants how often the individual disagreed with her/his spouse on "money matters, such as how much to spend, save or invest," and "household tasks, such as what needs doing and who does it." Options ranged from 1 (*A Lot*) to 4 (*Not at All*). A mean score of the three items was computed. Higher scores were indicative of less disagreement. Cronbach alpha = .72.

Positive and negative affect. Positive and negative affect was measure using nine adjectives describing respondent's mood: five items for negative affect and four items for positive affect. A stem of "During the past 30 days, how much of the time did you feel..." and the adjectives for negative affect were "afraid," "jittery," "irritable," "ashamed," and "upset" and the adjectives for positive affect were "enthusiastic," "attentive," "proud," and "active." Options for both the positive and negative affect scales ranged from 1 (All of the time) to 5 (None of the time). Items were reverse coded so higher scores indicated higher levels of positive and negative affect. The means of the items were used in analysis. Cronbach alpha = .82 for negative affect and .86 for positive affect.

Emotional Reactivity and Aggression. Aggression was measured using the aggression subscale of the multidimensional personality questionnaire, which consists of four items rated on a 4-point Likert type scale: 1 (*True of you*) to 4 (*False*). Items included, "Sometimes I seem to enjoy hurting someone by saying something mean" and "Sometimes I just like to hit someone." The emotional reactivity subscale consists of three items rated on the same scale and included, "My mood often goes up and down" and "Minor setbacks sometimes irritate me too much." For both scales, items were reversed coded and summed together, with higher scores reflective of greater emotional reactivity and aggression, respectfully. Cronbach alpha for the emotional reactivity sale was .75 and aggression was .66.

Covariates. Numerous covariates were used in the analysis. Sociodemographic variables included the dichotomous variables of race (White/racial minority), living with an alcoholic as a child (Yes/No), and gender (Male/Female).

Education was entered in as an ordinal variable ranging from 1 (*No Formal Schooling*) to 12 (*Doctorate*). We also controlled for physical health using one item: "In general, would you say your physical health is excellent, very good, good, fair, or poor." The physical health item was reverse coded where higher scores reflect better health.

## Statistical Analysis

First, descriptive statistics, including correlations, means, and SDs, were generated in SPSS. Next, structural equation modeling (SEM) using Mplus (Muthen & Muthen, 1998) was used to test the indirect associations between childhood abuse with adult mental health outcomes through marital quality. A model was created with childhood abuse as the predictor, mental health problems, including emotional reactivity, aggression, positive affect, and negative affect as outcomes, and marital quality as a mediator. Both childhood abuse and marital quality were measured using latent variables, each with three indicators. Childhood abuse indicators included parental emotional abuse, physical abuse, and severe physical abuse, while marital quality indicators were support, strain, and disagreement. SEM uses several statistics to evaluate the fit of a model, including the chi-square statistic, comparative fit index (CFI), Tucker–Lewis index (TLI), and root mean square error of approximation (RMSEA). An adequate fitting model has CFI and TLI values greater than .90 and preferably greater than .95. A non-significant chi-square test indicates good fit; however, this statistic is sensitive to sample size as it becomes significant in larger samples despite other indictors of a good fitting model (Kline, 2015). RMSEA values below .08 are deemed adequate but are preferably below .06. The indirect (mediating) effects from childhood abuse to adult mental health through marital quality were tested using bias-corrected bootstrap confidence intervals (CI) based on 5000 bootstrap samples. Bootstrapping is the preferred method of examining mediation because it does not assume the indirect effects to be normally distributed, as they often are not (Hayes, 2009). Final model fit was acceptable (CFI = .974, TLI = .934, RMSEA = .045, SRMR = .021,  $\chi^2$  (48) = 178.982, p < .001).

#### Results

## **Bivariate Associations**

Correlations are in Table 2. Childhood emotional, physical, and severe physical abuse were associated with each of the indicators of marital quality, including support, strain, and disagreement, and also with the mental health outcomes, with the exception of emotional abuse to emotional reactivity. Indicators for marital quality were moderately correlated with one another. Further, marital quality variables were associated with mental health outcome variables. Mental health

 Table 2.
 Correlations Among Study Variables and Covariates.

