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**BISEXUALITY AND MOTHERHOOD: AN INVESTIGATION OF PSYCHOLOGICAL  
DISTRESS, PARENTING EFFICACY, AND SELF ESTEEM THROUGH IDENTITY  
THEORY**

by

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## **ABSTRACT**

### **BISEXUALITY AND MOTHERHOOD: AN INVESTIGATION OF PSYCHOLOGICAL DISTRESS, PARENTING EFFICACY, AND SELF ESTEEM THROUGH IDENTITY THEORY**

Laurin B. Roberts  
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Bisexual individuals are more likely to be parenting as compared to other sexual minority individuals, however a review of the current research on sexual minority parenting and families demonstrates a limited understanding of the experiences unique to this population. Furthermore, the socialization of parenthood as both a heterosexual practice, and one that is intertwined with womanhood suggests bisexual mothers may encounter unique challenges and experiences in negotiating these two identities. Therefore the current study seeks to expand upon the literature with a primary aim of understanding the relationship between bisexuality and motherhood identities, psychological distress, parenting efficacy, and self-esteem from the theoretical perspective of identity theory. Data were examined from 211 self-identified bisexual women, who were currently parenting at least one child under the age of 18. Results revealed a moderating effect of parenting identity centrality on the relationship between bisexual identity centrality and sexual identity salience. Furthermore, sexual identity salience demonstrated significant relationships with participants' level of parenting guilt, self-esteem as a bisexual individual, and feelings of shame as a bisexual individual. Participants who reported higher feelings of efficacy in their parenting role reported lower levels of parenting guilt as well as lower levels of psychological distress. Finally, higher levels of sexual identity salience were related to lower levels of psychological distress. Results offer partial support for identity theory as a mechanism through which to understand experiences of parenting guilt, shame as a bisexual

individual, and psychological distress in a sample of bisexual mothers.

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This dissertation is dedicated to my parents.

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## TABLE OF CONTENTS

	Page
LIST OF TABLES .....	ix
LIST OF FIGURES .....	x
Chapter	
I. INTRODUCTION .....	1
BISEXUAL IDENTITY .....	2
PARENTING IDENTITY .....	9
MOTHERHOOD .....	10
MOTHERHOOD AND IDENTITY .....	11
BISEXUALITY AND PARENTING .....	14
INVISIBILITY AND DISCLOSURE OF A BISEXUAL IDENTITY .....	15
MENTAL HEALTH AND WELL-BEING .....	16
BISEXUAL AND PARENTING IDENTITIES .....	18
IDENTITY THEORY .....	20
THE CURRENT STUDY .....	25
HYPOTHESES .....	26
IDENTITY CENTRALITY AND IDENTITY SALIENCE .....	26
IDENTITY VERIFICATION AND EMOTION-BASED OUTCOMES .....	27
IDENTITY VERIFICATION, EMOTION-BASED OUTCOMES, AND PSYCHOLOGICAL DISTRESS .....	27
II. METHOD .....	29
PARTICIPANTS .....	29
PROCEDURE .....	35
MEASURES .....	36
DEMOGRAPHICS .....	36
PARENTING IDENTITY CENTRALITY .....	39
SEXUAL IDENTITY CENTRALITY .....	39
SEXUAL IDENTITY SALIENCE .....	40
PARENTING SELF-EFFICACY .....	42
SELF-ESTEEM AS A BISEXUAL INDIVIDUAL .....	43
GUILT AND SHAME .....	44
PSYCHOLOGICAL DISTRESS .....	45
III. RESULTS .....	46
MEASUREMENT MODEL .....	49
STRUCTURAL EQUATION MODEL .....	49



Chapter	Page
MODEL ESTIMATION .....	50
IDENTITY CENTRALITY AND IDENTITY SALIENCE.....	55
IDENTITY VERIFICATION AND EMOTION-BASED OUTCOMES .....	56
IDENTITY VERIFICATION, EMOTION-BASED OUTCOMES, AND PSYCHOLOGICAL DISTRESS.....	57
IV. DISCUSSION.....	62
IDENTITY CENTRALITY AND IDENTITY SALIENCE .....	63
IDENTITY VERIFICATION AND EMOTION-BASED OUTCOMES.....	66
GROUP IDENTITY .....	66
ROLE IDENTITY .....	67
IDENTITY VERIFICATION, EMOTION-BASED OUTCOMES, AND PSYCHOLOGICAL DISTRESS .....	68
LIMITATIONS.....	71
CLINICAL IMPLICATIONS AND FUTURE DIRECTIONS.....	72
V. CONCLUSIONS.....	76
REFERENCES .....	77
APPENDICES	
A. BASIC INFORMATION QUESTIONNAIRE.....	87
B. THE SELL ASSESSMENT .....	91
C. THE MULTIDIMENSIONAL INVENTORY OF BLACK IDENTITY CENTRALITY SUBSCALE .....	95
D. LESBIAN, GAY, AND BISEXUAL IDENTITY SCALE .....	96
E. THE NEBRASKA OUTNESS SCALE .....	97
F. THE PARENTING SENSE OF COMPETENCE SCALE .....	98
G. THE COLLECTIVE SELF-ESTEEM SCALE .....	99
H. THE HARDER PERSONAL FEELINGS QUESTIONNAIRE 2.....	100
I. THE MENTAL HEALTH INVENTORY-18 .....	101
VITA.....	102

## LIST OF TABLES

Table	Page
1. Demographic Characteristics of Sample.....	30
2. Frequencies of the Sell Assessment.....	33
3. Demographic Characteristics of Participants' Children .....	34
4. Descriptive Statistics of Study Measures.....	46
5. Intercorrelations of Variables .....	47
6. Psychological Distress Latent Variable CFA Standardized Factor Pattern Loadings .....	52
7. Model 1 Modification Indices.....	52
8. Model 2 Modification Indices.....	53
9. Factor Loadings for Latent Variables within the Final Model .....	58
10. Direct Path Estimates for the Final Model.....	59
11. Simple Slope Estimates for Moderation Effect .....	60
12. Hypothesized Indirect Path Estimates for the Final Model .....	61

