Intergenerational relationship quality and mental health at midlife: considering mother's relationship with multiple children

Zhe Zhang
Rice University

Abstract: Parent-child relationship quality is highly influential for parents' wellbeing across the life course. However, few studies investigate how relationships with multiple children matter for midlife parents' mental health. Moreover, collective intergenerational ambivalence, the presence of both positive and negative emotions from multiple children, has received insufficient research attention despite its theorized impacts on maternal well-being. Using NLSY79 data, this study addresses these gaps by analyzing how multiple adolescent and young adult children's reports of relationship quality with their mother, categorized by uniformly close, collective ambivalent, and uniformly unclose, are associated with mother's mental health at age 50. Models from OLS regression with lagged dependent variables find that midlife mothers in a collectively ambivalent relationship were at higher risk of increasing psychological distress than mothers in a uniformly close relationship with children. This research adds nuances to understanding complex intergenerational relationships at mothers' mid-life, with implications for improving the family's wellbeing.

Intergenerational relationships between parents and children are highly associated with both generations' wellbeing across the life course (Umberson, Pudrovska, & Reczek, 2010). Existing scholarship has established that positive qualities in parent-child ties are associated with higher parental wellbeing, whereas negative emotions in parent-child ties are associated with lower parental wellbeing (Merz, Schulze, & Schuengel, 2010; Milkie, Bierman, & Schieman, 2008). Increasing evidence suggests that intergenerational ambivalence, the simultaneous presence of positive and negative sentiments in parent-child relationships, is also highly related to lower parental wellbeing, especially mental health (Fingerman, Pitzer, Lefkowitz, Birditt, & Mroczek, 2008; Gilligan, Suitor, & Pillemer, 2015; Kiecolt, Blieszner, & Savla, 2011; Suitor, Gilligan, & Pillemer, 2011; Tighe, Birditt, & Antonucci, 2016). Yet, three significant gaps exist in the literature that prevents a full understanding of intergenerational ties and well-being.

First, the majority of current research focuses on correlates of relationship quality with adult children for older parents (above 60) (e.g., Gilligan et al., 2015; Lee & Szinovacz, 2016; Lendon, Silverstein, & Giarrusso, 2014; Pillemer & Suitor, 2002; Thomas et al., 2017). Much fewer studies focus on midlife parents exclusively (for exceptions, see Kiecolt, Blieszner, & Salvla, 2011). Notably, parenthood at midlife (40-60) is particularly demanding as many midlife parents' adolescent and emerging young adult children are undergoing various life transitions and redefining their social relationships, which can be connected with heightened conflict and ambivalence toward parents and further influence parents' mental health. Second, most parents in the U.S. have more than one child (Pew Research Center, 2018). Parental wellbeing is likely connected with all parent-child relationships in a family (Fingerman et al., 2012; Tosi & Grundy, 2018). However, the predominant approach is to consider how individual parent-child dyad

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matters for parent's mental wellbeing, not how individual parent-child ties in constellation with one another shape parental well-being (for exceptions, see Ward, 2008). Third, most of the current studies, especially those on parent-child ambivalence, tend to use cross-sectional data collected from a regional sample to examine the relationship between midlife parents' mental health and intergenerational quality (e.g., Fingerman et al., 2008; Gilligan et al., 2015).

In order to address these gaps, this study draws on the family and health literature, especially ambivalence theory, and asks: How do intergenerational relationship quality matter for mothers' mental health at midlife, considering mother's relationship quality with multiple children and paying particular attention to mother-child ambivalence? More specifically, this study analyzes how multiple adolescent and young adult children's reports of relationship quality with their mother, categorized by uniformly close, collective ambivalent, and uniformly unclose, are associated with mother's mental health at age 50? Using a multigenerational, national sample of mothers and their adolescent and young adult children, this research adds nuances to understanding complex intergenerational relationships at mothers' mid-life, with further implications for improving both mother's and family's wellbeing.