15	1		I	I	I	I	I	I		1	1	1	I	1	1	I		10 <b>4</b> **
4	I		I		1	I	I	I		I	1		1	I			.057*	.016 –.059*
13	1		I		ı	I	I	I		1	I		1	I		04I	-037	910.
12	1		I	I	ı	1	1	1		1	1	1	1		**890	—. <b>I06</b> **	.007	032
_	1		ı	1		1	1	1		1	1	1		073**	.053*	.026	093**	.272**
												'	254***			****80°	.082*	—·098***
0	I		I		ı			ı				***			-		-	
6	I		I	1	I			1		I		514**	.355***	**980°	015	010	075*	.143***
<b>&amp;</b>	I		I	I	ı	I	I	1			254***	.260***	.130**	207***	019	I64***	*160	102**
7	1		ı	ı	ı	1	1			.420***	435***	.521***	143***	165***	.045	003	.040	053*
			· 					147***		147***	.272***	.240**	.075**	**690	.054*	.036	078*	.031
	1		1	ı		ı	636*** -	259*** _			278****	302***	<b>II</b> 4***	100***	.013	017	*	025
5	ı		ı		1	***												
4	I		I	1		.579***	447***	.256***		.212	232***	.246***	***680	164***	016	042	.062*	*090 <sup>.</sup> —
e	1		1		***Z60	.125***	103***	3089***		.212***	₩ ₩ H	.153***	—.I28***	.026	044	031	.197**	176**
2	1			.710***	.102**	.147***	081	14***		.228***	.132***	**181	122***	077**	030	.007	.234***	150**
_			.515***	.642***	*990	***660	***060'-	.024		*** <b>980</b>	<u>₩</u> 101:	133**	<del>-</del>	.950	072	810.	.152***	201***
	I. Severe	physical abuse	2. Emotional	abuse 3. Physical	abuse 4. Disagreement	5. Strain	6. Support	7. Emotional	reactivity	8. Aggression	<ol><li>Positive affect</li></ol>	<ol> <li>Negative affect</li> </ol>	II. Physical health	I2. Age		14. Sex	15. Lived with	16. Education

Note. \* p < .05 \*\* p < .01 \*\*\* p < .001.

outcomes were also moderately correlated with each other. Age, education, physical health, and living with an alcoholic were fairly consistently associated with study variables, while gender and race were not; exceptions included that males reported higher levels of aggression and White adults reported higher levels of marital support.

## **SEM**

Results of the SEM model, including direct effects and latent variable factor loadings, can be seen in Figure 1. Regarding the factor loadings for the childhood abuse latent factor, emotional ( $\beta$  = .76, p < .001), physical ( $\beta$  = .92, p < .001), and severe physical abuse ( $\beta$  = .68, p < .001) all loaded significantly. Likewise, the three indicators of marital quality, including support ( $\beta$  = .71, p < .001), strain ( $\beta$  = .89, p < .001), and disagreement ( $\beta$  = .64, p < .001), also loaded significantly.

Direct Effects. In the full SEM model, childhood abuse was associated with poorer quality marriage ( $\beta = -.14$ , p < .001) and higher levels of negative affect ( $\beta = .10$ , p < .001) and aggression ( $\beta = .19$ , p < .001). Furthermore, childhood abuse was negatively associated with positive affect ( $\beta = -.08$ , p < .001). Childhood abuse was not, however, associated with emotional reactivity ( $\beta = .04$ , p > .05). Marital quality was associated with each mental health outcome. Specifically, marital quality was inversely associated with lower levels of emotional reactivity ( $\beta = -.28$ , p < .001), aggression ( $\beta = -.22$ , p < .001), negative affect ( $\beta = -.31$ ,  $\beta < .001$ ), and higher levels of positive affect ( $\beta = .31$ ,  $\beta < .001$ ).

Indirect Effects. Next, we examined the indirect effect from childhood abuse to emotional reactivity, aggression, negative affect, and positive affect using bootstrapping (see Table 3). The indirect effect from childhood abuse to emotional reactivity through marital quality was significant ( $\beta$  = .039, 95% CI [.020, .063]). Regarding aggression, like emotional reactivity, the indirect relationship from childhood abuse through marital quality was significant ( $\beta$  = .035, 95% CI [.020, .055]). Marital quality served as a potential mediator linking childhood abuse to both positive ( $\beta$  = .044, 95% CI [.071, ..022]) and negative affective symptoms ( $\beta$  = .043, 95% CI [.022, .070]).