**LIST OF FIGURES**

Figure	Page
1. Hypothesized Structural Equation Model.....	28
2. Results of the Final Hypothesized Structural Equation Model.....	54
3. Simple Slopes of Sexual Identity Saliency on Bisexual Identity Centrality at Different Levels of Parenting Identity Centrality.....	60
4. Simple Slopes of Sexual Identity Saliency on Parenting Identity Centrality at Different Levels of Bisexual Identity Centrality .....	61

## CHAPTER I

### INTRODUCTION

Despite the growing number of studies that examine sexual minority parenting experiences, few empirical accounts exist on bisexual parents. Instead, much of the research has focused on the parenting experiences of lesbian women or gay men, which leaves a number of important questions regarding bisexual parents and their families unanswered (Biblarz & Savci, 2010; Goldberg, 2010; Goldberg & Allen, 2013). The need for research on this population is bolstered by recent studies which suggest that bisexual individuals are more likely to be parenting, and may consider parenting more often than lesbian women and gay men. For instance, results of a nationally representative survey revealed that 59% of bisexual women and 32% of bisexual men surveyed endorsed being current parents, in contrast to 31% of lesbian women and 16% of gay men surveyed (PEW, 2013). Additionally, research by Gates and colleagues (2007) demonstrated that among non-parents, bisexual women and men were more likely to report a desire to have children (*bisexual women* = 75.4%; *bisexual men* = 70.4%), compared to lesbian women (37.4%) and gay men (57.0%). Together these studies highlight the breadth of the population, further illuminating the current gap in the literature and pressing the need for research to examine the potentially unique experiences bisexual individuals face as parents.

Most recently, a team of researchers started to address the call for research on the bisexual parent population through qualitative examinations of bisexual motherhood (e.g., Delvoye & Tasker, 2016; Tasker & Delvoye, 2015). Indeed, when considering parenting, it is likely that bisexual women may face particularly unique considerations given the socialization of motherhood as an important aspect of womanhood (e.g., Arendell, 2000) and the potential

conflict of parenthood as incongruent with a sexual minority identity (e.g., Cao, Mills-Koonce, Wood, & Fine, 2016). These studies, in combination with additional preliminary research (e.g., first-person accounts; Blanco, 2009; Wells, 2011), have begun to highlight the experiences of bisexual mothers in regards to constructing self-identity in the context of bisexuality, mothering, and the external social structure. An important next step in the development of the bisexual parenting literature is to examine these phenomenon using structured measurement and hypothesis testing. Thus, the current study expands upon the literature through a quantitative examination of identity theory as it applies to the negotiation of sexual identity and parenting identity among bisexually-identified women.

### **Bisexual Identity**

The literature on bisexual identity development is quite limited. Few researchers have sought to delineate the process by which individuals come to adopt a bisexual identity, a limitation that may be a consequence of historical conceptualizations of sexuality identity as a dichotomous construct (e.g., Ross & Dobinson, 2013; Rust 1993). Researchers have highlighted the erasure of bisexuality in research and the broader social context as a function of how sexual identity is socially constructed (e.g., Ross, Dobinson, & Eady, 2010; Ross & Dobinson, 2013; Rust, 2002; Yoshino, 2000). That is, sexual orientation has been described as dichotomous in which individuals are presumed to be attracted to either the same sex or opposite sex (Barker & Langdridge, 2008). Further, the language associated with sexual orientation has perpetuated the dichotomy through the use of binary terms such as heterosexual or homosexual, male or female, etc. (Bereket & Brayton, 2008). As a result, Ross and Dobinson (2013) suggest that, “this monosexist construction renders bisexuality (a) invisible, (b) irrelevant, and (c) illegitimate” (p. 92). Thus, based on their sexual identity, bisexual individuals are less visible in the social

context and often assumed to be heterosexual or lesbian/gay dependent upon the gender of their relationship partner. This experience, hereafter referred to as *bisexual invisibility*, reflects a substantial challenge in the process of bisexual identity development. Moreover, the idea that bisexual individuals face the same difficulties as lesbian, gay, or heterosexual individuals – based on the gender of their relationship partner – represents *bisexual irrelevance*. Finally, historical perspectives in sexual identity research have contributed to the idea of *bisexual illegitimacy*, where bisexual identity has been described as a “stepping stone” on the path toward a lesbian or gay identification (e.g., Chapman & Brannock, 1987; Miller 1979; Ponse, 1978). Only within the last two decades has research begun to acknowledge bisexuality as a relevant, legitimate identity (Diamond, 2008) and to examine the trajectories by which bisexual individuals identify as such.

Paula Rust (1993) was among the first to conduct an empirical investigation into the process of bisexual identity development. She explicitly sought to delineate a model of female sexual identity development in which both lesbian and bisexual identities were considered valid alternatives to a heterosexual identity. Furthermore, she aimed to offer a new conceptualization of the sexual identity process to counter preexisting developmental models, which she deemed problematic due to their endorsement of linear trajectories with clear “start” and “end” points (Rust, 1993). To address these goals Rust surveyed 346 lesbian-identified and 60 bisexual-identified women on several components of their sexual identity histories, including previously theorized milestones in sexual identity development (e.g., age at which participants experienced first feelings of same-sex attraction, age at which participants realized they may not be heterosexual, etc.). The results revealed a number of important conclusions regarding the process by which women come to identify as lesbian or bisexual. First, Rust demonstrated that

sexual identity development does adhere to an orderly, stage-sequential model but not all individuals' progress through the stages at the same pace or in the same order. Additionally, Rust highlighted significant differences between lesbian-identified and bisexual-identified participants in terms of the age at which certain sexual orientation milestones were experienced. Specifically, the average bisexual participant experienced each of the psychological events at an older age compared to the average lesbian participant. Notably, bisexual participants reported their first experiences of same-sex sexual attraction at the average age of 18, whereas lesbian participants reported these same experiences on average at 15 years of age (Rust, 1993). Furthermore, bisexual participants reported the adoption of a bisexual identity at an average age of 25 years old, whereas lesbian participants' average age of adopting a lesbian identity was 22 years old (Rust, 1993).