Theoretical and Empirical Background

Midlife mothers' intergenerational relationship quality and mental wellbeing
Family and health scholars have long recognized that positive sentiments in intergenerational relationships are connected with parents' better mental wellbeing whereas negative components in parent-child ties are associated with worse mental health among parents (Koropeckyj-Cox, 2002; Merz et al., 2010; Milkie et al., 2008; Ward, 2008). This is typically theorized to operate via social support and social strain. Social support serves to buffer stress from diminishing

mental wellbeing (Thoits, 2011), and social support from children is found to be associated with increased of life satisfaction and decreased loneliness, which all contributes to better mental health among parents (Chen & Silverstein, 2000; Lang & Schutze, 2002; Long & Martin, 2000). In contrast, strained intergenerational relationships are linked with parents' sense of loneliness, lower levels of happiness, and even negative treatment toward parents, which all lead to deteriorating mental health (Koropeckyj-Cox, 2002; Milkie et al., 2008). Compared to social support, strain in parent-child relationships tends to have more prominent and lasting effects on parental wellbeing (Umberson, 1992; Baumeister et al., 2001; Charles, 2010).

In addition to focusing on either intergenerational support or strain, over the past two decades, a burgeoning literature has identified the fundamental interplay between positive and negative elements in parent-child ties—what is known as ambivalence (Connidis & McMullin, 2002; Pillemer & Lüscher, 2004; Pillemer & Suitor, 2002). Current work suggests that ambivalent ties have detrimental effects on mental wellbeing (Suitor et al., 2011; Lee & Szinovacz, 2016), in part because the presence of both positive and negative sentiments is unpredictable and inherently stressful (Uchino, Holt-Lunstad, Smith, & Bloor, 2004). More recent evidence finds higher parent-child ambivalence scores to be linked with higher levels of psychological distress among older adults and their grown children (Fingerman et al., 2008; Gilligan et al., 2015; Lee & Szinovacz, 2016).

Existing literature casts most attention on the effects of support, strain, and intergenerational ambivalence on parents of older parents' wellbeing, yet fewer studies focus on parents at midlife (Fingerman, 2017). Such omission needs to be addressed as increasing evidence suggests that parents at midlife are exposed to intensified intergenerational support,

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strain, and ambivalence as children are entering adolescence and transitioning into emerging young adulthood (Kiecolt et al., 2011; Tighe et al., 2016). At this life course stage, adolescent and emerging young adult children establish independence from parents and experience important life event transitions such as enrollment in another educational institution (e.g., high school or college), departure from parental home, participation in romantic relationships, and transition to employment. During this time, parent-child conflicts increases but intergenerational support, especially those from parents to children, persist and may even increase (Aquilino, 2006; Noack & Buhl, 2004; Fingerman et al., 2012). Meanwhile, intergenerational ambivalence likely intensifies between emerging young adults and their midlife parents (Fingerman et al., 2016). Furthermore, midlife mothers' health is more susceptible to intergenerational conflict and ambivalence as women experience much more parenting stress than men (Umberson et al., 2010). This study amends the research gap by studying the association between midlife mothers' mental health and intergenerational relationship, considering both positive and negative ties and with particular focus on intergenerational ambivalence.

Rethinking intergenerational relationship quality: One mother and multiple children

Intergenerational relationship is distinct in that it can account for multiple relationship dynamics between mothers and children. Most American parents have more than one child. In 2014, about two thirds of U.S. women aged 40-44 had two or more children (Pew Research Center, 2015). Research consistently shows that mother and her offspring's lives are linked (Elder, Johnson, & Crosnoe, 2003), wherein wellbeing is linked with her interactions with multiple children and life events of multiple children. For example, Fingerman and colleagues find that parental wellbeing is associated with both the successes and failures of all grown children (Fingerman et al., 2012).

Specifically, parents who had two children encountering problems experienced poorer mental health than parents with one child suffering problems. More stressors from multiple children thus take a heavier toll on mother's wellbeing. Another study suggests that mothers with no frequent contact with all children had more depressive symptoms than mothers with frequent contact with at least one child (Tosi & Grundy, 2018). In other words, frequent contact with at least one child may greatly mitigate the negative effects of an estranged relationship with another child on mother's mental health. These two studies suggest that considering mother's relationship with only one child likely leads to biased conclusions about mother's mental wellbeing.