## **Discussion**

Childhood abuse has been consistently associated with mental health problems in adulthood. Prior research found adult interpersonal relationships may mediate the relationship between childhood abuse and mental health outcomes (author citation; Kong et al., 2018; Runtz & Schallow, 1997), and suggested

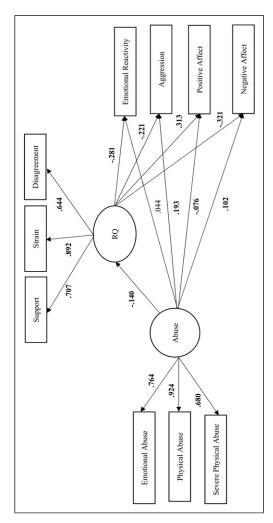


Figure 1. Results of latent variable structural equation meditational model.

Table 3.	Bootstrapped In	direct Effects	from	Childhood	Abuse to	Mental	Health
Outcome	s Through Marita	l Quality.					

Effect Abuse -> MQ -> negative affect Abuse -> MQ -> positive affect Abuse -> MQ -> aggression	Estimate .043 044 .035	95% bootstrapped CI [.022, .070] [071,022] [.020, .055]
Abuse -> MQ -> emotional reactivity	.039	[.020, .063]

Note. Confidence intervals that do not include 0 are statistically significant. CI = Confidence intervals; MQ = Marital Quality.

marital quality may be a potential mechanism (Kendall-Tackett, 2002). The purpose of the current study was to examine marital quality as a potential mediator linking childhood abuse to numerous indicators of mental health functioning, including positive and negative affective symptoms, aggression, and emotional reactivity. These results provide preliminary evidence that marital quality is a possible mechanism linking childhood abuse to adult mental health functioning as we detected significant indirect effects to positive affect, negative affect, emotional reactivity, and aggression.

This study's primary contribution was identifying that marriage quality was a mechanism linking childhood abuse to mental health outcomes in a large sample of midlife adults. Based on extent research, marital quality was expected to be a pathway linking childhood abuse to mental health outcomes, and this hypothesis was supported. Specifically, martial quality indirectly related childhood abuse to positive affect, negative affect, aggression, and emotional reactivity. Consistent with numerous studies, childhood abuse was associated with lower levels of marital quality (DiLillo et al., 2009; Dunlop et al., 2015; Whisman, 2006), which, in turn, was associated with each of the mental health problems (Whisman & Baucom, 2012).

Characteristics of high-quality marriages may provide a corrective experience compared to the traumagenic dynamics, including betrayal, powerlessness, traumatic sexualization, and stigmatization (Finkelhor & Browne, 1985). High-quality marriages, characterized by support, conflict resolution, and few negative interactions, can provide alternative experiences to adults abused as children. Marriages promoting self-esteem can ameliorate feelings of stigmatization, spousal support may override feelings of betrayal, and effectively resolving conflict can help adults feel empowered in their relationships. Consequently, marriages can have a diverse impact on mitigating negative symptoms as well as improving mental well-being (Beach et al., 1990; Whisman, 2007).

Thoits (2011) posited that higher quality marriages promote health though increasing health promotive behavior (e.g., dieting and exercise) and reducing health hindering behavior (e.g., alcohol use). She proposed high-quality marriages promote self-esteem and create a sense of belonging, companionship, acceptance, and emotional support (Thoits, 2011). Adults who were abused as children but forge a high-quality marriage, characterized by support, intimacy, and the ability to resolve conflict, may experience fewer mental health problems, and have greater positive affect, emotional regulation, and conflict resolution skills. This may be due to the psychosocial resources of the marital relationship (e.g., support) and increased self-esteem, which provides a secure base to talk about areas of disagreement and strain.

These findings suggest marital quality may mediate the abuse-mental health association, yet evidence of partial mediation for three of the four outcomes indicate there are other unmeasured variables affecting the relationship between childhood abuse and adult mental health. Prior research found familial and friend support are also mediators (Kong, 2017; Runtz & Schallow, 1997). For example, a recent study found childhood maltreatment was longitudinally associated with depressive and socially anxious symptoms through support from family, friends, and romantic partners, but did not account for individual factors (author citation). Kendall-Tackett (2002) suggested maladaptive coping strategies, cognitive schemas, and behavioral issues (e.g., sexual risk taking) also account for finding partial mediation. Future research may want to simultaneously examine interpersonal and intrapersonal pathways, providing insight into which paths have the strongest effect on adult mental health.

