

<Running Head>Mother–Child Depressive Symptoms in Later Life

Midlife Children’s and Older Mothers’ Depressive Symptoms: Empathic Mother–Child
Relationships as a Key Moderator

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Objective: This study aimed to evaluate the link between midlife children’s and older mothers’ depressive symptoms, whether this link is exacerbated in highly empathic mother–child relationships (i.e., shared strong feelings of being loved, cared for, and understood in the mother–child tie), and whether these associations vary by children’s gender.

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Background: Empathic mother–child relationships in later life may intensify the link between midlife children’s and older mothers’ depressive symptoms. Yet little is known about the emotional implications of the mother–child tie for midlife daughters and sons.

Method: The sample included 234 midlife children ($M = 49.75$ years) and their mothers ($M = 75.27$ years) from Wave 1 of the Family Exchanges Study. Linear regressions were estimated to determine the link between midlife children’s and older mothers’ depressive symptoms and the potential moderating role of highly empathic mother–child relationships.

Results: Midlife children had greater depressive symptoms when their mothers had greater depressive symptoms in the context of highly empathic mother–child relationships. This association was not moderated by children’s gender.

Conclusion: These findings underscore the enduring emotional salience of the mother–child tie and emphasize the importance of relationship characteristics that may heighten the link between midlife children’s and their mothers’ depressive symptoms.

Implications: Interventions to prevent or treat depressive symptoms among midlife adults may benefit from accounting for the role that their mothers’ depressive symptoms might play in maintaining these symptoms, particularly when mother–child ties are highly empathic.

Key Words: intergenerational, mother–child relationship, parent–child relations, relationship quality

The mother–child relationship is one of the most important and long-standing ties in each individual’s lifetime, with mothers and children typically maintaining frequent contact and strong mutual investment throughout the life course (Fingerman, 2001; Sutor et al., 2011).

Despite the lasting importance of the mother–child tie, few studies have examined the emotional implications of this relationship in later life. Studies of mothers and young or adolescent children reveal that mothers’ depressive symptoms predict children’s depressive symptoms, even after accounting for their shared environmental adversity (e.g., stressful life events, socioeconomic status, depression in fathers) and genetics (Cortes et al., 2006; Goosby, 2007; Lewis et al., 2011; McAdams et al., 2015; Silberg et al., 2010; Tully et al., 2008). Mothers’ depression also has long-term negative consequences for children’s mental health that extend into young adulthood (Ensminger et al., 2003; Hammen et al., 2012; Klein et al., 2005, Weissman et al., 2006).

In addition to frequent contact and close emotional bonds, midlife children and older mothers share a long relationship history that might amplify the link between their depressive symptoms. This link may be stronger among midlife children who have highly empathic relationships with their mothers (i.e., shared strong feelings of being loved, cared for, and understood in the mother–child tie) because they are likely to be affected more by their mothers’ emotions than those with a less empathic mother–child relationship. The present study explored whether midlife children’s depressive symptoms are positively associated with their mothers’ depressive symptoms and whether this link is exacerbated in highly empathic mother–child relationships. We focus on mother–child relationships because mothers sustain more emotionally

close ties with their children across the life span than do fathers (Connadis & Davies, 1992; Fingerman, 2001; Ha et al., 2006). Gender is pivotal in shaping family interactions over the life course (e.g., Birditt et al., 2009; Chesley & Poppie, 2009; Grigoryeva, 2017), and so we also considered whether these links differ among midlife daughters and sons.

ASSOCIATION BETWEEN CHILDREN'S AND MOTHERS' DEPRESSIVE SYMPTOMS

Family systems theorists propose that similarities in thoughts, feelings, and behaviors occur between parents and children due to their shared history, perspectives, and experiences (Bowen, 1978). Mothers and children are often similar, for instance, in their values and overall outlook on life (Suitor & Pillemer, 2006). Building on this framework, life course theory holds that children's development is embedded in their ties with parents, which involve reciprocal influences that shape each person's well-being (Bengtson & Allen, 1993; Umberson, 1992). The related concept of "linked lives" suggests that children and mothers remain interconnected throughout the life course and affect one another's emotions. Supporting these perspectives, multiple studies have shown that young or adolescent children's emotions are linked to their parents' emotions at one point in time, on a daily level, and over a period of months (Hammen, 2009; Larson & Almeida, 1999; Powdthavee & Vignoles, 2008). Research has also established that offspring of mothers with elevated depressive symptoms have an increased risk of depression during childhood and adolescence (Hammen et al., 2012; Klein et al., 2005; Weissman et al., 2006), which has been attributed to factors including biological predisposition, mutual exposure to stressors, and family conflict (Hammen, 2009; Joormann et al., 2009).

