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Examining the Association Between Parental Attachment, Fictive Kin Bonds, Psychological Needs Satisfaction, Emotional Distress, and Subjective Well-Being Among Black Americans

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EXAMINING THE ASSOCIATION BETWEEN PARENTAL ATTACHMENT, FICTIVE KIN BONDS, PSYCHOLOGICAL NEEDS SATISFACTION, EMOTIONAL DISTRESS, AND SUBJECTIVE WELL-BEING AMONG BLACK AMERICANS

by

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ABSTRACT

Secure attachment with parents predicts less emotional distress and greater subjective well-being across the lifespan. One mechanism by which parental attachment supports mental health outcomes is through psychological needs satisfaction (PNS). In addition to the attachment to parents, relationships with fictive kin caregivers are prevalent and important among Black families. The present study investigated the association between parental attachment, fictive kin bonds, psychological needs satisfaction and mental health outcomes (i.e., emotional distress and subjective well-being) in a sample of Black American adults. Two hundred twenty-three (N = 223) participants completed measures of parental attachment, fictive-kin bonds, psychological needs satisfaction (PNS), emotional distress, and subjective well-being (SWB). A measure of COVID-19 distress was also included. Three hypotheses were tested. First, it was hypothesized that parental attachment was positively associated with mediator PNS, positively associated with SWB, and negatively associated with emotional distress. Second, it was hypothesized that fictive kin bonds were positively associated with mediator PNS, positively associated with SWB, and negatively associated with emotional distress. Finally, it was hypothesized that fictive kin bods moderate the mediational relationship between parental attachment and PNS. SEM analyses were conducted to examine the relationships and results supported the first two hypotheses, but not the final one. Analyses found that both parental attachment and fictive bonds were significant unique predictors of PNS and mental health outcomes among Black Americans in this sample.

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CHAPTER I – INTRODUCTION

Self-determination theory posits that supportive relationships with caregivers are influential in supporting mental health outcomes by meeting basic human psychological needs (Vansteenkiste & Ryan, 2013). The satisfaction of these psychological needs (i.e., competence, relatedness, and autonomy) are theorized to attenuate emotional distress and promote greater well-being in the recipients (Vansteenkiste & Ryan, 2013). One such supportive caregiver relationship is the attachment formed with parents (Ainsworth & Bowlby, 1991). Secure parental attachments, characterized by high levels of care and autonomy-granting (i.e., authoritative parenting), are associated with less emotional distress and greater well-being (Ainsworth & Bowlby, 1991; Avagianou & Zafiropoulou, 2008; Love, 2008; Rothrauff et al., 2009; Zimmermann et al., 2008). Secure parental attachments developed during childhood are also linked to more favorable long-term mental health outcomes in early, middle, and older adults (Broussard & Cassidy, 2010; Sachs-Ericsson et al., 2011; Zimmermann et al., 2008). A balance of caregiver warmth and limit setting (i.e., authoritative parenting) has been consistently associated with the most positive outcomes (Liem et al., 2010). Warmth and autonomy-granting in the context of parent and caregiver relationships are influential in meeting children's psychological needs and influence emotional distress and subjective well-being long term (Ainsworth & Bowlby, 1991; Love, 2008; Avagianou & Zafiropoulou, 2008; Vansteenkiste & Ryan, 2013; Zimmermann et al., 2008).

While there are many studies supporting the validity of attachment relationships as predictive of positive outcomes, most of these studies have been conducted with samples of Europeans and White Americans (Causadias et al., 2022). Relatively few

studies have examined whether parental attachments operate similarly in samples of Black individuals (Causadias et al., 2022). Moreover, many of the studies of attachment focus on children and emerging adults (Chopik et al., 2013). It would be advantageous to examine if the current understanding of attachment relationships predicts positive outcomes in a broader age range, as well as among Black individuals (Causadias et al., 2022; Chopik et al., 2013)

In addition to exploring parental attachment, it is also important to examine non-familial relationships which may support positive mental health outcomes among Black Americans (Chatters et al., 2015; Hall, 2008; Pickard et al., 2011; Rose et al., 2019). Black Americans use non-familial caregivers, such as fictive kin relationships, as important providers of social support (Chatters et al., 1994; Taylor et al., 2001). Fictive kin bonds are not based in blood or legal ties; instead, they are families of choice that operate in a similar manner as blood relatives (Chatters et al., 1994; Taylor et al., 2001). Black families report having fictive kin relationships at higher rates than their White counterparts (Chatters et al., 1994; Taylor et al., 2001). Fictive kin bonds may be used to bolster social support or aid in childcare, suggesting that fictive kin may play an important role in children's lives (Chatters et al., 1994; Johnson, 1999).

Research also suggests that Black individuals may experience mental health outcomes such as emotional distress and subjective well-being in a different manner and at different rates than their White counterparts (Chapman & Steger, 2010; Williams et al., 2012; Yoo et al., 2018). However, research in these domains with samples of Black individuals remains underdeveloped (Chapman & Steger, 2010). It would be

advantageous to further develop the body of knowledge about these constructs among Black Americans (Williams et al., 2012; Yoo et al., 2018).

Black communities leverage fictive kin bonds in the care of children in ways that resemble family ties (Chatters et al., 1994). Regrettably, few quantitative studies have been conducted to determine if fictive kin bonds work in similar ways to parental bonds in supporting well-being and limiting emotional distress. Moreover, few studies have examined the moderating role fictive kin bonds in supporting psychological needs satisfaction. This study aimed to discover the ways in which fictive kin bonds interact with parental relationships to influence emotional distress and subjective well-being and the degree to which this is mediated by psychological needs satisfaction in a sample of Black individuals.

Emotional Distress

It is important to examine both emotional distress and well-being as distinct constructs in order to understand individuals' mental health (Rose et al., 2019). While well-being focuses more on affective and cognitive satisfaction with one's life, emotional distress focuses on psychological suffering (Rose et al., 2019; Seixas et al., 2017). Examining both the positive factors of well-being with the negative factors of psychological suffering helps unveil a more complete understanding of mental health (Suldo & Shaffer, 2008). Stated differently, low levels of emotional distress are not equivalent to well-being.

Emotional distress has mainly been measured using symptoms of depression and anxiety (Seixas et al., 2017). There are many factors that put individuals at higher risk for emotional distress, including biological, psychological, and social factors (Deroma et al.,

2009; Robinson et al., 2022). Biologically, individuals' neural appraisals of events, reactivity to stress, and ability to regulate stress responses account for much of their experience of emotional distress (Ashar et al., 2017; Beck & Bredemeier, 2016). A person's views of themselves, their interactions with others, and their health behaviors are also an important psychological component to the development of emotional distress (Lehman et al., 2017). Socially, pressures such as a demanding workload, financial problems, and difficulty adjusting to new circumstances may be associated with greater emotional distress (Deroma et al., 2009). Adverse childhood experiences can also contribute to long-term emotional distress, as they are associated with increased risk of individuals developing maladaptive views of themselves and the world (Pomerantz & Rudolph, 2003). Research also suggests that there are significant associations between gender and emotional distress (Falicov, 2003; Girgus & Yang, 2015; Grenier et al., 2019). Potential explanations for this gender difference include the possibility that differential socialization contributes to greater vulnerability for emotional distress in women (Girgus & Yang, 2015), and that women seek mental health assistance more than men, leading to disproportionate representation (Falicov, 2003).

Research has found several factors that appear to influence Black Americans' experience of emotional distress. Schultz et al. (2015) found a causal relationship between discrimination and symptoms of depression. Furthermore, Black Americans have higher rates of adverse experiences and pressures such as poverty, chronic stress, legal problems, and these are associated with greater emotional distress (Krieger et al., 2005; Myers, 2009; Myers et al., 2015). This is problematic because greater emotional distress has been associated with a number of constructs, including diminished self-

efficacy (Jiménez et al., 2017), decreased academic performance (Ahmed & Julius, 2015), increased risk of cardiovascular disease (Bouchard et al., 2019), and increased substance use (Meeyoung Min et al., 2007).

There is evidence suggesting that the experience, expression and alleviation of emotional distress varies by culture (Chapman & Steger, 2010; Kirmayer, 1989; Williams et al., 2012).; however, research is inconsistent in its findings about Black Americans' experience of emotional distress (Robinson et al., 2022; Watson et al., 2012). Black Americans were shown to have higher rates of anxiety in some studies (Ponting et al., 2020; Williams et al., 2012), whereas other studies revealed lower rates of anxiety among Black Americans (Chapman & Steger, 2010; Watson et al., 2012). Similar to anxiety, research findings about the Black American experience of depression varies. Some research among Black Americans suggest they experience less depression than White Americans (Hays & Gilreath, 2017; Nadeem et al., 2008; Watson et al., 2012). Black Americans demonstrated less pandemic-related emotional distress as compared to White Americans (Owens & Saw, 2021). However, other studies cite Black Americans experience more depression than their White counterparts (Ponting et al., 2020; Robinson et al., 2022; Williams et al., 2012). A nationally representative study found that symptoms consistent with a depressive disorder were 5% more prevalent among Black respondents (Centers for Disease Control and Prevention, 2010). Other nationally representative studies found that Black Americans experience a lower rate of mood and anxiety disorder, but a higher severity and for longer durations than White Americans (Breslau et al., 2005; Himble et al., 2009).

In addition to differential experiences of emotional distress, Black Americans also report leveraging different resources to protect against and alleviate distress (Chapman & Steger, 2010). Research suggests that Black families work to develop a positive ethnic identity during childhood, and this is associated with less emotional distress among Black Americans as adults (Williams et al., 2012). Black Americans also appear to leverage community support and fictive kin relationships at higher rates to manage emotional distress (Chapman & Steger, 2010; Hays & Gilreath, 2017). Given that Black Americans leverage fictive kin in support of alleviating emotional distress, it would be beneficial to observe whether fictive kin bonds are associated with better mental health outcomes. Moreover, there are relatively limited studies examining emotional distress across different age ranges; thus, how emotional distress operates across the lifespan is not well understood (Jiménez et al., 2017). Exploring the construct of emotional distress in a sample of Black Americans of varied ages would help broaden the knowledge of the correlates of emotional distress.