A final result highlighted by Rust's work was that, even after adopting an identity, lesbian and bisexual participants alike continued to wonder about the accuracy of this sexual identity. While the data supported the existence of a stage-sequential model, Rust (1993) asserted that, "variations on this experience are too common to be considered deviations from the norm" (p. 68). Participants did not typically follow a linear trajectory and instead questioned the accuracy of their sexual identities, experienced instances in which they identified as another sexual identity (e.g., lesbian, bisexual, unidentified), and at times returned to a previously held identity (e.g., "came out" as bisexual, later identified as lesbian, later identified again as bisexual; Rust, 1993). These findings compelled Rust to argue for a sexual identity model in which identity re-labeling, identity uncertainty, and variations from the sequential-stage trajectory are expected and normative. Thus, the traditional developmental model in which sexual identity progresses linearly from start to finish, with identity changes being reflective of

developmental “regression” or immaturity, is not an accurate depiction of the sexual identity process. Instead, Rust (1993) called for a social constructionist reconceptualization that considers sexual identity development in the context of the evolving sociopolitical environment, in which “changes in self-identity are to be expected of psychologically and socially mature individuals” (p. 68).

Furthering the literature on bisexual identity development, Weinberg, Williams, and Pryor (1994) completed a study in which they interviewed bisexual males and females about their sexual identity. Using qualitative analyses, the authors proposed a model of bisexual identity that included four stages: (1) initial confusion, (2) finding and applying the label, (3) settling into the identity, and (4) continued uncertainty (Weinberg et al., 1994). Aligning with previous research, Weinberg and colleagues suggested that most of the participants who came to identify as bisexual began the process with an established heterosexual identity. This heterosexual identity was later challenged by feelings of same-sex attraction, prompting participants to enter into what the authors termed “initial confusion” (Weinberg et al., 1994). Specifically, the researchers found that participants experienced a variety of feelings of confusion ranging from anxieties and uncertainties about their feelings of same-sex attraction to having limited awareness of the label “bisexual,” which led to confusion in categorizing their attraction toward men and women. Following this stage, which at times lasted for multiple years, participants experienced a variety of events in their lives that promoted the discovery and application of a bisexual label. These events included experiences such as reading about the bisexual identity, talking with others and receiving support and encouragement, reaching out to LGBT organizations, and coming to a place of acceptance regarding sexual feelings (Weinberg et al., 1994). Participants then progressed into a process of settling into their bisexual identity,



which was characterized by a tendency for those interviewed to become more self-accepting and less concerned with the negative social attitudes they encountered due to holding a label such as “bisexual” (Weinberg et al., 1994).

Weinberg and others (1994) recognized a final stage in which participants reported feelings of continued uncertainty about their sexual identity, despite their commitment to a bisexual identity. Although individuals had reached a level of self-acceptance regarding their bisexuality, some continued to encounter periods of doubt due to experiences of insufficient social validation and a general lack of support for bisexual individuals and the bisexual identity (Weinberg et al., 1994). More recently, Brown (2002) proposed that this “continued uncertainty stage” be best re-conceptualized as *identity maintenance* such that this label better represents the stage’s features. For instance, while participants reported experiences of uncertainty regarding their bisexual identity, most continued to label themselves as bisexual (approximately 75%) despite encountering these feelings (Brown, 2002). Thus participants’ experiences did not reflect the widespread stereotype that bisexual individuals are “confused” and do not have a stable sexual identity (e.g., Brewster & Moradi, 2010; Rust, 2000). Instead, bisexual individuals may face unique incidents of social invalidation – for example, pressures to “transition” to a lesbian or gay identity or adopt a heterosexual identity in the context of monogamy – during which they must renegotiate the meaning of their bisexual identity (e.g., Brown, 2002; Weinberg et al., 1994).

Albeit not without their limitations, these early studies on bisexual identity development began to uncover important factors relevant to the bisexual identity process. Namely the research demonstrated that, while important psychological events fall neatly into a stage-sequential process, bisexual identity development does not adhere to a clear linear path. Instead,

deviations from a linear trajectory may be normative and more accurately reflective of the process by which one establishes a non-heterosexual identity. Furthermore, continued exploration and returned examination of one's sexual identity and feelings of attraction should not be considered indicative of developmental immaturity. Rather revisiting the meaning of one's sexual orientation, to the extent that re-labeling occurs, can be expected and does not insinuate an "unhealthy" sexual identity (e.g., Brown, 2002; Rust, 1993; Weinberg et al., 1994). Each of these ideas coincides with Diamond's (2006) arguments about what past research "got wrong about sexual identity development" (p. 80), thus contradicting previously held linear models of sexual identity development.

Diamond (2006; 2008) supported her arguments through the collection of longitudinal data with non-heterosexual women (i.e., lesbian, bisexual, unlabeled). Over the course of 10 years, she interviewed 79 participants regarding characteristics of their sexual identity across four time points. Aligning with the aforementioned research, Diamond (2008) demonstrated that questioning of one's sexual identity does not cease once a label (i.e., lesbian, gay, bisexual) has been adopted. Instead, she found that 67% of the participants had changed their identity label once, and 36% had changed their label more than once, since initially coming out (Diamond, 2008). Further, Diamond (2006) argued against the longstanding idea that individuals who choose not to adopt a sexual identity label are ambivalent, uncertain, and thus experiencing internalized homophobia or mental health concerns. In contrast, she found that as her participants became more comfortable with their sexual attractions over time, they reported less confidence in the ability of a label to capture the complexities of their sexuality (Diamond, 2006). Indeed, 37% of those participants who changed their sexual identity label had transitioned from a sexual-minority label to an unlabeled identity (Diamond, 2006). Thus,

Diamond (2006) suggested that reporting an unlabeled identity did not constitute pathology, but instead “displayed a sophisticated understanding of the inherent limitations of sexual categorization” (p. 83).

