USING THE FAMILY STRESS MODEL TO UNDERSTAND THE ASSOCIATION OF PARENTING STRESS, PARENTING STRATEGIES, AND CHILD BEHAVIORAL OUTCOMES IN GRANDFAMLIES

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Bachelor of Arts in Psychology

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Seattle, Washington

2016

Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
MASTER OF SCIENCE
December, 2022

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Date of Degree: DECEMBER, 2022

Title of Study: USING THE FAMILY STRESS MODEL TO UNDERSTAND THE ASSOCIATION OF PARENTING STRESS, PARENTING STRATEGIES, AND CHILD BEHAVIORAL OUTCOMES IN GRANDFAMLIES

Major Field: PSYCHOLOGY

Abstract: There are over 2.4 million grandparents primarily responsible for raising their grandchildren (custodial grandparents; CGs). Although research on grandfamilies is scarce, we do know CGs have high levels of stress and many experience financial hardship. Additionally, their grandchildren are vulnerable to psychological disorders given the adverse circumstances that led to needing an alternative placement. Parenting research has found low-income, child behavioral problems, and stress are clearly linked with dysfunctional parenting strategies. Using the framework of the Family Stress Model (FSM; Conger et al., 2000), the current study examined how these factors are associated among grandfamilies. 79 CGs of 6-to 12-year-old grandchildren completed a REDCap survey with standardized measures assessing general stress, parenting stress, parenting strategies, and child behavior. It was hypothesized that parenting stress would be more strongly correlated with both dysfunctional parenting and child behavioral problems compared to general stress. Further, it was hypothesized that both parenting stress and dysfunctional parenting would predict child behavior. However, general stress was not expected to explain additional variance in child behavior when accounting for parenting stress and parenting. Finally, income was expected to moderate the associations between both parenting stress and child behavior as well as dysfunctional parenting and child behavior. The results were as follows. Although parenting stress was significantly correlated with parenting and child outcomes, general stress was similarly associated. As expected, parenting stress and dysfunctional parenting were predictive of child outcomes. However, general stress did explain additional variance in child behavior over and above parenting stress and parenting. Contrary to what was predicted, income did not moderate the associations of parenting and child behavior, nor parenting stress and child behavior. Overall, CGs in our sample had high levels of general and parenting stress. Consistent with previous research, grandchildren had high levels of behavioral problems and many families had low-income. Our findings highlight the need for a comprehensive treatment approach when working with grandfamilies. Limitations and directions for future research are discussed.

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CHAPTER I

INTRODUCTION

A recent report from the Children's Bureau estimates there are 423,997 children in the United States foster care system, 32% of whom reside with family members (U.S. Department of Health and Human Services, 2020). The rate of formal and informal family placements has been climbing for decades, and rates have increased more rapidly since the onset of the opioid epidemic (Brundage & Levine, 2019). This has significantly affected grandparent caregivers (custodial grandparents; CGs). The Family First Prevention Services Act of 2018 prioritized placement with family members, including grandparents, in order to divert children from foster care.

Little is known, however, about the impact caregiving has on CGs and their grandchildren, who are already vulnerable to psychological disorders given the precipitating factors that led to alternative placements (Smith & Palmieri, 2007). Likewise, grandparents taking on a parental role are vulnerable to poor mental health and high levels of parenting stress. This is partially influenced by their grandchildren's behavior and the financial hardship experienced by many CGs (Ge & Adesman, 2017; Xu et al., 2020). We know CG distress and low-income affect both how CGs parent and their grandchildren's behavioral outcomes (Smith et al., 2008).

The Family Stress Model (Conger et al., 2000) provides a framework for understanding how these variables interact to explain the emergence of child behavioral problems. There is evidence this framework can be applied to grandfamilies. However, currently the research is scarce and contradictory. This study aims to provide a better understanding of grandfamilies and the many factors influencing their well-being.

CHAPTER II

REVIEW OF LITERATURE

The number of grandparents primarily responsible for raising their grandchildren (custodial grandparents; CGs) has been steadily increasing and in 2018 over 2.4 million grandparents were responsible for their grandchildren (U.S. Census, 2018). CGs are grandparents who have been their grandchildren's full-time caregivers for a significant amount of time (usually at least 3 months). These grandparents and their grandchildren make up what is called grandfamilies. There are multiple reasons CGs raise their grandchildren. This arrangement typically results from parental inability to care for their children due to adverse circumstances including incarceration, substance abuse, and child abuse or neglect (Choi, 2016; Smith et al., 2019). Oftentimes, grandparents take over informally when they see a problem or believe they can better care for the child (Davey & Lynch, 2016). Other times they are sought by social services as a first placement option to keep children out of foster care (Siordia & Rauktis, 2016). Custodial grandparents represent a diverse group. Custodial grandparenting is more common among racially minoritized individuals, lower income families, and women (U.S. Census, 2018). The majority of the research on custodial grandparenting focuses on grandmothers due to the fact that over half of CGs are women. Also, women caregivers are typically the focus of parenting research in general. On average CGs are 4-10 years younger than their traditional grandparent counterparts with an average age of 55-62 (Chan et al., 2019; David & Nelson-Kakulla, 2019). Furthermore, CGs have less education than traditional parents and adults in general (Baker & Mutchler, 2010; Muthiah et al., 2019). Black, Indigenous, people of color (BIPOC) grandparents

are overrepresented within the CG population compared to white, non-Hispanic grandparents (Hayslip et al., 2019). Although this disparity is likely influenced by many factors, one lies in the reasons for assuming primary parenting responsibilities. White CGs typically assume a parenting role as a result of a crisis situation (parental death, legal troubles, etc.), whereas ethnic minority grandparents, in addition to crises, take over due to socioeconomic difficulties (Goodman & Silverstein, 2006). This may be in part because ethnically minoritized CGs experience higher rates of poverty than white CGs (Siorda & Rauktis, 2016). Custodial grandparenting is much more common in low socioeconomic strata. CGs are more likely to have lower income compared to other families and individuals in their area (Fuller-Thomson et al., 1997). Data from a national U.S. sample revealed that 68% of custodial grandmothers had total household incomes either near or below the poverty line (Mills et al., 2005). Despite struggling financially, CGs often do not get the same federal assistance that foster parents or legal guardians receive. This is partially due to difficulties understanding how to apply or obtain assistance as well as ineligibility (Baker et al., 2008). Thus, the full financial burden resulting from costs such as clothing and health care falls on CGs (Cooper, 2012).

Characteristics of CGs

Other than general CG demographics, information regarding individual characteristics varies and is inconsistent. However, there are general trends suggesting that parenting impacts CG health and stress levels. A Taiwanese study found CGs may experience better health including higher levels of well-being (Ku et al., 2013). Similarly, others have found that grandparent caregivers have better or similar health to their peers, but these studies typically are not examining CGs specifically or take place outside of the United States (Chen & Liu, 2012; Sadruddin et al., 2019). The vast majority of findings suggest that compared to their peers and other caregivers CGs have worse overall health (Musil et al., 2011). CGs have higher rates of many physical illness and chronic conditions and also report declines in their health as they

parent (Notter, 2022; Peterson, 2017). CGs are less likely to take preventative health care measures, such as getting flu vaccines or cholesterol screenings, after taking on a parenting role (Baker & Silverstein, 2008). CGs exhibit elevated risk for psychological illnesses such as depression and anxiety (Ge & Adesman, 2017; Goulette et al., 2016). Stress is another major problem among CGs. While younger CGs and single CGs experience the highest levels of distress, custodial grandparents as a whole have elevated stress levels (Conway et al., 2011; Mills et al., 2005; Smith et al., 2008). Stress may be especially high during the transition to assuming a parenting role (Musil et al., 2011).

CGs face multiple specific stressors, including financial strains, interpersonal challenges, and health issues (Lee et al., 2016). CGs with poorer health experience higher levels of stress, including fear of their poor health rendering them unable to parent (Ge & Adesman, 2017; Lee et al., 2016). CGs also experience more stress resulting from family relationships compared to noncaregiving grandmothers and those in multigenerational homes (Musil et al., 2011). Concerns over the relationship with their own child may also contribute to subjective stress (Lee et al., 2016; Shakya et al., 2012). Additionally, as parental responsibilities grow, some married CGs experience a decrease in marital satisfaction which may then lead to higher divorce rates (Jendrek, 1993). Lack of relationships also causes stress as low levels of social support are associated with higher stress levels (Doley et al., 2015; Kelley & Whitley, 2003).

Perhaps one of the most important factor is stress related to parenting. In one sample, 94% of CGs had significant levels of parenting stress (Ross & Aday, 2006). Lee et al. (2016) found that when accounting for income, demographic differences, and other risk factors, CGs experienced more parenting stress than their traditional parent counterparts. Even when compared to traditional parents of children with severe behavioral issues, a group of CGs (with and without grandchildren with behavioral problems) still experienced more stress (Sprang et al., 2015).

The association between these stressors and stress is unknown, however, there are several ways in which they may be linked. Abrupt changes to CGs' daily life and resulting adjustment

may contribute to the enhanced stress towards the beginning of their time caregiving (Choi et al., 2016). Some grandparents are concerned about the perceived stigma of being failures as parents to their own children (Hayslip et al., 2019). Feeling stigmatized exacerbates general feelings of loneliness and feeling different from their peers (Hayslip & Kaminski, 2005).

