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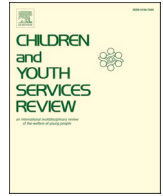
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Associations between family resilience and health outcomes among kinship caregivers and their children

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ABSTRACT

The health and mental health of kinship caregivers and their children have been the foci of substantial research and intervention over the last four decades. While evidence suggests the challenging circumstances surrounding kinship care may be linked with suppressed health outcomes, we have yet to examine how family resilience, defined as the transactional, intrafamilial processes that promote a family's ability to weather and grow through adversity, might shape multigenerational health and mental health outcomes in kinship families. Using data from the 2017–2019 National Survey of Children's Health, the current study examines associations between family resilience and health outcomes among kinship caregivers and their children. Weighted multiple linear regression analyses revealed family resilience was positively associated with global ratings of caregiver health, caregiver mental health, and child health. Family resilience was also negatively associated with parenting stress. Weighted logistic regression analyses revealed family resilience was associated with decreased odds of children having behavioral problems but was not associated with the odds of children having an internalizing disorder. Findings suggest kinship families that regularly engage in mutual support and problem solving may be better positioned to promote multigenerational health and mental health outcomes.

1. Introduction

Kinship care is a rapidly growing option for children requiring out-of-home care. Approximately 2.7 million children in the United States are raised by their grandparents (Kids Count, 2019), with increasing numbers of aunts, uncles, and adult siblings stepping into caregiving roles (Király et al., 2020). Although children may be in kinship care for various reasons, it often follows instances of parental incarceration, substance use, or child maltreatment (Lee et al., 2020). Most kinship care arrangements are negotiated privately within families or “voluntarily” by child protection services, resulting in informal placements that are generally unmonitored by child welfare agencies (Berrick & Hernandez, 2016). In contrast, formal kinship care placements are arranged and monitored by child welfare agencies and may require relative caregivers to become licensed foster parents in order to care for the child, receive foster care payments, and access medical and social services (Xu, Bright, Ahn, et al., 2020).

Research documents the prevalence of health and mental health problems among kinship caregivers and their children (Cuddeback, 2004; Szilagyi et al., 2015; Xu & Bright, 2018). Kinship caregivers disproportionately live under the federal poverty line, and experience

food insecurity and unemployment at higher rates than biological and non-relative foster parents (Ehrle & Geen, 2002), creating an ecological context that has been linked with poor health, mental health, and increased parenting stress (Hong et al., 2011; Lee et al., 2016). In addition to these ecological stressors, the health and mental health of children in kinship care may also suffer in the wake of child maltreatment, parental substance use, or parent incarceration that may have preceded their kinship care arrangement (Szilagyi et al., 2015). While children in formal kinship care have greater access to medical and social services by way of their involvement in the child welfare system (Xu, Bright, Ahn, et al., 2020), children in informal kinship care arrangements are often unable to access these necessary services (Berrick & Hernandez, 2016). Moreover, kinship caregivers across arrangements may be hesitant to seek services in fear that their demonstrated need might result in child removal (Pittman, 2015). Therefore, understanding how kinship families mitigate and resolve the array of ecological and caregiving challenges that can threaten their physical and mental well-being is crucial to building services that foster optimal outcomes.

Family resilience is the capacity for families to weather and grow through adverse circumstances by way of transactional, intrafamilial processes that promote mutual support and problem solving (Patterson,

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2002; Walsh, 2016b). Family resilience is a multidimensional construct consisting of a family's belief systems, organizational processes, and problem-solving strategies (Walsh, 2016a). Among non-kinship samples, family resilience has been linked to parents' improved emotional coping, increased odds of healthy exercising habits in children, and decreased instances of childhood asthma and anxiety, suggesting family resilience may play a role in creating health-promoting family environments (Burns et al., 2020; Kim et al., 2020; Nabors et al., 2020; Walsh, 2016b). Despite the myriad adversities experienced by kinship families, little research has examined the relationship between family resilience and health outcomes in this population. Qualitative research in this area has mostly focused on the strategies that licensed foster caregivers use to promote family resilience, but do not explicitly tie them to kinship families' health or mental health (Lietz et al., 2016; Schneiderman et al., 2012). Existing quantitative research has found a positive relationship between kinship caregivers' meaning making, a component of family resilience, and caregiver well-being, but it is still unclear whether this relationship would hold if family resilience were measured more holistically, or if family resilience is related to the well-being of children in kinship care (Cavanaugh et al., 2020). Using data from the National Survey of Children's Health (NSCH), the current study addresses these gaps by examining associations between family resilience and the health and mental health outcomes of kinship caregivers and their children.

1.1. Kinship caregiver health, mental health, and parenting stress

Research documents the high prevalence of health and mental health concerns among kinship caregivers (Cuddeback, 2004). Grandparents that are the primary caregivers for their grandchildren experience greater mobility issues and consistently report poorer physical health compared to their non-caregiving peers (Cuddeback, 2004; Musil et al., 2011). In one study, caregivers reported their health problems not only interfere with caregiving responsibilities but also frequently go unaddressed to preserve economic resources for children's needs (Monahan et al., 2013). Research also notes poor mental health among kinship caregivers (Doley et al., 2015; Garcia et al., 2015), with some studies finding that more than one in four kinship caregivers exceed the clinical cut-off for depression (Kelley et al., 2000; Minkler, 1997). Among mental health outcomes, parenting stress has been the subject of a growing body of kinship literature given its associations with parenting behaviors (Xu, Wu, Jedwab et al., 2020). Clinically significant levels of parenting stress among kinship caregivers are common, with one study reporting that 94% of their sample surpassed the clinical cut-off (Harrison et al., 2000; Kelley et al., 2000; Lee et al., 2016; Ross & Aday, 2006).

Scholars offer several explanations for the increased prevalence of poor health, mental health, and parenting stress outcomes among kinship caregivers. Given kinship caregivers tend to be older, age likely plays a role in elevated physical health concerns (Doley et al., 2015; Strozier & Krisman, 2007). Even so, the challenges associated with caregiving may also cause caregivers' health to be compromised compared to their non-caregiving peers (Musil et al., 2011; Strozier & Krisman, 2007). The transition to being a kinship caregiver is often unexpected and caregivers may have little time to prepare for this role (Berrick et al., 1994). Further, the circumstances leading to a kinship care arrangement may be fraught with familial tension, which has been linked to increased parenting stress and emotional strain (Grinstead et al., 2003; Pittman, 2015). Child health and mental health problems have also been linked to kinship caregiver anxiety and depression (Doley et al., 2015). Several studies note the relationship between child externalizing problems and high levels of kinship caregiver parenting stress (Harrison et al., 2000; Lee et al., 2016; Mackintosh et al., 2006). Finally, the ecological context surrounding kinship caregivers likely plays a role in determining caregiver health outcomes. Compared to non-relative foster caregivers, kinship caregivers are disproportionately poor,