The culmination of research proposing that questioning and changes to one’s sexual identity are normative and expected, particularly in the context of bisexuality, might lead one to consider the legitimacy of this sexual identity label. In other words, these notions return researchers to question whether bisexuality is a temporary transitional period or a stable sexual orientation (e.g., Diamond, 2008). In an effort to address this question, Diamond utilized her longitudinal data to systematically compare evidence for different models of bisexuality and provide a more refined understanding of the bisexual identity process. She analyzed changes in sexual identity, attractions, and behavior to determine support for either the conceptualization of bisexuality as a transitional stage or as a distinct orientation, with the capacity for fluidity (Diamond, 2008). Overall, Diamond (2008) found evidence for bisexuality as a distinct orientation, in which bisexuality can “best be interpreted as a stable pattern of attraction to both sexes in which the *specific balance* of same-sex to other-sex desire necessarily varies according to interpersonal and situational factors” (p. 12).

The idea that bisexuality is a stable and statistically valid identification is one of great importance. Perhaps even more groundbreaking is the empirical finding that one can have both a stable sexual minority identity *and* fluidity in accompanying attractions or behaviors, which are influenced by varying factors across the lifespan. Corroborated by perspectives and findings of additional researchers in the field (e.g., Rust, 1993, 1996; Fox, 1996; Weinberg et al., 1994), Diamond’s notion that contextual and social factors impact the enactment of a bisexual identity calls for a more nuanced understanding of bisexuality across the lifespan. Further, this assertion

leads one to consider the potentially influential contexts, experiences, or life-transitions that may impact how bisexual individuals enact this identity. Thus, what follows is a review of research that highlights what may be a particularly salient factor in the context of enacting bisexual identity: parenthood.

### **Parenting Identity**

The decision to become a parent has been conceptualized as one of the major life choices that face emerging adults (i.e., early 20s; Arnett, 2000), particularly when they begin to consider the social roles they wish to occupy in adulthood (e.g., Yaremko & Lawson, 2007). Indeed, parenthood is described as “one of the most salient markers of development in adults” (Katz-Wise, Priess, & Hyde, 2010, p. 18), a notion that dates back to Erikson’s ideas regarding development and generativity (e.g., Palkovitz, 1996; Palkovitz, Marks, Appleby, & Holmes, 2003). Specifically, researchers have theorized that the transition to parenthood produces a unique set of demands and challenges that may significantly impact one’s developmental trajectory in adulthood (e.g., Palkovitz, 1996). Parenthood has been shown to impact gender-role attitudes and characteristics, division of labor, and other role behaviors and attitudes (e.g., Katz-Wise et al., 2010). Moreover, this role change can effect social connections, identity salience (e.g., Katz-Wise et al., 2010; Laney, Carruther, Hall, & Anderson, 2014), and individual characteristics such as sense of morality (McMahon, 1995) and maturity (Palkovitz et al., 2003). Although the transition to parenthood undoubtedly impacts mothers and fathers alike, there are unequivocal differences in how men and women experience this life change and integrate the role of parenthood. Given the socialization processes of women as intertwined with parenting, there exist important considerations about the impacts, meaning, and identity of motherhood.

**Motherhood.** Not only is motherhood intertwined with female adult development, it is perhaps one of the most socially salient roles given to women (e.g., Arendell, 2000; Laney et al., 2014). While women's movement into the workforce spurred significant social changes around the expectations of parenting in American culture, gender socialization of this role persists. That is, women are often socialized to develop values and traits such as to be nurturing, caring, empathetic, etc. and to place relationships in high regard; traits which align neatly with the socially values traits in service of motherhood (Arendell, 2000; Laney et al., 2014; Yaremko & Lawson, 2007). Further, the discourse surrounding parenthood ascribes certain roles to men and women. Men as parents are socially tasked with providing for their children through engaging in tasks outside of the home, whereas women are socially tasked with the duties of providing care to children (e.g., Katz-Wise et al., 2010; Yaremko & Lawson, 2007). Despite changes to the economic social structure, much of society's composition still favors the gendered division of these roles, where men are afforded more opportunity to assume the provider role and women the nurturing role (Katz-Wise et al., 2010).

In addition to the social expectations of becoming a parent, women also face the existing social conceptualizations of what it means to be a "good mother" (e.g., Ali, Hall, Anderson, & Willingham, 2013; Katz-Wise et al., 2010; Laney et al., 2014). A woman is often expected to sacrifice her needs, wants, and desires to appropriately care for her children and meet their needs (e.g., Laney et al., 2014). In the process of this sacrifice, women's social relationships shift and they must newly consider how motherhood affects things such as their occupations, careers, and autonomy (Nicolson, 1999). Furthermore, women are expected to abandon their prior selves and sources of happiness and shift to meet these emotional needs entirely through their new

motherhood identity. Failure to live up to these idealized expectations may cause feelings of guilt, sadness, or depression (e.g., Nicolson, 1999).

Not surprisingly, given the socialization of womanhood and motherhood as intertwined, studies have shown parenting identity to be more salient and central for women as compared to men. For instance, Gaunt and Scott (2016) empirically examined the role of gender identities and sociostructural (e.g., number of children, ages of children, etc.) correlates play in parental identity and work identity centrality. The authors found that women participants demonstrated more central and salient parenting identities as compared to men. Furthermore, the younger the age of the child, and the higher the number of children a woman had, negatively impacted women's work identity but did not negatively impact men's work identity. Thus, not only do women exhibit higher levels of parenting identity centrality and salience, but it is likely that additional sociostructural factors that play a role in parenting demands may influence women's ability to engage with other identities in their lives (Gaunt & Scott, 2016).

**Motherhood and identity.** Recently, researchers have begun to examine how motherhood impacts women's identity development (e.g., Ali, et al, 2013; Laney et al., 2014; Laney, Hall, Anderson, & Willingham, 2015). Through qualitative investigation of varying groups of women, including working mothers (i.e., female faculty members; Laney et al., 2014), mothers receiving public assistance (Ali et al., 2013), and Christian women (Laney et al., 2015), researchers have begun to uncover key themes regarding the identity and transition to motherhood. Specifically, through interviews with 30 women, Laney and colleagues (2014) discovered a theme shared by their participants: motherhood expanded the "self" in a multitude of ways. First, participants described motherhood as *personally expansive* such that becoming a parent allowed them to develop characteristics that they believed would not have been possible

without motherhood. The mothers cited becoming more mature, giving, compassionate, empathic, and available, not only with their children, but toward relationships in general. In this way motherhood also appeared to be *relationally expansive*, that is, participants described motherhood as having changed who they were “as individuals and subsequently changed the ways they interacted with others” (Laney et al., 2014, p. 1242). Finally, participants’ responses highlighted motherhood as *generationally* and *vocationally expansive*. Participants described feeling as though motherhood had afforded them the opportunity to make an impact on future generations through the act of raising children. Additionally becoming a mother impacted the way in which participants approached their job, particularly as faculty members. Thus, Laney and colleagues (2014) concluded motherhood as a process by which women negotiate the impact of motherhood on a multitude of additional identities they possess including personal characteristics, relational interactions, and job performance.