Taking care of grandchildren limits time CGs can spend with friends and their spouse due to new responsibilities (Butler et al., 2005; Jendrek, 1993). Time is limited by both demands of parenting and increased expenditures that may lead to a disruption in retirement plans (Hayslip et al., 2019). Unfortunately, this may impact their ability to socialize and maintain relationships that provide support. Unsurprisingly, many CGs feel socially isolated which leads to a decrease in overall health (Hayslip et al., 2015; Mendoza et al., 2020). Mental health is also directly related to parenting stress and has been found to influence the link between financial difficulties and parenting stress (Xu et al., 2020).

CG Parenting

CGs' role includes being both a parent and grandparent (Martin et al., 2021). Specific parenting styles (such as attitudes and approaches) and strategies (specific behaviors) in custodial grandparents differ from those of traditional parents. Grandparents as a whole have reported having antiquated ideas about parenting (Hayslip et al., 2019). For example, 3/4 of a sample of grandparents strongly agreed or agreed that parents are too lax with children and the vast majority believed parenting and discipline in their day to be better (David & Nelson-Kakulla, 2019). CGs specifically highly value obedience and are less accepting than traditional parents of children having differing opinions (Hayslip & Kaminski, 2005). CGs also believe children should fill emotional roles that are typically parents' responsibility (Kaminski et al., 2008). Additionally, CGs view corporal punishment as necessary to prevent their grandchildren from ending up like their parents (Dannison & Smith, 2003).

However, there is little evidence that CGs actually use more discipline and not all studies have found different beliefs of corporal punishment compared to traditional parents (Kaminski et

al., 2008). Some have found that custodial grandparents use the same parenting strategies they used when raising their own children (Dolbin-MacNab, 2006; Fuentes et al., 2008). The strategies observed vary. There is evidence that CGs employ negative strategies such as inconsistent discipline and low responsiveness to their grandchild's needs and emotions (Bratton et al, 1998; Kaminski et al., 2008). Larger age gaps between CGs and grandchildren are associated with lower awareness, availability, and use of positive parenting strategies (Rodgers-Farmer, 1999; Smith et al., 2008). Due to increased age CGs typically have more health issues, and may then rely on grandchildren to complete necessary daily activities and to take on a caregiver role (Kaminski et al., 2008). Hayslip and Kaminski (2008) found half of CGs to be inconsistent and show anger when disciplining at least sometimes; but they did not compare CG parenting to that of traditional parents. However, they also found that half of CGs often used good discipline and 80% used positive parenting strategies. Researchers argue that because CGs have more life and parenting experience they have an advantage over traditional parents (Hayslip et al., 2019). Among a sample of grandparents with adolescents in Spain, interviews revealed flexible parenting styles as opposed to overly rigid or too lax (Fuentes et al., 2008).

Overall, there is little agreement whether parenting differs among CGs. Other variables, such as socioeconomic status, have been found to better explain differences in parenting between traditional parents and CGs (Pilksauskas & Dunfron, 2016). Current research relies on qualitative data and lacks standardized measures. Furthermore, the lack of consistent findings in research to date suggests there may be different underlying mechanisms that influence how CGs parent.

Characteristics of Grandchildren

Around 4% of children aged 0-17 live in a grandparent headed household (National Survey of Children's Health, 2017-2018), and there is evidence that custodial grandchildren have worse physical, mental, and academic outcomes than children raised by their parents (Sadruddin et al., 2019). Custodial grandchildren tend to perform worse in school and are less attentive in class than children from traditional families (Pilkauskas & Dunifron 2016). They are also more

likely to be suspended or expelled from school and are less likely to complete high school compared to children raised by two biological parents (Monserud & Elder, 2011). Furthermore, custodial grandchildren's physical health is among the poorest compared to children in other family structures and they are at a higher risk for physical illnesses due to growing up in poverty and without health insurance (Baker & Mutchler, 2010; Cross & Day, 2008; Saddruddin et al., 2019).

Custodial grandchildren are also at a higher risk for many psychological disorders (Smith & Palmieri, 2007). Smith et al. (2019) found that independent of race/ethnicity and gender, grandchildren had higher negative emotionality and behavioral symptoms compared to children in traditional families, including higher levels of externalizing disorders and overall behavioral problems (Ge & Adesman, 2017). In one sample of custodial grandchildren, 1/3 had behavioral problems (Kelley et al., 2011).

These children face additional risks. They are often raised by grandparents after experiencing traumas which led to their biological parents being unable to parent. Sprang et al. (2015) found that almost ¾ of grandchildren in a sample of 297 custodial grandfamilies had experienced or been exposed to trauma.

Although majority of the literature suggests custodial grandchildren are worse off than their peers, some studies indicate grandchildren do not differ or are even better off than their peers. Solomon and Marx (1995) found custodial grandchildren did not have worse physical health or increased school behavioral problems compared to children from two-parent homes. Similarly, Goulette et al. (2016) suggest children raised by grandmothers have lower levels of violence and no differences in antisocial behavior compared to children raised by female caregivers. Some have explained discrepant findings as resulting from differences in how grandchildren are parented. Differences in externalizing problems between custodial grandchildren and other children are thought to be nonexistent when grandchildren have a loving and trusting relationship with their grandparent (Goulette et al., 2016; Poehlmann et al., 2008).

Conflicting findings on custodial grandchild outcomes point to the need for further research on the mechanisms that lead to differential outcomes. Currently, we do not know which grandchildren are most at risk for developing mental disorders. However, there is evidence that relationships with their grandparent may be a protective factor. While parenting (e.g., warmth) has been identified as a predictor of child externalizing behaviors (Smith & Richardson, 2008; Poehlmann et al., 2008), very few studies have examined specific parenting strategies of CGs.

Parenting and Child Outcomes

Parent characteristics and practices are crucial for understanding child adjustment. While little is known about specific parenting practices in custodial grandparents, we do know parenting styles and strategies considerably influence child behavior. Strategies such as providing support and consistent discipline predict more favorable child outcomes (Amato & Fowler, 2002). In contrast, lack of these practices and harsh discipline are associated with child externalizing behaviors (Gryczkowski et al., 2010; Prevatt, 2003). When children have externalizing problems parents report higher levels of stress, another predictor of child maladjustment (Kelley et al., 2011; Neece et al., 2012).

The Family Stress Model (FSM; Conger et al., 2000) was developed to provide a framework for understanding the complex link between economic hardship and child adjustment. The FSM has been modified to include mediators such as caregiver distress and specific parenting strategies as well as child behavior problems as an outcome. This model has been supported by research. Jocson and McLoyd (2015) found parental distress predicted worse parenting, which in turn predicted later child maladaptive behaviors. Additionally, Hardaway and Cornelius (2014) found a pathway from low income to externalizing problems via maternal distress and parenting.

Smith et al. (2008) adapted the FSM for use in conceptualizing the association between grandparent stress, parenting, and child outcomes (Figure 1). In this model, grandparent distress (anxiety and depression) is thought to be associated with child externalizing problems both directly and through poorer parenting (low nurturance and ineffective discipline). Smith et al.

(2008) discovered parenting mediated the link between CG distress and child externalizing behaviors. Furthermore, the association between CG distress and child's overall psychological problems was dependent on other psychosocial circumstances like social support and relationships with the birth parent. Later, Smith and colleagues (2015) found more support for the mediation as well as correlations between CG distress, parenting strategies, and grandchild difficulties. Additionally, they included specific strategies and found grandmother distress (anxiety and depression) was associated with harsh, inconsistent, and ineffective discipline. Furthermore, harsh discipline mediated the path between grandmother distress and child externalizing problems (Smith et al., 2018). While the research is promising, to our knowledge Smith and his colleagues have conducted the only studies examining grandfamilies analyzed within the context of the FSM from two samples of custodial grandmothers and their grandchildren. Findings on specific parenting strategies was limited to a sample of grandmothers seeking treatment for their grandchildren in metropolitan areas and thus does not represent custodial grandparents as a whole. Additionally, they did not include the other pathways through which grandparent distress leads to child externalizing behaviors. Finally, their model does not include stress related to parenting although we know it is experienced by many CGs and is associated with poorer child outcomes.

The FSM was designed as a longitudinal causal model. However, there is clear evidence these associations are reciprocal. Studies have found a transactional relationship between parental stress as well as parental behaviors and child behavior problems (Neece et al., 2012; Rolon-Arroyo et al., 2018). Hayslip et al. (2014) found similar results among CGs; grandchild difficulties predicted grandparent distress. Finally, Xu et al. (2020) found parenting stress was predicted by grandchild mental health. As a result of the evidence of transactional associations between factors, this model should be explored without an explicit causal framework.

Summary & Critique:

The effects of custodial grandparenting are unclear given inconsistent findings across a small number of studies. CGs experience higher stress and more financial difficulties compared to traditional parents and their same-aged peers. Their grandchildren are vulnerable to externalizing problems due to lower SES, high trauma exposure, and caregivers with high distress levels. Poor parenting strategies found among CGs also increase the risk of grandchild externalizing behavior. Currently few studies have examined the association between these vulnerability factors and child behavior among grandfamilies. Therefore, how they impact one another is largely unknown.