unemployed, and more likely to experience food insecurity (Ehrle & Geen, 2002; Hong et al., 2011; Strozier & Krisman, 2007). Combined with the fact that the majority of kinship caregivers are unable to access financial or social services due to their lack of formal involvement in the child welfare system (Xu, Bright, Ahn, et al., 2020), kinship caregivers' health, mental health, and parenting stress may suffer as they strain to meet their family's needs (Berrick et al., 1994; Musil et al., 2011; Strozier & Krisman, 2007). In one mixed methods study, grandparent caregivers not only reported increased levels of parenting stress compared to other relative caregivers, but also reported much of their parenting stress stems from raising a child on a fixed income and limited possibilities for cash aid (Lee et al., 2016). Another study examining kinship caregiver parenting stress during the COVID-19 pandemic found material hardship was associated the increased odds of experiencing elevated levels of parenting stress (Xu, Wu, Levkoff, et al., 2020). Altogether, the well-being of kinship caregivers may be impacted by numerous individual-, family-, and system-level factors.

The combination of multiple caregiving challenges and limited government support often prompts kinship caregivers to turn to their families to acquire the financial support, child care, and other resources needed to raise a child (Lietz et al., 2016; Pittman, 2015). The intra-familial processes by which families coordinate these resources cannot be overstated: families must effectively communicate, make meaning of challenges, collectively devise solutions, and continuously rebalance individual responsibilities to meet the ever-changing needs of the family unit (Walsh, 2016a). Families that successfully enact these processes can swiftly deploy new routines that address the demands placed on the family system without overwhelming any particular individual (Henry, Hubbard, Struckmeyer, & Spencer, 2018; Patterson, 2002). While the resulting network of caregiving support likely eases caregivers' burden, it is unclear whether these intrafamilial processes may also be associated with improved kinship caregiver health, mental health, and parenting stress. Given health and mental health problems are more common among overwhelmed caregivers (Monahan et al., 2013), kinship families that regularly deploy processes of collective problem solving and mutual support may also provide respite and resources that can alleviate stressors that would otherwise erode kinship caregivers' health and mental health.

1.2. Health and mental health of children in kinship care

The health and mental health of children in kinship care have been widely studied since the expansion of kinship care in the 1980s (Berrick, 1998). Children in formal and informal kinship care generally experience poorer health than children living with their biological parents (Bramlett et al., 2017; Bramlett & Blumberg, 2007), although some studies report minimal differences (Scannapieco, Hegar, & McAlpine, 1997; Solomon & Marx, 1995). Studies note children in kinship care have similar health profiles as children in non-relative foster care, and are more likely to have chronic illnesses, special health care needs, and greater dental problems than children living with their biological parents (Bramlett et al., 2017; Bramlett & Blumberg, 2007; Leslie et al., 2002). The increased prevalence of health problems may be linked to the circumstances that led to children's out-of-home placement (e.g., child maltreatment and economic hardship) and barriers to adequate health care (Bramlett et al., 2017; Szilagy et al., 2015). As a result, kinship families often contend with challenges associated with their children's health.

Children in kinship care generally experience fewer mental health problems compared to children in non-relative foster care (see Xu & Bright, 2018 for a review). Existing evidence suggests selection bias may play a role in this difference (Font, 2015; Xu & Bright, 2018). Case-workers may be more likely to recommend a relative placement when children have fewer mental health concerns, and/or caregivers may be more likely to accept responsibility of children with fewer mental health problems (Jedwab et al., 2020). Children in kinship care also access

mental health services at lower rates than children in non-relative foster care, although it is unclear whether this is a result of the aforementioned selection bias, barriers to mental health services faced by kinship families, or caregivers not deeming their children's psychological issues sufficiently problematic to warrant intervention (Barth, 2008; Ehrle & Geen, 2002).

Potential benefits of kinship care notwithstanding, children in kinship care experience greater internalizing and externalizing problems than children living with their biological parents (Bramlett & Blumberg, 2007). Scholars link the increased prevalence of mental health problems to the circumstances that led to their kinship care arrangement (e.g., child maltreatment, parent death, parent substance abuse) and inadequate access to mental health services (Szilagyi et al., 2015). Children in informal kinship care—who constitute the vast majority of children in kinship care overall—are ineligible for most of the mental health services offered to children in formal foster care placements, meaning that their caregivers may have limited options in supporting children through the feelings of loss, rejection, and confusion that can accompany separation from their biological parents (Szilagyi et al., 2015; Xu & Bright, 2018). Given kinship families are more likely to live in poverty than non-relative foster families, financial barriers also impede access to mental health services (Lin, 2018). In sum, child mental health problems are a common concern among children in kinship families and may be difficult to address in the absence of adequate supports.

Evidence suggests children in kinship care may fare better when there is increased opportunity for their families to glean support from relatives. Caregiver social support and engagement have emerged as protective factors for health and mental health outcomes among children in kinship care (Lin, 2018; Xu, Bright, Huang, et al., 2020). Similarly, children report fewer internalizing and externalizing problems when kinship caregivers live closer to a child's original neighborhood and involve biological parents in their care (Gleeson & Seryak, 2010; Xu & Bright, 2018). Nevertheless, the benefits of increased opportunity for support are likely predicated on families' ability to effectively communicate with one another, appraise challenges, and reallocate family resources to meet the current demands placed on the family system. Without these exogenous transactions, families cannot mobilize on their social capital to alleviate the stressors that may compromise child health and mental health (Patterson, 2002; Walsh, 2016b). The relationship between these intrafamilial processes and the well-being of children in kinship care, however, has not been tested.

1.3. Associations between family resilience and health outcomes

Family resilience refers to a family's capacity to weather and emerge from adversity "strengthened and more resourceful" (Walsh, 2016a). Unlike other conceptualizations of resilience that focus on individual-level factors that promote well-being in the face of adversity, family resilience emphasizes the transactional, intrafamilial processes employed to navigate challenging circumstances (Walsh, 2016b). Walsh sorts these continuous processes into three broad categories: belief systems (the ability for families to remain optimistic and make meaning of challenges), organizational processes (strategies that families employ to adapt to adversity while recruiting instrumental and emotional support), and problem-solving processes (strategies families use to resolve problems). These processes allow families to recalibrate imbalances between their capabilities and stressors, and establish new routines that effectively manage adversity and family needs (Henry et al., 2018; Patterson, 2002). Family resilience processes vary widely by family and are inextricably linked to a family's cultural and ecological context (McCubbin & McCubbin, 2013). For instance, family resilience processes may be bounded by the physical household among those that subscribe to euro-centric formulations of the nuclear family, whereas families from collectivist cultures may engage wider networks of extended family to formulate efficacious responses to stressors (Robbins, Robbins, & Stennerson, 2013). Family resilience processes may also

involve service agencies and other community resources that increase the likelihood of positive adaptation (Walsh, 2016b).