Together, this theoretical and empirical work suggests that the association between children's and mothers' depressive symptoms may continue into later life.

MIDLIFE CHILDREN AND OLDER MOTHERS

It is important to examine how mothers' depressive symptoms are linked to depressive symptoms among midlife children for two primary reasons. First, the mother-child relationship is emotion-laden and often complicated. These characteristics are likely to be magnified in the later years of this relationship, which commonly involve simultaneous positive and negative emotions as each person negotiates the balance between needs for closeness and autonomy (Fingerman, 2001). Second, in later life, mothers are more likely to be widowed or have suffered the loss of close friends they relied on as confidants. As such, older mothers may share negative emotions with their midlife children more frequently than when they were younger, potentially resulting in emotional contagion. Bolstering this possibility, prior research indicates that older mothers maintain more emotionally intimate relationships with their adult children in general (Connadis & Davies, 1992) and following spousal loss (Ha et al., 2006) than do older fathers. Accordingly, the link between midlife children's and older mothers' depressive symptoms may occur partly because of the long-term emotional salience of this tie that heightens with age, especially among those who have highly empathic relationships with their mothers.

THE MODERATING ROLE OF EMPATHIC MOTHER-CHILD RELATIONSHIPS

Scholars have argued that empathy in the mother-child relationship involves feeling loved, cared for, and understood by one's mother or child (e.g., Bekteshi, & Kayser, 2013; Soenens et al.,

2007). We consider highly empathic mother–child relationships to be characterized by shared strong perceptions of being loved, cared for, and understood that may make children more sensitive to their mothers’ depressive symptoms. Research indicates that the emotional bond between mothers and children remains evident across the life course (Fingerman, 2001; Suiitor & Pillemer, 2006) and that positive feelings within the mother–child tie are linked to well-being (e.g., Lowenstein, 2007; Umberson, 1992). At the same time, there might be a downside to highly empathic mother–child ties in later life. Exposure to a loved one’s distress may be most deleterious to well-being, for example, among those in more emotionally interconnected relationships (Monin & Schulz, 2009; Tower & Kasl, 1995; Van Orden & Joiner, 2006). People in close relationships often experience emotional synchrony or empathy (Hatfield et al., 2008); therefore, similar depressive symptoms may be common within more empathic mother–child ties. Highly supportive relations between adult children and their mothers might also be somewhat stressful (Bangerter et al., 2018; Gunderson & Barrett, 2017), possibly intensifying shared distress for mothers and children in highly empathic relationships. Taken as a whole, prior work suggests that midlife children may report greater depressive symptoms when their mothers have greater depressive symptoms and they have a more empathic bond.

Potential Differences Between Daughters and Sons

Research earlier in the life course has found that the association between children’s and mothers’ depressive symptoms tends to be stronger for daughters than for sons; thus, daughters are believed to be more susceptible to the shared experience of their mothers’ psychological distress

(e.g., Burt et al., 2005; Cortes et al., 2006; Fergusson et al., 1995; Lewis et al., 2011). Daughters are usually socialized to be empathic, emotionally expressive, and relationally interdependent, which could lead to greater interpersonal sensitivity that predisposes the sharing of mothers' depressive symptoms. Furthermore, compared with mother–son dyads, mothers and daughters discuss their emotions more frequently (Flannagan & Perese, 1998) and display more emotional closeness, mutual concern, and responsiveness when the offspring is a young child (Benenson et al., 1998; Butler & Shalit-Naggar, 2008).