Subjective Well-Being

Subjective well-being (SWB) is a construct that encapsulates an individual's satisfaction with their life (Keyes & Magyar-Moe, 2003). SWB considers the domains of psychological, social, and emotional functioning, and it takes into account affect (Arthaud-Day et al., 2005; Diener et al., 1997; Keyes & Magyar-Moe, 2003; Rose et al., 2019). Social factors (such as higher socioeconomic status), and personal factors (such as more extroversion and less neuroticism) are shown to predict greater SWB (Gannon & Ranzijn, 2005). Additionally, environmental factors such as social support networks have also shown to increase SWB, as these networks may promote adaptive cognitions and

behaviors that facilitate positive affect and life satisfaction (Gallagher & Vella-Brodrick, 2008) . Alternatively, adverse childhood experiences are associated with less SWB in adulthood (Corcoran & McNulty, 2018; Oshio et al., 2013). One important social support network for the development of SWB is the attachment formed with parents (Corcoran & McNulty, 2018). Less secure parental relationships were associated with less positive affect, more negative affect, and less satisfaction with life (Corcoran & McNulty, 2018). Alternatively, a more secure relationship was associated with greater SWB (Yang et al., 2008).

The deterrents and supports of SWB vary by race (Yoo et al., 2018). For one, Black Americans' experience higher rates of perceived discrimination than White Americans (Bleich et al., 2019), and this is associated with less well-being in some Black samples (Seaton et al., 2008; Wong et al., 2003). This fact may explain why being taught positive aspects of ethnic identity was associated with greater SWB among Black Americans (Wong et al., 2003; Yoo et al., 2018). Strong familial support has also been associated with greater SWB among Black Americans (Rose et al., 2019); and it is worth examining whether fictive kin bonds operate to bolster familial support.

SWB has been found to predict a number of outcomes, including less physical illnesses (Nguyen et al., 2016), lower risk of mood disorders (Fischer et al., 2021), and decreased risk of suicide (Suh et al., 2021). As such, understanding SWB and its correlates among Black Americans may be helpful in improving mental health outcomes (Keyes & Magyar-Moe, 2003). This study sought to broaden the knowledge about the associations between parental attachment, fictive kin caregivers, and mental health outcomes (well-being and emotional distress) among Black Americans.

Parental Attachment

According to seminal work by Ainsworth and Bowlby, a secure relationship with primary caregivers provides a safe space for individuals to explore the world and themselves (Ainsworth & Bowlby, 1991; Sachs-Ericsson et al., 2011). A secure parental attachment is developed through authoritative caregiver relationships in which parents display warmth as well as provide for the development of autonomy in children (Ainsworth & Bowlby, 1991; Rothrauff et al., 2009). Attachment theory posits that primary caregivers are influential in meeting the innate needs of individuals (Deci & Ryan, 2000). Moreover, not meeting the individual's needs (i.e., providing too little care or too much overprotection) could have deleterious effects on well-being (Deci & Ryan, 2000; Love, 2008). Individuals who are recipients of less parental care and more overprotection receive fewer opportunities for adaptive psychological development, greater instances of negative self-evaluation, and greater levels of maladaptive adjustment (Love, 2008).

While attachment theory is thought to be relevant across a lifespan, much of the current research focuses on adolescents and young adults (Chopik et al., 2013; Rickman, 2018). Nonetheless, studies do support the use of attachment framework in emerging, middle, and older adults (Avagianou & Zafiropoulou, 2008; Broussard & Cassidy, 2010; Consedine & Fiori, 2009; Sachs-Ericsson et al., 2011; Zimmermann et al., 2008). Parental warmth is associated with better quality of life in emerging adults (Zimmermann et al., 2008). Secure parental attachment is also shown to be negatively associated with depressive symptoms and positively associated with self confidence in emerging and middle adults (Avagianou & Zafiropoulou, 2008). Studies of senior adults found secure

parental attachments to be associated with more resilience, less depression, less anxiety, and greater well-being (Bradley & Cafferty, 2001; Zhong et al., 2016).

Most of the current studies of attachment use White Americans or European samples and adolescents (Arbona & Power, 2003; Causadias et al., 2022; Rice et al., 1997). There is some evidence to support the use of attachment theory among samples of Black Americans, such as a study that found secure parental attachment to be associated with less emotional distress and greater life satisfaction in a sample of Black college students (Love, 2008). More secure parental relationships were also found to be associated with better college adjustment among Black Americans enrolled at a predominantly White university (Hinderlie & Kenny, 2002). Rice et al. (1997) also found more secure parental attachment to be associated with better emotional adjustment in older Black adolescents. However, more research is needed to examine the psychological correlates of parental attachment in Black American adults (Magai et al., 2001). Moreover, Black communities receive substantial support from individuals who are not the primary caregivers (Chatters et al., 1994; Taylor et al., 2013). This suggests that the role of non-familial caregivers should also be examined as influencing attachment for Black individuals (Magai et al., 2001).

Fictive Kin Relationships

Fictive kin, often known as chosen families, develop connections that resemble family ties. Fictive kin bonds are built on strong friendships or ceremonial ties rather than bloodlines or legal procedures (Chatters et al., 1994; Ebaugh & Curry, 2000). Fictive kin were useful in that they provided families with additional social and economic support (Chatters et al., 1994). Black Americans identify having fictive kin bonds at higher rates

than White Americans, frequently using terminology such “aunt,” “uncle,” or “play cousin,” to refer to fictive kin family members (Chatters et al., 1994). Older Black Americans have also been shown to bolster their support system with fictive kin bonds (Johnson, 1999; Jordan-Marsh & Harden, 2005). Other marginalized groups such as women and sexual minorities also have also been shown to leverage fictive kin bonds at higher rates (Blair & Pukall, 2015; Chatters et al., 1994).

Ethnographic qualitative studies have shown that the usage of fictive kin bonds differ depending on the community’s needs. Fictive kin may be influential in offering some financial relief by providing services like childcare in poorer communities. In more financially secure communities’ fictive kind bonds are an invaluable source of additional social support (Chatters et al., 1994). For immigrants in the United States, fictive kin bonds can offer comradery and connection for people who are far from their families of origin. Fictive kin bonds can also offer social capital in potentially harsh circumstances (Ebaugh & Curry, 2000). Fictive kin bonds may be particularly helpful in instances of less secure parental attachment (Hall, 2008). One qualitative study found that provision of care and autonomy-granting in the context of fictive kin relationships promoted greater psychological well-being among adult children with less secure parental relationships (Hall, 2008).

Though fictive kin appear to be a critical component of Black families, relatively little quantitative research has been undertaken to examine this construct (Chatters et al., 1994; Magai et al., 2001; Taylor et al., 2013). Moreover, no studies have explored the associations between fictive kin bonds and mental health outcomes among Black Americans. One mechanism by which fictive kin bonds and parental attachment may

influence mental health is by supporting children's psychological needs, as posited by the Self-Determination Theory (Deci & Ryan, 2000; Froiland et al., 2019; Vansteenkiste & Ryan, 2013).

Psychological Needs Satisfaction

Self-determination theory is a framework for understanding human motivation and psychological functioning (Deci & Ryan, 2000). This theory predicates that individuals are active agents in pursuit of developing an interpersonally and intrapersonally coherent and consistent sense of self (Vansteenkiste & Ryan, 2013). As individuals pursue this coherent self, it is important that their basic psychological needs are met (Vansteenkiste & Ryan, 2013). These basic psychological needs are autonomy, competence, and relatedness (Vansteenkiste & Ryan, 2013). Autonomy refers to a person's sense of volition in their lives (Costa et al., 2015). Competence refers to feeling of skilled and equipped to reach a desired goal (Costa et al., 2015). Relatedness refers to feeling connected to others (Costa et al., 2015). It is theorized that psychological needs satisfaction (PNS) in the context of close relationships fosters an environment in which an individual can work through challenges, choose their goals, and feel accepted as they pursue forming an integrated sense of self (Costa et al., 2015; La Guardia & Patrick, 2008; Vansteenkiste & Ryan, 2013).

PNS is associated with a number of positive psychological outcomes in children, adults, and seniors (Costa et al., 2015; Froiland et al., 2019; Vansteenkiste & Ryan, 2013). Greater PNS is associated with positive affect (Patrick et al., 2007), increased emotional awareness (La Guardia & Patrick, 2008), greater relationship satisfaction (La Guardia & Patrick, 2008), less emotional exhaustion (Vander Elst et al., 2012), and less

emotional distress (Dwyer et al., 2011). Alternatively, less PNS, also called need thwarting, is associated with less favorable outcomes (Vansteenkiste & Ryan, 2013). Need thwarting is associated with more aggression and depressive symptoms in children (Soenens et al., 2008). In adults, need thwarting is associated with maladaptive coping patterns, depression, and anxiety (Bartholomew et al., 2011), as well as feelings of incompetence (Costa et al., 2015) and relational hypervigilance (Ryan, 2005; Vansteenkiste & Ryan, 2013).

Research also indicates that childhood PNS has relevance to individual's adult functioning (Vansteenkiste & Ryan, 2013). Less PNS in childhood is associated with more emotional distress as well as the development of rigid thinking patterns (e.g., perfectionism) that contribute to psychological distress in adulthood (Vansteenkiste & Ryan, 2013). Less PNS is also associated with developing a tendency towards setting extrinsic goals, and this is associated with less well-being and more distress in samples of adults (Niemiec et al., 2009) and seniors (Van Hiel & Vansteenkiste, 2009). PNS has also been shown to mediate the relationship between attachment styles and emotional distress, with less secure attachment being associated with less PNS and greater emotional distress (Wei et al., 2005). PNS also mediated the relationship between socioeconomic status and physical health in adults (González et al., 2016).

PNS can be met in the context of many relationships, such as those developed with parents and other caregivers (Deci & Ryan, 2000; Froiland et al., 2019). One primary source of PNS early in life happens in the context of early attachments that children form with primary caregivers (Deci & Ryan, 2000). The extent to which caregivers support or thwart a child's innate desire for connection is thought to predict

long-term behaviors, emotional distress, and well-being (Deci & Ryan, 2000). This is supported by research that suggests childhood PNS predicts adulthood psychological distress and functioning (Vansteenkiste & Ryan, 2013).