Research using non-kinship samples suggests family resilience may be related to mental health and, albeit to a lesser extent, health outcomes for caregivers and children. Family resilience has been linked to parents' ability to emotionally cope with the challenges of having a child with a mental health disorder (Herbell et al., 2020). Among parents of children with developmental disorders, greater family resilience has been linked to decreased parenting stress and psychological distress (Kim et al., 2020; Suzuki et al., 2018). Studies have also found high family resilience is associated with greater odds of children attaining sufficient exercise and decreased odds of children having anxiety and asthma (Burns et al., 2020; Nabors et al., 2020). Turning to the broader caregiving literature, research ties family resilience with improved health and attainment of routine health care among adults caring for a relative with dementia (Henry et al., 2018). Taken together, these findings suggest families that effectively recruit mutual support and mobilize resources are better positioned to maintain their health and mental health.

Although research attests to the challenges associated with kinship care, the literature has yet to note whether family resilience is related to health and mental health outcomes in this population. Previous research has focused on the strategies foster families employ to build family resilience and adapt to the challenges of fostering (Lietz et al., 2016; Schneiderman et al., 2012). For instance, Schneiderman and colleagues found that foster caregivers' optimism and willingness to seek support from formal and informal sources was conducive to acquiring necessary health and mental health care services for the children in their care (Schneiderman et al., 2012). Other qualitative studies identify foster caregivers' consistent, empathetic communication with family members and caseworkers as a key factor in ensuring family functioning and service acquisition (Geiger et al., 2016; Lietz et al., 2016). Although this preliminary evidence suggests family resilience may play a role in shaping kinship family well-being, these studies feature small sample sizes and do not measure the impact of family resilience on health and mental health outcomes. One study found that meaning-making—using value-based reflection to make sense of adversity and appraise its manageability—was positively associated with overall kinship caregiver well-being (Cavanaugh et al., 2020). Nevertheless, additional research is needed to examine whether family resilience measured more holistically might offer benefits to caregivers and children. Such research could provide useful insights in understanding how kinship families withstand and grow through ecological and caregiving challenges that might otherwise threaten their physical and psychological well-being (Ehrle & Geen, 2002).

1.4. Current study

The purpose of the present study is to examine whether family resilience is associated with health and mental health outcomes among kinship caregivers and their children. This study aims to address the following research questions: (1) Is family resilience associated with kinship caregivers' health and mental health? (2) Is family resilience associated with kinship caregivers' parenting stress? (3) Is family resilience associated with the health of children in kinship care? And (4) Is family resilience associated with internalizing disorders or behavior problems in children? Based on my theoretical framework, I hypothesize family resilience will be positively associated with kinship caregiver's health and mental health. Second, I hypothesize family resilience will be negatively associated with kinship caregivers' parenting stress. Third, I predict family resilience will be positively associated with children's health. Finally, I hypothesize family resilience will be associated with decreased odds of children having an internalizing disorder and behavioral problems, respectively.

2. Methods

2.1. Participants

The current study analyzes data from the NSCH, an annual survey conducted by the U.S. Census Bureau to gather information about child and caregiver health from a representative, randomly selected sample of households with children ages 0–17 years (U.S. Census Bureau, 2020a). Upon confirming the presence of a child in the household, caregivers respond to questions pertaining to their and the target child's health, mental health, family life, and sociodemographic characteristics (see U.S. Census Bureau, 2020a for survey methodology). In households with multiple children, survey administrators selected the target child and the caregiver responded to the survey as they pertained to that child. Caregivers and their children were included in the current analytic sample if a) the primary caregiver was a grandparent, aunt or uncle, other relative, or non-relative, b) the child's secondary caregiver (if available) was also a grandparent, aunt or uncle, other relative, or non-relative, and c) the household was led by the kinship (respondent) caregiver. Given the NSCH was not designed to collect data from kinship caregivers, data from 2017, 2018, and 2019 were combined to increase the sample size (U.S. Census Bureau, 2020b). It is unknown whether participants were involved in the child welfare system, which may influence caregiver and child health outcomes (Lin, 2018). Among the sample of kinship caregivers, 12.6% of participants had missing data on at least one study variable and were excluded from analysis. The final analytic sample for this study consists of 2,635 kinship caregiver-child dyads, which constitute approximately 3.23% of the total dyads surveyed across 2017, 2018, and 2019 (total sample $n = 81,562$).

2.2. Measures

2.2.1. Family resilience

Kinship caregiver family resilience was measured using four survey items assessing the frequency with which kinship caregivers engage in intrafamilial processes of mutual support and problem solving when confronted with challenges. The four items asked were, "When your family faces problems, how often are you likely to do each of the following: 1) talk together about what to do, 2) work together to solve our problems, 3) know we have strengths to draw on, and 4) stay hopeful even in difficult times." Caregivers used a four-point scale to indicate whether they engaged in each behavior (1) all of the time, (2) most of the time, (3) some of the time, or (4) none of the time. To facilitate interpretation, scores were reverse coded and summed such that higher scores indicate higher family resilience. Sample scores ranged from 4 to 16. Cronbach's alpha for the family resilience scale was 0.90, indicating high internal reliability. Although this shortened measure does not capture every dimension of family resilience, this measure is consistent with general conceptualizations of family resilience and has been used in previous research to examine associations between family resilience and health outcomes (Kim et al., 2020; Nabors et al., 2020; Walsh, 2016b).

2.2.2. Caregiver mental health

Kinship caregiver mental health was assessed using a one-item global measure asking, "In general, how is your mental or emotional health?" Caregivers responded using a five-item scale: (1) excellent, (2) very good, (3) good, (4) fair, and (5) poor. Although single item mental health measures lack specificity, evidence suggests they are valid, reliable, and correlate with more extensive measures of psychological functioning (Ahmad et al., 2014). To facilitate interpretation, scores were reverse coded such that higher ratings corresponded with better mental health.

2.2.3. Caregiver physical health

Kinship caregiver physical health was assessed using a one-item global measure asking, "In general, how is your physical health?"

Caregivers responded using a five-item scale: (1) excellent, (2) very good, (3) good, (4) fair, and (5) poor. While single item physical health measures may exhibit bias, research suggests they offer comparable reliability and validity to lengthier health measures (Macias et al., 2015). Once again, scores were reverse coded such that higher scores corresponded to better physical health.