Previous work on mother–child ties in later life raises the question of whether the link between midlife children's and older mothers' depressive symptoms may be stronger among daughters than sons in highly empathic relationships with their mothers. Whereas grown daughters and sons both report feeling close to their mothers, older mothers perceive greater emotional closeness with daughters and prefer to rely on them for emotional support (Suitor & Pillemer, 2006). Additionally, relative to adult sons, adult daughters have more emotionally intense mother–child relationships (Birditt et al., 2009; Fingerman, 2001). Adult daughters also give more emotional support to their mothers (Chesley & Poppie, 2009) and more caregiving in response to mothers' health problems (Grigoryeva, 2017; Pillemer & Suitor, 2013) than do sons. This research indicates that older mothers might express negative emotions more often with daughters and receive more empathy and emotional aid from them than from sons. As a result, midlife daughters may be more likely to report greater depressive symptoms when their mothers

have greater depressive symptoms, particularly when they have a highly empathic mother–child relationship.

THE PRESENT STUDY

In this study, we examined the association between depressive symptoms reported by midlife children and their older mothers. We hypothesized that midlife children’s depressive symptoms would be positively associated with older mothers’ depressive symptoms, controlling for children’s sociodemographic characteristics and four factors linked to depressive symptoms in adulthood that may be confounding factors: self-rated health (Ambresin et al., 2014), neuroticism (Hakulinen et al., 2015), life problems (Moos et al., 2005), and negative mother–child relationship quality (Umberson, 1992). We hypothesized that this association would be exacerbated for midlife children with a highly empathic mother–child relationship. Finally, we predicted that the links in this study would be stronger for midlife daughters than for midlife sons.

METHODS

Sample and Procedures

The sample was drawn from Wave 1 of the Family Exchanges Study (FES; Fingerman et al., 2011). In 2008, the FES recruited adults aged 40 to 60 years ($M = 50.60$, $SD = 4.99$) who had at least one living parent and at least one living child aged 18 or older. Participants resided in the Philadelphia Primary Metropolitan Statistical Area (including urban, suburban, and rural areas), which comprises five counties in southeastern Pennsylvania and four counties in New Jersey.

Participants were identified using telephone lists purchased from Genesys Corporation and random digit dialing in regional area codes, with a stratified sampling method by age (aged 40–50 and 51–60) and gender.

Eligible midlife participants were identified ($n = 845$). Of these individuals, 633 (75%; 302 men and 331 women) completed an hourlong computer assisted telephone interview (CATI) in which they answered questions about their relationships with parents and adult children. Among these midlife participants, 308 had only a living mother, 90 had only a living father, and 235 had both parents living. Of the 633 midlife participants, 240 (44%) had one or more parents who agreed to complete a similar interview regarding their family relationships. Overall, 337 parents participated, with 234 participating mothers. Of these, 137 were mothers of female participants and 97 were mothers of male participants. Thus, the sample included data collected from 137 mother–daughter dyads and 97 mother–son dyads from separate families for a total of 234 mother–child dyads (see Table 1 for sample characteristics). Most children (98.9%) had a biological relationship with their mothers.

Measures

Depressive symptoms. Depressive symptoms were assessed with five items derived from the depression subscale of the Brief Symptom Inventory (BSI; Derogatis & Melisarator, 1983). This subscale is commonly used in psychiatric patient and nonpatient samples, has demonstrated high reliability and high construct validity in nonclinical community samples (Derogatis & Savitz, 2000; Urbán et al., 2014), and accounts for both the range and intensity of depressive

symptoms. On a scale ranging from 1 (*not at all*) to 5 (*extremely*), participants reported how distressed or bothered they were during the past week by the following problems: feeling lonely, feeling blue, feeling no interest in things, feeling hopeless about the future, and feeling worthless. The original BSI item assessing thoughts of ending one's life was dropped for this study because we were not assessing suicidality, and endorsement of this item is not expected in phone surveys. Mean scores for midlife children ($\alpha = .87$) and mothers ($\alpha = .76$) were determined, with higher scores representing greater depressive symptoms over the past week.

Highly empathic mother-child relationships. Empathic mother-child relationships were assessed with two widely used items that capture feelings of care and understanding in the mother-child tie (Fingerman et al., 2011; Polenick et al., 2018; Umberson, 1992). Participants rated how much they felt (a) loved and cared for by their mother/child and (b) understood by their mother/child (1 = *not at all*, 2 = *a little*, 3 = *somewhat*, 4 = *quite a bit*, 5 = *a great deal*). A dyadic measure of highly empathic relationships was calculated to indicate whether the midlife child and older mother each had scores at or above the median on both the item assessing love and care (i.e., a score of 5 for children and mothers) and the item assessing understanding (i.e., a score of 4 for children and mothers), 1 (*yes*) or 0 (*no*). This measure reflects children's and mothers' shared strong feelings of being loved, cared for, and understood by one another and is similar to components of empathy assessed in the broader literature (Cuff et al., 2016) and in studies specific to the mother-child relationship (Bekteshi, & Kayser, 2013; Soenens et al., 2007). About one-third (36.8%) of mother-child dyads were categorized as having a highly

empathic mother–child relationship, with the remainder (63.2%) categorized as having a less empathic mother–child relationship.