In terms of intergenerational relationship quality and mental health: when one mother receives health benefits from her supportive and affectionate relationship with one child, the positive effects of this relationship on wellbeing may be reduced due to the strained relationship with another child. Ward (2008) finds that the presence of both negative and positive feelings with different grown children in the family network, or "collective ambivalence," to be associated with lower levels of parental happiness, especially among mothers. Yet, how mother's mental wellbeing is influenced by the simultaneous presence of positive and negative sentiments from multiple children in the family remains largely unknown. Additionally, prior work has not sufficiently addressed how a mother's positive ties with all children or a mother's negative ties with all children differently explain maternal wellbeing. Contributing to a burgeoning line of research efforts that considers multiple members in a family relationship, this study conceptualizes intergenerational, support, strain, and ambivalence between one midlife mother and her multiple children in one scenario.

Following interdependence theory, which posits that one party's wellbeing can be influenced by the other's appraisals of the relationship (Fingerman et al., 2008; Rusbult & VanLange, 2003), this study examines multiple children's assessment of parent-child ties in relation to mothers' psychological wellbeing. In the case of closeness, all children would report high levels of support are characterized as uniformly close; all children would report high levels of strain are characterized as uniformly unclose; in the case of collective ambivalence, one mother has at least one child reporting overall positive feelings toward mother whereas the other children reported less positive ties with mother. Previous work, especially those that measured individual ambivalence from Griffin's formula, finds that higher ambivalence scores are associated with worse mental health (Fingerman et al., 2008; Gilligan et al, 2015; Lee & Szinovacz, 2016). This previous research suggests that individuals in an ambivalent relationship likely have more distress than those in either an overall supportive or an overall strained relationship. In line with this work, I hypothesize that mothers with collective ambivalent relationship with multiple children experience more psychological distress than mothers whose adolescent and young adult children reporting either uniformly close or uniformly unclose ties with mother. Further, guided by research that demonstrates positive effects of supportive ties and detrimental consequences of negative ties on wellbeing (Merz et al., 2010; Milkie et al., 2008; Umberson et al., 2010), I hypothesize that mothers with uniformly close relationship with multiple children experience less psychological distress than mothers with uniformly unclose ties with children.

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Intergenerational Relationship Quality and Mother's Mental Health: a longitudinal study design

In addition to examining the relationship between mother-multiple children ties and maternal mental health at midlife, this study further improves prior literature by using a longitudinal research design. Most of the prior research relies on cross-sectional data (e.g., Fingerman et al., 2008; Gilligan et al., 2015), which invites bias pertaining to reverse causality. Poor mental health such as symptoms of anxiety is found to be associated with declining relationship satisfaction over time (Rehman et al., 2015). Children's concerns about parental health likely increase intergenerational ambivalence (Willson, Shuey, & Elder, 2003). Notably, children's reported worries about parental health are common when parents are at midlife and are still in good health (Hay, Fingerman, & Lefkowitz, 2008). In line with this research, this study examines how parent-child relationship quality is associated with mother's midlife mental health over time.

The present study

Drawing on the family and health literature, this study examines the association between intergenerational relationship quality and mothers' mental health at midlife, considering one mother's relationship with multiple adolescent and young adult children. This study asks: how is mother's mental health at age 50 predicted by mother's relationship with multiple adolescent and young adult children, measured by uniformly close, collective ambivalent (some children report close relationship with mom whereas others do not), and uniformly unclose? This paper addresses multiple gaps in the literature on intergenerational ties and wellbeing by elucidating the complex intergenerational ties at a particularly stressful yet scarcely researched life course stage. This study also contributes to the literature by using data from a national sample and

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employing a longitudinal design to account for potential selection effects, details of which are depicted in the following section.

Data and Methods

Data

Data are from National Longitudinal Survey of Youth-1979, an ongoing panel study. In 1979, a nationally representative sample of 12,686 men and women aged between 14 and 22 were interviewed. Follow-up surveys were conducted annually until 1994 and biannually until 2014, the most recent wave available. Beginning in 2008, a 50-and over health module was launched to collect detailed information on individual wellbeing including mental health. Each respondent participates in the 50's health module once, usually right after they turned 50. The survey years of this health module currently spanned between 2008 and 2014. In 1986, a separate survey, NLSY79-Children (NLSY79-CH) was administered to collect a wide range of social, economic, developmental, and health information on children born to NLSY79 women. These children form the basis of the NLSY79 – Young Adult Survey (NLSY79-YA), which officially began in 1994. The NLSY79 children, once turned 14, would participate in NLSY79-YA survey, conducted biannually until 2014.

