

Research Article

A Longitudinal Investigation Into Marital Quality as a Mediator Linking Childhood Abuse to Affective Symptoms

Michael Fitzgerald, PhD^{1,*} and Kelly Berthiaume, PhD²

¹School of Child and Family Sciences, University of Southern Mississippi, Hattiesburg, Mississippi, USA. ²College of Education, University of North Texas, Denton, Texas, USA.

*Address correspondence to: Michael Fitzgerald, PhD, School of Child and Family Sciences, University of Southern Mississippi, 207 Joseph Green Hall, Hattiesburg, MS 39402, USA. E-mail: Michael.C.Fitzgerald@usm.edu

Received: August 20, 2020; Editorial Decision Date: May 18, 2021

Decision Editor: Deborah S. Carr, PhD, FGSA

Abstract

Objective: Childhood abuse is positively associated with adult mental health problems and adult interpersonal relationships have been previously suggested to be a mediator. The role of marital partners, however, is less well understood. The current study will investigate marital quality as a mediator linking childhood abuse and positive and negative affective symptoms.

Method: The current study utilized 3 waves of data from the Midlife Development in the United States. Using a sample of 1,104 married adults (95.4% White), structural equation modeling examined the mediating effect of marital quality linking childhood abuse to positive and negative affective symptoms over a 20-year period.

Results: Structural equation modeling revealed that childhood abuse was inversely associated with marital quality but was not directly associated with positive or negative affective symptoms. Marital quality was positively associated with greater positive affect and negatively associated with lower negative affect over a 9-year period, controlling for prior symptoms. Tests of indirect effects indicate that marital quality mediated the relationship between childhood abuse to both positive and negative affective symptoms, fully accounting for the association.

Discussion: It appears that childhood abuse impacts the quality of adults' marriages, which may have significant implications for both positive and negative aspects of adult mental health. Marriages may be an important factor in understanding mental health in midlife and older adults among adults who were abused. Interventions should target the quality of adult marriages, and focusing on marital support, strain, and disagreement may be particularly effective.

Keywords: Childhood abuse, Marital quality, Mediation, Mental health

Childhood abuse, including physical, sexual, and emotional abuse, has been linked to mental and relational health problems in adulthood (DiLillo et al., 2009; Fitzgerald & Gallus, 2020). Childhood abuse is prevalent in the United States, where 36.5% of adults report childhood emotional abuse, 24% report physical abuse, and 20.1% of women and 8% of men report childhood sexual abuse (Stoltenborgh et al., 2015). Childhood abuse has been linked to greater mental health problems in adulthood including greater negative affect (Kong et al., 2019),

depression (Sperry & Widom, 2013), and social anxiety (Fitzgerald & Gallus, 2020). Further, childhood abuse has been linked to decreased positive aspects of adult mental health including positive affect, self-esteem, and life satisfaction (Kong, 2018; Kong et al., 2019; Widom et al., 2018). Given the longstanding, multifaceted mental health consequences associated with abuse in childhood, it is imperative to understand the mechanisms that influence the relationship between childhood abuse and adult mental health.

Childhood abuse has also been consistently linked to poorer-quality marriages (DiLillo et al., 2009; Whisman, 2014) and there may be significant implications for adult mental health. Marriages may be of particular importance because they differ from other social relationships in several ways. One notable difference is that married adults interact with each other more frequently than friends or family members because they typically live together, thus providing more opportunities for interaction. Additionally, spouses move through the life course together and address challenges related to work, parenting, and sex, which are facets unique to marital relationships (Olson et al., 2018). A large body of research suggests that higher-quality marriages are associated with a dualistic impact on adult mental health, including decreases in mental health problems (see Whisman & Baucom, 2012 for review) and increases in mental well-being (see Proulx et al., 2007 for review). It has been proposed that marriages influence adult mental health through provisions of psychosocial resources, such as companionship, belonging, emotional support, and promote health-promotive behaviors (Thoits, 2011).

High-quality marriages may be beneficial for adults who experienced childhood abuse. Childhood abuse is by a lack of physical and emotional safety and a high-quality marriage can provide a corrective experience offering companionship, support, and nurturance (Whiffen et al., 2000). In this way, the quality of an adult's marriage may account for the relationship between childhood abuse and adult mental health (Fitzgerald & Gallus, 2020). Previous studies, however, have largely neglected adult marriages in linking childhood abuse to adult mental health outcomes. Several studies using data from the study of Midlife in the United States (MIDUS) have examined the associations of emotional support from family members on adult health outcomes among adults who were abused in childhood, but have not distinguished the role of marital partners from that of family and friends (Chiang et al., 2018; Kong, 2018). This is a glaring omission given the robust evidence of the health-promotive effects marital quality has on adult mental health (see Whisman & Baucom, 2012 for review). Even fewer studies have considered the longitudinal trajectory of these relationships. Thus, the current study examined the mediating effect of marital quality linking childhood abuse to positive and negative affective symptoms using three waves of data from the MIDUS study.