Children's gender. We considered midlife children's gender, 1 (*daughter*) or 0 (*son*), to evaluate whether the association between children's and older mothers' depressive symptoms significantly differed between mother–daughter and mother–son relationships.

Covariates. Models controlled for midlife children's sociodemographic characteristics: race, 1 (*non-Hispanic White*) or 0 (*racial/ethnic underrepresented group*); marital status, 1 (*currently married or remarried*) or 0 (*not currently married*); and years of education. In addition, we controlled for children's reports of self-rated health, neuroticism, life problems, and negative mother–child relationship quality. Self-rated health was measured with one item ranging from 1 (*poor*) to 5 (*excellent*). This measure is often used in survey research and is related to objective health status (Jylha, 2009). Neuroticism was assessed with four items (Lachman & Weaver, 1997). Participants reported how well each item described themselves on a scale from 1 (*not at all*) to 4 (*a lot*): moody, worrying, nervous, and calm. Mean scores were calculated ($\alpha = .72$). Life problems were assessed from participants' reports of whether they experienced the following in the past 12 months: a major financial problem, a serious health problem, or a drinking/drug problem (Bangerter et al., 2018). Negative mother–child relationship quality was measured with two items reflecting negative interactions within the parent–child tie (Polenick et al., 2018; Umberson, 1992). Participants rated (a) how much criticism they receive from their mother and (b) how much their mother makes demands on them from 1 (*not at all*) to

5 (*a great deal*). Mean scores were determined ($\alpha = .62$). Summed scores were created for the total number of life problems. In post hoc tests, we considered mothers' reports of their own race, marital status, years of education, self-rated health, neuroticism, life problems, and negative mother-child relationship quality (i.e., how much criticism and demands mothers perceive from their child) as covariates. In post hoc tests, we also controlled for whether midlife children currently had a living father, 1 (*yes*) or 0 (*no*). Of the 232 midlife children with data on this variable, 103 (44.0%) reported having a living father.

Statistical Analysis

We used hierarchical linear regression to examine associations between midlife children's and older mothers' depressive symptoms. Although we included data from both midlife children and their mothers, the midlife child was the unit of analysis rather than the mother-child dyad; thus, our analytic approach was appropriate because the assumption of independence of observations was not violated (Kenny & Cook, 1999). In the first step of Models 1 and 2, we entered the predictor (mothers' depressive symptoms) and moderator (highly empathic mother-child relationship) variables, along with midlife children's sociodemographic characteristics (race, marital status, and years of education) and gender as covariates. In Model 2, we also included midlife children's self-rated health, neuroticism, life problems, and perceptions of negative mother-child relationship quality as covariates to account for potential confounding factors. In the second step of Models 1 and 2, we added a two-way interaction term to evaluate the moderating effects of highly empathic mother-child relationships on the association between

children's and mothers' depressive symptoms (mothers' depressive symptoms \times highly empathic mother-child relationship). We added a three-way interaction term in the third step of Models 1 and 2 to determine whether this link differed by children's gender (mothers' depressive symptoms \times highly empathic mother-child relationship \times children's gender). We included all two-way interaction terms within the three-way interaction (highly empathic mother-child relationship \times children's gender; mothers' depressive symptoms \times children's gender).

Continuous covariates and predictors were mean centered before creating the interaction terms.

To examine significant interactions, we estimated simple slopes of the association between children's and mothers' depressive symptoms among those with and without a highly empathic mother-child relationship. We used a Bonferroni correction to adjust for testing two sets of models (α/n , where $\alpha = .05$ and $n = 2$ models) such that coefficients with p values less than .025 were considered statistically significant.

RESULTS

Table 1 shows midlife children's and older mothers' background characteristics and mean scores for major study variables. We conducted bivariate correlations and paired t tests on key variables in preliminary analyses. There was a significant positive correlation between children's and mothers' reports of depressive symptoms ($r = .16, p = .01$). Empathic mother-child relationship scores were unrelated to depressive symptoms among children and mothers. Midlife daughters and sons did not significantly differ on any study variables.