This study employed data from NLSY79 women and data from their adolescent and young adult children in NLSY79-YA. By 2014, 3,162 NLSY79 mothers, who had at least one child aged 14 or older, had participated in the 50's health module. 24 mothers were dropped due to missing values on the dependent variables. The analysis used two waves of data – one that contains the 50's health module (used as Wave 2) and the prior wave (Wave 1). For instance, if a respondent participated in the 50's health module in 2010 (Wave 2), her answers from year 2008

(Wave 1, at around age 48), if available, would also be used in the analysis. This restriction

criteria results in a final sample of 2,534 midlife women.

<center>*Measures*</center>

Dependent Variables: Psychological Distress

Psychological Distress[1] is measured with a 7-item version of the Center for Epidemiological

Studies Depression Scale (CES-D), from the 50's health module. Respondents reported

frequencies in the past week that they experienced the following symptoms: (1) I did not feel like

eating; my appetite was poor; (2) I had trouble keeping my mind on what I was doing; (3) I felt

depressed; (4) I felt that everything I did was an effort; (5) My sleep was restless;(6) I felt sad; (7)

I could not get "going". For each item, respondents selected answers from rarely or none of the

time, some or little of the time, occasional or a moderate amount of the time, and most of all of

the time. NLSY researchers combined the seven answers into a single scale, which I log

transformed to address the positive skew. The transformed scores were further multiplied by 100

so as to increase interpretability of the results (see Clarke et al., 2011 for a similar approach).

Higher CESD scores indicate greater psychological distress (Cronbach's alpha = 0.83).

Independent Variables: Intergenerational Relationship at Wave 1

Children's responses from NLSY79-YA were used to construct the independent variables.

Starting in 2000, respondents in NLSY79-YA reported how close they felt toward mother, the

answer options of which were extremely close, quite close, fairly close, and not very close.[2]

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[1] The NLSY79 CES-D questions were asked in 1992, 1994, the 40's health module (year 1998, 2000, 2002, 2004, or 2006), and the 50's health module. Models that can better address changes in mental wellbeing over time (e.g., growth curve modeling) cannot be used in this study, because most of the NLSY79 children were too young to be eligible for NLSY79-YA survey prior to 1994.
[2] NLSY79 did not ask for mother's assessment of the relationship with children.

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More than 50% of the answers concentrated in "extremely close", therefore, I combined the three less close options into one single category of "not so close". Taking answers from multiple children to one mom from wave 1, I generated a variable of intergenerational relationship with three categories: uniformly close, uniformly unclose, and ambivalent wherein at least one child described relationship with mom as not so close but others reported close ties with mom.

Control Variables

The covariates include race/ethnicity (Non-Hispanic White, Non-Hispanic Black, Hispanic), marital status (Never married, married, other), employment status (employed, other), highest grade completed, family income (adjusted for inflation and reported in 2014 dollars, and log transformed to account for positive skew of the original distribution), family size (top coded at six), and health insurance coverage (private, public, self-pay). These variables are all measured at Wave 1 (at around age 48). The analysis also includes mother's prior psychological distress, measured by the 7-item of CES-D scales from the 40's health module. The CES-D scales were administered once to NLSY79 respondents when they turned 40 (1998-2006).

<div align="center">Analytical Strategy</div>

This study used Ordinary Least Squares regression models (OLS) with lagged dependent variables to examine the association between intergenerational relationship quality and mother's mental health at age 50. Specifically, I studied the role of mother-children ties at Wave 1 in predicting mother's mental health at Wave 2. I also examined how the negative changes in intergenerational ties between Wave 1 & Wave 2 explain variation in mother's mental wellbeing at Wave 2. Mother's psychological distress reported at around age 40 was used as a proxy for the mental wellbeing at Wave 1 and included in all models. The inclusion of previous health

conditions in the model is shown to reduce effects of reverse causality (Johnson, 2005).