Childhood Abuse, Relationship Quality, and Mental Health

Research has demonstrated that childhood abuse has a longstanding effect on adult mental health (Kong et al., 2019; Taillieu et al., 2016). Studies examining the effects of childhood abuse on adult mental health have supported these findings across the life course, including in young, midlife, and older adults (Kong, 2018). Childhood abuse has been linked to both clinical mental health problems

(Cogle et al., 2010; Mandavia et al., 2016) as well as subclinical mental health symptoms (Kong, 2018; Sperry & Widom, 2013; Widom et al., 2018). More specifically, childhood abuse has been linked to greater negative affective symptoms (i.e., shame), fewer positive affective symptoms (i.e., cheerfulness), and poorer psychological well-being (Kong, 2018; Kong et al., 2019). Further, research has found that adults who were abused in childhood are more likely to have treatment-resistant mental health problems, recurring symptoms, and stability of symptoms over time (Nanni et al., 2012). The far-reaching arm of childhood abuse on adult mental health indicates there is a significant need to identify pathways linking childhood abuse to mental health.

The perpetrators of childhood abuse are often an individual who the child trusts (i.e., parents; Sedlak et al., 2010). The interpersonal nature of childhood abuse provides a strong conceptual basis to suggest that adults who were abused in childhood may have difficulties forming and maintaining intimate relationships in adulthood. If children are abused by their caregivers, children may come to expect their marital partners to behave in a similar way (DiLillo et al., 2009; Finkelhor & Browne, 1985). For example, childhood abuse commonly leads to internalized feelings of shame and guilt, powerlessness, mistrust, and creates attachment insecurity (Alexander, 1992; Finkelhor & Browne, 1985). Without resolution, internalized beliefs of shame, fear, and worthlessness are carried into the marital relationship (Godbout et al., 2009), leading to numerous marital problems (Colman & Widom, 2004). Research has found that childhood abuse is linked to lower levels of marital quality, increased likelihood of infidelity, and greater relational instability (i.e., threatening to end the relationship; Colman & Widom, 2004). Additionally, adults who were abused in childhood report more frequent negative interactions and less frequent positive interactions (Whisman, 2014), demonstrate poorer communication skills (Banford Witting & Busby, 2019), use more volatile conflict resolution strategies (Knapp et al., 2017), and are less trusting of their partners (DiLillo et al., 2009). By extension, adults who report communication issues, poorer conflict resolution styles, and less support are in lower-quality relationships (Bryant et al., 2016). DiLillo and colleagues (2009) argued that although overall indicators of marital quality are helpful, understanding the associations between childhood abuse and specific processes within adult marriages provides more nuanced information that can aid both clinicians and researchers in understanding specific ways in which childhood abuse is associated with marital processes. This current study operationalized marital quality as a reflection of three marital processes: support, strain, and disagreement.

The relationship between marital quality and mental health outcomes has been of keen interest to researchers and clinicians alike (Baucom et al., 2012). A large body of research has documented the relationship between marital

relationship quality and adult mental health (Whisman & Baucom, 2012). Specifically, studies have found that adults in lower-quality marriages enhance the likelihood of experiencing affective symptoms, such as depression, anxiety, and substance use (Goldfarb & Trudel, 2019; Overbeek et al., 2006; Priest, 2013). Beach and colleagues (2003) found that marital quality was prospectively inversely associated with both husbands' and wives' reports of depression over a 1-year period. Further evidence has shown that happily married adults reported higher levels of self-esteem, greater overall happiness, less hostility, and fewer depressive symptoms (Waite et al., 2009).

Marital quality is suggested to influence mental health in several ways. Thoits (2011) proposed numerous pathways by which marriages may influence adult mental health. Specifically, she argued that through normative observation of others' behavior, adults may change their behavior accordingly. For example, adults with partners who do not drink heavily, eat healthily, exercise regularly, and engage in other health-promotive behaviors are more likely to engage in those same behaviors. Additionally, Thoits (2011) discusses the concept of "mattering" or an individual's belief "that one is an object of another person's attention, one is important to that person, and he or she depends on one for fulfillment of specific needs" (p. 148). Adults who perceive themselves to be of importance to their partners are suggested to have a greater sense of purpose and obligation and consequently also report better mental health (Flett et al., 2016). Thoits (2011) also emphasized the importance of emotional support and companionship for adult mental health. It is presumed that adults who receive greater emotional support and have a companion with whom they go through life together with have better mental health. Spending quality time with partners is the antithesis of loneliness, which is a well-known corollary of mental health problems (Barg et al., 2006).