Although PNS is assumed to be universal, relatively few studies have included Black Americans (Froiland et al., 2019). One study examined Black teenagers and found PNS to be a significant predictor of a better relationship with teachers as well as happiness (Froiland et al., 2019). However, there remains a need for research to study whether PNS is associated with positive outcomes in a sample of Black American adults. Understanding the relationship between parental attachment, PNS, and mental health outcomes among Black Americans is crucial. This examination would provide valuable insight to individuals and practitioners that will allow them to better understand and address mental health symptoms which are associated with less secure parental attachments (Wei et al., 2005).

Moreover, parents are not the only caregivers that can meet a child's psychological needs (Ainsworth & Bowlby, 1991; Vansteenkiste & Ryan, 2013). Since Black Americans report leveraging fictive kin in the care of children (Chatters et al., 1994), understanding whether fictive kin caregivers support psychological needs could be beneficial to understanding the development of PNS among Black Americans.

Current Study

Emotional distress is associated with a number of undesirable outcomes, such as decreased academic performance, diminished physical health, and increased substance use (Ahmed & Julius, 2015; Bouchard et al., 2019; Meeyoung Min et al., 2007; Seixas et al., 2017). Many factors, such as parental attachment, adverse childhood experiences,

race, and gender have been associated with emotional distress (Avagianou & Zafiropoulou, 2008; Falicov, 2003; Girgus & Yang, 2015; Pomerantz & Rudolph, 2003).

Research suggests that Black Americans experience, express, and alleviate emotional distress in culturally specific ways (Chapman & Steger, 2010; Kirmayer, 1989; Williams et al., 2012); however, current research findings provide mixed results on the prevalence rates of emotional distress among Black Americans (Breslau et al., 2005; Centers for Disease Control and Prevention, 2010; Himble et al., 2009). Black Americans may also leverage their social support networks in distinct ways to alleviate distress (Chapman & Steger, 2010; Hays & Gilreath, 2017).

Subjective well-being (SWB), conceptualized as life satisfaction and affect, is also an important component of mental health (Arthaud-Day et al., 2005; Ebaugh & Curry, 2000; Rose et al., 2019). Greater SWB is associated with less physical illness, lower occurrence of mood disorders, and lower suicide risk (Fischer et al., 2021; Nguyen et al., 2016; Suh et al., 2021). Factors such as socioeconomic status and personality traits have been shown to predict SWB (Gannon & Ranzijn, 2005). Positive connections with social support networks, such as family, are also shown to influence SWB (Gallagher & Vella-Brodrick, 2008). Studies of Black Americans found that strong familial support as well as explicit discussions about positive aspects of ethnicity were associated with greater SWB (Rose et al., 2019; Wong et al., 2003; Yoo et al., 2018).

Studies have demonstrated that both emotional distress and SWB are influenced by parental attachment (Avagianou & Zafiropoulou, 2008; Rose et al., 2019). A secure parental attachment, characterized by high care and low overprotection, provides a stable base for children to explore themselves and the world (Ainsworth & Bowlby, 1991;

Sachs-Ericsson et al., 2011). In instances of less secure attachments, children may develop maladaptive views of themselves and the world that can impact their mental health adjustment across their lifespan (Chopik et al., 2013; Love, 2008).

One mechanism by which a secure parental attachment may influence mental health outcomes is by satisfying psychological needs (Deci & Ryan, 2000). The self-determination theory posits that the relationships that individuals have with their parents and other important caregivers can influence emotional distress and SWB by fostering environments that promote autonomy, competence, and relatedness (Costa et al., 2015; Froiland et al., 2019; La Guardia & Patrick, 2008; Patrick et al., 2007; Vansteenkiste & Ryan, 2013). This theory is supported by research that shows that less secure attachment is associated with less PNS and greater emotional distress (Niemiec et al., 2009; Van Hiel & Vansteenkiste, 2009; Vansteenkiste & Ryan, 2013). Less PNS in childhood is also associated with developing rigid thinking patterns that contribute to less SWB among adults and seniors (Van Hiel & Vansteenkiste, 2009; Vansteenkiste & Ryan, 2013).

Parental attachment and PNS are influential in the experience of emotional distress and SWB (Avagianou & Zafiropoulou, 2008; Bartholomew et al., 2011; La Guardia & Patrick, 2008; Patrick et al., 2007; Rose et al., 2019). However, much of current research about attachment and PNS focuses on young adults and White American or European samples (Causadias et al., 2022; Chopik et al., 2013; Froiland et al., 2019). It is important to understand if the constructs operate similarly among Black American adults in order to have a better comprehension of minority mental health. Thus, the first objective of this study was to explore whether greater parental attachment predicts greater PNS, less emotional distress, and greater SWB in a sample of Black Americans.

Given the importance of fictive kin support in Black families, conceptualization of Black American mental health should extend past blood relatives (Chatters et al., 1994; Spruill et al., 2014). In addition to parental bonds, Black Americans use distinct sources of support that is similar to family, such as fictive kin. Fictive kin relationships are family-like bonds that provide additional social support and, at times, childcare in Black American families (Chatters et al., 1994). No studies have examined whether fictive kin bonds can operate like parental attachment in the support of psychological needs satisfaction. Moreover, no study has shown how fictive kin bonds interact with parental attachment in the support of PNS to influence emotional distress and SWB. Given the prevalence of fictive kin relationships in Black communities (Taylor et al., 2013), and the use of these relationships to support children (Chatters et al., 1994), it may be assumed that fictive kin bonds may have an additional effect on PNS in combination with parental attachment. Therefore, the second objective of this study was to discover whether greater fictive kin bonds predict greater PNS, less emotional distress, and greater SWB in a sample of Black Americans.

Finally, the limited research available suggests that fictive kin bonds can be beneficial in the case of less secure parental attachment in the provision of care and autonomy-granting, and this promoted greater psychological well-being (Hall, 2008). This suggests that fictive kin may have a moderating effect on the interaction between parental attachment, PNS, and mental health outcomes. Therefore, the final objective of this study examined whether fictive kin bonds have a moderating effect on PNS in its mediation between parental attachment and emotional distress or SWB.

Research Questions and Hypotheses

Question 1: Does PNS mediate the relationship between parental attachment and the outcome variables emotional distress and SWB?

Hypothesis 1: PNS will mediate the relationship between parental attachment and emotional distress such that greater parental attachment will be associated with greater PNS, which will in turn be associated with more SWB and less emotional distress.

Question 2: Does PNS mediate the relationship between fictive kin bonds and the outcome variables emotional distress and SWB?

Hypothesis 2: PNS will mediate the relationship between fictive kin bonds and emotional distress such that greater fictive kin bonds will be associated with greater PNS, which will in turn be associated with greater SWB and less emotional distress.

Question 3: Do fictive kin bonds moderate the mediational relationship of PNS on parental attachment and the outcome variables of emotional distress and SWB?

Hypothesis 3: Fictive kin bonds will moderate the mediational relationship of PNS on parental attachment and emotional distress. Greater fictive kin bonds will be associated with greater PNS, less emotional distress, and greater SWB.

CHAPTER II – METHODS

Participants and Procedure

The Institutional Review Board (IRB) Human Subjects Protection Review Committee of the University of Southern Mississippi examined and approved this study. See Appendix A for IRB approval form. A desired sample size for the mediation analyses was 229 using an effect size of .25 and statistical power of .8 (Boomsma & Hoogland, 2001; Soper, 2022). After data cleaning (described below) 223 participants were used for the final analyses. Most of the participants (143 people) were Black American volunteers from the University of Southern Mississippi recruited through SONA. Snowball sampling on social media and email campaigns were also used to recruit an additional 80 volunteers. Participants completed surveys using Qualtrics software.

In order to participate in the survey, volunteers needed to identify as Black (e.g., African American, Afro-Caribbean, African) and reside in the United States. Participants also had to report having a fictive kin parental figure involved in their childhood prior to the age of 16. In this study, a fictive kin parental figure was defined as an individual who was neither the primary caregiver nor a blood relative but took on a parental role in the lives of the participants. Participants were informed that they could have become acquainted with their fictive kin parental figure in many ways (e.g., close family friend, adult mentor); however, the person should not be someone legally connected to the participant (e.g., stepparent or foster parent). Participants meeting inclusion criteria were directed to review and sign the informed consent if they wished to participate in the study (see Appendix B). Survey measures were administered in a random sequence to minimize any effects related to the order of presentation. Two instructed response items were

included as quality control checks (i.e., “select ‘very true’ for this item”). Participants who missed both quality assurance checks were removed from data analysis.

Data was monitored to determine if participants completed measures, appropriately identified fictive kin, and correctly answered quality assurance questions. Due to the frequent occurrence of irregular responses, robust data screening was conducted to reduce the occurrence of computer-generated responses. Several measures were included to reduce the occurrence of computer-generated responses. Participants were asked to type the word “human” and incorrect responses were removed from the data. Participants were also asked to enter the first name of their primary caregiver and fictive kin parental figure. Unfitting responses (e.g., characters instead of letters; non-name responses; naming conventions which included first name, middle initial, and last name) were removed from analysis. Finally, individuals whose geotagged location did not match the state they selected as their current location were removed from data analysis.

In total, data were received from 1106 participants. There were 883 respondents removed for the following reasons: 144 respondents did not complete 25% or more of the survey, 109 respondents responded incorrectly to the quality assurance check; 175 respondents did not answer consent item; 150 respondents’ geotagged location did not match their self-described location; 136 respondents did not have a fictive kin parental figure; 126 respondents incorrectly answered the naming convention items; 22 respondents did not identify as Black; 12 respondents were missing all data from the measures; 5 respondents incorrectly entered “human” in the authentication response; 3

respondents were under the age of 18; and 1 respondent resided outside of the United States.