2.2.4. Parenting stress

Parenting stress was measured using three survey items that assessed the extent to which parents experienced emotional distress related to caregiving. Caregivers responded to the following three items: "During the past month, how often have you felt 1) that this child is much harder to care for than most children his or her age? 2) this child does things that really bother you a lot? and 3) angry with this child?" Caregivers rated their responses on a five-item scale: (1) never, (2) rarely, (3) sometimes, (4) usually, or (5) always. Responses across all three items were summed, with sample scores ranging from 3 to 15, with higher scores indicating greater parenting stress. Cronbach's alpha for the parenting stress scale was 0.80, indicating good internal reliability.

2.2.5. Child health

Child health was measured using a single-item global health measure. Caregivers were asked, "In general, how would you describe this child's health?" Caregivers rated their child's health on a five-point scale: (1) excellent, (2) very good, (3) good, (4) fair, and (5) poor. To facilitate interpretation, scores were reverse coded such that higher scores represented higher ratings of physical health.

2.2.6. Child internalizing disorders

Child internalizing disorders were measured using a dichotomous composite variable created by combining two survey items assessing depression and anxiety in the target child. Caregivers were asked to indicate if a doctor or other health care provider ever told them that the target child has depression or anxiety. A composite variable was created in which children whose caregivers indicated "yes" to either question were categorized as having an internalizing disorder. This variable was dummy coded for analysis with (0) indicating the child does not have an internalizing disorder and (1) indicating the child has an internalizing disorder.

2.2.7. Child behavioral problems

Child behavioral problems were measured using a dichotomous variable. Caregivers were asked to indicate if a doctor, other health care provider, or educator ever told them that their child had behavioral or conduct problems. This variable was dummy coded for analysis with (0) indicating the child does not have behavioral problems and (1) indicating the child has behavioral problems.

2.2.8. Covariates

Analyses controlled for covariates that are related to caregiver or child outcomes. Covariates included caregiver age, caregiver sex, caregiver marital status, caregiver education level, caregiver relationship to the child, child adverse childhood experience (ACE) scores, child age, child sex, child race, child ethnicity, number of children in the household, the number of total family members in the household, and income as a percentage of the federal poverty level. The model predicting parenting stress also included caregiver mental and physical health as covariates given past reports documenting the associations between health and parenting stress (Hayslip et al., 2015, 2019; Kelley et al., 2000). In order to protect the confidentiality of respondents, the U.S. Census Bureau does not report caregiver race, ethnicity, or income in public use microdata. Child race, child ethnicity, and income as a percentage of the federal poverty level are used as approximate covariates. Income as a percentage of the federal poverty level was categorized into four groups: <100%, 100–199%, 200–399%, and > 400%. As recommended by the U.S. Census Bureau (U.S. Census Bureau, 2020b), income

as a percentage of the federal poverty level was imputed using multiple imputation given the high level of missingness across the variables they used to create this measure. Child ACE scores were measured by asking caregivers to indicate (yes or no) whether a child had experienced any of the following eight adverse childhood experiences: parent or guardian divorce, parent or guardian death, parent or guardian incarceration, witnessed domestic violence, experienced violence, lived with someone who experienced mental health problems, lived with someone who had substance use problems, or experienced discrimination due to their race or ethnicity. Presumably due to the sensitive nature of these questions, 8.16% of respondents were missing data on at least one of the eight items. Following a procedure similar to Houtepen and colleagues, cases were retained if caregivers answered 50% or more of the ACE items (Houtepen et al., 2018). Each reported ACE was scored as “1” and a total ACE score was calculated by summing the eight ACE items, with the resulting sample scores ranging from 0 (no reported ACEs) to 8 (eight reported ACEs). For models predicting caregiver outcomes, child health and mental health were included as covariates given evidence citing their influence on kinship caregiver outcomes (Doley et al., 2015). Caregiver health and mental health were included as covariates in models predicting child outcomes in light of evidence citing their influence on child health and mental health outcomes (Garcia et al., 2015; Xu & Bright, 2018).

2.3. Analytic plan

Data were analyzed using Stata 16.0 (StataCorp, 2019). Given the relatively low amount of missing data (3.28% or less for any variable of interest), cases with missing data from study variables were omitted from analyses. A comparison of cases with missing and complete data revealed significant differences across five variables: caregiver mental health, family resilience, caregiver education, child race, and income as a percentage of the federal poverty level. Caregivers included in the study had higher self-reported mental health ($p = .04$) and family resilience ($p = .01$). Caregivers with education beyond a high school diploma were more likely to be included in analyses ($p = .03$). Caregivers with children who were Native Hawaiian or Pacific Islander ($p = .02$) or identified as another race ($p = .02$) were more likely to be dropped from analyses. Greater proportions of caregivers with incomes <100% ($p < .001$) were dropped from analyses, whereas greater proportions of caregivers with incomes within 200–399% ($p < .001$) of the federal poverty level were retained in analyses. These differences suggest that the current findings may not be generalizable to the most vulnerable kinship families.

Prior to hypothesis testing, a series of regression analyses were conducted to assess relationships between key study and demographic variables. Given the majority of kinship research involves grandparent caregivers, I performed linear and logistic regressions to examine whether the dependent and independent variables differed across caregivers' relationship to the child (grandparent or another relative). Additionally, caregivers with partners or larger households may have increased possibilities for the exogenous transactions needed to build family resilience. Therefore, linear regression was used to determine if partner status or family size was associated with family resilience. Associations between child age and family resilience were also examined given children may partake in family resilience processes as they grow older (Henry et al., 2018). Linear regression was used given Stata is unable to render correlation coefficients using imputed survey data. Controlling for covariates, I used multiple linear regression to examine associations between family resilience and kinship caregiver health, mental health, parenting stress, and child health. Because Stata does not provide R^2 for models using imputed survey data, continuous variables in linear regression models were standardized to enable the interpretation of regression coefficients as effect sizes (i.e., standard deviations). I used logistic regression to test if family resilience decreased the odds of the target child having an internalizing disorder or behavioral problems.

I report an adjusted 95% odds ratio (OR) for each logistic model.

3. Results

3.1. Demographic characteristics

Kinship caregiver demographic characteristics generally mirrored those of other kinship caregiver samples (Table 1; Berrick et al., 1994; Strozier & Krisman, 2007). Caregivers were mostly women (75.68%) and predominately grandparents of the target child (73.53%). Approximately 61.48% of caregivers were either married or living with their partner and just over half had a high school diploma or less (51.41%). Caregivers were 55.25 years old on average and 62.83% of caregivers lived below 200% of the federal poverty level. Households had an average of 4.06 members. Children in the current sample were equally split by sex (51.01% girls) and were approximately 8.57 years of age. Most children were either white (51.01%) or Black (33.10%), and 22.83% were Latinx. Approximately 11.90% of children had been diagnosed with an internalizing disorder and 15.23% had been diagnosed with an externalizing disorder. These rates were significantly higher ($p < .001$) than those of the greater NSCH sample (internalizing: 9.12%; externalizing: 7.54%), which is consistent with prior research (Bramlett & Blumberg, 2007).