In a similar vein, Ali and others (2013) completed a qualitative study with 15 participants who described motherhood as a transformative process. The authors highlighted how all mothers appeared to experience a type of identity change, though the way in which each participant experienced the change varied. Some participants described an instantaneous transformation of their identity whereas others discussed a long-term process by which they felt their identity shift. Of interest are the consequences of the shifts in identity for each of the mothers. Specifically, participants expressed a range of emotional changes including feeling as though they were able to encounter more joy and compassion in addition to some increases in anxiety. Behaviorally, participants discussed how motherhood immensely impacted the way in which they interacted with others or shaped their decisions. The women noted a shift in choices since entering motherhood, where there was an awareness that their behaviors and actions now impacted

someone other than themselves. Finally, participants highlighted the changes motherhood brought to their sense of self identity including feeling a greater sense of purpose, maturity, self-worth, and self-esteem (Ali et al., 2013).

Furthering the idea that women's identity development is significantly impacted by the transition to motherhood, Laney and colleagues (2015) reported on qualitative interviews with a sample of 30 mothers. Through the participants' narratives, the researchers uncovered themes regarding motherhood identity that appear to align with those described by others (e.g., Ali et al., 2013; Laney et al., 2014). Specifically, developing a motherhood identity was depicted as a process by which women seem to undergo significant changes to their identities held before becoming a parent. In contrast, the participants discussed this experience in a different light. For instance many of the mothers described a phenomenon by which they "lost" their identities they held prior to motherhood and experienced feelings of self-loss, but later came to rediscover these identities when the demands of parenting had decreased. Furthermore, the women articulated a sense of redefining themselves within the context of motherhood, meaning that prior identities had to be negotiated given the pervasiveness of the parenting identity. Thus, the authors concluded that becoming a mother, and adopting the motherhood identity, "can be conceptualized as a fracturing of identity wherein women lose or have compressed selves for a time" (Laney et al., 2015, p. 138). This identity fracture appears to allow mothers to incorporate their children into their lives and attend effectively to their needs, and as parenting demands decrease with age, allows for the reincorporation of prior identities as negotiated with motherhood.

While helpful in its promotion of incorporating the needs of the child into a mothers' awareness, this process of identity fracturing can be a challenging psychological event when



confounded with idealized expectations of motherhood. As previously discussed, mothers are expected to abandon their sense of self prior to becoming a parent, to give up those sources of happiness, and to find happiness and a new self explicitly through motherhood. However, research has shown that women may experience emotional repercussions with this loss of self, such as feelings of ambivalence toward their roles as mothers (Parker, 1995) and experiences of postpartum depression (Nicolson, 1999). Further, some mothers may have difficulties with identity reintegration or reconciliation following this fracturing period. For instance, some participants in Ali and colleagues' (2013) study described lack of confidence about their ability to fulfill expectations of motherhood and expressed incongruence between who they were as a mother, and who they wanted to be as a mother. Taken together, these studies on identity and motherhood suggest that women likely undergo significant identity changes when becoming parents that can result in both positive and negative emotional consequences.

### **Bisexuality and Parenting**

As previously discussed, bisexual individuals are currently parenting (e.g., PEW, 2013) and are more likely to report a desire to parent compared to other sexual minority individuals (e.g., Gates et al., 2007), and yet there are very few studies that have examined the potentially unique experiences of bisexual parents. Most of what is currently known has been derived from published first-person accounts or studies including small samples of bisexual parents. In fact, a recent literature review conducted by Ross and Dobinson (2013) found only seven empirical articles reporting specific findings on this population. Although limited, these varying sources provide a foundation upon which we can begin to discern those experiences unique to bisexual parents. Specifically, bisexual parents may encounter distinct challenges or report different

outcomes with respect to (1) invisibility and disclosure of bisexual identity, (2) mental health outcomes and general well-being, and (3) the intersection of bisexual and parenting identities.

**Invisibility and disclosure of a bisexual identity.** A bisexual parent's sexuality cannot be identified solely based on the gender of their co-parent or partner, which is an experience unique from their lesbian, gay, and heterosexual counterparts. As a result these parents face bisexual invisibility and must regularly negotiate the process of disclosure over the course of their lives. This disclosure process may be particularly salient when encountering novel situations such that assumptions of heterosexuality or homosexuality may be made based on a partner's gender. Considering these potentially unique disclosure experiences, Costello (1997) interviewed lesbian, gay, and bisexual (LGB) parents about coming out to their families of origin. Contrary to the experiences of lesbian and gay participants in the study, a self-identified bisexual mother described her disclosure experience as unaccompanied by a displeased or traumatic reaction from her family. Costello suggests that the lack of an adverse reaction may be a function of the participant's marital status, where the disclosure of a bisexual identity occurred in the context of a *heterosexual marriage*, thus potentially alleviating the perceived threat of non-traditional parental or family values often referenced in the context of same-sex parenting. Although individual accounts are far from generalizable, Costello's discussion aligns with ideas of heteronormativity and potential concerns about discrimination in the bisexual parenting population. That is, parents who disclose their bisexuality to others may face prejudicial beliefs such as bisexual individuals being "unfit" for parenting due to stereotypes of instability in relationships and the inability to adhere to monogamy (e.g., Moss, 2012; Ross et al., 2012).