The dataset was examined to determine if assumptions were violated. In order to test, studentized residuals, leverage values, Cook's distances, and standardized DFFITs were calculated. No outliers were identified or removed. The remaining sample used for the analysis was comprised of 223 participants. One hundred forty-three participants (64.1%) were from the student sample collected through SONA systems and 80 participants (35.9%) were collected from snowball sample.

As illustrated in the demographics table (see Table 1), most of the participants identified as African American (75.8%) and female (85.7%). Participants ranged from 18 to 67 years old with an average age of 24.9 years old (*SD* = 7.83). Most participants identified growing up in a two-parent household (61%). Participants identified their primary caregivers and fictive kin parental figures as mostly female (85.7% and 66.1%, respectively). Racial demographics of primary caregivers and fictive kin parental figures closely resembled those of the participants, with African Americans making up the majority of primary caregivers and fictive kin figures (78.5% and 78.3%, respectively). Participants' mean age when they first met their fictive kin caregiver was 6.1 years old (*SD* = 5.71). They reported knowing their fictive kin caregiver for an average of 16.9 years (*SD* = 8.85).

Table 1

Demographic Characteristics of the Sample

	n	%
Participant gender		
Female	191	85.7
Male	30	13.5
Other	2	0.90
Participant ethnicity		
African American	169	78.5
African (born in Africa)	10	4.5
African (parents born in Africa)	7	3.1
Afro-Caribbean (born in the Caribbean)	7	3.1
Afro-Caribbean (parents born in the Caribbean)	9	4
Afro-Latino	7	3.1
Multiracial	11	4.9
Other	3	1.3
Participant raised by two parents		
Yes	136	61
No	82	36.8
No answer	5	2.2
Primary caregiver		
Mother	162	72.6
Father	21	9.4
Grandmother	16	7.2
Grandfather	3	1.3
Other female family member	14	6.2
Other male family member	6	2.2
Other/Not listed	2	.9
Primary caregiver ethnicity		
African American	175	78.5
African (born in Africa)	9	4
African (parents born in Africa)	19	8.5
Afro-Caribbean (born in Caribbean)	6	2.6
Afro-Caribbean (parents born in Caribbean)	2	.9
Afro-Latino	11	4.9
Multiracial	1	.4

Table 1 (continued).

Demographic Characteristics of the Sample

	n	%
Primary caregiver marital status		
Single	42	18.8
Married	117	52.5
Unmarried, living with partner	6	2.7
Divorced	33	14.8
Separated	9	4
Widowed	14	6.3
Other	2	.9
Fictive kin gender		
Female	146	66.1
Male	74	33.5
Trans	1	.5
Fictive kin ethnicity		
African American	173	78.3
African (born in Africa)	6	2.7
African (parents born in Africa)	20	9
Afro-Caribbean (born in the Caribbean)	7	3.2
Afro-Caribbean (parents born in the Caribbean)	1	.5
Afro-Latino	13	5.9
Multiracial	1	.5
Nature of fictive kin relationship		
Family friend	98	44.3
Parent of personal friend	30	13.6
Met at church/faith community	23	10.4
Met at school (e.g., coach/ teacher)	15	6.8
Neighbor	16	7.2
Other	38	17.2

Table 1 (continued).

Characteristic (Range)	*M*	*SD*
Participant age (18-67)	24.9	7.8
Primary caregiver age (33-84)	51	10.1
Age of fictive kin (18 - 84)	50.5	12.2
Quality of relationship with primary caregiver growing up (2-7)	5.7	1.4
Quality of relationship with primary caregiver currently (1-7)	5.9	1.3
Quality of relationship with fictive kin parental figure growing up (1-7)	5.8	1.5
Quality of relationship with fictive kin parental figure currently (1-7)	5.7	1.6
Age when first met fictive kin figure (0 - 16)	6.1	5.7
Hours of contact with fictive kin figure per week as a child (0 - 168)	22.3	26.67
Years of acquaintance with fictive kin (2-60)	16.9	8.9

Measures

Demographic Survey

Table 1 shows the information gathered from a demographic survey, which was used to explore the participants' ethnicities, genders, and ages. Demographic information and subjective relationship ratings were also collected about the participants' primary caregivers and fictive kin parental figures. Participants provided ratings for their relationships during childhood in addition to their current rating on a Likert scale ranging from 1 through 7. Participants rated their relationship with parents to be an average of 5.7 (*SD* = 1.4) during childhood and they rated their current relationship to be 5.9 (*SD* = 1.3).

They rated relationships with their fictive kin parental figures to be an average of 5.8 (*SD* = 1.5) during childhood and 5.7 (*SD* = 1.6) currently.

Parental Attachment

While no scale perfectly represents attachment theory as proposed by Bowlby and Ainsworth (Andretta et al., 2015; Vivona, 2000), research supports the use of several instruments to measure the requisite factors of attachment (Mattanah et al., 2011). This study used the full Parental Bonding Instrument (PBI; Parker et al., 1979) to measure parental attachment. The PBI is a 25-question survey which measures the degree of care and lack of overprotection behaviors and attitudes experienced by the participant in their interactions with parents (Terra et al., 2009). The ideal configuration of parenting is thought to be one which demonstrates high care and low overprotection (Terra et al., 2009).

The PBI has been shown to predict constructs such as mood disorders, coping mechanisms, and parent-child conflicts (Suzuki & Kitamura, 2011; Buelow et al., 2002; Lopez & Gover, 1993). The PBI has demonstrated stability over a 20-year time period (Terra et al., 2009) and the test-retest reliability coefficient is .76 after three-weeks (Lopez & Gover, 1993). Response options range from 3: “very like” to 0: “very unlike” on a 4-point Likert scale. After reverse scoring several items, scores which reflected higher care and lower overprotection were indicative of greater parental bonds. Use of the total score on PBI to represent total attachment score is supported by research (Kapçı & Küçüker, 2006).

Fictive Kin Bonds

In order to measure bonds with fictive kin parental figures, the modified 12-item version of the Parental Bonding Instrument (modified PBI; Carnegie Mellon University, 2016) was administered. The modified PBI includes 12 of the 25 questions used in the original Parental Bonding Instrument (Carnegie Mellon University, 2016; Parker et al., 1979). Items were chosen based on factor analysis published in the original article, (Carnegie Mellon University, 2016; Parker et al., 1979). The modified PBI also includes the subscales of care and overprotection, (Terra et al., 2009). The modified PBI has evidence of good internal consistency, with a Cronbach's α of 0.81 (Carnegie Mellon University, 2016). The modified PBI answer options range from 1: "very unlike" to 4: "very like" on a 4-point Likert scale. Multiple items were reverse scored, and a total score was calculated so that higher total scores indicated greater fictive kin parental figure bonds.

To ensure participants answered questions about one fictive kin figure, they were asked to enter the name of one fictive kin parental figure to consider when answering all of the modified PBI questions. That person's name was then entered as piped text throughout the modified PBI to ensure participant was referring to the correct individual when responding.

Psychological Needs Satisfaction

The Basic Needs Satisfaction in General Scale (BNSG-S; Gagne, 2003) was used to measure psychological needs satisfaction. The BNSG-S is a 21-item self-report measure that includes the subscales that self-determination theory suggests are basic psychological needs: autonomy, competence, and relatedness. Negatively worded items

were reverse scored, and higher scores were associated with more autonomy, competence, or relatedness. Subscales were summed to produce a total score, with higher values indicating higher psychological needs satisfaction. Use of total score for BNSG-S is common (Deci et al, 2010; Zahedi Tajrishi et al, 2011). The BNSG-S demonstrates acceptable to strong internal consistencies, with Cronbach's alphas of .69 for autonomy, .71 for competence, and .86 for relatedness (Gagne, 2003). The BNSG-S has also been shown to have convergent validity with measurements of loneliness, shame, depression, and non-suicidal self-injury in young adults (Emery et al., 2016; Wei et al., 2005). The measure also has been shown to predict life satisfaction and self-esteem in emerging and middle-aged adults (Butkovic et al., 2020).

Subjective Well-Being

The Satisfaction With Life Scale (SWLS; Diener et al., 1985) was employed to measure subjective well-being. The SWLS is a 5-item self-report measure that reflects participants' global well-being (Pavot et al., 1998). Responses are on a 7-point Likert scale from 1 (strongly disagree) to 7 (strongly agree). Participants' answers on the SWLS were summed to produce a total score of subjective well-being. The SWLS demonstrates convergent validity with mental health measures, and it has been shown to predict events such as suicide attempts (Arrindell et al., 1991; Pavot & Diener, 2008). The SWLS has also demonstrated acceptable internal consistency, with Cronbach's alpha scores in the range of .64 to .75. (Arrindell et al., 1991).

Emotional Distress

The Depression, Anxiety, and Stress Scale (DASS-21; Lovibond & Lovibond, 1995) was used to measure participants' emotional distress. The DASS-21 inquired about

respondents' emotional experience in the past week. There are 21 items in this measure and responses range from 0 (did not apply to me at all) to 3 (applied to me most of the time). A total score was generated with higher score indicating greater emotional distress (Lovibond & Lovibond, 1995). The DASS-21 exhibits high reliability and convergent validity with other measures of anxiety and depression (Henry & Crawford, 2005). It also has evidence of good internal consistency in samples of diverse races and ages (Norton, 2007; Sinclair et al., 2012).

Coronavirus Questionnaires

A pandemic quality of life assessment was included in order to account for the potential influence of COVID-19 on emotional distress and life satisfaction. The COVID-19 Impact on Quality-of-Life scale (COV19-QOL; Repišti et al., 2020) is a 6-item measure that assessed the extent that coronavirus has impacted respondents' physical and psychological health. Response options range from 1, (completely disagree) to 5 (completely agree). Higher total scores signify greater pandemic-related distress. The COV19-QOL has evinced an internal consistency of .885 in non-clinical samples (Repišti et al., 2020). It also demonstrates evidence of content validity (Voitsidis et al., 2021).