3.2. Associations between covariates and key study variables

Caregivers that were grandparents reported significantly higher levels of family resilience than other relative caregivers ($\beta = 0.23$; $p = .03$). On average, grandparents' estimated family resilience was 0.23 standard deviations greater than that of other relative caregivers. Caregiver mental health ($\beta = 0.11$; $p = .31$), caregiver physical health ($\beta = -0.16$; $p = .12$), caregiver parenting stress ($\beta = -0.11$; $p = .14$), child health ($\beta = 0.01$; $p = .94$), child internalizing disorder (OR = 0.20; $p = .39$), and child behavioral problems (OR = -0.19 ; $p = .39$) did not differ significantly across caregivers' relationship to the child. Caregivers' partner status ($\beta = 0.15$; $p = .12$), family size ($\beta = 0.02$; $p = .70$), and child age ($\beta = -0.11$; $p = .08$) were not associated with family resilience.

3.3. Associations with caregiver health outcomes

3.3.1. Caregiver mental health

Controlling for covariates, family resilience was positively associated with kinship caregiver mental health ($\beta = 0.26$, $p < .001$; Table 2). For each standard deviation increase in family resilience, kinship caregiver mental health increased by 0.26 standard deviations. Among covariates, caregiver age ($\beta = 0.08$, $p = .04$), child health ($\beta = 0.25$, $p < .001$), and having an income within 200–399% ($\beta = 0.35$, $p < .001$) and >400% ($\beta = 0.38$, $p = .001$) of the federal poverty level were positively associated with caregiver mental health. Child ACE scores ($\beta = -0.12$, $p = .006$) were negatively associated with caregiver mental health.

3.3.2. Caregiver health

Controlling for covariates, family resilience was positively associated with kinship caregiver health ($\beta = 0.12$, $p = .001$; Table 2). For each standard deviation increase in family resilience, kinship caregiver health increased by 0.12 standard deviations. Among covariates, child ACE score ($\beta = -0.10$, $p = .04$), and Black racial identity ($\beta = -0.25$, $p = .006$) were negatively associated with caregiver health. Child health ($\beta = 0.28$, $p < .001$) and having an income within 200–399% ($\beta = 0.42$, $p < .001$) and > 400% ($\beta = 0.42$, $p = .001$) of the federal poverty level were positively associated with caregiver health.

3.3.3. Parenting stress

Controlling for covariates, family resilience was negatively associated with kinship caregiver parenting stress ($\beta = -0.15$, $p < .001$; Table 2). For each standard deviation increase in family resilience,

Table 1
Weighted descriptive statistics for overall sample ($N = 2,635$).

Variable	%	M	95% CI	Range
Dependent variables				
Caregiver mental health				
Poor	0.91			
Fair	5.50			
Good	18.72			
Very good	35.27			
Excellent	39.60			
Caregiver physical health				
Poor	2.65			
Fair	13.10			
Good	31.12			
Very good	36.80			
Excellent	16.34			
Caregiver parenting stress		5.07	[4.91–5.22]	3–15
Child health				
Poor	0.20			
Fair	2.24			
Good	15.83			
Very good	30.46			
Excellent	51.27			
Child internalizing disorder				
Yes	11.90			
No	88.10			
Child behavioral problems				
Yes	15.23			
No	84.77			
Independent variables				
Family resilience		13.57	[13.30–13.84]	4–16
Caregiver age ¹		55.25	[54.08–56.42]	18–75
Number of children ¹		2.11	[2.02–2.19]	1–4
Household size ¹		4.06	[3.92–4.20]	1–8
Caregiver sex				
Female	75.68			
Male	24.32			
Caregiver relation to child				
Grandparent	73.53			
Aunt or uncle	5.67			
Other relative	15.36			
Non-relative	5.45			
Caregiver marital status ²				
Partnered	61.48			
Not partnered	38.52			
Caregiver education ³				
High school diploma or less	51.41			
Greater than high school diploma	48.59			
Child ACE Score		1.73	[1.59–1.88]	0–8
Child age		8.57	[8.09–9.06]	0–17
Child sex				
Female	51.01			
Male	48.99			
Child race				
White	51.01			
Black	33.10			
American Indian or Alaska Native	1.69			
Native				
Asian	3.04			
Native Hawaiian or Pacific Islander	0.84			
Other race	3.51			
Two or more races	6.82			
Child ethnicity				
Non-Latinx	77.17			
Latinx	22.83			
Poverty level				
<100%	30.77			
100–199%	32.06			
200–399%	25.07			
>=400%	12.10			

Notes. M = mean; 95% CI = 95% confidence interval; ACE = adverse childhood experience; range represents range observed in sample; ¹ To protect confidentiality, NSCH coded all caregivers 75 years of age and older as 75+, households with four or more children as 4+, and households with eight or more individuals as 8+. For analyses, caregivers' 75 or older were replaced with 75, households

with four or more children were replaced with 4, and households with eight or more individuals were replaced with 8; ²Partnered caregivers reported being married or living with a partner; ³Caregivers who reported attending vocational school, having some college credit, an associate degree, bachelor's degree, master's degree, or doctorate were grouped into the *greater than high school diploma* category.

kinship caregiver parenting stress decreased by 0.15 standard deviations. Among covariates, caregiver age ($\beta = 0.06, p = .022$), child health ($\beta = -0.10, p = .001$), child behavioral problems ($\beta = 0.93, p < .001$), child ACE score ($\beta = 0.12, p = .003$), child age ($\beta = 0.07, p = .012$), and Asian racial identity ($\beta = 0.43, p = .004$) were positively associated with parenting stress. Caregiver mental health ($\beta = -0.09, p = .01$) was negatively associated with parenting stress.

3.4. Associations with child health outcomes

3.4.1. Child health

Controlling for covariates, family resilience was positively associated with child health ($\beta = 0.07, p = .04$; Table 3). For each standard deviation increase in family resilience, child health increased by 0.07 standard deviations. Among covariates, caregiver mental health ($\beta = 0.19, p < .001$), caregiver physical health ($\beta = 0.12, p = .004$), and caregiver education ($\beta = 0.18, p = .006$) were positively associated with child health. Child ACE score ($\beta = -0.12, p = .003$) and child age ($\beta = -0.12, p < .001$) were negatively associated with child health.

3.4.2. Child internalizing disorder

Controlling for covariates, family resilience was not significantly associated with decreased odds of the target child being diagnosed with an internalizing disorder (OR = 0.94, $p = .13$; Table 3). Among covariates, caregiver mental health (OR = 0.68, $p = .005$), caregiver sex (OR = 0.61, $p = .049$), and having a child of color (Black OR = 0.36, $p < .001$, American Indian or Alaska Native OR = 0.10, $p < .001$, Asian OR = 0.03, $p = .001$, another race OR = 0.21, $p = .02$, and two or more races OR = 0.44, $p = .02$) were associated with decreased odds of being diagnosed with an internalizing disorder. Caregiver education (OR = 1.75, $p = .011$), child ACE score (OR = 1.45, $p < .001$), and child age (OR = 1.15, $p < .001$) were associated with greater odds of an internalizing disorder diagnosis.