Children who were abused are implicitly or explicitly given the message they do not matter, they are unimportant, defective, or unworthy. Consequently, abused children do not receive the support needed to develop a healthy sense of self and other (Alexander, 1992; Finkelhor & Browne, 1985). These underlying feelings can often extend into adulthood, leaving adults vulnerable to marital problems (Banford Witting & Busby, 2019; Whisman, 2006). On the other hand, marriages may be a source of resilience for adults who were abused. Marital partners can offer those who were abused in childhood support, comfort, validation, and a sense of meaning (Flett et al., 2016; Goff et al., 2006). High-quality marriages can also bolster self-esteem, combat loneliness and isolation with companionship, and create a sense of belonging (Flett et al., 2016; Thoits, 2011). In this way, marriages can provide a corrective experience where underlying feelings of worthlessness and inadequacy can be corrected. Adults who were abused in childhood but successfully cultivate a high-quality marriage are likely to experience mental health benefits. While these preliminary

findings lend support to the notion that marital relationship quality helps to explain the relationship between childhood abuse and adult mental health, longitudinal research is needed to provide more robust evidence and established directionality of effects between marital quality and mental health outcomes over time.

The Present Study

Extant research suggests that marital quality may be a possible mechanism linking childhood abuse to mental health. Inquiry into marital quality as a potential mediator can be a significant advancement in our understanding of how childhood abuse is associated with mental health over time. This advancement can identify the marital relationships as a critical part of understanding adult mental health among adults who were abused in childhood. This understanding may potentially provide the foundation for clinical intervention. The objective of the current study is to determine if the link between childhood abuse and positive and negative affective symptoms is explained by marital relationship quality using three waves of the MIDUS data. It is hypothesized that childhood abuse would be negatively associated with adult marital quality and positive affect as well as positively associated with negative affect. Secondly, it is expected that marital quality will be positively associated with positive affect and negatively associated with negative affect. Finally, it is hypothesized that marital quality will mediate the relationship between childhood abuse and negative and positive affect.

Method

Data from the current study are from the MIDUS study. The MIDUS study has been continually funded by the John D. and Catherine T. MacArthur Foundation Research Network since the study's inception in 1995. The MIDUS study consists of three waves of data which were collected in 1995–1996 (MIDUS 1), 2004–2006 (MIDUS 2), and 2013–2015 (MIDUS 3). MIDUS 1 consisted of 7,108 respondents, MIDUS 2 retained 4,963 respondents, and MIDUS 3 retained 3,294 respondents. Each wave consisted of a telephone interview and a self-administered questionnaire (SAQ). Adults were included in the current study if they participated in both the telephone interview and SAQ at each of the three waves and were continuously married to the same partner over all three waves, as to create a homogeneous sample of married adults. In MIDUS 1, there were 4,666 married adults, in MIDUS 2, there were 3,505, and in MIDUS 3, there were 2,211 married adults. The analytic sample consisted of 1,104 continuously married adults who had not been previously divorced and completed the SAQ and telephone interviews in all three waves. Childhood abuse was measured at MIDUS 1, marital support, strain, and disagreement,

which are the respective indicators of marital quality, measured as a latent variable were measured at MIDUS 2, and positive and negative affective symptoms were measured at MIDUS 2 and MIDUS 3; MIDUS 2 positive and negative affective symptoms were used as covariates to control for initial levels of affective symptoms. Participant characteristics can be seen in Table 1.

Measures

Child abuse

Childhood abuse was measured using adult retrospective reports of childhood physical and emotional abuse. In the MIDUS data, there are measures for emotional abuse, physical abuse, and severe physical abuse. Physical abuse, severe physical abuse, and emotional abuse were each measured with 2 items: one for maternally perpetrated abuse and one for paternal abuse. The items began with the stem, “when you were growing up, how often were any of the things mentioned above done to you by ...” and each response asked about specific family members (e.g., mother or woman who raised you, father or man who raised you). Items were assessed on a frequency scale ranging from 1 (*Often*) to 4 (*Never*). Example acts of emotional abuse were “insulted or swore at you” and items capturing physical abuse and severe physical abuse were “slapped you” and “kicked, bit or hit you with a fist,” respectfully. For the current study, only abuse perpetrated by mothers and fathers were used. Items were reverse-coded and maternal and paternal abuse were averaged for indicator of total parental abuse. Greater scores are an indicator of greater parental abuse. Parental emotional, physical, and severe physical abuse were used as indicators of a latent variable representing childhood abuse.