Association Between Midlife Children's and Older Mothers' Depressive Symptoms

The hierarchical linear regression models are shown in Table 2. Children's greater depressive symptoms were significantly associated with their mothers' depressive symptoms in Model 1 ($B = .17, \beta = .15, p = .024$); however, this association became nonsignificant in Model 2 after controlling for children's reports of self-rated health, neuroticism, life problems, and negative mother-child relationship quality. The association between midlife children's and older mothers' depressive symptoms was moderated by highly empathic mother-child relationships in Model 1 ($B = .57, \beta = .26, p = .001$) and Model 2 ($B = .44, \beta = .20, p = .003$). Figure 1 shows that children's greater depressive symptoms were significantly associated with their mothers' greater depressive symptoms when the mother-child relationship was highly empathic ($B = .38, \beta = .14, p = .003$) but not less empathic ($B = -.06, \beta = -.05, p = .452$), controlling for children's reports of sociodemographic characteristics, self-rated health, neuroticism, life problems, and negative mother-child relationship quality. This association did not vary by children's gender.

Post Hoc Tests

To test the stability of findings, we estimated models controlling for mothers' reports on study covariates (race, marital status, and years of education in Model 1 and self-rated health, neuroticism, life problems, and perceptions of negative mother-child relationship quality in Model 2; see Table 1) along with all covariates from the main analysis in the subsample of 233 children with complete data on these variables. We also estimated the main models controlling for whether midlife children had a living father in the subsample of 232 children with data on this variable. The pattern of findings held across these models, confirming their stability.

DISCUSSION

This study extends the literature on mother–child ties by considering the moderating role of empathic mother–child relationships in shaping how midlife children’s depressive symptoms are associated with their mothers’ symptoms. In line with family systems theory and life course perspectives, the findings indicate that older mothers’ psychological well-being has significant implications for midlife children’s psychological well-being. More precisely, midlife daughters and sons both appeared to experience greater depressive symptoms when their mothers had greater depressive symptoms and the mother–child relationship was highly empathic.

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Mother–Child Relationships*

The positive association between midlife children’s and their mothers’ depressive symptoms was present when accounting for children’s sociodemographic characteristics but reduced to nonsignificance once we also controlled for self-rated health, neuroticism, life problems, and negative mother–child relationship quality. This suggests that mothers’ depressive symptoms are not directly linked to midlife children’s depressive symptoms when adjusting for these potential confounding factors. In the context of highly empathic mother–child relationships, however, children’s and mothers’ depressive symptoms were associated over and above children’s sociodemographic characteristics, self-rated health, neuroticism, life problems, and perceptions of negative mother–child relationship quality. This association remained even after controlling for mothers’ self-reports on these variables and whether children had a living father,

demonstrating that depressive symptoms among older mothers have robust and distinct implications for midlife children's depressive symptoms when they have a more empathic bond with their mothers. These findings therefore expand on research showing that children's and mothers' depressive symptoms are associated beyond the effects of stressful life events and socioeconomic factors when children are young (e.g., Cortes et al., 2006; Lewis et al., 2011; McAdams et al., 2015; Silberg et al., 2010; Tully et al., 2008), and imply that such links persist in later life.

Interestingly, no significant differences were found between midlife daughters and sons. In contrast to research findings that daughters are more vulnerable than sons to sharing their mothers' psychological distress as young children (e.g., Burt et al., 2005; Cortes et al., 2006; Lewis et al., 2011), the present study suggests that midlife daughters and sons might both be vulnerable to this experience when mother-child ties are highly empathic. At midlife, the long history of the mother-child relationship may mitigate the effects of early socialization processes that encourage daughters to respond to their mothers' negative emotions in a more empathic manner than sons. Men also tend to become more interdependent in their family relationships as they age (Kahn et al., 2011), which might diminish earlier gender differences in the emotional nature of mother-child interactions. Indeed, studies of young adult children suggest that sons may grow closer to their mothers when mothers experience more internalizing symptoms (Franz & McKinney, 2018) and that sons' greater positive feelings toward their mothers mediates the association between sons' and mothers' psychopathology (Walker & McKinney, 2015).