3.4.3. Child behavioral problems

Controlling for covariates, family resilience was significantly associated with decreased odds of the target child having behavioral problems (OR = 0.91, $p = .02$; Table 3). For each unit increase in family resilience, the odds of child behavioral problems decreased by 9%. Child ACE score (OR = 1.46, $p < .001$) and having a child that was a boy (OR = 3.55, $p < .001$) were associated with greater odds of having behavioral problems. Children's Asian identity (OR = 0.05, $p = .006$) and caregiver mental health (OR = 0.78, $p = .049$) were associated with decreased odds of having behavioral problems.

4. Discussion

The current study offers a more robust exploration of the associations between family resilience and the health outcomes of kinship caregivers and their children. These findings are consistent with previous literature examining the relationships between family resilience and health outcomes (Burns et al., 2020; Cavanaugh et al., 2020; Kim et al., 2020; Nabors et al., 2020), and suggest the ongoing, transactional processes of mutual support and problem solving in the face of adversity are associated with improved intergenerational health and mental health outcomes in kinship families.

Grandparents reported greater family resilience than other relative caregivers. This finding may be reflective of grandparents' previous parenting experience, which might enhance their ability to recruit

Table 2

Linear regression analyses for associations between family resilience and ratings of caregiver mental health, physical health, and parenting stress ($N = 2,635$).

Variables	Mental health		Physical health		Parenting stress	
	β	95% CI	β	95% CI	β	95% CI
Family resilience	0.26***	[0.17–0.36]	0.12**	[0.05–0.19]	-0.15***	[-0.21– -0.09]
Caregiver mental health	–	–	–	–	0.05	[-0.01–0.11]
Caregiver physical health	–	–	–	–	-0.09*	[-0.16– -0.02]
Caregiver age	0.08*	[0.00–0.16]	-0.07†	[-0.15– 0.01]	0.10**	[0.04–0.16]
Number of children	0.07†	[-0.00–0.14]	0.04	[-0.04–0.12]	-0.01	[-0.06–0.04]
Household size	-0.02	[-0.10–0.06]	0.05	[-0.04–0.13]	0.02	[-0.04–0.08]
Relation to child						
Other relative (reference)						
Grandparents	-0.03	[-0.21–0.15]	-0.07	[-0.27–0.12]	-0.14†	[-0.29–0.01]
Caregiver sex						
Female (reference)						
Male	0.13†	[-0.02–0.29]	0.15†	[-0.02–0.31]	-0.08	[-0.19–0.04]
Caregiver marital status						
Not partnered (reference)						
Partnered	-0.05	[-0.21–0.11]	-0.02	[-0.17–0.13]	0.03	[-0.16–0.10]
Caregiver education level						
High school diploma or less (reference)						
Greater than high school diploma	0.06	[-0.08–0.19]	0.09	[-0.05–0.23]	0.04	[-0.07–0.14]
Child health	0.25***	[0.17–0.33]	0.22***	[0.14–0.29]	-0.09**	[-0.15– -0.03]
Child internalizing disorder	-0.14	[-0.32–0.05]	-0.07	[-0.25–0.12]	0.11	[-0.06–0.28]
Child behavioral problems	-0.07	[-0.24–0.10]	-0.08	[-0.24–0.09]	0.92***	[0.76–1.08]
Child ACE score	-0.12**	[-0.20– -0.03]	-0.10*	[-0.19– -0.01]	0.11**	[0.04–0.19]
Child age	0.04	[-0.03– 0.12]	0.01	[-0.07–0.08]	0.07*	[0.01–0.12]
Child sex						
Female (reference)						
Male	0.05	[-0.08–0.18]	-0.01	[-0.14–0.13]	0.06	[-0.05–0.16]
Child Race						
White (reference)						
Black	0.02	[-0.15–0.19]	-0.26**	[-0.44– -0.07]	-0.07	[-0.22–0.07]
American Indian or Alaska Native	0.04	[-0.49–0.57]	-0.02	[-0.36–0.31]	0.02	[-0.25–0.28]
Asian	-0.33	[-0.77–0.11]	0.04	[-0.28–0.37]	0.36*	[0.07–0.65]
Hawaiian or Pacific Islander	-0.27	[-1.05–0.52]	0.00	[-0.49–0.50]	0.24	[-0.35–0.84]
Other Race	0.40†	[-0.03–0.83]	0.18	[-0.16–0.53]	-0.20	[-0.49–0.08]
Two or more races	-0.12	[-0.42–0.17]	-0.20	[-0.51–0.11]	-0.02	[-0.19–0.14]
Child ethnicity						
Non-Latinx (reference)						
Latinx	0.04	[-0.14–0.22]	0.04	[-0.17–0.25]	0.03	[-0.11–0.18]
Poverty level						
<100% (reference)						
100–199%	0.16	[-0.03–0.35]	0.18†	[-0.00–0.37]	-0.11	[-0.28–0.06]
200–399%	0.35***	[0.17–0.53]	0.42***	[0.20–0.65]	-0.05	[-0.23–0.13]
>=400%	0.38**	[0.16–0.60]	0.42**	[0.18–0.66]	0.06	[-0.13–0.24]
Constant	-0.24†	[-0.49– 0.01]	-0.23	[-0.50– 0.05]	-0.10	[-0.29–0.10]

Notes. ACE = Adverse childhood experience; † $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.

family support that meets parenting demands. Caregiver's partner status, family size, and child age were not associated with family resilience. Although these findings suggest the main predictor variable was not associated with these constructs, it should be noted past research suggests having a greater number of individuals to turn to in times of need has been linked to greater family resilience (Black & Lobo, 2008). Additionally, children tend to partake in family resilience processes as they grow older (Henry et al., 2018).

Family resilience was positively associated with higher ratings of kinship caregiver health and mental health, and negatively associated with parenting stress. These findings corroborate prior explorations of family resilience among foster and kinship caregivers (Cavanaugh et al., 2020; Schneiderman et al., 2012). Kinship caregivers that regularly turn to their families during times of need might receive greater social support and perceive greater family resources (Gleeson et al., 2016; Walsh, 2003). Kinship caregivers may consequently appraise challenging circumstances as more manageable, which can mitigate psychological distress and parenting stress (Cavanaugh et al., 2020; Gleeson et al., 2016). Similarly, kinship caregivers that endorse greater family resilience may be more likely to seek their families' support for daily caregiving tasks. Having a larger network of adults that share caregiving responsibilities may provide greater opportunity for respite, which has been tied to improved well-being (Madden et al., 2016). It should be

noted that this relationship may be bi-directional: it is possible caregivers with better health have greater capacity to engage in the exchanges central to promoting family resilience. Future research may benefit from methods that can ascertain the directionality of this association.