Coefficients in lagged dependent variables can thus be taken as the average change in the

dependent variable between Wave 1 & Wave 2 in relation to the estimated effect from the

independent variable (Finkel, 1995; Williams, Sassler, & Nocholson, 2008). Additionally, Wald

tests were used to examine differences between coefficients within the same model. Likelihood-

ratio tests were conducted to compare model fits across nested models.

Multiple imputation with chained equation was employed to maximize data usage

(Royston, 2005; Van Buuren, 2012; White, Royston & Wood, 2011). The majority of the

covariates had less than 5% missing, which was appropriate for imputation (Schafer, 1999). The

one exception is family income, which had 15% invalid answers. I conducted sensitivity analysis

that excluded family income but contained other highly correlated SES variables such as health

insurance type and achieved education. The results were qualitatively similar to those presented

in the text. Conditional distribution for missing values on all variables was generated by Gibbs

sampling techniques (Royston 2005). Five distinct data sets were produced, which was deemed

appropriate for models with up to 20% missing (Royston, 2005; Van Buuren, 2012). Following

prior research (Van Hippel, 2007), I included dependent variables with missing values in the

imputation models and deleted them for the analysis. All the descriptive and multivariate

analyses are estimated using the mi command in Stata/MP 15.0 (StataCorp, 2017).

Results

Descriptive Results

Table 1 displays descriptive information for the variables used in the analysis. On average,

mothers in the sample had a distress score of 130.38 at Wave 2 (around age 50). At Wave 1

(around age 48), about 38% of individuals had uniformly close relationship with their adolescent and young adult children, 30% of mothers had ambivalent relationship with her children, and 32% of mothers had uniformly unclose relationship with her children. Respondents had an average of 1.87 adolescent or young adult children at Wave 1 and 60% of mothers had two or more children. Results from regression with no covariates (see Model 1 in Table 2) show that at age 50, mothers with uniformly close intergenerational relationship reported an average distress score of 125.59, which is lower than that of mothers with ambivalent intergenerational ties ($b= -9.40$, $p < 0.05$) and that of mothers with uniformly unclose parent-children ties ($b= -6.08$, $p = 0.17$).

<div align="center">*Multivariate Results*</div>

Regression models predicting change in psychological distress at Wave 2 are shown in Table 2. Model 1 From Table 2 estimates the association between Wave 1 intergenerational ties and change in mental health. Model 2 indicates that compared to mothers with uniformly close relationship with children, mothers with ambivalent relationship with children reported higher levels of psychological distress ($b= 8.36$, $p < 0.05$), controlling for all the sociodemographic covariates. Distress score of mothers with uniformly unclose relationship with children was not statistically different from mothers in the two other groups. Sensitivity analysis (Table 3) shows that results in Model 2 for Table 2 were primarily driven by mothers with fewer children (two or less). About 40% of mothers in the sample had only one adolescent or young adult child. Regression results without this group of mothers did not reveal differences in mental wellbeing by mother-child relationship quality.

Discussion

Intergenerational relationship quality is highly influential for parents' wellbeing across the life course. However, substantial gaps remain, especially in assessing the role that relationships with multiple children play in midlife parents' wellbeing. Moreover, collective intergenerational ambivalence, the presence of both positive and negative emotions from multiple children, has received insufficient research attention given its theorized impacts on maternal well-being. Additionally, the majority of existing literature uses a cross-sectional design and is thus limited in demonstrating the effects of intergenerational relationship quality on mental health. This study addresses these research gaps by answering the question – how is mother's mental health at age 50 associated with her relationship with multiple children? I used data from a national sample and constructed the main independent variables with multiple children's responses about mother-child relationships. Models from OLS regression with lagged dependent variables find that midlife mothers in an ambivalent relationship with adolescent and young adult children were at higher risk of increasing psychological distress at age 50 than mothers in a uniformly close relationship with children.