Furthermore, another study found no gender differences among adult children in the association between the emotional support they receive from and give to their parents (Sommer & Buhl, 2018), indicating that midlife daughters and sons in highly empathic relationships with their mothers may respond to mothers' negative emotions in a similar way.

Study Limitations

The present findings should be considered taking into account study limitations. First, cross-sectional analyses preclude the determination of causal associations. Given the emotional transmission within families (Larson & Almeida, 1999; Hammen, 2009; Powdthavee & Vignoles, 2008), adult children's depressive symptoms may also affect their mothers' mental health. Second, we were not able to pinpoint potential mechanisms that explain the mother-child depressive symptom association. It is plausible, for example, that midlife children and older mothers who share similar levels of depressive symptoms have highly empathic relationships because of their similar thoughts, emotions, and behaviors. Prior work has found that older mothers feel more emotionally close to daughters with whom they perceive greater similarity in their general outlook on life (Suitor & Pillemer, 2006), which could include their tendency to share affective states. Moreover, the association between midlife children's and older mothers' depressive symptoms might stem from earlier interactions. Mothers in highly empathic relationships with their midlife children may, for instance, have modeled depressive symptoms and provided social reinforcement for their children's expression of these symptoms over the

years. Nevertheless, the present findings highlight the value of future research to clarify the temporal sequencing of these constructs.

With respect to sample characteristics, this study included a majority of non-Hispanic White mothers and children, limiting generalizability to racial/ethnic underrepresented groups. In addition, on average, low levels of depressive symptoms were reported in this study, which may partly reflect the higher mortality rates among adults with severe symptoms (Gilman et al., 2017). Future studies are needed to examine whether the present findings extend to clinically significant depressive symptoms. The midlife sample of adults aged 40 to 60 is consistent with other studies (Lachman, 2015; Lachman et al., 2015); still, the findings from this study may not apply to people who are sometimes considered as midlife adults (e.g., those aged 35–39 or 61–64) in the broader literature (e.g., Clarke et al., 2011; Haigh et al., 2018). Additionally, the data were collected shortly before the economic recession in September of 2008. The findings may have been different during or after the crash. Further, it is possible that mother–child dyads in this sample are more likely than average to have highly empathic relationships given their shared participation in this study, and so the findings may not generalize to the wider population. This might also in part explain the lack of gender differences among midlife children. Last, because mothers had low levels of functional disability, the findings may not generalize to midlife children with mothers who have intensive care needs.

Practical Considerations and Future Directions

This study has important implications for clinicians and policymakers focused on the mental health of aging adults. Depressive symptoms in midlife and later life are a serious public health concern. Elevated symptoms of depression in adults are linked to a heightened risk of major depressive disorder (Cuijpers & Smit, 2004) and early mortality (Cuijpers et al., 2013).

Depressive symptoms at midlife also predict a host of other detrimental consequences, including onset of cardiovascular disease, greater functional disability, and an increased likelihood of dementia (Barnes et al., 2012; Covinsky et al., 2010; Xiang & An, 2015). The vast majority of research examining family influences related to depressive symptoms in adulthood has centered on marriage (e.g., Baucom et al., 2014; Meis et al., 2013). This study demonstrates that the mother–child tie is another key family relationship that may increase or maintain depressive symptoms among midlife men and women. As a consequence, the routine clinical care of midlife adults with depressive symptoms might be enhanced by incorporating assessments about the quality of their relationship with their mothers and mothers’ emotional health. Knowledge of how the mother–child tie contributes to family contexts that worsen or perpetuate depressive symptoms during midlife would be useful in determining potentially underrecognized interpersonal factors which may complicate treatment.

Family-based interventions designed to prevent or treat depressive symptoms among midlife adults may also benefit from a greater understanding of the role that older mothers’ depressive symptoms might play in the context of highly empathic mother–child relationships. Interventions for midlife adults who have elevated depressive symptoms may, for instance, target

strategies to more effectively manage emotions regarding the relationship with their mothers and mothers' own psychological distress. In some cases, it may be beneficial to involve older mothers during treatment. Such family-based approaches could include individual sessions to treat mothers' depressive symptoms, which may have reverberating positive effects on their midlife children. Earlier in the life course, the successful treatment of parents' depressive symptoms has been linked to improvements in their young or adolescent offspring's depressive symptoms and functioning (Gunlicks & Weissman, 2008). Joint sessions with midlife children and older mothers that target their communication patterns might also be effective. Helping midlife children and older mothers navigate the emotional challenges within their relationship, cope with negative feelings in ways that minimize emotional contagion, and support one another using adaptive strategies that preserve their own mental health may further alleviate depressive symptoms. With clinical guidance, empathic bonds between midlife children and older mothers may be a powerful resource in combating depressive symptoms and promoting well-being.