There exists limited empirical research on understanding what factors may impact the disclosure of a bisexual identity as a parent, however detailed first-person accounts highlight the

importance of perceived support or a favorable social context. For instance, Brand (2001) cited influential variables in his decision to disclose his bisexual identity including experiencing support from his spouse and recognizing the societal acceptance of sexual minority identities in his country, the Netherlands. In contrast, Anders (2005) reviews his experiences with disclosing his bisexuality as an American. Throughout his writing he details uncertainty about how this disclosure would impact his relationship with his son, citing concerns regarding social stereotypes and perceptions about bisexuality. Indeed, negative attitudes toward bisexuality (biphobia) have been found to exist in both the heterosexual and lesbian/gay communities within the United States (e.g., Balsam & Mohr, 2007; Eliason, 1997; Mulick & Wright, 2008; Ochs, 1996), which suggests potentially unique disclosure negotiations specific to the larger socio-political environment.

Taken together these studies and personal accounts highlight unique challenges faced by bisexual parents that appear to be confounded within a bisexual identity. That is, bisexual parents are faced with a recurring decision process of disclosing their sexual identity, or encountering assumptions of sexuality and resulting invisibility, due to the very nature of their sexual identity in a parenting context. Given this experience, it is important to consider what is known about bisexual identity development and how this may interact with additional contexts to impact parenting among this population.

**Mental health and well-being.** Research on mental health outcomes of bisexual parents has been largely limited to the examination of bisexual women during the perinatal period. For example, Ross, Steele, Goldfinger, and Strike (2007) sought to measure perinatal depressive symptomatology among lesbian and bisexual women. The study included 64 participants, 11 of whom identified as bisexual. Among the bisexual women, five were the biological parent of a

child less than one year of age, one was the non-biological parent of a child less than one year of age, and five were currently pregnant. The results of the study indicated that, while the average scores on the Edinburgh Postnatal Depression Scale (EPDS) were within the healthy range, lesbian and bisexual biological mothers reported significantly higher EPDS scores than a previously published sample of heterosexual women. Further, when lesbian and bisexual participants were compared on the measure of postnatal depression, bisexual women reported significantly higher EPDS scores (Ross et al., 2007). The authors suggested that perinatal depression may be more common among lesbian and bisexual women in comparison to heterosexual women (Ross et al., 2007).

Literature published by the same group of authors further examined the experiences of bisexual female individuals who were trying to conceive, currently pregnant, or parenting a child less than a year old (e.g., Ross et al., 2012; Steele et al., 2008). Compared to lesbians, bisexual women reported poorer mental health outcomes in early parenthood (Ross et al., 2012). Furthermore, the authors found that bisexual women demonstrated poorer scores on assessments of substance use, social support, and perceived discrimination. These differences were found to be particularly salient for bisexual women who endorsed sexual activity with men in the recent past (Ross et al., 2012). Additionally, researchers have demonstrated that women who achieved conception through intercourse with a male reported the highest rates of mental health service use as well as the highest rates of unmet needs for mental health services (Steele et al., 2008).

In an effort to further understand the experiences of lesbian and bisexual women who are trying to conceive, Yager and colleagues (2010) recruited 33 lesbian and bisexual participants, 15 who were trying to conceive (TTC) and 18 who were in the postpartum period (PP). Participants were not separated by sexuality and therefore the results were discussed collectively.

The researchers did not find statistically significant differences between those in the TTC group and those in the PP group on measures of depression and anxiety but did discuss findings of lower relationship satisfaction and social support in those individuals in the TTC group. The results suggest that the lesbian and bisexual women may experience difficulties in relationship satisfaction and perceived social support when attempting to start a family, however it is not well understood why these experiences are present. Taken together, these findings among the literature suggest the existence of unique parental experiences and concerning mental health outcomes of bisexual individuals that warrant further examination.

**Bisexual and parenting identities.** Two first-person accounts (e.g., Blanco, 2009; Wells, 2011) and two recent qualitative studies (e.g., Delvoye & Tasker, 2016; Tasker & Delvoye, 2015) have addressed the intersections among bisexual identity and parenting. First-person narratives have alluded to the idea that parenting desire or parenting experiences may influence the development or enactment of a bisexual identity. For instance, Wells (2011) detailed how her experience as a single lesbian mother impacted her sexual identification, specifically describing difficulties with previous lesbian partners' willingness to participate in raising a child. These challenges, in conjunction with her desire to find a partner for co-parenting, ultimately prompted her shift from a lesbian to a bisexual identity. In her writings, Blanco (2009) discussed becoming more active and engaged in her bisexual identity following her transition to parenthood, during which she increased participation in the LGBT community as a way to normalize the experience of bisexuality for her child. Together these accounts suggest that the experience of parenthood may shape bisexual identity and influence how individuals participate within certain contexts.

Expanding upon the narratives of bisexual parents, Tasker and Delvoye (2015) made use of thematic analysis as a way to highlight the process of identifying as a bisexual mother. The authors interviewed seven self-identified bisexual mothers regarding their experiences of bisexual identity and the transition to parenthood. Participants' responses produced themes regarding the prioritization of children, connecting and disconnecting with social others, and a broader questioning of heteronormativity and relationship expectations in society (Tasker & Delvoye, 2015). More specifically, the authors found that some women's description of importance of their bisexual identity had lessened once they assumed the identity of a parent. In contrast, others made deliberate choices to disclose their identity to their children and maintain active bisexual behaviors during parenthood. Tasker and Delvoye also highlighted an important shared experience among *all* of the participants: biphobia. Specifically, all of the parents had reported encountering biphobic attitudes or prejudicial experiences over the course of their lifetime, with some experiencing heterosexual assumptions based upon their partnership with a male co-parent (Tasker & Delvoye, 2015).

Furthering the investigation into bisexual motherhood, Delvoye and Tasker (2016) completed a narrative analysis with eight self-identified bisexual women who were parenting in the United Kingdom. The results demonstrated a trajectory in which women first constructed a bisexual identity, later enacting upon these feelings of attraction through romantic and sexual relationships, and finally becoming parents. Through these narratives, Delvoye and Tasker (2016) concluded that participants were able to construct self-identities (e.g., sexual identity and parenthood) in ways that could co-exist but were also afforded different levels of importance or significance at different points in their lifetime, which aligns aforementioned theories regarding bisexual identity enactment (e.g., Diamond, 2008). Thus, through both personal-accounts and

qualitative analysis, researchers have begun to conceptualize the ways in which bisexual identity and parenthood intertwine to impact bisexual parents' experiences.