Data Analysis

Prior to running analyses, data screening was conducted. Frequencies were examined to explore the spread of the data. Participants missing entire measures or 25% or more of the overall data were excluded from analysis (n = 144). Measures were mean centered. Missing data points were replaced using the valid means substitution (Dodeen, 2003). Outliers were assessed by running tests of studentized residuals, leverage values, and standardized DFFITs. The studentized residuals and standardized DFFITs did not

reveal values that increased or decreased by more than 0.5 or 67%, respectively. Additionally, no leverage values increased by more than 67% compared to the previous value.

The assumptions of normality, homoscedasticity, linearity, and no multicollinearity were evaluated to determine if regression analysis were appropriate. A histogram plot of residuals was generated to determine normality. Pseudo-z scores were also examined to check for skewness and kurtosis. The histogram plot approximated a normal curve and the pseudo-z scores fell within the criterion values of positive and negative 3; thus, the assumption of normality was not violated. In order to evaluate homoscedasticity, predicted values and standardized residual values of the dependent variables were plotted. There was no pattern of increase or decrease across predicted values, thus this assumption was not violated. In order to determine if the relationships were linear, partial plots were generated. No curved or non-linear pattern appeared in the plot; therefore, linearity was assumed. Lastly, multicollinearity was evaluated by inspecting the tolerance values. All values exceeded the criterion of 0.2, thus no multicollinearity was assumed. T-tests were conducted to determine if participants reported significantly different levels of emotional distress and SWB across gender. Results did not indicate a significant difference in the variables based on gender; therefore, gender was not included as a covariate.

In order to test the first two hypotheses, structural equation models were conducted using Lavaan package version .6-17 in R with maximum likelihood estimation. The first mediation analysis used PBI-PC as the independent variable, BNSG-S as the mediator, and SWLS and DASS-21 as the dependent variables. This model was

used to examine whether BNSG-S mediates the relationships between PBI-PC and the outcome variables (SWLS and DASS-21). A second mediation analyses used PBI-FK as the independent variable, BNSG-S as the mediator, and SWLS and DASS-21 as the dependent variables. This model was used to examine whether BNSG-S mediates the relationships between PBI-FK and the outcome variables.

In order to test the final hypothesis, Process for R Version 4.3.1 was employed. Two analyses were run. Both analyses included PBI-PC as an independent variable, BNSG-S as the mediator, and PBI-FK as a moderator between PBI-PC and BNSG-S. SWLS was included as the dependent variable in one model and DASS-21 was the dependent variable in the other. These models were used to determine if PBI-FK moderates the mediational relationship of BNSG-S between PBI-PC and the outcome variables.

A final supplemental analysis was run using PBI-PC and PBI-FK as the independent variables, SWLS and DASS-21 as the dependent variables, and BNSG-S as the mediator. This model was tested to investigate the simultaneous effect of PBI-PC and PBI-FK on BNSG-S SWLS, and DASS-21.

CHAPTER III – RESULTS

Means, standard deviations, and Cronbach's α's for each measure are displayed in Table 2 below. Table 2 also includes correlations for the coronavirus impacts as measured by the COVID-19 Impact on Quality-of-Life Scale (COV19-QOL).

Pearson correlations indicated that a significant positive relationship exists between the PBI-PC and the PBI-FK $r(223) = .31$, $p<.001$, the PNS $r(223) = .47$, $p<.001$, and the SWLS $r(223) = .22$, $p<.001$. The PBI-PC was significantly inversely associated with the DASS-21 $r(223) = -.39$, $p<.001$. The PBI-FK was significantly positively associated with the BNSG-S $r(223) = .41$, $p<.001$. The PBI-FK was significantly inversely associated with the DASS-21 $r(223) = -.28$, $p<.001$. BNSG-S was significantly positively associated with the SWLS $r(223) = .39$, $p<.001$ and inversely associated with the DASS-21 $r(223) = -.58$, $p<.001$. SWLS was significantly negatively associated with the DASS-21 $r(223) = -.23$, $p<.001$. COV19-QOL was significantly associated with all variables in the analysis. COV19-QOL was negatively associated with PBI-PC $r(223) = -.22$, $p<.01$, PBI-FK $r(223) = -.14$, $p<.05$, BNSG-S $r(223) = -.37$, $p<.01$, and SWLS $r(223) = -.27$, $p<.01$. It was positively associated with DASS-21 $r(223) = .45$, $p<.01$. Notably, data were collected between February 2023 and March 2024 after COVID-19 quarantine restrictions were lifted. Thusly, COVID-19 impacts seen in this study reflect effects which persisted beyond the lockdown period. The average score on the SWLS for the sample was 22.9 ($SD = 6.1$) and the average score on the DASS-21 was 39.9 ($SD = 14.0$). PBI-FK was not significantly associated with the SWLS.

Table 2

Means, Standard Deviations, Pearson Correlations, and Reliability Matrix for Measures

	M	***SD***	***Cronbach's α***	**1**	**2**	**3**	**4**	**5**	**6**
1. PBI-PC	*51.1*	*12.9*	*(.89)*	-	.31**	.47**	.22**	-.39**	-.22**
2. PBI-FK	*39.3*	*5.4*	*(.74)*		-	.41**	.06	-.28**	-.14*
3. BNSG-S	*106.3*	*17.7*	*(.88)*			-	.39**	-.55**	-.37**
4. SWLS	*22.9*	*6.1*	*(.84)*				-	-.23**	-.27**
5.DASS-21	*18.9*	*14.0*	*(.95)*					-	.45**
6. COV19-QOL	*15.1*	*6.2*	*(.89)*						-

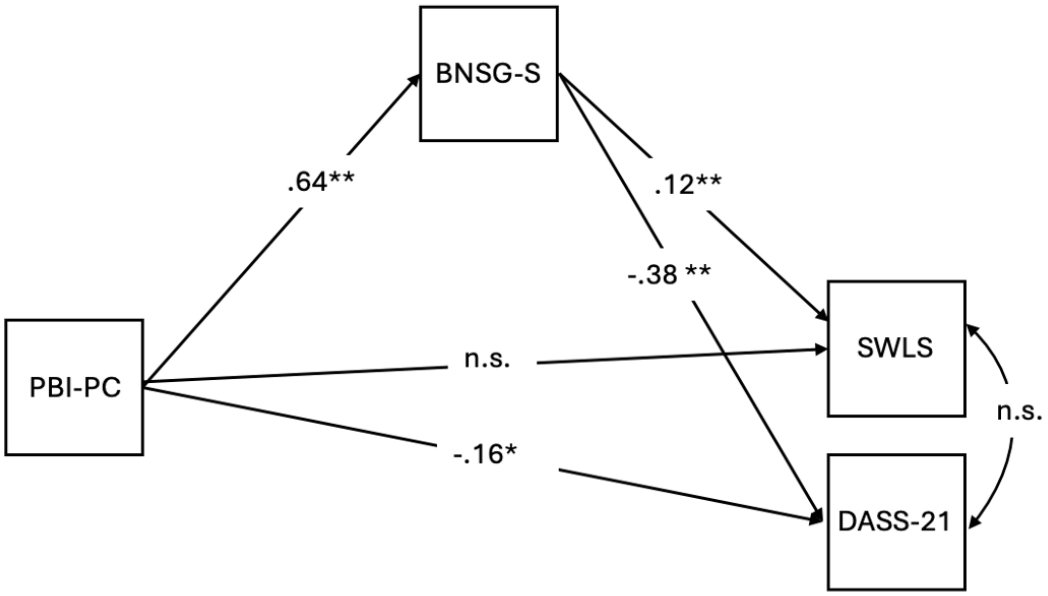
Note. This figure represents the means, standard deviations, Cronbach's alphas and correlations for measures included in the study. The Parental Bonding Instrument (PBI-PC), measures parental attachment; the Modified Parental Bonding Instrument (PBI-FK) measures fictive kin bonds; the Basic Needs Satisfaction General Scale (BNSG-S) measures psychological needs satisfaction; the Satisfaction with Life Scale (SWLS) measures subjective well-being; the Depression Anxiety Stress Scale (DASS-21) measures emotional distress; and the COVID-19 Impact on Quality-of-Life scale (COV19-QOL) measures COVID-19 impacts. Correlations significant at a p-value of less than .05 are represented by a single asterisk (*), and correlations significant at a p-value of less than .001 are represented by two asterisks (**).

Hypothesis 1 posited that psychological needs satisfaction would mediate the relationship between parental attachment and emotional distress such that greater parental attachment would be associated with greater psychological needs satisfaction, which would in turn be associated with greater subjective well-being and lower emotional distress. The results of the first analysis support the initial hypothesis. The model with PBI-PC as the predictor and BNSG-S as the mediator explained 12.5% of the variance in SWLS and 32% of the variance in DASS-21. PBI-PC predicted BNSG-S (β = 0.68 p<.001, 95% CI = [0.52, 0.83]), and BNSG-S predicted SWLS (β = 0.11, p<.001, 95% CI = [0.06, 0.16]). BNSG-S had an inverse relationship with DASS-21 scores (β = -0.38, p<.001, 95% CI = [-0.48, -0.28]). These results indicate a significant indirect effect of

parental attachment on both outcome variables through the mediator BNSG-S. The direct effect of PBI-PC on DASS-21 was also significant (β = -0.16, p = .02, 95% CI = [-0.30, -0.03]), showing that parental attachment predicted emotional distress even while taking psychological needs satisfaction into account. PBI-PC did not have a significant direct effect on SWLS (β = -0.12, p = .48, 95% CI = [-0.44, 0.21]). There was no significant covariance between SWLS and DASS-21 in this model (β = -2.59, p = .55, 95% CI [-11.128, 5.94]). Results of the first analysis indicate that PNS partially mediated the relationship between parental attachment and emotional distress and fully mediated the relationship between parental attachment and SWB in this sample (see Figure 1).