This study has two main contributions to the literature. First, findings in the study suggest that mothers' mental health is highly responsive to intergenerational relationship quality at midlife. A wealth of existing scholarship reveals that older parents' wellbeing is influenced by a complexity of intergenerational ties, including intergenerational support and strain (Thomas et al., 2017), mother's favoritism toward specific children (Suitor et al., 2017), parental dissatisfaction (Reczek & Zhang, 2016), and relationship equity (De Jong Gierveld & Dykstra, 2008). Much less research attention has been cast on midlife parents (Fingerman, 2017). In view

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of the increasing challenges of parenting adolescent and young adult children at midlife as well as the changing parent-child relationship qualities at this life course stage (Fingerman et al., 2012), this study examines the intergenerational relationship qualities and maternal mental health at midlife. Findings suggest that collective ambivalence, especially when compared with a uniformly close relationship, is associated with more psychological distress for midlife mothers. The collective ambivalence between midlife mothers and adolescent and young adult children may set the stage for family dynamics of parents' favoritism, unbalanced parent-child exchanges, or parental dissatisfaction in later life, with significant implications for the wellbeing of both generations.

Second, I find that collective ambivalence, wherein at least one child reported unclose relationship with mother but other children described close feelings toward mother, was associated with significantly higher psychological distress among mothers, compared to mothers who had uniformly close relationship with multiple children. These results resonate with prior studies that reported detrimental effects of ambivalent parent-child relationships on parental mental health (Fingerman et al., 2008; Gilligan et al., 2015; Lee & Scze, 2016; Ward, 2008), with unique contributions. An emerging line of research has extended the concept of an ambivalent relationship between one child and one parent to collective ambivalence, which recognizes both positive ties and negative ties in multiple relationships rather than individual dyads (Ward, 2008; Ward et al., 2008; Reczek, 2016). Among this work, Ward (2008) examines mother's mixed feelings toward multiple children – a mother reporting positive feelings toward on child and negative feelings toward another simultaneously, and finds this to be associated with less happiness. Reczek (2016) approaches collective ambivalence from a holist perspective

by studying the perceived collective ambivalence in a broader family unit, wherein gay and lesbian adults' experience parent, sibling, "in-law", and extended kin as having both positive and negative beliefs and behaviors. This study extends the current research by constructing collective ambivalence with accounts from multiple children, and further connects these accounts with mother's mental wellbeing. In other words, collective ambivalence, defined as multiple family members – multiple children's perceptions toward mother, is verified to carry significant weight in predicting mother's wellbeing. This finding complements prior work in demonstrating the relational nature of the ambivalent construct, wherein accounts from multiple family members should be considered to improve our standing in the complex family dynamics (Pillemer & Suitor, 2008; Reczek, 2016).

Next steps

Building on the current findings, I plan to further explore the association between intergenerational relationship and mothers' midlife wellbeing in three main ways. First, I intend to explore why mothers in a collectively ambivalent intergenerational relationship have more psychological distress than other mothers. Guided by the life course perspective and using more data from NLSY79-Young adults, I plan to compare the demographic characteristics and life events (e.g., behavior problems, education outcomes, employment status, relationship status) of young adult children by the three different mother-children relationships, paying attention to differences among the siblings. Second, sensitivity analysis shows that the main finding in the study – mental health difference between mothers in a collectively ambivalent intergenerational relationship and mothers in a uniformly close intergenerational relationship, is largely driven by mothers who had two or fewer young adult children. This finding is interesting and important in

view of the fact that women today are more likely to have fewer children than women in the past five decades. I plan to explore this further. Third, I will examine how changes in mother's overall relationship with multiple children over time matter for mother's mental wellbeing. Preliminary results shows the breakdown of mother's overall relationship with multiple children at Wave 2 remains similar to that of Wave 1 (37% uniformly close, 31% ambivalent, 32% uniformly unclose), but some changes were present. Between Wave 1 and Wave 2, 5% of mothers transitioned into an ambivalent relationship with children from a uniformly unclose relationship (n = 124), and another 5% of mothers transitioned into an ambivalent intergenerational relationship from a uniformly close relationship (n = 139). I plan to compare these individuals to those who stayed in the same intergenerational relationship between two waves, and determine which group of mothers is particularly at risk of elevated mental distress.