### **Identity Theory**

Identity theory traces its roots to the ideas of James Mead and structural symbolic interactionism (Burke & Stets, 2009; Stets & Serpe, 2013; Stryker & Burke, 2000) and has been extensively applied to the empirical investigation of identity in social psychology. According to the theory, identities are defined as a set of shared meanings that either (1) characterize an individual's social role (*role identity*), (2) place an individual as belonging to a certain social group (*group identity*), or (3) describe an individual as inhabiting unique traits compared to social others (*person identity*) (e.g., Burke & Stets, 2009; Stets & Burke, 2000; Stets & Serpe, 2013; Stryker & Burke, 2000). Identity theory largely concerns itself with specifying, "how the meanings attached to various identities are negotiated and managed in interaction" (Stets & Serpe, 2013, p. 31). This approach includes a multitude of goals ranging from describing the relationship between multiple identities to determining the linkages between identities and varied outcomes (e.g., measurements of self-concept, physical, and mental health; Stets & Serpe, 2013). Thus, an exhaustive review of the theory in its entirety is likely beyond the scope of this project (for reviews see Burke & Stets, 2009; Stets, 2006; Stets & Serpe, 2013; Stryker & Burke, 2000). Instead, what follows is a discussion of the terminology, concepts, and implications that are most relevant to the current study.

As previously mentioned, *identities* are a set of shared meanings that attach an individual to a role, group, or personal characteristic (Burke & Stets, 2009; Stets & Serpe, 2013). According to identity theory, *meanings* "are individuals' responses when they reflect upon themselves in a role, social, or person identity" (Stets & Serpe, 2013, p. 37). To explain this

phenomenon, Stets and Serpe (2013) describe how if an individual thinks of what it means to be moral (person identity), a worker (role identity), and a member of the parent teacher association (group identity), they may consider themselves principled, efficient, and reliable; the meanings assigned to each identity. Central to identity theory is the concept of *identity verification*.

Specifically, identity theory hypothesizes that individuals are driven to behave in ways that are perceptually consistent, implying that their internal identity meanings match their perceptions of the situation (e.g., Burke & Stets, 2009; Stets & Serpe, 2013; Stryker & Burke, 2000). In other words, identity verification occurs when an individual perceives “that others see them in a situation in the same way they see themselves” (Stets & Serpe, 2013, p. 38). Consequences of identity verification and non-verification include the eliciting of positive and negative emotions, respectively (Burke & Stets, 2009; Stets & Burke, 2000; Stets & Serpe, 2013; Stryker & Burke, 2000).

The verification of a *single* identity is likely to be a simplistic process, however the evocation of a single identity in the context of modern society is likely unrealistic. Indeed, identity theory suggests that people inhabit multiple identities, as informed by William James’ ideas regarding multiple selves (e.g., Burke & Stets, 2009; Stets & Serpe, 2013). Thus, identities are proposed to fall into a hierarchy influenced by concepts such as salience, centrality, and prominence (Stets & Serpe, 2013). In identity theory, *identity salience* refers to “the probability that one will invoke a specific identity across situations” (Stets & Serpe, 2013, p. 40), where invoking one’s identity refers to allowing that identity to guide situation-specific behavior given its need for verification. Multiple identities are organized into a salience hierarchy, where those that are more salient to the individual are seen as more important for verification and therefore become the guiding mechanisms behind behaviors and perceptions (Burke & Stets, 2009).



Identity salience can be informed by one's level of *identity commitment*, both structural and affective. Specifically, *interactional commitment* refers to the quantitative degree to which an individual interacts with people based upon a given identity (Stets & Serpe, 2013). In contrast, *affective commitment* is a qualitative indicator composed of the individuals' personal assessments of themselves with respect to that identity, and the level of emotional discomfort they would face should they have to abandon or no longer engage in social interactions based upon that identity (Stets & Serpe, 2013). Thus, higher degrees of interactional and affective commitment inform higher levels of identity salience, which in turn places an identity at more sophisticated levels on the hierarchical structure.

The organization of multiple identities can be further influenced by the concepts of *identity centrality* and *prominence*. Identity centrality, an idea originally proposed by Rosenberg (1979), is an indicator of the internalized importance of an identity to one's self-concept (as cited in Stets & Serpe, 2013). Thus, identities that are endorsed as more representative of the self, or are more defining of one's self-concept, are proposed to be higher in centrality. Similarly, identity theory discusses prominence as interchangeable with centrality, where more important identities are higher in prominence (Burke & Stets, 2009; Stets & Serpe, 2013). When an identity is central/prominent to an individual, it occupies a higher level in the hierarchical structure, and is therefore more likely to be evoked for verification in a given situation (Stets & Serpe, 2013). While the concepts of centrality and prominence are considered equivalent in identity theory, they are theoretically distinguishable from identity salience. Specifically, Stets and Serpe (2013) describe salience as "based on probable behavior, while centrality/prominence is based on the internalized importance of an identity" (p. 42). Researchers have shown identities to differ in values of salience and centrality/prominence, where an identity can be both

salient and central, or highly salient but not central/prominent (e.g., Stryker & Serpe, 1994). Further, researchers have suggested a temporal relationship between the concepts, where levels of centrality/prominence inform levels of salience, and thus promote the probability of an identity being evoked and informing behavior across situations (e.g., Brenner, Serpe, & Stryker, 2014; Burke & Stets, 2009).

As previously discussed, one of the major goals of identity theory is to examine and describe how multiple identities are negotiated in varying social contexts (e.g., Burke & Stets, 2009; Stets & Serpe, 2013). Of particular importance is the idea that, due to the inhabitation of multiple identities within a single self, there are likely to be contexts in which multiple identities are activated but cannot simultaneously be verified (Burke & Stets, 2009). When this occurs, identity theory proposes that those identities more prominent/central and salient will take precedence in the verification process and guide one's behavior in the situation (Burke & Stets, 2009). However, as previously discussed, identity theory also highlights the emotional consequences inherent to verification and non-verification of identities. Specifically, identities that are verified will elicit positive emotions whereas identities that are not verified will elicit negative emotions (Burke & Stets, 2009; Stets & Serpe, 2013). Researchers associated with the theory further suggest that, dependent upon the type of identity verified or non-verified (i.e., role, group, person identity), specific emotions may be expected. Burke and Stets (2009) hypothesize that verification of role identities lead individuals to experience feelings of competency and efficacy, group identities to feelings of self-worth and self-esteem, and person identities to feelings of authenticity. In contrast, non-verification of each of these identity types can lead to feelings of discomfort and guilt, embarrassment and shame, and sadness, respectively (Burke & Stets, 2009).