Figure 1

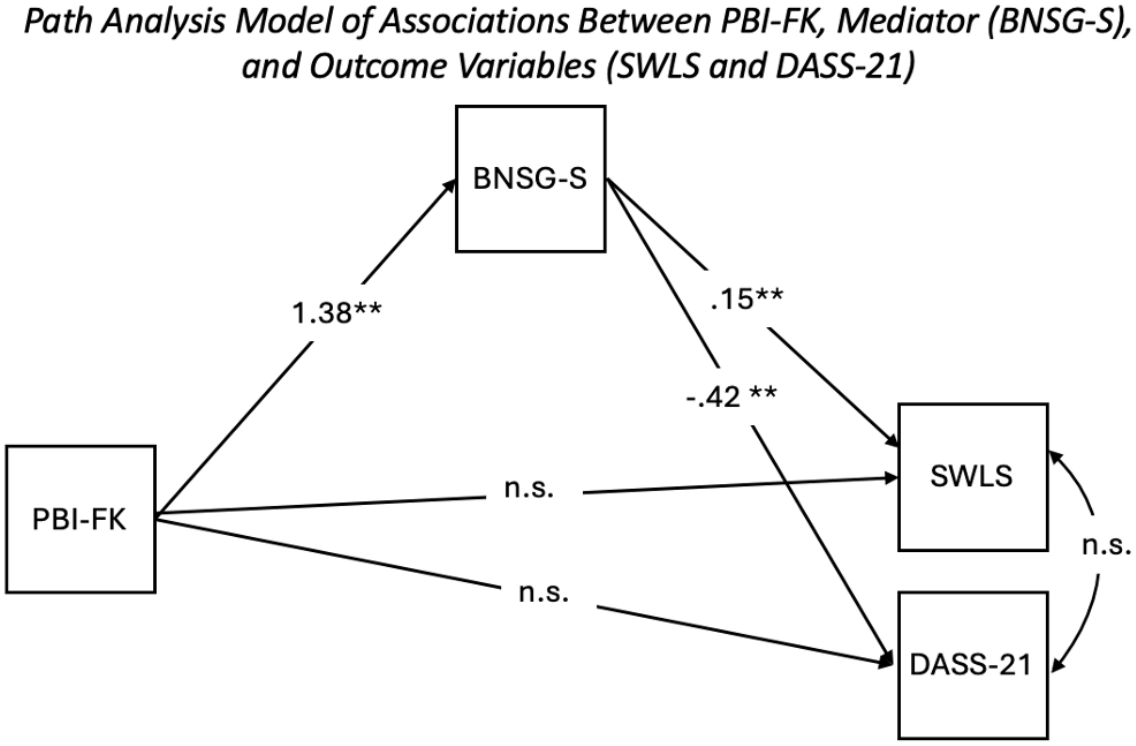
Path Analysis Model of Associations Between PBI-PC, Mediator (BNSG-S), and Outcome Variables (SWLS and DASS-21)



Note: This figure represents the path analysis with PBI-PC as the independent variable, BNSG-S as the mediator, and both SWLS and DASS-21 as outcome variables. Regressions significant at a p-value of less than .05 are represented by a single asterisk (*), and regressions significant at a p-value of less than .001 are represented by two asterisks (**).

Hypothesis 2 posited that psychological needs satisfaction would mediate the relationship between fictive kin bonds and emotional distress such that greater fictive kin bonds would be associated with greater psychological needs satisfaction, which would in turn be associated with greater subjective well-being and less emotional distress. As illustrated in Figure 2, the analysis supported this hypothesis. The model with PBI-FK as a predictor and BNSG-S as mediator explained 30.5% of the variance in DASS-21 and 13.4% of the variance in SWLS. PBI-FK predicted BNSG-S (β = 1.47, p<.001, 95% CI = [1.08, 1.86]) and BNSG-S predicted SWLS (β = 0.14, p<.001, 95% CI = [0.09, 0.19]) and had an inverse relationship with DASS-21 (β = -0.42, p<.001, 95% CI = [-0.52, -0.32]). This suggests a significant indirect effect of parental attachment on both outcome variables through the mediator variable psychological needs satisfaction. The direct paths between PBI-FK and both outcome variables were insignificant, with the 95% confidence interval for SWLS being between -0.29 and 0.02. (β = -0.13, p = .09) and the 95% confidence interval for DASS-21 being between -0.44 and 0.21. (β = -0.12, p = .48). This suggests that psychological needs satisfaction fully mediated the relationship of fictive kin bonds on emotional distress as well as subjective well-being (see Figure 2).

Figure 2



Note. This figure represents the path analysis with PBI-FK as the independent variable, BNSG-S as the mediator, and both SWLS and DASS-21 as outcome variables. Regressions significant at a p-value of less than .001 are represented by two asterisks (**).

Hypothesis 3 posited that fictive kin bonds would moderate the mediational relationship of PNS between parental attachment and the outcome variables of SWB and emotional distress. Greater fictive kin bonds were hypothesized to be associated with greater SWB and less emotional distress. Two analyses were run using the Process for R Version 4.3.1 using PBI-PC as the independent variable, BNSG-S as the mediator, PBI-FK as the moderator between the independent and mediator variables. The first analysis used SWLS as the dependent variable and the second used DASS-21 as the dependent variable. Neither analysis (with SWLS or DASS-21 as dependent variables) supported this hypothesis. In both analyses, there was no significant interaction between PBI-PC

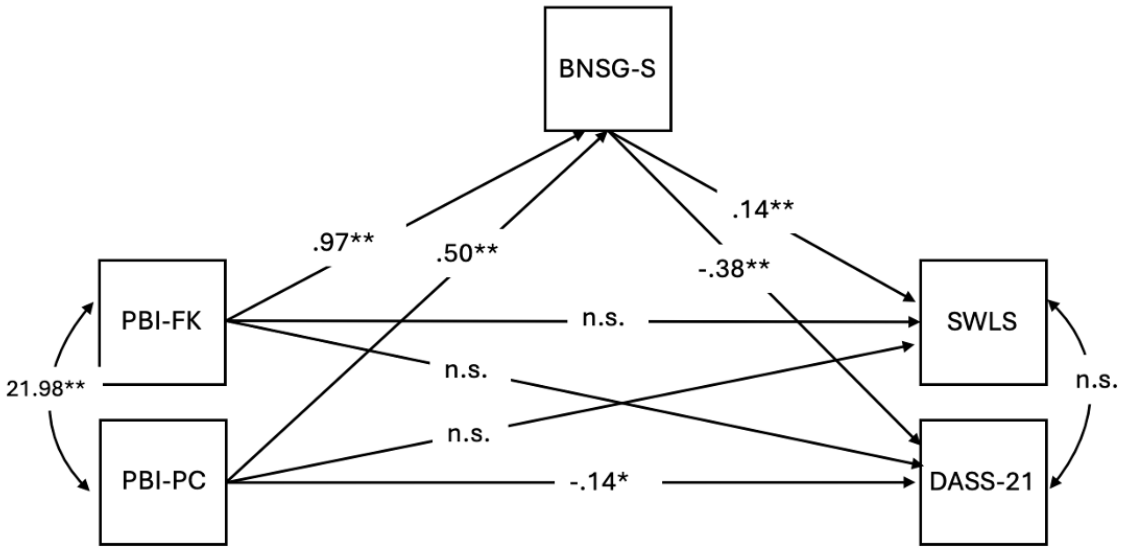
and PBI-FK, showing that PBI-FK did not moderate the mediational relationship between PBI-PC and BNSG-S (b = 0.002, p = .90, 95% CI [-0.03, 0.32]).

Supplemental analyses were conducted to investigate the simultaneous effect of parental attachment and fictive kin bonds on PNS, SWB, and emotional distress. The model with both predictors (PBI-PC and PBI-FK), one mediator (BNSG-S) and two outcome variables (SWLS and DASS-21) explained 13.8% of the variance in SWLS and 33.4% of the variance in DASS-21. Similar to previous analyses, PBI-PC predicted BNSG-S (β = 0.54, p<.001, 95% CI = [0.38, 0.69]). PBI-FK also predicted BNSG-S (β = 1.05, p<.001, 95% CI = [0.68, 1.43]). BNSG-S significantly predicted SWLS (β = 0.13, p<.001, 95% CI = [0.08, 0.18]). BNSG-S had a significant inverse relationship with DASS-21 (β = -0.37, p<.001, 95% CI = [-0.48, -0.27]). This suggests there is a significant indirect effect of parental attachment and fictive kin bonds on both outcome variables through the mediator PNS.

The same direct effect was significant in the supplemental analysis: the direct effect of PBI-PC on DASS-21 (β = -0.16, p = .02, 95% CI = [-0.30, -0.03]). This suggested that parental attachment predicts emotional distress even controlling for fictive kin bonds and PNS. PBI-PC did not have a significant direct effect on SWLS (β = 0.03, p = .32, 95% CI = [-0.03, 0.10]). PBI-FK did not reveal significant direct paths to either SWLS (β = -0.15, p = .07, 95% CI = [-0.30, 0.01]) or DASS-21 (β = -0.07, p = .69, 95% CI = [-0.38, 0.25]). There is significant covariance between PBI-PC and PBI-FK (β = 21.98, p < .001, 95% CI = [12.55, 31.41]). As reflected in Figure 3, there was no significant covariance between SWLS and DASS-21 in this model (β = -2.59, p = .55, 95% CI [-11.128, 5.94]).

Figure 3

Path Analysis Model of Associations Between PBI-PC, PBI-FK, Mediator (BNSG-S), and Outcome Variables (SWLS and DASS-21)



CHAPTER IV – DISCUSSION

The purpose of this study was to examine whether parental attachment and fictive kin bonds are significant predictors of subjective well-being and emotional distress among Black Americans, and if psychological needs satisfaction mediates this relationship. The first research question explored whether PNS mediated the relationship between parental attachment and both subjective well-being and emotional distress. Results confirmed the hypothesis that for Black Americans, greater parental attachment was associated with greater PNS, and greater PNS was associated with higher SWB and lower emotional distress. These findings support previous research which suggests that secure parental attachment during childhood is a factor in meeting adults psychological needs (Deci & Ryan, 2000) and that the satisfaction of these psychological needs leads to less emotional distress and improved functioning in adulthood (Vansteenkiste & Ryan, 2013). There have been no studies examining these relationships in a sample of Black adults, and these findings confirm that traditional models of parenting also can be considered with this population.