## Limitations

Strengths of the study include the novelty of examining marital quality as a mediator linking childhood abuse to adult mental health, a large sample, and assessing a variety of mental health outcomes, yet this study is not without limitations. First, the study was cross-sectional, constraining our ability to make causal inferences. Second, the MIDUS data did not have an assessment of sexual abuse or neglect, so our assessment does not encapsulate the full experience of child maltreatment. Third, future research should not rely solely on survey methods because respondents with mental health problems may have biased perceptions of prior abuse. Prospective studies using substantiated cases of maltreatment (e.g., child protective services records) as well as observational methods can attenuate these limitations. The sample was also predominantly White, so extrapolations to racial minorities are significantly limited. Last, childhood abuse reports are retrospective and may be subject to reporting biases including not disclosing or recalling abuse.

## Clinical Implications

Study findings have implications for clinicians. Marital quality was identified as a possible mechanism linking maltreatment to mental health outcomes. Although individual therapy could be effective and is sometimes required depending on the level of aggression within the relationship, we recommend couple therapy. Denton and Burwell (2006) found, compared to individual therapy, couple therapy demonstrated increases in both mental health functioning and marital quality. We suggest addressing disagreement, strain, and support in marriage may be particularly helpful. Partners may be caught in negative cycles of interaction (e.g., pursuer-distancer) leading to relational distress and higher levels of affective symptoms, emotional reactivity, and aggression. Replacing negative sequences of interaction (e.g., criticism and withdrawal) with more positive ones (e.g., intimacy and support) can allow couples to cope with stress, successfully navigate individual differences, and inject positive emotions into their marriage (Johnson, 2002). We recommend emotion-focused therapy for use where one or both partners have a history of abuse, as it has been found to be an effective treatment for such couples (Dalton et al., 2013), and may help address both marital problems and mental health issues.

Regarding aggression, results indicate addressing the couple relationship can improve aggression and other mental health problems, and that couple therapy can directly address such problems better than individual therapy. A thorough assessment of IPV is necessary so safety can be ensured. A meta-analysis found couple therapy for IPV shows promise (Karakurt et al., 2016); however, the authors cautioned to carefully assess each partner individually and again as a couple. Situational couple violence is characterized by mild to moderate levels of violence and can be worked on in the context of couple therapy. Alternatively, there is characterological violence and intimate terrorism that incorporates aspects of control and more consistent and severe relationship violence. In such cases, couple therapy is contra-indicated (Karakurt et al., 2016).

### Conclusion

Results suggest marital quality may be one pathway by which childhood abuse is associated with adult mental health outcomes. Marital quality may be a point of intervention for clinicians and focusing on support, strain, and conflict may be a particularly important area of intervention. Adults who were abused as children are likely to view relationships negatively, leading to lower quality marriages; however, if adults develop high-quality marriages, they will likely report better mental health through fewer mental health problems such as emotional reactivity, aggression, and negative affect and greater positive aspects. Thus, a stronger marriage may have a dualistic impact on adult mental health.

## **Declaration of conflicting interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## **Funding**

The author(s) received no financial support for the research, authorship, and/or publication of this article: There was no direct funding associated with the publication of the current manuscript.

#### **ORCID iDs**

Michael Fitzgerald https://orcid.org/0000-0002-2161-3792 Jacob A. Esplin https://orcid.org/0000-0001-8943-9658