Contrastingly, there is evidence this situation can be positive for both the grandparent and the grandchild. CGs may experience better health including higher levels of well-being and grandchildren may be protected from negative effects of trauma (Hayslip & Patrick, 2003; Ku et al., 2013). Placements within the family can be highly successful and children placed with family members have better behavioral outcomes than children in foster care and children in single parent homes (Rubin et al., 2008; Winokur et al., 2014).

Consistent with the FSM, the associations between parental stress, parenting, and behavioral outcomes found in traditional families is similar in grandfamilies. CGs with higher levels of stress use ineffective parenting strategies like inconsistent discipline (Smith et al., 2015). Stress levels are exacerbated when their grandchildren have behavioral issues (Conway et al., 2011; Doley et al., 2015). Behavioral outcomes seem to be influenced by grandparent and grandchild interactions. Grandchildren who have fewer warm interactions with their CGs have higher levels of externalizing behaviors than those with more positive interactions (Poehlmann et al., 2008). Furthermore, ineffective parenting strategies are associated with poor grandchild adjustment and behavioral issues (Smith & Richardson, 2008).

While preliminary findings support components of the Family Stress Model a more comprehensive approach examining multiple vulnerability factors is needed. Also, we do not know under what conditions specific factors like stress lead to negative child outcomes and we

need to test more aspects of the FSM that have not been well studied. It is likely that parenting influences the extent to which stress affects behavioral problems. Certain parenting strategies may be protective, but we do not yet have a clear picture as to which strategies CGs use. Understanding the positive strategies and deficits in CG parenting can lead to development of better treatment interventions. Also, inclusion of other factors, like financial difficulties and stress related to parenting, will provide a clearer picture of the complex association between factors and other areas to intervene.

Current Study

The current study aimed to better understand the effect of CG stress and parenting strategies on grandchildren's behavioral outcomes, focusing on three aspects of the FSM. First, parenting stress specifically was included given that it's reported at higher rates among custodial grandparents compared to grandparents and parents. We expected it would be more strongly related to parenting strategies than general stress and therefore provide more fruitful information on the association between CG factors and grandchild outcomes. Specific parenting strategies, as opposed to attitudes, was also evaluated. Finally, we examined grandchild externalizing behaviors given the support for its link to parenting stress and strategies, and because researchers have found high levels of externalizing symptoms among custodial grandchildren. Our focus was on school-aged children as they are the focus in the majority of the grandfamily literature. Also, externalizing symptoms are more common in middle childhood and children this age may be more affected by grandparent factors (Smith et al., 2008).

The Family Stress Model provides a good framework and fits with the evidence we do have on grandfamilies. It also includes the complex associations between individual factors like caregiver stress and child behavior, caregiver and child interactions, and external factors such as income. More recently, Smith and his collogues (2018) have found promising support for its use with CGs; however, they have yet to examine stress related to parenting as an aspect of CG

distress. Furthermore, studies using the FSM have used a causal framework despite evidence that these factors have bidirectional links.

Hypotheses

Given previous findings on grandfamilies, parenting stress, parenting strategies, and child behavior (1) we expected parenting stress would have a stronger association with both dysfunctional parenting and child externalizing behaviors compared to overall stress. Using the framework of the FSM, (2) we expected parenting stress and dysfunctional parenting strategies to predict child externalizing behavior. Additionally, because parenting stress was expected to have a higher association with the other factors, (3) overall stress was not expected to add any additional ability to predict externalizing behaviors beyond parenting stress and parenting strategies. Finally, income was expected to be an important factor in understanding these links with it influencing (4) the association between parenting strategies and child externalizing behaviors, as well as (5) the association between parenting stress and child externalizing behaviors.

CHAPTER III

METHODOLOGY

Participants

Custodial grandparents were recruited via support groups and other organizations that serve grandfamilies. Grandparents were all primary caregivers of grandchildren 6-12 years of age, lived in the United States, and were fluent in English. Surveys were completed on REDCap (Harris et al., 2009).

727 responses were collected for this study; however, 645 were excluded due to being identified as computer generated (bot) responses. Additionally, one participant was excluded due to being a repeat participant and two were excluded for reporting on children outside of the age range. The final sample included 79 custodial grandparents. CGs were between the ages of 44-81 (M = 60.78, SD = 8.11). Child ages ranged from 6 to 12 (M = 8.91, SD = 2.09). CGs were primarily female (91.1%), married (50.6%), white (69.6%), and represented 21 states. Most were primary caretakers for one (44.3%) or two (35.4%) children. Time caregiving ranged from 6 months to 12 years (M= 5.80, SD= 2.81). Placements were primarily a legal arrangement (88.6%) and permanent (62.0%). There were slightly more male grandchildren (50.6%) than female grandchildren (45.6%). 42.3% of grandchildren had been diagnosed with a mental or physical disorder and 57.7% had prenatal substance exposure. Majority of children had received individual therapy (64.6%). 84.4% of grandchildren had public health insurance, 14.3% were on private health insurance, and 1.3% were uninsured. See Table 1 for further demographic information.

Materials

Demographic Questionnaire

A demographics form assessed grandparent's age, race/ethnicity, and family income. Additionally, their grandchildren's age, sex, and grade in school was collected. The income to poverty ratio was calculated by dividing total household income by poverty guidelines set by the U.S. Census Bureau which takes into account number of individuals in a household. Ratios of 1.0 or below indicates poverty status. Low-income is often defined by assistance programs as total family income falling at or below 130% of the poverty guideline. Finally, grandparents included their reason for becoming their grandchild's caregiver.

Depression, Anxiety, and Stress Scales-21 (DASS-21; Lovibond & Lovibond, 1995)

The DASS-21 is an abbreviated version of the DASS-42 and includes 21-items measuring depression, anxiety, and stress levels in adults. The DASS-21 includes subscales of Depression (α=.91), Anxiety (α=.84), and Stress (α=.90). Items are rated on a 4-point Likert scale ranging from 0 ("did not apply to me at all") to 3 ("applied to me very much or most of the time"). The DASS-21 Stress subscale was used to assess grandparent stress with higher scores indicating more stress and raw scores above 7 were considered clinically significant. Within this sample internal consistency of the Stress subscale was strong (α=.89).

Alabama Parenting Questionnaire (APQ; Frick, 1991)

The Alabama Parenting Questionnaire is a 42-item parent report questionnaire used to assess parenting. The APQ measures five dimensions of parenting strategies: Parental Involvement, Positive Parenting, Poor Monitoring/Supervision, Inconsistent Discipline, and Corporal Punishment. Items are rated on a 5-point frequency scale ranging from 1 (Never) to 5 (Always). More recently, Randolph & Radey (2011) found three subscales among a sample of children aged 6-10 including positive reinforcement (α=.78), positive discipline (α=.69), and negative discipline (α=.80). The 7-item negative discipline scale was used to measure poor

parenting with higher scores indicating poorer parenting. In this sample, the internal consistency of the negative discipline subscale was adequate (α=.77).

Child Behavior Checklist for Ages 6-18 (CBCL; Achenbach & Rescorla, 2001)

The Child Behavior Checklist for Ages 6-18 is a 113-item caregiver report of child behavior. Questions are presented on a 3-point Likert scale (not true, sometimes/somewhat true, very/often true). The CBCL yields two broad-band domains (Internalizing (α=.90) and Externalizing (α=.94) behaviors) and eight narrow-band scales. The Externalizing score, which consists of the Rule Breaking Behavior and Aggressive Behavior scales, was used to measure child behavioral problems. Higher factor scores indicate higher levels of child problem behaviors. Internal consistency of the Externalizing scale in this sample was high (α=.95).

Parental Stress Scale; (PSS; Berry & Jones, 1995)

The Parental Stress Scale (PSS) is an 18-item measure of parental stress and has good internal consistency (α=.83). Responses are rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The PSS was used to assess stress related to parenting with higher scores indicating more parental stress. In this sample, internal consistency was high (α=.91).

Procedures

After receiving Review Board approval, recruitment fliers with the study link were posted on social media and sent to organizations serving grandfamilies. Consent to participate and data were all be collected via REDCap. Upon completion of the study, participants were compensated $8 for completing the survey and entered to win one of four $25 gift cards.

CHAPTER IV

FINDINGS

Descriptive Statistics

DASS-Stress scores (*M*=7.02, *SD*=4.65) indicate that 43% of CGs have clinically significant levels of general stress. Stress related to parenting (PSS scores) was also high (*M*=46.45, *SD*=12.63). Compared to the original validation sample by Berry & Jones (1995), 77.5% of CGs scored above the mean of the original nonclinical sample and 54.9% of participants scores fell above the mean of the clinical sample. Child behavioral problem scores (CBCL-Externalizing; *M*=12.56, *SD*=12.06) indicate that 41.4% of grandchildren have elevated levels of externalizing behavior. Finally, income ratio scores (*M*=2.18, *SD*=1.64*)* suggest that 20.8% of families live in poverty. This is consistent with previous findings that CGs have high levels of both general and parenting stress, their grandchildren have high levels of externalizing behaviors, and grandfamilies have low yearly income levels. See Table 2 for further descriptive information.