It is noteworthy here that parental attachment only affected SWB through the mediator PNS, suggesting that meeting individuals' psychological needs is critical in the development of SWB with Black Americans. This is in line with previous research which states that PNS is the foundation of improving social and personal functioning across multiple social contexts, which may contribute to well-being (Vansteenkiste & Ryan, 2013; Milyavskaya & Koestner, 2011; Deci & Ryan, 2000). Parental attachment had both an indirect effect through PNS and a direct effect on emotional distress suggesting that in addition to PNS, there are other factors of parental attachment which influence emotional

distress. This finding is consistent with research which shows that parental factors such as responsiveness, lack of abuse, and communication styles influence psychological outcomes (Ciocca et al, 2020; Cummings et al, 2013).

The second research question explored whether fictive kin bonds operated similarly to parental attachment in the satisfaction of psychological needs, and in turn, the lessening of emotional distress and improvement of SWB. Results indicated that PNS fully mediated the relationship between fictive kin bonds, SWB, and emotional distress among Black Americans. This finding is important and represents one of the only quantitative studies quantifying the contribution fictive kin parental figures have on adult development. This suggests that, similar to parents, the mechanism by which fictive kin bonds may influence these psychological outcomes is through fostering an environment which provides opportunities for autonomy, relatedness, and competence. This is consistent with literature which states that PNS experienced outside of the context of parental relationships can be influential in psychological outcomes (Costa et al., 2015). This also supports literature which suggests that the provision of care and autonomy granting in the context of fictive kin relationships promoted greater psychological well-being (Hall, 2008).

One combined model which included both independent variables (parental attachment and fictive kin bonds) was found to be significant with pathways paralleling those described in the separate models. This analysis showed that both parental attachment and fictive kin bonds were unique predictors of PNS. What is important about this final model, is that we are able to examine how both fictive kin bonds and parental attachment simultaneously worked through PNS to predict SWB. This study strengthens

previous findings that fictive kin extend the support that children receive from parents (Chatters et al., 1994; Magai et al., 2001; Taylor et al., 2013). This is the only study of its kind which examined both fictive kin and parenting contributions to adult emotional distress and well-being. Further, this included a sample of Black Americans. This is significant because research suggests Black Americans experience, express, and alleviate emotional distress in culturally specific ways (Chapman & Steger, 2010; Kirmayer, 1989; Williams et al., 2012). Thus, it is crucial to research Black Americans to determine the generalizability of constructs which are typically studied among White Americans. There was significant covariance between parental attachment and fictive kin bonds in this model. It could be the case that the relationships participants had with their parents were similar to that of their family members, as the majority of respondents stated that they became acquainted with their fictive kin figure through a parent or family member. Future research can explore whether fictive kin parental figures from different sources (e.g., coaches, family friends, church members) have differential impacts on psychological outcomes.

The final research question examined whether fictive kin bonds moderated the mediational relationship between parental attachment and psychological needs satisfaction. The results of this study did not support that hypothesis. Though fictive kin bonds were influential in the provision of PNS, they did not moderate the mediational relationship between parental attachment and PNS. It is likely that the fictive kin bonds are better understood to operate as a separate additional social support as opposed to being a moderator for the parental relationship. The limited available research does suggest that fictive kin bonds may be particularly helpful in the case of less secure

parental attachment (Hall, 2008). Given that most of the individuals in this study were college students, grew up with both parents, and reported good relationships with primary caregivers, it is possible that the moderational effect of fictive kin was less evident in this sample.

There are several limitations to consider in this study. For one, all measures were collected via self-report, and are thusly subject to response bias, social desirability, or misunderstanding (Rosenman et al., 2011). Moreover, all measures were administered at one point in time, making it difficult to isolate mediational effects. Causal relationships cannot be inferred from this study. Another potential limitation of this study is the use of the modified Parental Bonding Instrument as a proxy for both parental attachment and to measure fictive kin relationships. There is currently no measure validated to quantify the unique relationship of fictive kin parental figures; thus, this study employed a measure which research suggests can best simulate fictive kin bonds. Future research can explore developing a measure which represents the unique nature of fictive kin relationships. Developing a measure specifically for the construct of fictive kin parental figure relationships would allow future researchers to better explore which factors of the relationship are most impactful for the satisfaction of psychological needs as well as other outcomes of interest. Another limitation of this study is the inclusion of a sample with a wide age range (18 to 67 years old). It is likely that as participants age, a greater number of factors are influential in their experience with PNS, SWB, and emotional distress; thus, it may be hard to interpret linkages between both parental attachment and fictive kin care and the outcome variables in this study. Finally, the participants in this study were primarily college students, had generally good relationships with their

parents, and had an average emotional distress rating within mild range. Future research can explore whether fictive kin bonds have differential effects in a more diverse sample.

In summation, this study supports earlier findings about parental attachment and fictive kin relationships while also expanding our understanding in significant ways. For one, these findings were consistent with previous research which indicates that parental attachment is critical for PNS, SWB, and emotional distress (Corcoran & McNulty, 2018; Deci & Ryan, 2000; Oshio et al., 2013). This research extends previous findings by focusing on a multiethnic sample of Black Americans, which has not yet been systematically examined. This study also adds quantitative support to the existing literature which suggests that fictive kin bonds can operate in similar and additive ways to parental attachment (Chatters et al., 1994). Understanding how fictive kin parental attachment works is important due to its common use among Black Americans and immigrant families (Ebaugh & Curry, 2000; Taylor et al., 2013). This study illuminates that among Black Americans, fictive kin bonds are influential in supporting increased SWB and decreased emotional distress. Moreover, this study has been unique in quantifying PNS as a mediator by which fictive kin bonds may facilitate these psychological outcomes.

This work contributes to the body of research by expanding empirical understanding regarding the role of parental attachment as well as fictive kin bonds in the support of Black Americans mental health outcomes. It also deepens our understanding of PNS as a potential mechanism by which these relationships influence mental health outcomes. Overall, these findings underscore the important role that non-traditional

family networks have in fulfilling needs and improving mental health within Black American family structures.

APPENDIX A – IRB Approval Form

Office *of*
Research Integrity

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

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NOTICE OF INSTITUTIONAL REVIEW BOARD ACTION

The project below has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services regulations (45 CFR Part 46), and University Policy to ensure:

- The risks to subjects are minimized and reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered involving risks to subjects must be reported immediately. Problems should be reported to ORI via the Incident submission on InfoEd IRB.
- The period of approval is twelve months. An application for renewal must be submitted for projects exceeding twelve months.

PROTOCOL NUMBER:	22-1662
PROJECT TITLE:	Examining the Association Between Parental Attachment, Fictive Kin Bonds, Psychological Needs Satisfaction, Emotional Distress, and Subjective Wellbeing Among Black Americans
SCHOOL/PROGRAM	Psychology
RESEARCHERS:	PI: Roxanne Watts Investigators: Watts, Roxanne~Nicholson, Bonnie~
IRB COMMITTEE ACTION:	Approved
CATEGORY:	Exempt Category
APPROVAL STARTING:	13-Jan-2023

Donald Sacco Jr.

Donald Sacco, Ph.D.
Institutional Review Board Chairperson

APPENDIX B – Informed Consent

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INSTITUTIONAL REVIEW BOARD

STANDARD (ONLINE) INFORMED CONSENT

STANDARD (ONLINE) INFORMED CONSENT PROCEDURES
The Project Information and Research Description sections of this form should be completed by the Principal Investigator before submitting this form for IRB approval. Use what is given in the research description and consent sections below when constructing research instrument online. Last Edited May 13th, 2019

Today's date:July 15, 2022		
PROJECT INFORMATION		
Project Title: Examining the Association Between Parental Attachment, Fictive Kin Bonds, Psychological Needs Satisfaction, Emotional Distress, and Subjective Wellbeing Among Black Americans		
Principal Investigator: Roxanne Watts	Phone: (414)510-3905	Email: roxanne.watts@usm.edu
College: Univeristy of Southern Mississippi	School and Program: School of Psycology, Counseling Psychology Program	
RESEARCH DESCRIPTION		

1. **Purpose**:

   This study is aimed at exploring the correlatations between parental attachment, fictive kin parental figures, and mental health outcomes.

2. **Description of Study:**

   Study participants will be asked to respond to a series of questionnaires that will take approximately 20 to complete. Please read each item carefully and respond thoughtfully, as quality assurance checks will be included to ensure the validity of resposnes. Participants who do not pass the quality assurance check will be excluded from the data analyses.

3. **Benefits:**

   Participants who complete the survey through the SONA system will receive .5 SONA credits. Participants who were not recruited through SONA will be entered in a gift card raffle. Two randomly selected participants will be sent $25 gift cards by email.

   Additionally, participating in this study can help researchers discover practices that promote improved mental health among Black adults.

4. **Risks:**

   This study does not pose a risk for medical injury, nor does it involve any treatment procedures that could pose additional risks. There are no foreseeable risks associated with participation in this study. However, if the content of the questionnaire induces distress, the participants should contact the researcher immediately.

5. **Confidentiality:**

To ensure confidentiality, identifying information like name and contact information will not be associated with the participants' survey responses. All information that participants provide will be kept confidential and stored in a secure location for six (6) years before being destroyed.

6. **Alternative Procedures:**

No alternative procedures are required or provided.

7. **Participant's Assurance:**

This project and this consent form have been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5125, Hattiesburg, MS 39406-0001, 601-266-5997.

Any questions about this research project should be directed to the Principal Investigator using the contact information provided above.

CONSENT TO PARTICIPATE IN RESEARCH

I understand that participation in this project is completely voluntary, and I may withdraw at any time without penalty, prejudice, or loss of benefits. Unless described above, all personal information will be kept strictly confidential, including my name and other identifying information. All procedures to be followed and their purposes were explained to me. Information was given about all benefits, risks, inconveniences, or discomforts that might be expected. Any new information that develops during the project will be provided to me if that information may affect my willingness to continue participation in the project.

Include the following information only if applicable. Otherwise delete this entire paragraph before submitting for IRB approval: The University of Southern Mississippi has no mechanism to provide compensation for participants who may incur injuries as a result of participation in research projects. However, efforts will be made to make available the facilities and professional skills at the University. Participants may incur charges as a result of treatment related to research injuries. Information regarding treatment or the absence of treatment has been given above.