#### References

- Afifi, T. O., Ford, D., Gershoff, E. T., Merrick, M., Grogan-Kaylor, A., Ports, K. A., MacMillan, H. L., Holden, G. W., Taylor, C. A., Lee, S. J., & Peters Bennett, R. (2017). Spanking and adult mental health impairment: The case for the designation of spanking as an adverse childhood experience. *Child Abuse & Neglect*, 71, 24–31. https://doi.org/10.1016/j.chiabu.2017.01.014.
- Banford Witting, A., & Busby, D. (2019). The long arm of trauma during childhood: Associations with resources in couple relationships. *Journal of Marital and Family Therapy*, 45, 534–549. https://doi.org/10.1111/jmft.12354
- Beach, S. R., Sandeen, E., & O'Leary, K. D. (1990). *Depression in marriage: A model for etiology and treatment*. Guilford Press.
- Bradbury, T. N., Fincham, F. D., & Beach, S. R. (2000). Research on the nature and determinants of marital satisfaction: A decade in review. *Journal of Marriage and Family*, 62, 964–980. https://doi.org/10.1111/j.1741-3737.2000.00964.x
- Bryant, C. M., Futris, T. G., Hicks, M. R., Lee, T. K., & Oshri, A. (2016). African American stepfather–stepchild relationships, marital quality, and mental health. *Journal of Divorce & Remarriage*, 57, 375–388. https://doi.org/10.1080/10502556.2016.1196852
- Chen, P., Coccaro, E. F., Lee, R., & Jacobson, K. C. (2012). Moderating effects of childhood maltreatment on associations between social information processing and adult aggression. *Psychological Medicine*, 42, 1293–1304. https://doi.org/10. 1017/S0033291711002212
- Coates, A. A., & Messman-Moore, T. L. (2014). A structural model of mechanisms predicting depressive symptoms in women following childhood psychological maltreatment. *Child Abuse & Neglect*, *38*(1), 103–113.
- Dalton, E. J., Greenman, P. S., Classen, C. C., & Johnson, S. M. (2013). Nurturing connections in the aftermath of childhood trauma: A randomized controlled trial of emotionally focused couple therapy for female survivors of childhood abuse.

- Couple and Family Psychology: Research and Practice, 2(3), 209. https://doi.org/10.1037/a0032772
- Denton, W. H., & Burwell, S. R. (2006). Systemic couple intervention for depression in women. *Journal of Systemic Therapies*, 25, 43–57. https://doi.org/10.1521/jsyt. 2006.25.3.43
- DiLilio, D., & Long, P. J. (1999). Perceptions of couple functioning among female survivors of child sexual abuse. *Journal of Child Sexual Abuse*, 7, 59–76. https://doi.org/10.1300/J070v07n04\_05
- DiLillo, D., Lewis, T., & Loreto-Colgan, A. D. (2007). Child maltreatment history and subsequent romantic relationships: Exploring a psychological route to dyadic difficulties. *Journal of Aggression, Maltreatment & Trauma*, 15, 19–36. https://doi.org/10.1300/J146v15n01 02
- DiLillo, D., Peugh, J., Walsh, K., Panuzio, J., Trask, E., & Evans, S. (2009). Child maltreatment history among newlywed couples: A longitudinal study of marital outcomes and mediating pathways. *Journal of Consulting and Clinical Psychology*, 77, 680–692. https://doi.org/10.1037/a0015708
- Dube, S. R., Anda, R. F., Whitfield, C. L., Brown, D. W., Felitti, V. J., Dong, M., & Giles, W. H. (2005). Long-term consequences of childhood sexual abuse by gender of victim. *American Journal of Preventive Medicine*, 28, 430–438. https://doi.org/10.1016/j.amepre.2005.01.015
- Dunlop, B. W., Hill, E., Johnson, B. N., Klein, D. N., Gelenberg, A. J., Rothbaum, B. O., & Kocsis, J. H. (2015). Mediators of sexual functioning and marital quality in chronically depressed adults with and without a history of childhood sexual abuse. *The Journal of Sexual Medicine*, 12, 813–823. https://doi.org/10.1111/jsm.12727
- Dvir, Y., Ford, J. D., Hill, M., & Frazier, J. A. (2014). Childhood maltreatment, emotional dysregulation, and psychiatric comorbidities. *Harvard Review of Psychiatry*, 22, 149-161. https://doi.org/10.1097/HRP.0000000000000014
- Fincham, F. D., & Rogge, R. (2010). Understanding relationship quality: Theoretical challenges and new tools for assessment. *Journal of Family Theory & Review*, 2, 227–242. https://doi.org/10.1111/j.1756-2589.2010.00059.x
- Finkelhor, D., & Browne, A. (1985). The traumatic impact of child sexual abuse: A conceptualization. *American Journal of Orthopsychiatry*, 55, 530–541. https://doi.org/10.1111/j.1939-0025.1985.tb02703.x.
- Finkelhor, D., Ormrod, R. K., & Turner, H. A. (2007). Polyvictimization and trauma in a national longitudinal cohort. *Development and Psychopathology*, *19*, 149–166. https://doi.org/10.1017/S0954579407070083
- Fletcher, G. J., Simpson, J. A., & Thomas, G. (2000). The measurement of perceived relationship quality components: A confirmatory factor analytic approach. Personality & Social Psychology Bulletin, 26, 340–354. https://doi.org/10.1177/0146167200265007
- Flett, G. L., Goldstein, A. L., Pechenkov, I. G., Nepon, T., & Wekerle, C. (2016).