Hypothesis 1

It was hypothesized that parenting stress would have a stronger association with both dysfunctional parenting and child externalizing behaviors than overall stress. This was tested through Pearson's bivariate correlations analysis of the PSS, CBCL-Externalizing scale, DASS-stress scale, and the APQ- negative discipline scale. We looked at the magnitude of correlations and expected a strong association of the CBCL and APQ to the PSS. We also expected a strong association of the CBCL and APQ to the DASS but with a smaller degree. To determine whether

the associations were significantly different, we calculated the *t*-statistic for the difference between correlation coefficients (Chen & Popovich, 2002).

Child externalizing behavior was significantly correlated with both parenting stress (r=.58, p<.001) and general stress (r=.60, p<.001). There was not a significant difference between the two associations, $t(66)$=.21, p>.05. Similarly, dysfunctional parenting (M=14.41, SD=4.18) was correlated with both parenting stress (r=.40, p=.001) and general stress (r=.41, p<.001). There was not a significant difference between the associations of parenting stress and general stress with dysfunctional parenting, $t(65)$=.10, p>.05. Thus, this hypothesis was not supported.

Hypothesis 2

It was hypothesized that dysfunctional parenting strategies and parenting stress would explain a significant amount of variance in child externalizing behaviors. This was tested through a forward hierarchical multiple regression of the PSS and the APQ- negative discipline subscale on the CBCL-Externalizing scale.

The model was significant and accounted for 35.8% of variance in child externalizing behavior, $F(2, 63)$=17.54, p<.001. Negative discipline did not contribute significantly to the model (β=.07, p>.05), but parenting stress did (β=.57, p<.001). Thus, this hypothesis was partially supported.

Hypothesis 3

It was hypothesized that general stress would not explain a significant amount of variance in child externalizing behaviors over and above dysfunctional parenting and parenting stress. This was tested as the second step of the stepwise regression of the PSS, the APQ-negative discipline subscale, and the DASS-stress scale on the CBCL- Externalizing scale.

The overall model explained 42.5% of variance in child externalizing behavior, $F(3, 62)$=15.27, p<.001. There was a significant R^2 change of .07, $F(1,62)$=7.25, p<.01. Thus, this hypothesis was not supported. Both parenting stress (β=.35, p=.01) and overall stress (β=.37,

$p<.01$) contributed significantly to the overall model while dysfunctional parenting did not (β=-.01, $p>.05$).

Hypothesis 4

It was hypothesized that income would influence the association between parenting strategies and child externalizing behaviors (Figure 2). This was tested with a moderation analysis with 5,000 bootstrap samples (Hayes, 2017). We predicted that family income ratio would moderate the association between the APQ-negative discipline subscale and the CBCL-Externalizing scale. The overall model was not significant, $R^2=.10$, $F(3,63)=.2.41$, $p=.07$. Income was not found to moderate the link between negative parenting strategies and child externalizing behavior, $b= -.05$, $SE=.26$, $t(63)=-.21$, $p>.05$.

Hypothesis 5

It was hypothesized that income would influence the link between parenting stress and child externalizing behaviors (Figure 3). This was tested with a moderation analysis with 5,000 bootstrap samples (Hayes, 2017) of family income ratio moderating the association between the PSS and the CBCL-Externalizing scale. The overall model was significant $R^2=.36$, $F(3,59)=11.16$, $p<.001$. However, income did not moderate the association between parenting stress and child externalizing behaviors, $b=.07$, $SE=.10$, $t(59)=.67$, $p>.05$.

Post-hoc Analyses

Given the null findings regarding Negative Discipline and child outcomes we included other potential covariates in the regression analysis. Specifically, we controlled for child age and months caregiving to examine if poorer parenting was predictive of child behavioral problems. Negative discipline did not explain variance in child externalizing behavior in either of the steps (Table 4). Additionally, we examined the association of study variables with the Positive Reinforcement and Positive Discipline subscales of the APQ (Table 5). Positive discipline was

not associated with the other study variables and reinforcement was only correlated with parenting stress.

CHAPTER V

CONCLUSIONS

This study examined multiple factors associated with child outcomes among grandfamilies. Specifically, parenting practices, caregiver stress, income, and child behavioral problems were examined. As expected, grandparents in our sample had high levels of both general stress and stress related to parenting. Consistent with previous findings, general stress and parenting stress were positively associated with both poorer parenting and child behavioral problems. Contrary to what was predicted, neither type of stress was more strongly linked to these outcomes. Additionally, general stress accounted for differences in child outcomes over and above stress related to parenting. This suggests that general stress and parenting stress are unique constructs that both impact child functioning. Stress related to parenting included CGs' perception of how parenting impacts their lifestyle and the quality of the CG-grandchild relationship. Parenting stress was strongly associated with general stress symptoms (i.e., irritability, difficulty relaxing), but general stress captured distinct aspects of stress that may be important for understanding child behavior. Our results indicate that a comprehensive understanding of the many stressors grandparents face is necessary to fully understand child externalizing symptoms. Parenting stress is just one facet of the many stressors CGs face. CGs have also described stress more specific to their situation such as loss of the grandparenting role and negative perception from their community (Hansen et al., 2022). Situational stressors, relational stressors, and physiological manifestations of stress may all individually contribute to grandchild well-being.

Unsurprisingly, grandchildren in our sample had high levels of behavioral problems. Contrary to what was expected, dysfunctional parenting was not a useful construct for understanding differences in grandchild behavior. Although negative discipline strategies were linked with both stress and child outcomes, dysfunctional parenting did not help to explain child outcomes when accounting for CG stress. The association between dysfunctional parenting and child behavioral problems has been well established in traditional families (Sege et al., 2018; Stormshak et al., 2000). In a previous study using the APQ, poorer parenting was associated with disruptive behavior in 9- to 12- year-olds (Frick et al., 1999). Additionally, longitudinal studies have found that parenting predicts later child externalizing behavior (Glatz & Buchanan, 2015; Hosokawa & Katsura, 2017). Among grandfamilies, poorer grandmother parenting has also been linked with grandchild externalizing behavior (Smith et al., 2018). There are a few potential explanations for why our findings were inconsistent with the previous literature. The negative discipline subscale primarily measures inconsistent/lax parenting strategies. Although others have reported many CGs are inconsistent in their parenting (Hayslip & Kaminski; Kaminski et al., 2008), CGs in our study were generally consistent. Many of the CGs scored low on negative discipline strategies which led to a restricted range of scores. Therefore, lack of variability may have contributed to our discrepant findings. It is also possible that the strategies captured in the negative discipline subscale are less important in grandfamilies. Traditional grandparents are often associated with being more lax with their grandchildren. Given the dual role CGs hold, laxness may not negatively impact grandchildren like it would in traditional families because it is expected of a grandparent. Alternatively, the effects of caregiving may also depend on the grandchild's age and how long they have been primarily parented by their grandparents. There is likely a difference in outcomes for children who spent most of their lives raised by biological parents and children who have always seen their grandparent as more of a parental figure. The impact of CG parenting may only be recognizable after a certain length of time in a primary caregiver role that was not captured by the limited size of our sample.

In contrast to the Family Stress Model, income was not associated with child outcomes. Grandfamily income ratio did not influence the associations between stress and child externalizing behavior nor parenting and child externalizing behavior. In fact, income ratio was not significantly associated with any of these variables. There has been strong support for the link of income and stress, child externalizing behavior, and parenting (Lansford et al., 2019; Roubinov & Boyce, 2017; Stone et al., 2016). Differential outcomes may be due to the fact that many of our families' income ratio fell below the poverty line. The median household income of grandfamilies in our sample was below the national median (U.S. Census Bureau, 2021). Therefore, our sample had many participants who likely experience financial hardship and stress related to finances. The general trends of low income levels, high caregiver stress, and high levels of child externalizing symptoms are consistent with what would be expected based upon past research.

Clinical Implications

The high levels of both CG and grandchild mental distress observed in our study highlight the need for psychological interventions informed by the unique needs of grandfamilies. CGs would likely benefit from learning ways to manage their stress and parenting strategies to help manage their grandchild's behavior. External stressors such as financial instability, physical health concerns, and changes in relationships also need to be considered when treating CGs. Treatment cost or physical constraints may become a barrier to receiving help if not addressed. Clinicians also need to account for grandchild factors that may impact treatment. Many of the grandchildren in our study had prenatal exposure to substances which has been linked with later externalizing behavior and cognitive deficits (Tien et al., 2020; Wozniak et al., 2019). Providers need to be mindful of the increased risk for psychiatric disorders and screen for cognitive delays that may impact efficacy of treatment. A comprehensive approach to treatment is needed to address the unique needs of grandfamilies. Providing families with access to community services, opportunities to build social support, and family therapy would help to address the many factors impacting their overall well-being. Fruhauf et al. (2022) recently implemented an intervention

that focuses on grandparents, grandchildren, and individuals serving grandfamilies. Part of the intervention included CGs talking in a group format. Group treatment may be especially beneficial to CGs given feelings of isolation. Montoro-Rodriguez et al. (2021) found evidence for brief group sessions in improving CG's well-being. Fruhauf et al. (2022) also found that needs of grandfamilies differed based on the state in which the intervention occurred. Flexibility may be necessary to accommodate the specific services needed depending on where the grandfamily lives. Wraparound treatments would likely be especially beneficial for grandfamilies. However, further exploration of interventions geared towards grandfamilies is needed.