CONSENT TO PARTICIPATE IN RESEARCH

By clicking the box below, I give my consent to participate in this research project.

☐ Check this box if you consent to this study, and then click "Continue." (Clicking "Continue" will not allow you to advance to the study, unless you have checked the box indicating your consent.)

If you do not wish to consent to this study, please close your browser window at this time.

APPENDIX C – DEMOGRAPHCS FORM

Research Participant Demographic Questionnaire

For the purposes of this study, you will be asked to identify a ***fictive kin parental figure***. A fictive kin parental figure is *not* your primary caregiver or a blood relative. Instead, fictive kin are non-familial persons who have a parent-like role in your life prior to your turning age 16. This can include a close family friend or other adult mentor that was regularly involved with you and/or your family during your upbringing whom you also view as family. This person cannot be someone legally bound to you (e.g. stepparent or foster parent).

Do you have ***fictive kin parental figure***?
☐ Yes
☐ No

Participants in this study will need to identify as Black American. For the purposes of this study, Black Americans are defined as people of African descent who currently live in the United States of America. This includes the categories such as African American, Afro-Caribbean, Afro-Latino, African, and multiracial Black.

Do you identify as Black American?
☐ Yes
☐ No

The following survey will ask a series of questions about your primary caregiver. If you have more than one parent or guardian, please select one of them (perhaps the one who has had the most influence on you) and think about that person to answer the primary caregiver questions. Please select yes to confirm you understand the directions and will answer questions about one person as your primary caregiver.

☐ Yes
☐ No

The survey will also ask about fictive kin parental figures. If you have more than one fictive kin parental figure, please select one of them (perhaps the one who has had the most influence on you) and think about that person to answer the fictive kin parental figure questions. Please select yes to confirm you understand the directions and will answer questions about one person as your fictive kin parental figure.

☐ Yes
☐ No

Personal Information

What is your age? _____	What is your gender? ☐ Male ☐ Female ☐ Other _____
What is your marital status? Married Divorced Separated Never married Unmarried and living with partner Widowed Other (please describe) _____	What is your employment status? Working full-time Working part-time Retired Seeking employment Homemaker Prefer not to say Other
Do you have children? Yes No Prefer not to say How many children do you have, if any? _____	
Which best describes you. Select all that apply: ☐ African American ☐ African origin (born in African country) ☐ African origin (parents born in Africa country) ☐ Afro-Caribbean (born in the Caribbean) ☐ Afro-Caribbean (born in the Caribbean) ☐ Afro-Latino/ Black Hispanic ☐ Multiracial (please specify) _____ ☐Other (please specify) _____	

What is your estimated annual household income?

☐ Under $20,000
☐ $20,001 - $40,000
☐ $40,001 - $60,000
☐ $60,001 - $80,000
☐ $80,001 - $100,000
☐ $100,001 or over

What is the highest level of education you completed?
☐ Less than high school
☐ High school or GED
☐ Some college, but no degree
☐ Associates degree
☐ Bachelor's degree
☐ Post-graduate degree

Primary Caregiver Information

For the purposes of this study, you will be asked to identify a ***primary caregiver***. Please select the person primarily involved with the majority of your upbringing from birth to age 16. If you have multiple caregivers, please choose only one to respond to the primary caregiver questions.
Answer the following questions with your primary caregiver in mind.

Which option below best describes your primary caregiver? Mother Father Grandmother Grandfather Other female family member (e.g. aunt) Other male family member (e.g. uncle) Other (please describe) _____	What is your primary caregiver's marital status? Married Divorced Separated Never married Unmarried and living with partner Widowed Other (please describe) _____
Which best describes your primary caregiver? Biological parent Adoptive parent Foster parent	Were you raised by two parents (biological, step-parents, foster or adoptive)? ☐ Yes ☐ No

Step-parent Other (please describe) _____	☐ Other (please describe) _____
Which best describes your primary caregiver? ☐ African American ☐ African origin ☐ Afro-Caribbean ☐ Afro-Latino/ Black Hispanic ☐ American Indian or Alaska Native ☐ Asian ☐ Native Hawaiian or Pacific Islander ☐ White/Caucasian ☐ Multiracial (please specify) _____ ☐Other (please specify) _____	
Is your primary caregiver still living? ☐ Yes ☐ No. If no, please include the year the primary caregiver passed away _____ ☐ Unsure If applicable, what is your primary caregiver's current age? _____	What is your primary caregivers estimated annual household income? ☐ Under $20,000 ☐ $20,001 - $40,000 ☐ $40,001 - $60,000 ☐ $60,001 - $80,000 ☐ $80,001 - $100,000 ☐ $100,001 or over ☐ Don't know/Prefer not to answer What is the highest level of education your primary caregiver completed? ☐ Less than high school ☐ High school or GED ☐ Some college, but no degree ☐ Associates degree ☐ Bachelor's degree ☐ Post-graduate degree
Please rate the quality of your relationship with your primary caregiver ***when you were a child*** on a scale from 1-10 (10 indicating highest quality, 1 indicating lowest quality) _____	

1----------5----------
10
Lowest quality Moderate quality Highest quality

Please rate the *current* quality of your relationship with your primary caregiver on a scale from 1-10
(10 indicating highest quality, 1 indicating lowest quality) _____

1----------5----------
10
Lowest quality Moderate quality Highest quality

How do you primarily engage with your primary caregiver now?

☐ In person
☐ Telecommunication (phone calls, text messages, or video call)
☐ Virtually (social media)
☐ My primary caregiver is now deceased
☐ I no longer communicate with my primary caregiver
☐ Other _____

To what extent did your primary caregiver encourage you to make your own decisions growing up?

1----------4----------7
Not at all true Very true

To what extent did your primary caregiver help you feel more capable of accomplishing tasks or goals?

1----------4----------7
Not at all true Very true

To what extent do you feel close to your primary caregiver?

1----------4----------7
Not at all true Very true

Fictive Kin Parental Figure Information

You have indicated that you have a fictive ***kin parental figure*** (a person who is *not* a primary caregiver or a relative, but nevertheless had a parent-like role in your life). If you have multiple fictive kin parental figures, please choose only one to consider when

responding to fictive kin questions in this survey. The fictive kin caregiver you select should have been in your life at some point when you were between the ages of 1 and 16. Answer the following questions with your fictive kin parental figure in mind.

<table>
<tr>
<td>What is your fictive kin's gender?

☐ Male
☐ Female
☐ Other _____

Is your fictive kin a blood relative?

☐ Yes
☐ No</td>
<td>Is your fictive kin still living?

☐ Yes
☐ No. If no, please include the year the fictive kin passed away _____
☐ Unsure

If applicable, what is your fictive kin's current age? _____</td>
</tr>
<tr>
<td colspan="2">What is your fictive kin's race?

☐ African American
☐ African origin
☐ Afro-Caribbean
☐ Afro-Latino/ Black Hispanic
☐ American Indian or Alaska Native
☐ Asian
☐ Native Hawaiian or Pacific Islander
☐ White/Caucasian
☐ Multiracial (please specify) _____
☐Other (please specify) _____</td>
</tr>
<tr>
<td colspan="2">What is the highest level of education your fictive kin completed?
☐ Less than high school
☐ High school or GED
☐ Some college, but no degree
☐ Associates degree
☐ Bachelor's degree
☐ Post-graduate degree</td>
</tr>
<tr>
<td colspan="2">What is your fictive kin parental figure's estimated annual household income?

☐ Under $20,000</td>
</tr>
</table>

☐ $20,001 - $40,000
☐ $40,001 - $60,000
☐ $60,001 - $80,000
☐ $80,001 - $100,000
☐ $100,001 or over
☐ Don't know/Prefer not to answer

Which option below best describes your relationship to your fictive kin?

I think about/refer to this person as a mother/father
I think about/refer to this person as a grandmother/grandfather
I think about/refer to this person as an aunt/uncle
I think about/refer to this person as a cousin
I think about/refer to this person as a brother/sister
I think about/refer to this person as a family friend
I think about/refer to this person as a personal friend
Other (please describe) _____

How many years has the fictive kin been present in your life? _____

Between which ages was the fictive kin present in your life?

_____

How did you meet your fictive kin?
☐ My fictive kin was a family friend
☐ My fictive kin was the parent of a personal friend
☐ My fictive kin was a member of my church or faith-based community
☐ My fictive kin was a coach, teacher, or other school-based figure
☐ My fictive kin was a neighbor
☐ Other _____

When you were growing up, about how many hours of contact (in-person or remote) did you have with your fictive kin per week? _____

0 hours----------25 hours--------
50+hours

Please check all of the statements that are/were applicable to your fictive kin.
☐ My fictive kin made me feel like I belonged
☐ I celebrated special events (e.g. birthdays/holidays) with my fictive kin
☐ I engaged in fun activities with my fictive kin
☐ My fictive kin was involved in providing academic support
☐ My fictive kin was involved in providing emotional support
☐ My fictive kin was involved in providing financial support

☐ My fictive kin was involved in discipline during my childhood

Please rate the quality of your relationship with your fictive kin parental figure *when you were a child* on a scale from 1-10
(10 indicating highest quality, 1 indicating lowest quality) _____

1----------5----------
10
Lowest quality Moderate quality Highest quality

Please rate the *current* quality of your relationship with your fictive kin parental figure on a scale from 1-10

1----------5----------
10
Lowest quality Moderate quality Highest quality

How do you primarily engage with your fictive kin parental figure now?

☐ In person
☐ Telecommunication (phone calls, text messages, or video call)
☐ Virtually (social media)
☐ My fictive kin parental figure is now deceased
☐ I no longer communicate with my fictive kin parental figure
☐ Other _____

Please share how you met your fictive caregiver. What relationship do they have to you or your family?

To what extent did your fictive kin encourage you to make your own decisions?

1----------4----------7
Not at all true Very true

To what extent did your fictive kin help you feel more capable of accomplishing tasks or goals?

1----------4----------7
Not at all true Very true

To what extent do you feel close to your fictive kin?

1----------4----------7
Not at all true Very true

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