  Antecedents, correlates, and consequences of feeling like you don't matter:

- Associations with maltreatment, loneliness, social anxiety, and the five-factor model. *Personality and Individual Differences*, 92, 52-56. https://doi.org/10.1016/j.paid.2015.12.014.
- Godbout, N., Dutton, D. G., Lussier, Y., & Sabourin, S. (2009). Early exposure to violence, domestic violence, attachment representations, and marital adjustment. Personal Relationships, 16(3), 365-384.https://doi.org/10.1111/j.1475-6811.2009.01228.x
- Goff, B. S. N., Reisbig, A. M., Bole, A., Scheer, T., Hayes, E., Archuleta, K. L., & Smith, D. B. (2006). The effects of trauma on intimate relationships: A qualitative study with clinical couples. *American Journal of Orthopsychiatry*, 76(4), 451-460. https://doi.org/10.1037/0002-9432.76.4.451.
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76, 408–420. https://doi.org/10. 1080/03637750903310360
- Hollist, C. S., Miller, R. B., Falceto, O. G., & Fernandes, C. L. C. (2007). Marital satisfaction and depression: A replication of the marital discord model in a Latino sample. *Family Process*, 46, 485–498. https://doi.org/10.1111/j.1545-5300.2007.00227.x
- Johnson, S. M. (2002). Emotionally focused couple therapy with trauma survivors: Strengthening attachment bonds. Guilford Press.
- Karakurt, G., Whiting, K., Van Esch, C., Bolen, S. D., & Calabrese, J. R. (2016). Couples therapy for intimate partner violence: A systematic review and meta-analysis. *Journal of Marital and Family Therapy*, 42, 567–583. https://doi.org/10.1111/jmft.12178
- Kendall-Tackett, K. (2002). The health effects of childhood abuse: Four pathways by which abuse can influence health. *Child Abuse & Neglect*, 26, 715–729. https:// doi.org/10.1016/S0145-2134(02)00343-5
- Kline, R. B. (2015). *Principles and practice of structural equation modeling*. Guilford publications.
- Knapp, A. E., Knapp, D. J., Brown, C. C., & Larson, J. H. (2017). Conflict resolution styles as mediators of female child sexual abuse experience and heterosexual couple relationship satisfaction and stability in adulthood. *Journal of Child Sexual Abuse*, 26, 58-77. https://doi.org/10.1080/10538712.2016.1262931.
- Kong, J. (2017). Childhood maltreatment and psychological well-being in later life: The mediating effect of contemporary relationships with the abusive parent. *The Journals of Gerontology: Series B*, 73(5), e39–e48. https://doi.org/10.1093/geronb/gbx039
- Kong, J., Martire, L. M., Liu, Y., & Almeida, D. M. (2018). Effect of childhood abuse on emotional reactivity to daily interpersonal stressor in adulthood. *Innovation in Aging*, 2, 335. https://doi.org/10.1093/geroni/igy023.1227
- Ledermann, T., Bodenmann, G., Rudaz, M., & Bradbury, T. N. (2010). Stress, communication, and marital quality in couples. *Family Relations*, *59*, 195–206. https://doi.org/10.1111/j.1741-3729.2010.00595.x