Policy

Policy changes are needed before comprehensive treatments can be implemented. Currently, many CGs do not receive the same financial support provided to foster parents. Others do not have the legal authority necessary to seek treatment for their grandchildren. CGs may also be unaware of supports that are available to them. In a report to congress, the Advisory Council to Support Grandparents Raising Grandchildren (2021) drafted recommendations for addressing these issues. First, awareness of grandfamilies and their needs is necessary so that they can receive needed support. Training educators, pediatricians, and other professionals would ensure grandfamilies are receiving the best care and provide opportunities to be connected with resources. Kinship navigator programs are another helpful support to CGs. Funding these programs would help CGs navigate healthcare, social services, legal aid, and other processes they need to go through to care for their grandchild. These resources can lessen some of the stress of caregiving. Additionally, awareness of the needs of grandfamilies can potentially lead to earlier intervention and prevention of problems.

Limitations and Strengths

Limitations of our study are important in interpreting our findings. First, due to the cross-sectional nature of our study, we do not know if CG stress predicts later child behavior. Next, the demographic make-up of our sample differs from national data which limits the generalizability

of our findings. Our subjects primarily lived in the Midwest and South which may explain high rates of substance exposure among grandchildren. CGs in other regions of the country may have different needs or barriers that are more impactful. Additionally, the ethnicity of our sample does not match known demographics of CGs (25% African American, 8% American Indian) (Generations United, 2021). Only 10% of grandparents in our study identified as Black/African- and 5% were American Indian. Our results may differ because ethnically minoritized CGs experience other stressors and barriers that may impact the factors we examined. Excluding the impact of experiences due to marginalization has been noted as a weakness of CG intervention literature in general (McCarthy, 2021).

Our study also had many strengths. It is one of the few using standardized measures. Additionally, many previous studies have been concentrated in small regions of specific states. Recruiting online allowed for CGs across the country to participate. This study is among the few examining the FSM in the context of grandfamilies. Insight into the links between the various factors affecting grandchild emotional health will provide insight into potential areas of intervention to improve the lives of grandfamilies.

Future Directions

Future research can focus on how these factors change over time and influence one another. A longitudinal study would provide a better understanding of the bi-directional nature of the links between the many factors influencing child outcomes. Additionally, closer examination of the many other stressors grandfamilies face may enhance intervention. Examining the role of other factors, such as years caregiving, initial adjustment period, and the physical decline experienced by CGs, on stress over time is warranted. The impact of COVID-19 and increase in CGs resulting from parental death may also change the demographics and needs of grandfamilies. CGs dealing with grief over losing a child may have very different stressors than CGs who become caregivers due to parental substance use. Finally, grandfamilies have many strengths.

Identifying and capitalizing on the many protective factors can build resilience among grandfamilies.

Conclusion

Grandparents can provide needed care to their grandchildren when biological parents are unable to be caregivers. CGs' positive parenting can provide children with a consistent and warm environment. Many factors influence the overall well-being of grandfamilies. CGs experience a variety of stressors that impact their grandchild's behavioral health. Although CGs and grandchildren are more vulnerable to mental distress, there are practical stressors that can be targeted to alleviate suffering. Much more research on grandfamilies is needed to promote resilience among grandfamilies.

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APPENDICES

APPENDIX A

TABLES

Table 1. *Demographics*

Variable	N = 79 (%)
Annual Household Income	
$4,999 or less	3 (4.0)
$5,000 - $14,999	3 (4.0)
$15,000- $24,999	9 (12.0)
$25,000- $39,999	23 (30.7)
$40,000- $49,999	7 (9.3)
$50,000- $74,999	11 (14.7)
$75,000- $99,999	7 (9.3)
$100,000- $149,999	8 (10.7)
$150,000- $199,999	3 (4.0)
$200,000 or higher	1 (1.3)
Marital Status	
Married	40 (50.6)
Widowed	9 (11.4)
Living with partner	3 (3.8)
Divorced	17 (21.5)
Legally separated	4 (5.1)
Single/Never married	6 (7.6)
Caregiver Race/Ethnic Background	
White	55 (70.5)
Black/ African American	8 (10.3)
Hispanic/ Latinx	5 (6.4)
Asian	2 (2.6)
American Indian	4 (5.1)
Biracial	3 (3.8)
Other	1 (1.3)

Table 2. *Descriptive Statistics*

Variable	N = 79 (%)
DASS-Stress score	
Normal (0-7)	45 (57)
Mild (8-9)	9 (11.4)
Moderate (10-12)	13 (16.5)
Severe (13-16)	10 (12.7)
Extremely Severe (17-21)	2 (2.6)
CBCL-Externalizing T-score	
Normal (0-59)	45 (58.4)
Borderline (60-64)	7 (9.1)
Clinical (65+)	25 (32.5)
Income Ratio	
Below Poverty Line (<1.0)	15 (20.8)
Low-Income (1.0-1.3)	12 (16.7)
Above 1.3	45 (62.5)

Table 3. *Hierarchical Regression*

	b	*SE B*	*β*	*p*
Step 1				
Constant	-16.12	5.70		.01
Negative Discipline	.20	.33	.07	.54
Parenting Stress	.56	.12	.57	<.01
Step 2				
Constant	-9.30	6.00		.13
Negative Discipline	-.02	.32	-.01	.95
Parenting Stress	.35	.13	.35	.01
General Stress	.94	.35	.37	.01

Note. R^2=.36 for Step 1; R^2*change*=.07 for Step 2 (all *p*s≤.01)

Table 4. *Hierarchical Regression with Covariates*

	b	*SE B*	*β*	*p*
Step 1				
Constant	-22.71	7.65		<.01
Months Caregiving	.03	.04	.09	.47
Child Age	.75	.74	.12	.31
Negative Discipline	.17	.35	.05	.64
Parenting Stress	.53	.11	.53	<.01
Step 2				
Constant	-15.12	7.57		.05
Months Caregiving	.06	.04	.16	.15
Child Age	.59	.69	.10	.40
Negative Discipline	-.13	.34	-.04	.71
Parenting Stress	.28	.13	.29	.04
General Stress	1.08	.35	.42	<.01

Note. R^2=.39 for Step 1; R^2*change*=.09 for Step 2 (all *p*s<.01)

Table 5. *Descriptive Statistics and Correlations of APQ subscales*

Variable	*M*	*SD*	1	2	3	4	5	6
1. APQ-Negative Discipline	14.41	4.12	--					
2. APQ-Positive Reinforcement	25.58	2.75	-.20	--				
3. APQ-Positive Discipline	16.09	2.82	.13	-.09	--			
4. Income Ratio	2.18	1.64	.05	.02	-.12	--		
5. PSS	46.45	12.63	.40**	-.38**	.06	-.03	--	
6. DASS-Stress	7.03	4.65	.39**	-.10	.04	.08	.67**	--
7. CBCL-Externalizing	12.56	12.06	.27*	-.10	.15	-.13	.58**	.58**

APPENDIX B

FIGURES

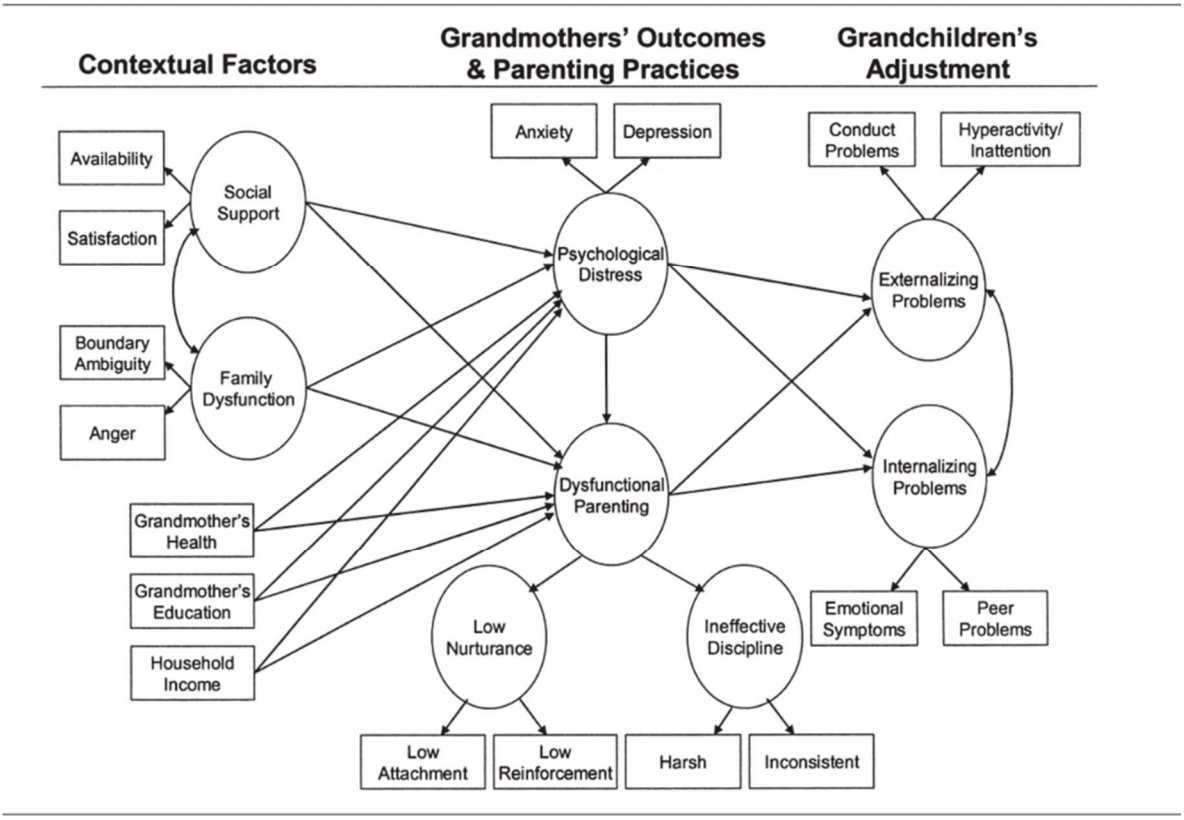

Figure 1. Expanded version of the FSM as applied to grandfamilies (Smith et al., 2008)