Support

Perceptions of support from their partner were assessed with six items. 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.” Questions were rated on a 4-point Likert type scale ranging from 1 (*A lot*) to 4 (*Not at all*). Items were reverse-coded and averaged; higher scores reflect higher levels of support. Cronbach’s $\alpha = .90$

Strain

Marital strain was assessed with six items tapping into how frequently requests from the spouse or the relationship were straining. Example items included “does he or she make too many demands of you,” “does he or she make you feel tense,” and “does he or she let you down when you are counting on him or her.” Items were scored on a Likert-type scale ranging from 1 (*Often*) to 4 (*Never*). Items were coded and summed such that higher scores reflect lower levels of strain so that all indicators of marital quality had positive factor loadings on the latent variable. Cronbach’s $\alpha = .88$.

Disagreement

Disagreement was measured using three questions. Participants were asked how often the individual disagreed about aspects of their marriage including “money matters, such as how much to spend, save or invest,” “household tasks, such as what needs doing and who does it,” and “leisure time activities, such as what to do and with whom.” Each item was rated on a 4-point Likert-type scale ranging from 1 (*A lot*) to 4 (*Not at all*). Scores were reverse-coded and summed so that higher scores were indicative of less disagreement. Cronbach’s $\alpha = .75$.

Positive and negative affect

Positive and negative affect was measure using nine items reflecting mood within the past 30 days. The negative affect scale consisted of five items and the positive affect scale consisted of four items. A stem of “During the past 30 days, how much of the time did you feel ...” was used. Negative affective items included “afraid,” “jittery,” “irritable,” “ashamed,” and “upset” and positive affect items included “enthusiastic,” “attentive,” “proud,” and “active.” Both items on the positive and negative affect scale were rated on a 5-point Likert scale, ranging from 1 (*All of the time*), to 5 (*None of the time*). Items were reverse-coded and averaged such that higher scores indicate higher levels of positive and negative affect (Cronbach’s α for negative affect = .81 and positive affect = .86).

Covariates

Several sociodemographic covariates were used, including age, gender, race, income, and education. Age was entered into as a continuous variable, whereas race (White/racial ethnic minority) and gender (male/female) were entered in as dichotomous variables. Education was entered in as an ordinal variable ranging from 1 (*No schooling or some*

Table 1. Descriptive Characteristics of Sample

	N (%) / M (SD)
Education	7.54 (1.68)
Age (at MIDUS 3)	63.64 (11.30)
Gender	
Male	517 (49.7%)
Female	523 (50.3%)
Household income	\$99,507 (\$71,735)
Race	
White	982 (95.4%)
Racial minority	47 (4.6%)

Notes: MIDUS = Midlife in the United States. Descriptive statistics were drawn from MIDUS 2 unless otherwise noted.

grade school) to 12 (*PhD or other professional degree*). Income was entered as a continuous variable with scores ranging from 0 to >\$300,000. Lastly, to establish the contributions of marital quality on positive and negative affect over time (at MIDUS 3), positive and negative affective symptoms at MIDUS 2 were used as covariates.

Statistical Analysis

Descriptive statistics were run in IBM SPSS Statistics version 25 (IBM Corp., 2017). Mplus (Muthén & Muthén, 1998–2012) was used to conduct structural equation modeling (SEM) and test the indirect associations from childhood abuse to adult mental health outcomes through marital quality. Both childhood abuse and marital quality were measured as latent variables with emotional, physical, and severe physical abuse as indicators for childhood abuse and support, strain, and disagreement as indicators for marital quality. SEM uses several fit statistics to evaluate the adequacy of the model. Common fit statistics include the chi-squared 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 nonsignificant chi-squared test also indicates good fit; however, the chi-squared statistic is sensitive to sample size where it becomes significant in larger sample despite other indicators of a good fitting model. RMSEA below .08 is deemed adequate, but preferably below .06. The indirect (mediating) effects from childhood abuse to positive and negative affect through marital quality were tested using bias-corrected bootstrapped confidence intervals (CI) based on 5,000 bootstrap samples.

Results

Preliminary Analysis

Descriptive statistics, including correlations, means, and standard deviations, are displayed in Table 2. Childhood emotional abuse was significantly correlated with all study variables. Physical abuse and severe physical abuse were

sparsely associated with marital quality and mental health variables; physical abuse was associated with disagreement and strain, while severe physical abuse was associated with only negative affect. Not surprisingly, marital quality variables were positively correlated with one another. Positive and negative affect were moderately, negatively correlated with each other. Each of the marital quality variables was associated with both positive and negative affective symptoms.