Future research should also consider more proximal interpersonal mechanisms that may explain the present findings. Among healthy older mothers and their daughters, for example, Martini and Busseri (2010) found that emotion regulation strategies used to cope with negative emotions in the mother-child relationship predicted levels of negative affect related to their exchanges of support. Another study of midlife daughters and older mothers found that their reports of positive emotions during typical visits were correlated, as were their rates of positive interpersonal behaviors during a structured task (Lefkowitz & Fingerman, 2003). Such short-

term characteristics of mother–child interactions and links to more transient emotions may be consequential for how midlife children view and respond to their mothers’ psychological distress. Identifying these processes may also assist in the development of targeted interventions to reduce depressive symptoms among midlife adults as well as their older mothers.

Finally, future work should consider the longitudinal association between midlife children’s and older mothers’ depressive symptoms. In particular, it would be valuable to use dyadic analysis to evaluate stability in children’s and mothers’ depressive symptoms over time as well as how both individuals influence the other person’s depressive symptoms. Along with highly empathic mother–child relationships, it will be important to identify other aspects of the mother–child tie (e.g., individual and dyadic coping) that might impact long-term stability and influence with regard to depressive symptoms and additional measures of poor emotional well-being (e.g., anxiety symptoms) within mother–child dyads.

Conclusion

In summary, this study indicates that the association between midlife children’s and older mothers’ depressive symptoms depends partly on whether the mother–child tie is highly empathic. In light of demographic trends including increased life expectancy and greater incidence of divorce, mothers and children are likely to be a critical source of mutual support for an increasingly longer period of time. Continued examination of the dynamic processes through which the mother–child relationship may influence psychological well-being in midlife and later life is clearly warranted.

AUTHOR NOTE

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Table 1*Background Characteristics and Key Variables for Midlife Children and Older Mothers*

Characteristic	Mother–daughter dyads (<i>n</i> = 137)				Mother–son dyads (<i>n</i> = 97)			
	Mothers		Daughters		Mothers		Sons	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Depressive symptoms	1.46	0.66	1.51	0.74	1.44	0.55	1.47	0.68
Age in years	74.40	5.95	49.52	4.91	76.51	6.36	50.08	4.64
Education in years	12.58	2.35	14.25	2.03	12.40	2.30	14.07	2.07
Self-rated health	3.04	0.78	3.51	1.01	3.01	1.11	3.53	1.13
Neuroticism	4.75	2.36	4.75	2.68	2.22	0.81	2.58	0.73
Negative mother–child relationship quality	1.77	0.73	2.20	0.99	1.52	0.60	2.01	0.77
	<i>n</i> (%)							
Race (non-Hispanic White)	87 (63.5)		86 (62.8)		59 (60.8)		59 (60.8)	
Marital status								
Married	55 (40.1)		98 (71.6)		34 (35.1)		69 (71.1)	
Cohabiting	0 (0.0)		5 (3.6)		0 (0.0)		2 (2.1)	
Single, never married	3 (2.2)		8 (5.8)		3 (3.1)		11 (11.3)	
Divorced	19 (13.9)		19 (13.9)		12 (12.4)		8 (8.2)	
Separated	2 (1.5)		6 (4.4)		1 (1.0)		5 (5.2)	

Widowed	58 (42.3)	1 (0.7)	47 (48.5)	1 (1.0)
Work status				
Employed full time	6 (4.4)	81 (59.1)	2 (2.1)	72 (74.2)
Employed part time	12 (8.8)	17 (12.4)	4 (4.1)	6 (6.2)
Homemaker	14 (10.2)	14 (10.2)	11 (11.3)	0 (0.0)
Disabled	5 (3.6)	11 (8.0)	4 (4.1)	8 (8.2)
Unemployed	1 (0.7)	6 (4.4)	0 (0.0)	5 (5.2)
Retired	96 (70.1)	4 (2.9)	74 (76.3)	2 (2.1)
Life problems				
Financial problem	12 (8.8)	22 (16.1)	9 (9.3)	17 (17.5)
Health problem	65 (47.4)	61 (44.5)	50 (51.5)	32 (33.0)
Drinking/drug problem	1 (0.7)	3 (2.2)	0 (0.0)	3 (3.1)
Highly empathic mother-child relationship	48 (35.0)		38 (39.2)	

Note. $N = 234$ mother-child dyads.