- Lee, C., & White, H. R. (2012). Effects of childhood maltreatment on violent injuries and premature death during young adulthood among urban high-risk men. *Archives of Pediatrics & Adolescent Medicine*, *166*, 814–820. https://doi.org/10.1001/archpediatrics.2012.244
- Maldonado, R. C., Watkins, L. E., & DiLillo, D. (2015). The interplay of trait anger, childhood physical abuse, and alcohol consumption in predicting intimate partner aggression. *Journal of Interpersonal Violence*, 30(7), 1112–1127. https://doi.org/10.1177/0886260514539850
- Miller, R. B., Mason, T. M., Canlas, J. M., Wang, D., Nelson, D. A., & Hart, C. H. (2013). Marital satisfaction and depressive symptoms in China. *Journal of Family Psychology*, 27, 677. https://doi.org/10.1037/a0033333
- Muthen, L. K., & Muthen, B. O. (1998-2017). *Mplus user's guide* (8th ed.). Los Angeles, CA: Muthe'n & Muthen.
- Nelson, J., Klumparendt, A., Doebler, P., & Ehring, T. (2017). Childhood maltreatment and characteristics of adult depression: Meta-analysis. *The British Journal of Psychiatry*, *210*, 96–104. https://doi.org/10.1192/bjp.bp.115.180752
- Norton, R. (1983). Measuring marital quality: A critical look at the dependent variable. *Journal of Marriage and the Family*, 45, 141–151. https://doi.org/10.2307/351302
- Priest, J. B. (2013). Anxiety disorders and the quality of relationships with friends, relatives, and romantic partners. *Journal of Clinical Psychology*, 69, 78–88. https://doi.org/10.1002/jclp.21925
- Proulx, C. M., Helms, H. M., & Buehler, C. (2007). Marital quality and personal well-being: A meta-analysis. *Journal of Marriage and Family*, 69, 576–593. https://doi.org/10.1111/j.1741-3737.2007.00393.x
- Riggs, S. A., Cusimano, A. M., & Benson, K. M. (2011). Childhood emotional abuse and attachment processes in the dyadic adjustment of dating couples. *Journal of Counseling Psychology*, 58, 126–138. https://doi.org/10.1037/a0021319
- Runtz, M. G., & Schallow, J. R. (1997). Social support and coping strategies as mediators of adult adjustment following childhood maltreatment. *Child Abuse & Neglect*, 21, 211–226. https://doi.org/10.1016/S0145-2134(96)00147-0
- Spencer, C. M., Keilholtz, B. M., & Stith, S. M. (2020). The association between attachment styles and physical intimate partner violence perpetration and victimization: A meta-analysis. *Family Process*, 60, 270-284. https://doi.org/10. 1111/famp.12545.
- Stoltenborgh, M., Bakermans-Kranenburg, M. J., Alink, L. R., & van IJzendoorn, M. H. (2015). The prevalence of child maltreatment across the globe: Review of a series of meta-analyses. *Child Abuse Review*, 24, 37–50. https://doi.org/10.1002/car.2353
- Taillieu, T. L., Brownridge, D. A., Sareen, J., & Afifi, T. O. (2016). Childhood emotional maltreatment and mental disorders: Results from a nationally representative adult sample from the United States. *Child Abuse & Neglect*, 59, 1-12. https://doi.org/10.1016/j.chiabu.2016.07.005.

- Thoits, P. A. (2011). Mechanisms linking social ties and support to physical and mental health. *Journal of Health and Social Behavior*, *52*, 145–161. https://doi.org/10. 1177/0022146510395592
- Whisman, M. A. (2006). Childhood trauma and marital outcomes in adulthood. *Personal Relationships*, 13(4), 375-386. https://doi.org/10.1111/j.1475-6811. 2006.00124.x.
- Whisman, M. A. (2007). Marital distress and DSM-IV psychiatric disorders in a population-based national survey. *Journal of Abnormal Psychology*, *116*, 638–643. https://doi.org/10.1037/0021-843X.116.3.638
- Whisman, M. A. (2014). Dyadic perspectives on trauma and marital quality. Psychological Trauma: Theory, Research, Practice, and Policy, 6, 207–215. https://doi.org/10.1037/a0036143
- Whisman, M. A., & Baucom, D. H. (2012). Intimate relationships and psychopathology. *Clinical Child and Family Psychology Review*, 15, 4–13. https://doi.org/10.1007/s10567-011-0107-2
- Widom, C. S., Horan, J., & Brzustowicz, L. (2015). Childhood maltreatment predicts allostatic load in adulthood. *Child Abuse & Neglect*, 47, 59–69. https://doi.org/10.1016/j.chiabu.2015.01.016
- Zink, T., Klesges, L., Stevens, S., & Decker, P. (2009). The development of a sexual abuse severity score: Characteristics of childhood sexual abuse associated with trauma symptomatology, somatization, and alcohol abuse. *Journal of interpersonal violence*, 24(3), 537-546. https://doi.org/10.1177/0886260508317198.