Family resilience was also associated with higher ratings of child health. Previous research links family resilience with healthy exercising habits in children and decreased odds of asthma, suggesting that families with greater resilience might be better poised to promote positive health behaviors in children that stave off health problems (Burns et al., 2020; Nabors et al., 2020). Families with greater resilience may also be better prepared to handle acute health concerns (e.g., illnesses or injuries requiring hospitalization), thereby limiting the long-term effects these episodes can have on children's health. Family resilience was also associated with the decreased odds of children having behavioral problems. Families that regularly approach challenges with effective problem solving, meaning making, and communication may more effectively mitigate the negative effects ecological and caregiving adversities might have on children's behavior. Further, the act of turning to one another to resolve difficulties may model healthy ways of navigating adverse events and processing negative emotions (Szilagyi et al., 2015; Xu, Bright, Huang, et al., 2020; Xu & Bright, 2018). Contrary to my hypothesis and evidence from non-kinship samples, family resilience

Table 3

Linear and logistic regression analyses for associations between family resilience and ratings of child health, internalizing disorders, and behavior problems ($N = 2,635$).

Variables	Health		Internalizing disorders		Behavior problems	
	β	95% CI	OR	95% CI	OR	95% CI
Family resilience	0.07*	[0.00–0.14]	0.94	[0.87–1.02]	0.91*	[0.84–0.98]
Caregiver mental health	0.19***	[0.11–0.28]	0.68**	[0.52–0.89]	0.78*	[0.62–1.00]
Caregiver physical health	0.12**	[0.04–0.20]	0.89	[0.71–1.13]	0.85	[0.68–1.06]
Caregiver age	0.06	[–0.02–0.13]	1.01	[0.99–1.03]	1.00	[0.98–1.02]
Number of children	–0.00	[–0.07–0.07]	0.93	[0.70–1.22]	0.90	[0.72–1.12]
Household size	–0.00	[–0.08–0.07]	0.93	[0.77–1.14]	0.95	[0.81–1.10]
Relation to child						
Other relative (reference)						
Grandparent	–0.06	[–0.23–0.11]	1.32	[0.70–2.49]	0.80	[0.47–1.36]
Caregiver sex						
Female (reference)						
Male	0.08	[–0.07–0.22]	0.61*	[0.38–1.00]	0.82	[0.53–1.26]
Caregiver marital status						
Not partnered (reference)						
Partnered	–0.07	[–0.23–0.09]	0.98	[0.63–1.51]	1.23	[0.79–1.92]
Caregiver education level						
High school diploma or less (reference)						
Greater than high school diploma	0.18**	[0.05–0.31]	1.75*	[1.14–2.70]	1.12	[0.75–1.66]
Child ACE score	–0.12**	[–0.20– –0.04]	1.45***	[1.31–1.62]	1.46***	[1.32–1.63]
Child age	–0.12***	[–0.19– –0.06]	1.15***	[1.10–1.20]	1.02	[0.98–1.06]
Child sex						
Female (reference)						
Male	–0.02	[–0.15–0.10]	1.50*	[1.01–2.22]	3.55***	[2.29–5.51]
Child Race						
White (reference)						
Black	–0.06	[–0.23–0.11]	0.36***	[0.21–0.61]	1.23	[0.77–1.99]
American Indian or Alaska Native	0.18	[–0.14–0.49]	0.10***	[0.03–0.35]	0.78	[0.15–4.04]
Asian	–0.31	[–0.70–0.08]	0.03**	[0.00–0.22]	0.05**	[0.01–0.43]
Hawaiian or Pacific Islander	0.02	[–0.65–0.70]	0.26	[0.04–1.63]	0.58	[0.16–2.12]
Other Race	0.15	[–0.11–0.41]	0.21*	[0.06–0.76]	0.66	[0.17–2.59]
Two or more races	0.05	[–0.16–0.25]	0.45*	[0.23–0.89]	0.88	[0.49–1.57]
Child ethnicity						
Non-Latinx (reference)						
Latinx	0.16†	[–0.01–0.32]	0.96	[0.55–1.66]	0.62†	[0.36–1.07]
Poverty level						
<100% (reference)						
100–199%	0.11	[–0.09–0.31]	0.88	[0.51–1.54]	1.23	[0.72–2.13]
200–399%	0.16	[–0.08–0.40]	0.67	[0.37–1.23]	0.93	[0.51–1.68]
>=400%	0.18†	[–0.02–0.38]	0.79	[0.40–1.57]	1.54	[0.80–2.95]
Constant	–0.13	[–0.38–0.11]	0.20†	[0.04–1.08]	0.73	[0.12–4.39]

Notes. ACE = adverse childhood experience; † $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.

was not associated with the odds of children having an internalizing disorder (Nabors et al., 2020). It is possible turning inward to one's family does not allow caregivers to acquire the mental health services needed to address children's internalizing symptoms. Moreover, the high prevalence of internalizing disorders among children in the United States generally suggests this issue may be fairly normative, regardless of family resilience (Jamnik & DiLalla, 2019). Consequently, family resilience may not be a strong predictor of internalizing outcomes. Alternatively, evidence suggests caregivers may have greater difficulties detecting internalizing problems compared to behavioral problems (Weissman et al., 1987). Kinship caregivers might positively skew their assessments of children's well-being and therefore not see their child's symptoms as sufficiently problematic to warrant consultation with a professional, thereby decreasing the likelihood of a diagnosis (Barth, 2008).

Several covariates were significant predictors of health and mental health outcomes across models. Child ACE scores were associated with worse health and mental health across kinship caregivers and their children. This may be indicative of family difficulties that suppress the health outcomes of both children and their caregivers (Balistreri & Alvira-Hammond, 2016). Child health was inversely associated with kinship caregiver well-being, corroborating literature that links child health issues to caregiver physical and psychological distress (Denby et al., 2015). Caregiver health and mental health were positively

associated with child health and decreased odds of having an internalizing or externalizing disorder, thus bolstering existing evidence that suggests poor caregiver health and mental health may have a toll on child well-being (Xu & Bright, 2018). Similarly, caregiver mental health was negatively associated with parenting stress. This finding corroborates previous research linking caregiver mental health to parenting stress (Hayslip et al., 2015, 2019; Kelley et al., 2000). Child behavioral problems were positively associated with parenting stress, which is consistent with previous research citing the caregiving challenges associated with raising a child with conduct problems (Suárez & Baker, 1997). Child age was associated with higher parenting stress, poorer child health, and greater odds of being diagnosed with an internalizing and externalizing disorder. Children's health typically worsens as they get older (Case & Paxson, 2002). This pattern is also reflected among psychological diagnoses, which become more frequent as children develop into adolescents (Kovacs & Devlin, 1998). Taken together, this may suggest caregivers of older children in the current sample might experience greater parenting stress as they navigate their children's health and mental health care needs (Raphael et al., 2010). All children of color (except Native Hawaiian or Pacific Islander children) were less likely to be diagnosed with an internalizing disorder compared to their white peers. This might be reflective of racism that impedes health and mental health care access and quality (Feagin & Bennefield, 2014). Greater incomes were associated with improved caregiver health and

mental health, corroborating research noting the relationship between increased income and well-being (Marmot, 2002). Similarly, caregiver education was positively associated with child health and the increased odds of having an internalizing disorder, which may be indicative increased economic resources and access to health care professionals that can diagnose and treat children (Feagin & Bennefield, 2014; Marmot, 2002).