Table 2*Linear Regression Examining the Association Between Midlife Children's and Older Mothers' Depressive Symptoms*

Predictors	Midlife Children's Depressive Symptoms							
	Model 1				Model 2			
	<i>B</i>	<i>SE</i>	β	ΔR^2	<i>B</i>	<i>SE</i>	β	ΔR^2
Step 1				.09**				.31***
Children's gender	.05	.09	.03		-.02	.08	-.02	
Children's race	-.07	.11	-.05		-.03	.10	-.02	
Children's marital status	-.23 [†]	.11	-.15		-.18	.10	-.12	
Children's education in years	-.06*	.02	-.16		-.02	.02	-.04	
Children's self-rated health					-.09	.05	-.13	
Children's neuroticism					.29***	.06	.30	

Children's life problems				.23**	.07	.23	
Children's negative mother-child relationship quality				.05	.05	.06	
Mothers' depressive symptoms	.17*	.07	.15	.06	.07	.05	
Highly empathic mother-child relationship	-.04	.09	-.03	-.05	.09	-.03	
Step 2				.05**			.03**
Mothers' Depressive symptoms × Highly empathic mother-child relationship	.57**	.16	.26	.44**	.15	.20	
Step 3				.03 [†]			.03*
Mothers' depressive symptoms × highly empathic mother-child relationship × children's gender	.54	.33	.19	.44	.30	.15	
Total R^2	.17			.37			

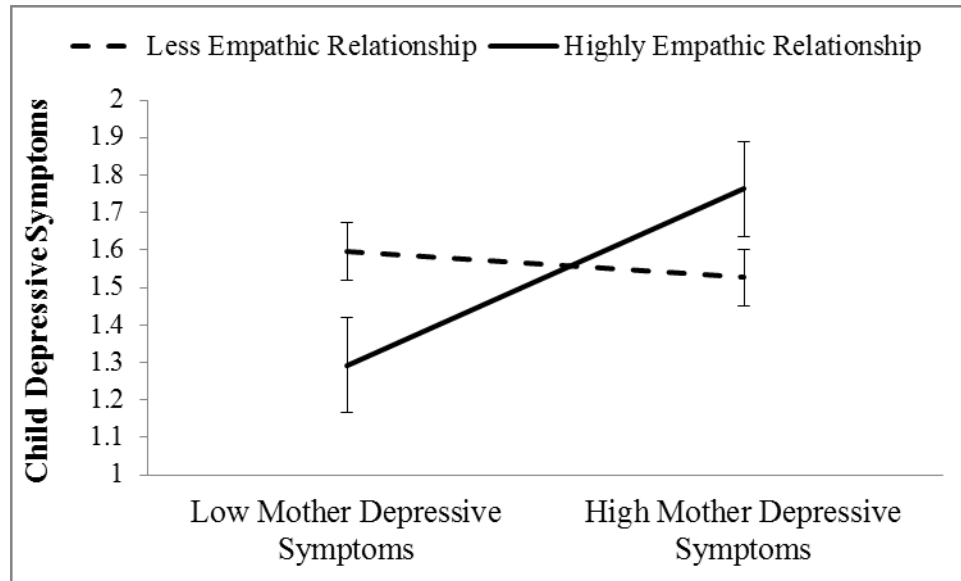
Note. Estimates are presented from each model step. Models controlled for the two-way interactions within the three-way

interaction in Step 3 (mothers' depressive symptoms \times children's gender; and highly empathic mother-child relationship \times children's gender). $N = 234$ mother-child dyads.

$\dagger p < .050$. $*p < .025$. $**p < .010$. $***p < .001$.

Figure 1

The significant moderating effect of highly empathic mother–child relationships on the association between midlife children’s and older mothers’ depressive symptoms (range = 1–5)



Note. Standard error bars are included. $**p < .010$.