Taken together, this study extends prior research on intergenerational relationship and maternal wellbeing at midlife. The findings establish that one midlife mother's mental wellbeing is linked with her relationship with all of her adolescent and young adult children, collectively. Using ongoing panel data on a contemporary cohort, the results deepen our understanding about midlife mothers who experience increasing parenting demands and responsibilities to adolescent and coming of age children. Notably, the findings also highlight the importance of considering multiple children's accounts of relationship with mother. Future studies should continue to advance the knowledge on family dynamics at midlife, how these dynamics are linked with both generations' wellbeing across the life course, and how these relationships are conditioned by social contexts such as race, class, and gender.

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Table 1. Sociodemographic and Health Characteristics of the Sample (Unweighted, Imputed) NLSY79 (1998-2014)

	Mean or Percent	SD
CESD score at W2	130.38	91.89
Mother-children relationship quality at W1		
Uniformly close	37.69	
Ambivalent	30.43	
Uniformly unclose	31.89	
Number of YA children	1.87	0.88
Control variables at W1		
Race/Ethnicity		
NonHispanic White	48.11	
NonHispanic Black	31.73	
Hispanic	20.17	
Marital Status		
Never Married	9.98	
Married or Cohabiting	57.14	
Previously married	32.87	
Highest Grade Completed	13.39	1.90
Employment Status		
Employed	78.81	
Logged family income-(inflation adjusted)	11.12	
Family size	3.11	1.35
Health Insurance		
Private	69.40	
Public	13.93	
Self-pay	16.67	
CESD score at W1	118.27	
N (Person)	2,534	

Table 2. Results from OLS Regression Models Predicting Psychological Distress at Wave 2

	Model 1		Model 2	
	b	SE	b	SE
Mother-children relationship quality at W1				
Uniformly close (ref)				
Ambivalent	9.398*	4.447	8.363*	4.059
Uniformly unclose	6.078	4.390	4.507	3.972
Control variables at W1				
Race/Ethnicity (ref: NonHispanic White)				
NonHispanic Black			-12.927**	4.136
Hispanic			-19.048***	4.485
Marital Status (ref: Married)				
Never Married			4.302	6.613
Previously married			-2.317	4.489
Highest Grade Completed			0.049	0.967
Employed (ref: Not employed)			-15.526***	4.581
Logged family income-(inflation adjusted)			-12.601***	3.547
Family size			1.057	1.360
Health Insurance (ref: Private)				
Public			18.983**	5.902
Self-pay			7.228	5.279
CESD score at W1			0.372***	0.019
Intercept	125.586***		235.146***	38.705
R-Squared	0.002		0.21	
N (NLSY79)	2,534		2,534	

+ p<.10 * p<.05 ** p<.01 *** p<.001
Source: NLSY79 and 79 Young Adults Survey.

Table 3. Results from OLS Regression Models Predicting Psychological Distress at Wave 2

	Model 1		Model 2	
	b	SE	b	SE
Mother-children relationship quality at W1				
Uniformly close (ref)				
Ambivalent	7.45+	4.25	11.67*	5.04
Uniformly unclose	4.98	4.02	5.89	4.21
Race/Ethnicity (ref: NonHispanic White)				
NonHispanic Black	-14.270***	4.263	-12.447**	4.704
Hispanic	-18.949***	4.636	-20.162***	5.112
Marital Status (ref: Married)				
Never Married	4.880	6.898	2.761	7.540
Previously married	-1.260	4.671	0.527	5.195
Highest Grade Completed	-0.033	0.995	0.015	1.086
Employed (ref: Not employed)	-15.622**	4.749	-15.408**	5.288
Logged family income-(inflation adjusted)	-9.412*	3.780	-9.618*	4.235
Family size	0.667	1.435	2.003	1.638
Health Insurance (ref: Private)				
Public	20.256**	6.153	17.181*	6.803
Self-pay	10.628+	5.511	11.994+	6.146
CESD score at W1	0.371***	0.020	0.365***	0.021
Intercept	200.807***	41.222	198.433***	46.249
R-Squared	0.21		0.20	
N (NLSY79)	2,392		1,991	

+ p<.10 * p<.05 ** p<.01 *** p<.001

Source: NLSY79 and 79 Young Adults Survey.

Note: Model 1 contains mothers with three or fewer adolescent or young adult (YA) children,
Model 2 contains mothers with two or fewer YA children.