4.1. Limitations

This study is not without limitations. The NSCH was not designed to collect data from kinship caregivers, meaning it cannot be assumed that the current sample is representative of kinship caregivers in the United States. It was also impossible to discern if children were involved in the child welfare system. Given the differences in service access and mental health outcomes between formal and informal kinship caregivers (Lin, 2018; Xu & Bright, 2018), additional research is needed to determine whether the relationship between family resilience and health outcomes varies as a function of child welfare system involvement. Moreover, I cannot infer causality due to the cross-sectional and correlational nature of the current study. Additionally, health and mental health outcomes were assessed using one-item self-report measures, which do not provide insight to specific health or mental health outcomes. Future research may benefit from incorporating more robust scales of specific diagnoses and third-party informants to avoid biases associated with self- and caregiver reports (Barth, 2008; Gorber & Tremblay, 2016). This may be particularly relevant for child mental health outcomes. High rates of comorbidity between child internalizing and externalizing disorders are common (in the current study having an internalizing disorder was associated with greater odds of having an externalizing disorder; $OR = 2.37, p < .001$). However, because externalizing and internalizing disorders may elicit different family responses and parenting practices (Langley et al., 2010; Serbin et al., 2015), nuanced measures of mental health diagnoses and the family resilience processes enacted to address them are needed to better understand the differential family responses to children's internalizing and externalizing disorders.

4.2. Implications for future research

Findings highlight kinship families' resilience and their ability to promote multigenerational health and mental health outcomes despite racism, poverty, and adverse childhood experiences. These findings corroborate research illustrating the benefits that kinship care can confer by keeping families together and sustaining children's relationships with their family members (Kiraly & Humphreys, 2013). However, some researchers assert that the circumstances that result in kinship care arrangements may be emblematic of family dynamics that are inconducive to successful caregiving (Font, 2015; Kroll, 2007). In order to clarify the social contexts that may promote kinship family resilience and health outcomes, future research might include explicit measures of the social actors that kinship caregivers turn to when in need. The current measure asked caregivers if they turn to family during times of need, but it does not capture who these relatives are nor how relational quality may shape how kinship caregivers seek support. Further, the current measure does not indicate if turning to family members results in the recruitment of external support from the larger community, which would similarly enhance family resilience (Patterson, 2002; Walsh, 2016b). Social network analysis, a paradigm that maps the actors, relationships, and resources gleaned from an individual's social network (McArthur & Winkworth, 2017), may provide a greater understanding of who caregivers turn to in times of need, the type of resources they seek and receive from family versus their larger community, and the circumstances that spur support-seeking. Understanding who kinship caregivers turn to during times of need can offer clarification to extant conundrums in kinship care literature (i.e., under what circumstances is parent contact beneficial?) and offer insight to the lived experiences of

kinship families. Additional mixed-method examinations of family resilience would also be helpful. Family resilience varies as a function of myriad ecological factors that are difficult to measure via scales (Walsh, 2016b). Interview data that explores how caregivers navigate relational dynamics with family members during times of need might provide complementary information that goes uncaptured by quantitative scales. Such explorations might also reveal differences across cultures regarding who families consider as appropriate actors to turn to when adapting to various stressors (Robbins et al., 2013).

4.3. Implications for policy and practice

Kinship caregivers may benefit from services that encourage explicit, thoughtful reflection about who in their familial network they can call on for support. The FOCUS Family Resilience Program, a family-based intervention aimed to build family resilience after experiences of trauma and loss among military families, might be a fruitful intervention to pilot among kinship families (Saltzman, 2016). Although current evidence attesting to FOCUS' effectiveness among kinship or child welfare populations is limited, its attention to meaning making, healthy communication, and family integration may offer a medium through which kinship families can navigate tensions and uncertainties that might inhibit the effective mobilization of support and resources during times of need (Saltzman, 2016; Saltzman et al., 2013). In addition to building family resilience, parents and children participating in FOCUS have shown reductions in psychological distress and improved pro-social behaviors (Saltzman, 2016). Given both kinship and military families may contend with numerous hardships, the FOCUS Family Resilience program might offer similar benefits to kinship families. Given the potential bidirectional relationships between health and family resilience, services that primarily target health and mental health may also positively shape family resilience processes. Caregiver support groups may be one such option. In addition to providing an opportunity to process emotions with others who are acutely familiar with the dynamics of kinship care, support groups often create a space of collective strategizing and resource sharing that is conducive to resolving challenges in kinship care (Rushovich et al., 2017). Accordingly, health and mental health interventions may also promote family resilience processes.

Facilitating the piloting of FOCUS and other innovative kinship family services inevitably requires policy change that increases funding for such services and research. While the Families First Prevention Services Act has spurred research to build the evidence base for kinship support services, as of this writing none of the evaluated kinship programs have met the evidence threshold required for federal reimbursement (Title IV-E Prevention Services Clearinghouse, 2021). In both 2018 and 2019, the federal government allotted \$20 million for states, tribes, and territories to establish, expand, or evaluate kinship navigator programs. Although a promising step, \$20 million distributed across 46 states, eight Native American tribes, and two territories will likely not provide sufficient financial support to effectively evaluate new kinship family services in a timely manner (Beltran, 2019).

5. Conclusion

The current study extends existing family resilience research by examining associations between family resilience and well-being among kinship caregivers and their children. Findings suggest family resilience may promote health and mental health outcomes among kinship families and suggests kinship families benefit when they can engage other household members in problem solving and mutual support. While additional research is needed to examine how family resilience relates to kinship caregivers' social networks and specific diagnoses, the current study provides a foundation for future research that can inform necessary services for kinship caregivers and the children in their care.

CRedit authorship contribution statement

Anthony Gómez: Conceptualization, Formal analysis, Funding acquisition, Investigation, Methodology, Writing - original draft, Writing - review & editing.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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