Structural Equation Model

Prior to examining the mediational model, the measurement model was examined, which is a prerequisite for examining both direct and indirect effects (Anderson & Gerbing, 1988). The measurement model consists of only latent variables, which included childhood abuse and marital quality. In the measurement model, a confirmatory factor analysis was conducted to examine the factor structure of the latent variables to ensure accurate measurement of the latent constructs as well as examine the relationships among the latent constructs. The measurement model demonstrated excellent fit: $\chi^2(8) = 9.43, p > .05$, CFI = 1, TLI = 1, RMSEA = .01. Following the measurement model, control and outcome variables were added (Anderson & Gerbing, 1988). The final SEM mediational model demonstrated adequate model–data fit: $\chi^2(45) = 142.89, p < .001$, CFI = .96, TLI = .93, RMSEA = .04.

Results of the SEM model can be seen in Figure 1. Regarding the factor loadings for the child abuse latent variable, emotional ($\beta = .80, p < .001$), physical ($\beta = .62, p < .001$), and severe physical abuse ($\beta = .60, p < .001$) all loaded significantly. Likewise, the three indicators of the marital quality latent variable, including support ($\beta = .82, p < .001$), strain ($\beta = .77, p < .001$), and disagreement ($\beta = .70, p < .001$), also loaded significantly. Regarding the direct effects, childhood abuse was associated with a poorer-quality marriage ($\beta = -.15, p < .001$), but was not directly associated with negative affect ($\beta = .01, p = .63$) or positive affect ($\beta = -.00, p = .76$). Marital quality was longitudinally associated with both positive affective symptoms ($\beta = .10, p < .01$) and negative affective symptoms ($\beta = -.11, p < .001$) while controlling for prior affective symptoms.

Table 2. Correlations, Means, and Standard Deviations Among Study Variables

	1	2	3	4	5	6	7	M (SD)
1. Emotional abuse M1	—							3.54 (1.06)
2. Physical abuse M1	.48***	—						3.71 (.95)
3. Severe physical abuse M1	.48***	.37***	—					2.42 (.67)
4. Support M2	-.09**	-.09*	-.03	—				3.67(.33)
5. Strain M2	.16***	.14***	.05	-.63***	—			2.14 (.34)
6. Disagreement M2	.10**	.09*	.01	-.44***	.55***	—		5.42 (1.26)
7. Negative affect M3	.08*	.02	.08*	-.23***	.22***	.12***	—	1.40 (.37)
8. Positive affect M3	-.08**	-.04	-.05	.21***	-.19***	-.16***	-.54***	3.50 (.46)

Notes: MIDUS = Midlife in the United States. M1 = MIDUS 1; M2 = MIDUS 2; M3 = MIDUS 3.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Following direct effects, two indirect effects were examined: one for the positive affect and one for negative affect (see Table 3). The estimated coefficient for the indirect effect of childhood abuse on adult negative affect through marital relationship quality was statistically significant ($\beta = .02$, 95% CI = 0.001, 0.036), such that childhood abuse was associated with lower levels of marital quality which, in turn, was associated with lower levels of negative affect. Likewise, the indirect effect of childhood abuse on adult positive affect through marital relationship quality was significant ($\beta = -.02$, 95% CI = -0.031, -0.001), such that greater childhood abuse was associated with lower levels of marital quality, which was then associated with greater positive affect.

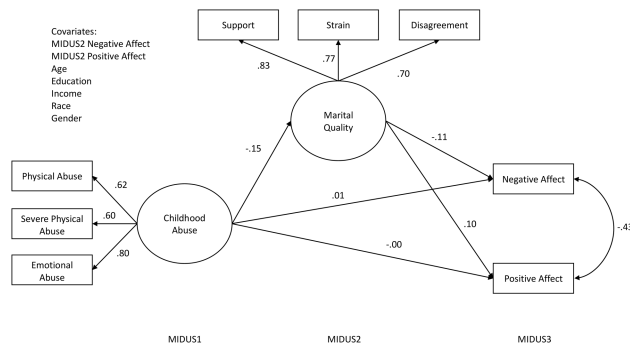


Figure 1. Results of structural equation mediational model examining childhood abuse, marital quality, and affective symptoms.

Table 3. Bootstrapped Indirect Effects From Childhood Abuse to Positive and Negative Affective Symptoms Through Marital Quality

Pathway	β	95% Bootstrapped CI
Childhood abuse → marital quality → positive affect	-.02	-0.031, -0.001
Childhood abuse → marital quality → negative affect	.02	0.001, 0.036

Note: Confidence intervals (CIs) that do not include 0 between the upper and lower bound are significant.