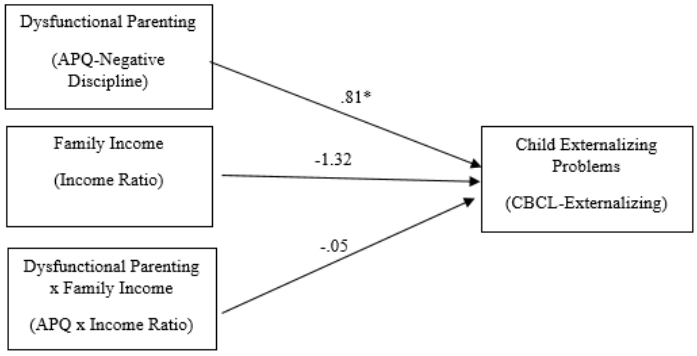

Figure 2. Hypothesis 4

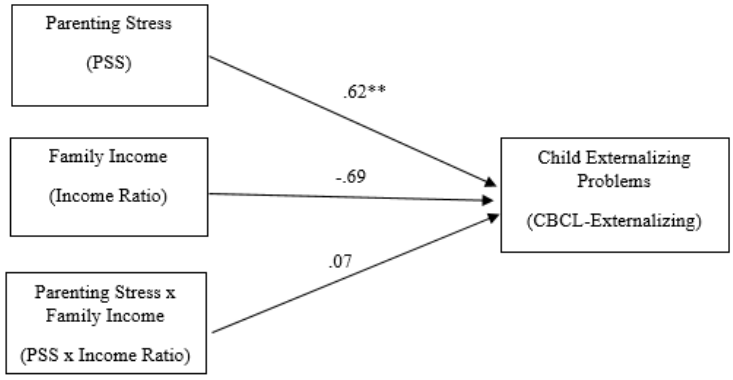

Figure 3. Hypothesis 5

APPENDIX C

THESIS PROPOSAL LITERATURE REVIEW

The number of grandparents primarily responsible for raising their grandchildren (custodial grandparents; CGs) has been steadily increasing for decades and has approximately doubled in the U.S. since the 1970s (Chan et al., 2019; U.S. Census Bureau, 2018). CGs are grandparents who have been their grandchildren's full-time caretakers for a significant amount of time (usually at least 3 months). These grandparents and their grandchildren make up what is called grandfamilies. In some situations, the goal is for the child to return to the parent rather than remain under the grandparents' care. However, the term CG would still apply to the grandparent while they maintain the majority of parenting duties (even if the arrangement is not legally registered or mandated). CGs who have legal custody of their grandchildren differ from foster parents who are non-relative caretakers. Parental involvement varies by situation but grandparents who are primary caretakers are considered CGs. Homes where there are no parents present are also referred to as skipped- generation households (which is comprised of CGs and their grandchildren). Grandparents who assist with parenting and/or live in their children's house are not typically considered CGs. In these instances, the grandparents may be considered co-parents depending on the level of responsibility. Finally, traditional families or traditional parents refer to situations where parents (biological, step, or adoptive) are primarily the caretakers. There are multiple reasons CGs raise their grandchildren. In 2018 over 2.4 million grandparents were responsible for their grandchildren (U.S. Census, 2018). This arrangement typically results from parental inability to care for their children due to adverse circumstances including incarceration, substance abuse, and child abuse or neglect (Choi, 2016; Smith et al., 2019). Oftentimes, grandparents take over informally when they see a problem or believe they can better care for the child (Davey & Lynch, 2016). Other times they are sought by social services as a first placement option to keep children out of foster care (Baker et al., 2008; Cross & Day, 2008; Haylsip & Kaminski, 2005; Siordia & Rauktis, 2016). Custodial grandparents represent a diverse group.

Custodial grandparenting is more common among ethnic minorities, lower income families, and women (U.S. Census, 2018). The majority of the research on custodial grandparenting focuses on grandmothers due to the fact that over half of CGs are women. Also, women caregivers are typically the focus of parenting research in general. On average CGs are 4-10 years younger than their traditional grandparent counterparts with an average age of 55-62 (Chan et al., 2019; David & Nelson-Kakulla, 2018). Furthermore, CGs have less education than traditional parents and adults in general (Baker & Mutchler, 2010; Muthiah et al., 2019). While approximately 4% of grandparents in the U.S. are CGs, the likelihood of becoming a CG differs based on race and ethnicity. Minorities are overrepresented within the CG population compared to white, non-Hispanic grandparents (Choi et al., 2016; Fuller-Thomson et al., 1997; Haylsip & Kaminski, 2005; Hayslip et al., 2019; Siordiav& Rauktis, 2016). Specifically, individuals who identified as African American were more likely (with around 80% higher odds) than other racial or ethnic groups to become CGs (Fuller-Thomson et al., 1997; Hayslip et al., 2019). Additionally, Mexican American grandparents are four times more likely than Caucasian grandparents to assume a custodial grandparenting role (Choi, 2016). Although this disparity is likely influenced by many factors, one lies in the reasons for assuming primary parenting responsibilities. White CGs typically assume a parenting role as a result of a crisis situation (parental death, legal troubles, etc.). Whereas racial minority grandparents, in addition to crises, take over due to socioeconomic difficulties (Goodman & Silverstein, 2006). This may be in part because minority CGs experience higher rates of poverty than white CGs (Siorda & Rauktis, 2016). Custodial grandparenting is much more common in low socioeconomic strata. CGs are more likely to have lower income compared to other families and individuals in their area (Choi, 2016; Edwards, 2003; Fuller-Thomson et al., 1997). Data from a national U.S. sample revealed that 68% of custodial grandmothers had total household incomes either near or below the poverty line (Mills et al., 2005). Despite struggling financially, CGs often do not get the same federal assistance that foster parents or legal guardians receive. This is partially due to difficulties understanding how to apply

or obtain assistance as well as ineligibility (Baker et al., 2008; Hayslip et al., 2019). Thus, the full financial burden resulting from costs such as clothing and health care falls on CGs (Baker et al., 2008; Cooper, 2012).

Characteristics of CGs

While we know about general CG demographics, information regarding individual characteristics varies and is inconsistent. However, there are general trends suggesting that parenting impacts CG health and stress levels. A Taiwanese study found CGs may experience better health including higher levels of well-being (Ku et al., 2013). Similarly, others have found that grandparent caregivers have better or similar health to their peers, but these studies typically are not examining CGs specifically or take place outside of the United States (Chen & Liu, 2012; Sadruddin et al., 2019). The vast majority of findings suggest that compared to their peers and other caregivers CGs have worse overall health (Hayslip & Kaminski, 2005; Minkler & Fuller-Thomson, 1999; Musil et al., 2011). CGs have higher rates of many physical illness and chronic conditions and also report declines in their health as they parent (Baker & Silverstein, 2008; Choi et al., 2016; Hadfield, 2014; Peterson, 2017; Taylor et al., 2017). CGs are also less likely to take preventative health care measures, such as getting flu vaccines or cholesterol screenings, after taking on a parenting role (Baker & Silverstein, 2008). Mentally, CGs fare worse with elevated risk for psychological illnesses such as depression and anxiety (Ge & Adesman, 2017; Goulette et al., 2016; Haylsip & Kaminski, 2005). CGs also have lower levels of general emotional well-being (Choi et al., 2016; Fuller-Thomson & Minkler, 2000).

One negative impactor of well-being is stress. Stress in itself is a major problem among CGs. While younger CGs and single CGs experience the highest levels of distress, custodial grandparents as a whole have been documented to have elevated levels of stress in many facets of life (Conway et al., 2011; Mills et al., 2005; Smith et al., 2008). Stress may be especially high during the transition to assuming a parenting role and when the grandchild transitions out of the CG's care (Meyer & Kandic, 2017; Musil et al., 2011).

CGs cite a myriad of specific stressors as contributing to high levels of stress. Financial strains, interpersonal challenges, and health are often reported sources of stress (Lee et al., 2016). CGs with poorer health experience higher levels of stress (Lee et al., 2016). This includes fear of their poor health rendering them unable to parent (Ge & Adesman, 2017). CGs also experience more stress resulting from family relationships compared to noncaregiving grandmothers and those in multigenerational homes (Musil et al., 2011). Concerns over the relationship with their own child has been reported to be a factor in feelings of subjective stress (Lee et al., 2016; Shakya et al., 2012). Additionally, as parental responsibilities grow some married CGs experience a decrease in marital satisfaction which may then lead to higher divorce rates (Jendrek, 1993). Lack of relationships also causes stress as low levels of social support are associated with higher stress levels (Doley et al., 2015; Kelley & Whitley, 2003).

Perhaps one of the most important factor is stress related to parenting. Ross and Aday (2006) found that 94% of a sample of African American CGs had significant levels of parenting stress. Lee et al. (2016) found that when accounting for income, demographic differences, and other risk factors, CGs experienced more parenting stress than their traditional parent counterparts. Even when compared to traditional parents of children with severe behavioral issues, a group of CGs (with and without grandchildren with behavioral problems) still experienced more stress (Sprang et al., 2015).

The association between these stressors and stress is unknown, however there are many ideas about the ways in which they are linked. The sometimes abrupt changes to CGs' daily life and resulting adjustment may contribute to the enhanced stress towards the beginning of their time caregiving (Meyer & Kandic, 2017). In addition to adjustment, some grandparents are concerned about the perceived stigma of being failures as parents to their own children (Hayslip et al., 2019). Some suggest that the stigma of failing as a parent is linked to feelings of being different than their peers and feelings of isolation that are often reported by CGs (Haylsip & Kaminski, 2005; Pitcher, 2002). Feelings of loneliness may also be exacerbated by feeling

different than traditional parents with same-aged children (Lee et al., 2016). Although CGs are younger than other grandparents, there is still a significant age gap between CGs and traditional parents. Based on these findings, researchers have suggested that feeling different may also be related to stress. CGs are also more physically isolated from others their age. Taking care of grandchildren limits time CGs can spend with friends and their spouse due to new responsibilities (Butler et al., 2005; Jendrek, 1993). Time is limited by both demands of parenting and increased expenditures that may lead to a disruption in retirement plans (Hayslip et al., 2019). Unfortunately, this may impact their ability to socialize and maintain relationships that provide support. Unsurprisingly, Mendoza et al. (2020) found 64% of a sample of 74 grandparents felt very socially isolated. This resulting lack of social support may lead to adverse consequences as it has been found to be a predictor of decreased health (Hayslip et al., 2015). CG's mental health may also be affected which Xu et al. (2020) found to be both directly related to parenting stress and also an influence on the link between financial difficulties and parenting stress. The culmination of all this stress may exacerbate health issues which in turn may increase overall stress levels, creating a vicious cycle. The unique stressors CGs face resulting from their age, abrupt role change, and health all impact how they parent.

CG Parenting

Overall, specific parenting styles (such as attitudes and approaches) and strategies (specific behaviors) in custodial grandparents have been shown to differ from those of traditional parents. Grandparents as a whole have reported having antiquated ideas about parenting (Hayslip et al., 2019). For example, three-quarters of a sample of grandparents strongly agreed or agreed that parents are too lax with children. Furthermore, the vast majority believed parenting and discipline in their day to be better (David & Nelson-Kakulla, 2018). CGs specifically highly value obedience and are less accepting than traditional parents of children having differing opinions (Hayslip & Kaminski, 2005). CGs also have been found to believe children should fill emotional roles that are typically the parent's responsibility (Kaminski et al., 2008). Additionally, CGs view

corporal punishment as necessary to prevent their grandchildren from ending up like their parents (Dannison & Smith, 2003).

However, there is little evidence that CGs actually use more discipline and not all studies have found different beliefs of corporal punishment compared to traditional parents (Kaminski et al., 2008). Some have found that custodial grandparents use the same parenting strategies they used when raising their own children (Dolbin-MacNab, 2006; Fuentes et al., 2008). The strategies observed vary. There is evidence that CGs employ negative strategies. Bratton et al. (1998) observed that CGs had trouble disciplining and setting limits. When compared to traditional parents, CGs may use less helpful strategies. Kaminski et al. (2008) found CGs scored lower than traditional parents on a measure of awareness of and responsiveness to children's needs and emotions. Hayslip & Kaminski (2008) found half of CGs to be inconsistent and show anger when disciplining at least sometimes; but they did not compare CG parenting to that of traditional parents. However, they also found that half of CGs often used good discipline and 80% used positive parenting strategies. In contrast, others have observed positive strategies used by CGs. Among a sample of grandparents with adolescents in Spain, interviews revealed flexible parenting styles as opposed to overly rigid or too lax (Fuentes et al., 2008). Regardless of parenting style or strategy, most CGs have positive relationships with their grandchildren. CGs have described having an affectionate relationship with their grandchildren (Fuller-Thomson et al., 1997; Pitcher, 2002). Fuentes et al. (2008) found over 90% of CGs described their relationship with their grandchild as good.

Differences in parenting between traditional parents and CGs may be the result of many factors. Researchers argue that because CGs have more life and parenting experience they have an advantage over traditional parents (Hayslip et al., 2019). However, no studies have tested this claim. Age likely contributes to differences and was listed by CGs as contributing to feelings that parenting the second time was more difficult (Dolbin-MacNab, 2006). Even within CGs, larger age gaps between CGs and grandchildren are associated with lower awareness, availability, and

use of positive parenting strategies (Rodgers-Farmer, 1999; Smith et al., 2008). Due to increased age CGs typically have more health issues. CG health problems can lead to a reliance on grandchildren to complete necessary daily activities which leads children to take on a caregiver role (Kaminski et al., 2008). CGs also have to deal with the unclear role of being both a grandparent and parent (Martin et al., 2020). While grandparents are viewed by society as being more lenient, parents do not get to be as lax. Finally, others have proposed that differences between traditional parents and CGs parenting has nothing to do with the type of parent. Pilksauskas and Dunfron (2016) found no differences in parenting when CGs were compared to urban parents. Therefore, they concluded differences in other studies are better explained by socioeconomic status.

Overall, there is little agreement whether parenting differs among CGs. There is even less data on specific parenting practices and discipline strategies of CGs in general. The little information we do have relies on qualitative data and lacks standardized measures. It's unclear whether and how parenting by CGs differs from that of traditional parents. The lack of consistent findings in research to date suggests there may be different underlying mechanisms that influence how CGs parent.

Characteristics of Grandchildren

Around 4% of children aged 0-17 live in a grandparent headed household (National Survey of Children's Health, 2017-2018). Although the majority of the literature on grandfamilies focuses on CG health, there is evidence that custodial grandchildren differ from their peers in many areas of life. Children raised by CGs have worse physical, mental, and academic outcomes than children raised by their parents (Sadruddin et al., 2019). Academically grandchildren tend to perform worse in school and are less attentive in class than children from traditional families (Campbell et al., 2006; Pilkauskas & Dunifron 2016). Grandchildren are also more likely to be suspended or expelled from school and are less likely to complete high school compared to children raised by two biological parents (Monserud & Elder, 2011). Furthermore, custodial

grandchildren's physical health is among the poorest compared to children in other family structures (Conway & Li, 2012; Saddruddin et al., 2019; Ziol-Guest & Dunifon, 2014). For example, Bramlett and Blumberg (2007) found custodial grandchildren were much more likely to have asthma-related health problems along with other physical health concerns. Additionally, they discovered that compared to children from traditional families, grandchildren are four times more likely to have developmental, emotional, and behavior problems.

Custodial grandchildren are also at a higher risk for many psychological disorders (Smith & Palmieri, 2007). Smith et al. (2019) found that independent of race/ethnicity and gender, grandchildren had higher negative emotionality and behavioral symptoms compared to children in traditional families. Therefore, they have a higher likelihood of developing a mental disorder. More specifically, custodial grandchildren have higher levels of externalizing disorders and overall behavioral problems (Edwards, 2006; Ge & Adesman, 2017; Pittman, 2007; Smith & Palmieri, 2007). In one sample of custodial grandchildren 1/3 had behavioral problems (Kelley et al., 2011).

Given the reasons why many children are in CG care it is not surprising that they are at a higher risk for psychological disorders. Children often are raised by grandparents after experiencing various traumas which led to their biological parents being unable to parent. Sprang et al. (2015) found that almost ¾ of grandchildren in a sample of 297 custodial grandfamilies had experienced or been exposed to trauma. Additionally, certain risk factors put grandchildren at a higher risk for physical illnesses. For example, many of these children grow up in poverty and without health insurance (Baker & Mutchler, 2010; Cross & Day, 2008).

Although the majority of the literature suggests custodial grandchildren are worse off than their peers, some studies indicate that grandchildren do not differ or are even better off than their peers. Solomon and Marx (1995) found custodial grandchildren did not have worse physical health or increased school behavioral problems compared to children from two-parent homes. Additionally, findings by Goulette et al. (2016) suggest children raised by grandmothers have

lower levels of violence and no differences in antisocial behavior compared to children raised by biological mothers or other female caregivers. Some have explained discrepant findings as resulting from differences in how grandchildren are parented. Differences in externalizing problems between custodial grandchildren and other children are thought to be nonexistent when grandchildren have a loving and trusting relationship with their grandparent (Goulette et al., 2016; Poehlmann et al., 2008). Hayslip and Patrick (2003) argued that CGs may provide grandchildren with a buffer from trauma.