Discussion

Research has well-established links from childhood abuse to adult mental health, thus identifying pathways that account for the relationship is of great importance. Interpersonal pathways have been suggested to link maltreatment to adult mental health including social support (Sperry & Widom, 2013) and familial relationships (Kong, 2018); however, the role of marital partners remains less well understood. The purpose of the current study was to longitudinally examine marital quality as a potential mediator linking childhood abuse to positive and negative affective symptoms. Overall, findings indicated that marital relationship quality

explained the relationship from childhood abuse to both positive and negative affective symptoms over a 9-year period among a sample of continuously adults.

Consistent with prior research, and supporting our first hypothesis, we found that childhood abuse was associated with greater negative affect, lower positive affect as well as poorer quality marriages among midlife and older adults (Colman & Widom, 2004; Kong, 2018; Kong et al., 2019). These findings support the notion that childhood abuse has a dualistic impact on adult mental health, where abuse is associated with higher levels of negative affect and lower levels of positive affect. Additionally, consistent with previous findings documenting an association between marital quality and adult mental health, we also found marital quality was associated with better mental health including less negative affect and greater positive affect (Beach et al., 1990; Proulx et al., 2007; Whisman, 2007; Whisman & Baucom, 2012).

Results from the present study made a meaningful contribution to the existing literature by identifying the longitudinal relationship between marital quality and adult mental health in the context of childhood abuse among a large sample of midlife and older adults. The current study is among the few longitudinal studies to investigate childhood abuse and marital relationship quality (e.g., DiLillo et al., 2009). To our knowledge, this is the first study to longitudinally examine whether marital quality explains the relationship between childhood abuse and adult mental health. One prior study noted the role of emotional support from romantic partners as a mediator linking childhood maltreatment to depressive and social anxiety symptoms (Fitzgerald & Gallus, 2020). Using a sample of continuously married adults, the current study documented that marital quality is an important factor in understanding adult mental health over time. Childhood abuse creates negative internalized representations of relationships (Alexander, 1992), which may lead to problematic marital interactions including more negative and fewer positive interactions (Whisman, 2014). For example, children who are abused often experience shame, and may feel that they but having a supportive partner can provide a corrective experience and adults can feel valued, important, worthy, and loveable. Goff and colleagues (2006) found that childhood abuse can potentiate decreased communication and cohesion in relationships. They specifically note that talking about how abuse can create emotional distance and lack of synchrony in the relationship. Experiencing abuse in childhood may leave adults vulnerable to mental health problems because the marital relationship may be characterized by greater conflict (Fitzgerald, 2021), less support (Fitzgerald & Gallus, 2020), and more strained interactions (Whisman, 2014), which may lead to poorer mental health. Additionally, lower-quality marriages can negatively shape health-promotive behaviors (e.g., avoidant coping and substance use) that may increase negative affect and decrease

positive affect (Thoits, 2011; Umberson and Montez, 2010). Further, lower-quality marriages offer fewer opportunities for supportive interactions that may protect against mental health problems (Beach et al., 1990).

These findings demonstrate that marital relationship quality explains the relation between childhood abuse and both positive and negative affective symptoms via indirect-only mediation (Hayes & Rockwood, 2017; Rucker et al., 2011; Zhao et al., 2010). Essentially, results from the mediational analysis have likely documented marital relationship quality as a primary mediator between childhood abuse and negative and positive affective symptoms. As such, the likelihood of other possible large mediators aside from the proposed framework is remote (Rucker et al., 2011). However, we are reluctant to conclude that marital quality fully mediated the relation between childhood abuse and affective symptoms. Such a claim would assume that all possible mediators, suppressors, and factors were accounted for and confidently measured without error (Hayes & Rockwood, 2017).

Limitations

Despite several strengths of the current study, including a large sample of adults, assessing specific dimensions of adult marriages, and investigating marital quality and adult mental health over time, it is not without limitations. First, the present study only assessed childhood physical and emotional abuse and did not consider neglect or sexual abuse in its analyses. Consequently, the parameter estimates found may underestimate the relationship between childhood abuse and marital quality and affective symptoms. An additional consideration is that reports of abuse were retrospective in nature and may be subject to recall bias. Second, the current study assessed broad clusters of adults' affective symptoms, but did not investigate specific symptom clusters (i.e., depressive symptoms) or mental health diagnoses (i.e., generalized anxiety disorder). Third, the study used a predominantly White sample, thus extrapolations to racial and ethnic minorities would be inappropriate. Last, previous research has suggested that family and friends have an impact on adult mental health (Chiang et al., 2018; Kong et al., 2018), and the current study focused on the marital relationship. Future research should consider examination of marital quality, family relationship quality, and friendship quality simultaneously.

Conclusion

Despite the limitations of the present study, this current finding adds to the existing body of knowledge by examining the longitudinal relationship between marital quality and adult mental health. Although childhood abuse is negatively associated with marital quality, if adults form a high-quality marriage, there are significant, positive

implications for adult mental health over time. Clinical interventions may want to focus on improving the quality of adult marriages, and focus specifically on support, strain, and disagreement between the couple when treating mental health problems in older adults. Couple therapies, such as Emotion Focused Therapy, have been previously shown to be effective with childhood abuse (Dalton et al., 2013) and may improve adult mental health through increasing marital quality.

Funding

None declared.

Conflict of Interest

None declared.

Author Contributions

M. Fitzgerald completed the literature review, statistical analysis, and the discussion and K. Berthiaume reviewed the manuscript and helped develop the discussion section.

Acknowledgments

The current study used data from the study of Midlife Development in the United States, which was supported by the National Institute on Aging (grants 5-PO1-AG20166-04 and PO1AG020166).

References

- Alexander, P. C. (1992). Application of attachment theory to the study of sexual abuse. *Journal of Consulting and Clinical Psychology, 60*(2), 185–195. doi:10.1037//0022-006x.60.2.185
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin, 103*(3), 411–423. doi:10.1037/0033-2909.103.3.411
- 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*(3), 534–549. doi:10.1111/jmft.12354
- Barg, F. K., Huss-Ashmore, R., Wittink, M. N., Murray, G. F., Bogner, H. R., & Gallo, J. J. (2006). A mixed-methods approach to understanding loneliness and depression in older adults. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences, 61*(6), S329–S339. doi:10.1093/geronb/61.6.s329
- Baucom, D. H., Whisman, M. A., & Paprocki, C. (2012). Couple-based interventions for psychopathology. *Journal of Family Therapy, 34*(3), 250–270. doi:10.1111/j.1467-6427.2012.00600.x
- Beach, S. R., Katz, J., Kim, S., & Brody, G. H. (2003). Prospective effects of marital satisfaction on depressive

- symptoms in established marriages: A dyadic model. *Journal of Social and Personal Relationships*, 20(3), 355–371. doi:10.1177/0265407503020003005
- Beach, S. R. H., Sandeen, E. E., & O’Leary, K. D. (1990). *Depression in marriage: A model for etiology and treatment*. Guilford Press.
- 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(6), 375–388. doi:10.1080/10502556.2016.1196852
- Chiang, J. J., Chen, E., & Miller, G. E. (2018). Midlife self-reported social support as a buffer against premature mortality risks associated with childhood abuse. *Nature Human Behaviour*, 2(4), 261–268. doi:10.1038/s41562-018-0316-5
- Colman, R. A., & Widom, C. S. (2004). Childhood abuse and neglect and adult intimate relationships: A prospective study. *Child Abuse & Neglect*, 28(11), 1133–1151. doi:10.1016/j.chiabu.2004.02.005
- Cougle, J. R., Timpano, K. R., Sachs-Ericsson, N., Keough, M. E., & Riccardi, C. J. (2010). Examining the unique relationships between anxiety disorders and childhood physical and sexual abuse in the National Comorbidity Survey—Replication. *Psychiatry Research*, 177(1–2), 150–155. doi:10.1016/j.psychres.2009.03.008
- 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), 209–221. doi:10.1037/a0032772
- 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(4), 680–692. doi:10.1037/a0015708
- Finkelhor, D., & Browne, A. (1985). The traumatic impact of child sexual abuse: A conceptualization. *The American Journal of Orthopsychiatry*, 55(4), 530–541. doi:10.1111/j.1939-0025.1985.tb02703.x
- Fitzgerald, M. (2021). Developmental pathways from childhood maltreatment to young adult romantic relationship functioning. *Journal of Trauma & Dissociation*, 1–17. doi:10.1080/15299732.2020.1869653
- Fitzgerald, M., & Gallus, K. (2020). Emotional support as a mechanism linking childhood maltreatment and adult’s depressive and social anxiety symptoms. *Child Abuse & Neglect*, 108, 104645. doi:10.1016/j.chiabu.2020.104645
- 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. doi: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. doi:10.1111/j.1475-6811.2009.01228.x
- Goff, B. S. N., Reisbig, A. M., Bole, A., Scheer, T., Hayes, E., Archuleta, K. L., Henry, S. B., Hoheisel, C. B., Nye, B., Osby, J., Sanders-Hahs, E., Schwerdtfeger, 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. doi:10.1037/0002-9432.76.4.451
- Goldfarb, M. R., & Trudel, G. (2019). Marital quality and depression: A review. *Marriage & Family Review*, 55(8), 737–763. doi:10.1080/01494929.2019.1610136
- Hayes, A. F., & Rockwood, N. J. (2017). Regression-based statistical mediation and moderation analysis in clinical research: Observations, recommendations, and implementation. *Behaviour Research and Therapy*, 98, 39–57. doi:10.1016/j.brat.2016.11.001
- IBM Corp. (2017). *IBM SPSS Statistics for Windows, version 25.0*. IBM Corp.
- 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(1), 58–77. doi:10.1080/10538712.2016.1262931
- Kong, J. (2018). 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: Psychological Sciences and Social Sciences*, 73(5), e39–e48. doi:10.1093/geronb/gbx039
- Kong, J., Moorman, S. M., Martire, L. M., & Almeida, D. M. (2019). The role of current family relationships in associations between childhood abuse and adult psychological functioning. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, 74(5), 858–868. doi:10.1093/geronb/gby076
- Mandavia, A., Robinson, G. G., Bradley, B., Ressler, K. J., & Powers, A. (2016). Exposure to childhood abuse and later substance use: Indirect effects of emotion dysregulation and exposure to trauma. *Journal of Traumatic Stress*, 29(5), 422–429. doi:10.1002/jts.22131
- Muthén, L., & Muthén, B. (1998–2012). *Mplus user’s guide* (7th ed.). Muthén & Muthén.
- Nanni, V., Uher, R., & Danese, A. (2012). Childhood maltreatment predicts unfavorable course of illness and treatment outcome in depression: A meta-analysis. *The American Journal of Psychiatry*, 169(2), 141–151. doi:10.1176/appi.ajp.2011.11020335
- Olson, D., DeFrain, J., & Skogrand, L. (2018). *Marriages and families: Intimacy, diversity, and strengths* (9th ed.). McGraw-Hill Education.
- Overbeek, G., Vollebergh, W., de Graaf, R., Scholte, R., de Kemp, R., & Engels, R. (2006). Longitudinal associations of marital quality and marital dissolution with the incidence of DSM-III-R disorders. *Journal of Family Psychology*, 20(2), 284–291. doi:10.1037/0893-3200.20.2.284
- Priest, J. B. (2013). Anxiety disorders and the quality of relationships with friends, relatives, and romantic partners. *Journal of Clinical Psychology*, 69(1), 78–88. doi: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(3), 576–593. doi:10.1111/j.1741-3737.2007.00393.x
- Rucker, D. D., Preacher, K. J., Tormala, Z. L., & Petty, R. E. (2011). Mediation analysis in social psychology: Current practices and new recommendations. *Social and Personality Psychology Compass*, 5(6), 359–371. doi:10.1111/j.1751-9004.2011.00355.x