Conflicting findings on custodial grandchild outcomes point to the need for further research on the mechanisms that lead to differential outcomes. Currently, we do not know which grandchildren are most at risk for developing mental disorders. However, there is evidence that relationships with their grandparent may be a protective factor. Poehlmann et al. (2008) found that CGs who interacted with children in a warm manner reported lower levels of externalizing behaviors in the children. Additionally, consistency was linked with better outcomes (Smith et al., 2015). While parenting has been identified as a predictor of child externalizing behaviors (Smith & Richardson, 2008), very few have examined specific parenting strategies of CGs.

Parenting and Child Outcomes

Parent characteristics and practices are crucial for understanding child adjustment. While we do not know a lot about specific parenting practices in custodial grandparents, we do know parenting styles and strategies considerably influence child behavior. Strategies such as providing support and consistent discipline have all been linked with more favorable child outcomes (Amato & Fowler, 2002). In contrast, lack of these practices and harsh discipline are associated with child externalizing behaviors (Gryczkowski et al., 2010; Prevatt, 2003). When children have externalizing problems parents report higher levels of stress, another predictor of child maladjustment (Kelley et al., 2011; Neece et al., 2012).

Summary & Critique:

The effects of custodial grandparenting are still unclear. Research on grandfamilies is scarce and findings are inconsistent. The little we do know is heavily based on unstandardized measures and focuses primarily on CG health. While findings are not entirely consistent, it is likely that CGs experience higher stress and more financial difficulties than traditional parents and their same-aged peers. Similarly, information on outcomes for custodial grandchildren is inconclusive and lacking. However, we do know they experience high levels of trauma and may take on parental responsibilities. They are also vulnerable to externalizing problems due to lower SES, high exposure to trauma, and caregivers with high levels of distress. Poor parenting strategies found among CGs also increase the risk for grandchild externalizing problems. Currently few studies have examined the association between these vulnerability factors and child behavior among CG families. Therefore, how they impact one another is largely unknown.

Contrastingly, there is evidence this situation can be positive for both the grandparent and the grandchild. CGs may experience better health including higher levels of well-being and grandchildren may be protected from negative effects of trauma (Hayslip & Patrick, 2003; Ku et al., 2013). Placements within the family can be highly successful and children placed with family members have been shown to have better behavioral outcomes than children in foster care and children in single parent homes (Rubin et al., 2008;Winokur et al., 2014).

We see evidence that the association between parental stress, parenting, and behavioral outcomes found in traditional families is similar in grandfamilies. CGs with higher levels of stress have been found to use ineffective parenting strategies like inconsistent discipline (Downey & Cayne, 1990; Rodgers-Farmer, 1999; Smith & Richardson, 2008). Stress levels are often exacerbated when their grandchildren have behavioral issues (Conway et al., 2011; Doley et al., 2015). Behavioral outcomes seem to be influenced by grandparent and grandchild interactions. Grandchildren who have fewer warm interactions and strained relationships with their CGs have higher levels of externalizing behaviors than those with more positive interactions (Hayslip et al.,

2000; Poehlmann et al., 2008). Furthermore, ineffective parenting strategies have been associated with poor grandchild adjustment and behavioral issues (Smith & Richardson, 2008).

The Family Stress Model (FSM; Conger et al., 2000) was developed to provide a framework for understanding the complex link between economic hardship and child adjustment. Variables include economic pressure, negative financial events, and caregiver relational conflict. Caregiver depression (both primary and secondary caregivers) impacts child adjustment both directly and through parenting. Over the years the FSM has been modified to include caregiver distress in general (rather than specifically depression), specified parenting strategies, and child behavior problems. There are researchers who have found support for this model. Jocson and McLoyd (2015) found parental distress was related to worse parenting, which in turn was predictive of later child maladaptive behaviors. Additionally, Hardaway and Cornelius (2014) found a pathway from low income to externalizing problems via maternal distress and parenting. The FSM has been adapted by Smith et al. (2008) for use in conceptualizing the association between grandparent stress, parenting, and child outcomes. In this model, grandparent distress (anxiety and depression) is thought to be associated with child externalizing problems both directly and through poorer parenting. Dysfunctional parenting includes both low levels of nurturance and ineffective discipline. Smith et al. (2008) discovered parenting mediated the link between CG distress and child externalizing behaviors. They also found that the association between CG distress and child's overall psychological problems was dependent on other psychosocial circumstances like social support and relationships with the birth parent. Later, Smith and colleagues (2015) found more support for the mediation as well as correlations between CG distress, parenting strategies, and grandchild difficulties. Families who received treatment targeting parenting as well as a CBT intervention improved in all three of the variables over a control (Smith et al., 2018[2]). Additionally, they included specific strategies and found grandmother distress (anxiety and depression) was associated with harsh, inconsistent, and ineffective discipline. Furthermore, harsh and inconsistent discipline were associated with

externalizing symptoms. Only harsh discipline mediated the path between grandmother distress and child externalizing problems (Smith et al., 2018[1]). While the research is promising, to our knowledge Smith and his collogues have conducted the only studies examining grandfamilies analyzed within the context of the FSM from two samples of custodial grandmothers and their grandchildren. Findings on specific parenting strategies was limited to a sample of grandmother's seeking treatment for their grandchildren in metropolitan areas and thus does not represent custodial grandparents as a whole. Additionally, they did not include the other pathways through which grandparent distress leads to child externalizing behaviors. Finally, their model does not include stress related to parenting although we know it is experienced by many CGs and is associated with poorer child outcomes.

The FSM is not without limitations. It is designed to be a longitudinal causal model looking at parental effects on child behavior. However, there is clear evidence these associations are reciprocal. Studies have found a transactional relationship between parental stress as well as parental behaviors and child behavior problems (Neece et al., 2012; Rolon-Arroyo et al., 2018). Hayslip et al. (2014) found similar results among CGs. They also found that grandchild difficulties predicted grandparent distress as opposed to what the FSM would predict. Finally, Xu et al. (2020) found parenting stress was predicted by grandchild mental health. As a result of the evidence of transactional associations between factors, this model should be explored without an explicit causal framework.

While preliminary findings support components of the Family Stress Model we need a more comprehensive approach to examine multiple vulnerability factors together to determine their individual and combined impacts. Also, we do not know under what conditions specific factors like stress lead to negative child outcomes and we need to test more aspects of the FSM that have not been well studied. It is likely that parenting influences the extent to which stress affects behavioral problems. Certain parenting strategies may be protective, but we do not yet have a clear picture as to which strategies CGs use. Understanding the positive strategies and deficits in

CG parenting can lead to development of better treatment interventions. Also, addition of other factors, like financial difficulties and stress related to parenting, will provide a clearer picture of the complex association between factors and other areas to intervene.

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APPENDIX D

IRB APPROVAL

Oklahoma State University Institutional Review Board

Date:	03/30/2021
Application Number:	IRB-21-168
Proposal Title:	The Well-Being of Grandfamilies
Principal Investigator:	Makena Kaylor
Co-Investigator(s):	
Faculty Adviser:	MAUREEN SULLIVAN
Project Coordinator:	
Research Assistant(s):	
Processed as:	Exempt
Exempt Category:	

Status Recommended by Reviewer(s): Approved

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in 45CFR46.

This study meets criteria in the Revised Common Rule, as well as, one or more of the circumstances for which continuing review is not required. As Principal Investigator of this research, you will be required to submit a status report to the IRB triennially.

The final versions of any recruitment, consent and assent documents bearing the IRB approval stamp are available for download from IRBManager. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be approved by the IRB. Protocol modifications requiring approval may include changes to the title, PI, adviser, other research personnel, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and consent/assent process or forms.
2. Submit a request for continuation if the study extends beyond the approval period. This continuation must receive IRB review and approval before the research can continue.
3. Report any unanticipated and/or adverse events to the IRB Office promptly.
4. Notify the IRB office when your research project is complete or when you are no longer affiliated with Oklahoma State University.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact the IRB Office at 405-744-3377 or irb@okstate.edu.

Sincerely,

Oklahoma State University IRB

VITA

MAKENA L. KAYLOR

Candidate for the Degree of

Master of Science

Thesis: USING THE FAMILY STRESS MODEL TO UNDERSTAND THE ASSOCIATION OF PARENTING STRESS, PARENTING STRATEGIES, AND CHILD BEHAVIORAL OUTCOMES IN GRANDFAMLIES

Major Field: PSYCHOLOGY

Biographical:

Education:

Completed the requirements for the Master of Science in Psychology at Oklahoma State University, Stillwater, Oklahoma in December 2022

Completed the requirements for the Bachelor of Arts in Psychology at Seattle Pacific University, Seattle, Washington in 2016.

Experience:
Graduate Researcher, Oklahoma State University
Graduate Teaching Assistant, Dept. of Psychology, Oklahoma State University
Graduate Clinician, Psychological Services Center, Oklahoma State University

Professional Memberships:
American Psychological Association
Association for Behavioral and Cognitive Therapies
Oklahoma Psychological Association