- Sedlak, A. J., Mettenberg, J., Basena, M., Petta, I., McPherson, K., Greene, A., & Li, S. (2010). *Fourth National Incidence Study of Child Abuse and Neglect (NIS-4): Report to Congress, Executive Summary*. U.S. Department of Health and Human Services, Administration for Children and Families.
- Sperry, D. M., & Widom, C. S. (2013). Child abuse and neglect, social support, and psychopathology in adulthood: A prospective investigation. *Child Abuse & Neglect*, 37(6), 415–425. doi:10.1016/j.chiabu.2013.02.006
- 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. doi:10.1002/car.2353
- Taillieu, T. L., Brownridge, D. A., Sareen, J., & Affi, 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. doi: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(2), 145–161. doi:10.1177/0022146510395592
- Umberson, D., & Montez, J. K. (2010). Social relationships and health: A flashpoint for health policy. *Journal of Health and Social Behavior*, 51(suppl.), S54–S66. doi:10.1177/0022146510383501
- Waite, L. J., Luo, Y., & Lewin, A. C. (2009). Marital happiness and marital stability: Consequences for psychological well-being. *Social Science Research*, 38(1), 201–212. doi:10.1016/j.ssresearch.2008.07.001
- Whiffen, V. E., Thompson, J. M., & Aube, J. A. (2000). Mediators of the link between childhood sexual abuse and adult depressive symptoms. *Journal of Interpersonal Violence*, 15(10), 1100–1120. doi:10.1177/088626000015010006
- Whisman, M. A. (2006). Childhood trauma and marital outcomes in adulthood. *Personal Relationships*, 13(4), 375–386. doi: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(3), 638–643. doi: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(3), 207–215. doi:10.1037/a0036143
- Whisman, M. A., & Baucom, D. H. (2012). Intimate relationships and psychopathology. *Clinical Child and Family Psychology Review*, 15(1), 4–13. doi:10.1007/s10567-011-0107-2
- Widom, C. S., Czaja, S. J., Kozakowski, S. S., & Chauhan, P. (2018). Does adult attachment style mediate the relationship between childhood maltreatment and mental and physical health outcomes? *Child Abuse & Neglect*, 76, 533–545. doi:10.1016/j.chiabu.2017.05.002
- Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37(2), 197–206. doi:10.1086/651257