The tenets of identity theory have been empirically supported through a variety of methods including cross-sectional surveys, longitudinal, and experimental designs (see Burke, Ownes, Serpe, & Thoits, 2003; Stets & Serpe, 2013 for reviews). For instance, a variety of studies have demonstrated identity centrality/prominence and salience as guiding mechanisms behind behaviors (Stets & Serpe, 2013). Researchers have shown how highly salient and prominent parenting identities predicted two facets of mothers' behaviors including making sacrifices for the child's needs and accepting mother-role burdens (Nuttbrock & Freudiger, 1991). Additionally, the link between identity and behavior has been demonstrated among college students, where higher student identity salience was predictive of participants' success in school (Burke & Reitzes, 1981).

Identity theory has also been studied through longitudinal research, which has provided a foundation of information about identity verification, nonverification, and resulting emotions. For example, Cast and Burke (2002) examined identity verification among newly married couples over the course of two years and found that verification of a salient, prominent spousal identity led to increased experiences of love, trust, and commitment among spouses and greater feelings of self-worth and self-esteem for the partners (Cast & Burke, 2002). Similarly, during a three year follow up, Burke and Harrod (2005) found that instances of identity verification led to feelings of self-worth and further demonstrated that identity nonverification within the marital relationship led participants to experience feelings of increased depression, anger, and distress. The emotional consequences of identity verification and non-verification have also been demonstrated through a series of experimental studies (e.g., Stets, 2005; Stets & Osborne, 2008) in which participants received feedback on a task that would be seen as identity congruent (verification) or identity incongruent (nonverification). Finally, research has started to examine

identity theory's hypothesis regarding the presence of multiple identities and the negotiation or effects of multiple identities across contexts. For instance, Settles (2004) examined the role of identity centrality in informing participants' proposed conflicting identities: woman identity and scientist identity. As hypothesized, Settles found that higher degrees of gender identity centrality negatively impacted participants' performance in science-based activities. Additionally, this conflict between the two identities was predictive of lower levels of well-being across all participants.

Given the hypotheses of identity theory, combined with the existing literature on bisexuality, motherhood, and bisexual parenting, one might expect potential challenges associated with negotiating the verification of both bisexual and parenting identities. As previously discussed, bisexual parents face unique experiences regarding disclosure or concealment of sexual identity. First, bisexual individuals face invisibility given the assumption of heterosexuality or homosexuality based upon their partner's gender. Further, bisexual parents face greater invisibility given their participation in a traditionally heterosexual practice (i.e., parenting), and disclosure of a bisexual orientation in this context may elicit prejudicial attitudes regarding bisexual individuals' "fitness" for parenting. Thus, disclosure or concealment of one's sexual identity in a social context may create a conflicting situation in which both the bisexual identity and parenting identity are activated verification purposes.

### **The Current Study**

Review of the current research on bisexual parents demonstrates a limited body of literature on the experiences unique to this population. Furthermore, there is room for a more sophisticated understanding of the processes associated with bisexual identity development over the life span, and how this may interact with the inherent complexities of bisexual parenthood.

Recent qualitative research has sought to explore this process (e.g., Delvoye & Tasker, 2016; Tasker & Delvoye, 2015), however these studies are not without limitations. Specifically, examination of this population has been limited to European countries such as England and the Republic of Ireland, which have potentially unique social environments regarding sexual minorities and parenthood. Thus, much remains to be understood regarding the bisexual parenting population specific to the United States, a country in which biphobic attitudes are prevalent (e.g., Balsam & Mohr, 2007; Eliason, 1997; Ochs, 1996) and in which there have been recent legislative changes regarding sexual minority rights. Therefore, the current study seeks to expand upon the literature through quantitative analyses that examine a sample of bisexual mothers in the United States. The main aim of the current study is to understand the relationship between bisexuality and motherhood identities, psychological distress, efficacy, and self-esteem from the theoretical perspective of identity theory.

### **Hypotheses**

Based upon the expected conflicts and outcomes of multiple identities through the perspective of identity theory, the following hypotheses were proposed (see Figure 1 for a visual depiction of the hypothesized structural equation model):

#### **Identity centrality and identity salience.**

1. Bisexual identity centrality would be positively related to participants' sexual identity salience.
2. Parenting identity centrality would be negatively related to participants' sexual identity salience.
3. Parenting identity centrality would moderate the relationship between bisexual identity centrality and sexual identity salience. Specifically, the relationship between

high bisexual identity centrality and high levels of sexual identity salience would be weakened when participants' reported high levels of parenting identity centrality.

**Identity verification and emotion-based outcomes.**

4. Sexual identity salience would be positively related to participants' feelings of self-esteem as a bisexual individual.
5. Sexual identity salience would be negatively related to participants' shame as a bisexual individual.
6. Self-esteem as a bisexual individual would be negatively related to participants' shame as a bisexual individual.
7. Sexual identity salience would be negatively related to participants' parenting self-efficacy.
8. Sexual identity salience would be positively related to participants' parenting guilt.
9. Parenting efficacy would be negatively related to participants' parenting guilt.

**Identity verification, emotion-based outcomes, and psychological distress.**

10. Sexual identity salience would be negatively related to participants' psychological distress.
11. Parenting efficacy would be negatively related to participants' psychological distress.
12. Self-esteem as a bisexual individual would be negatively related to participants' psychological distress.
13. Parenting self-efficacy would mediate the relationship between sexual identity salience and psychological distress.
14. Self-esteem as a bisexual individual would mediate the relationship between sexual identity salience and psychological distress.

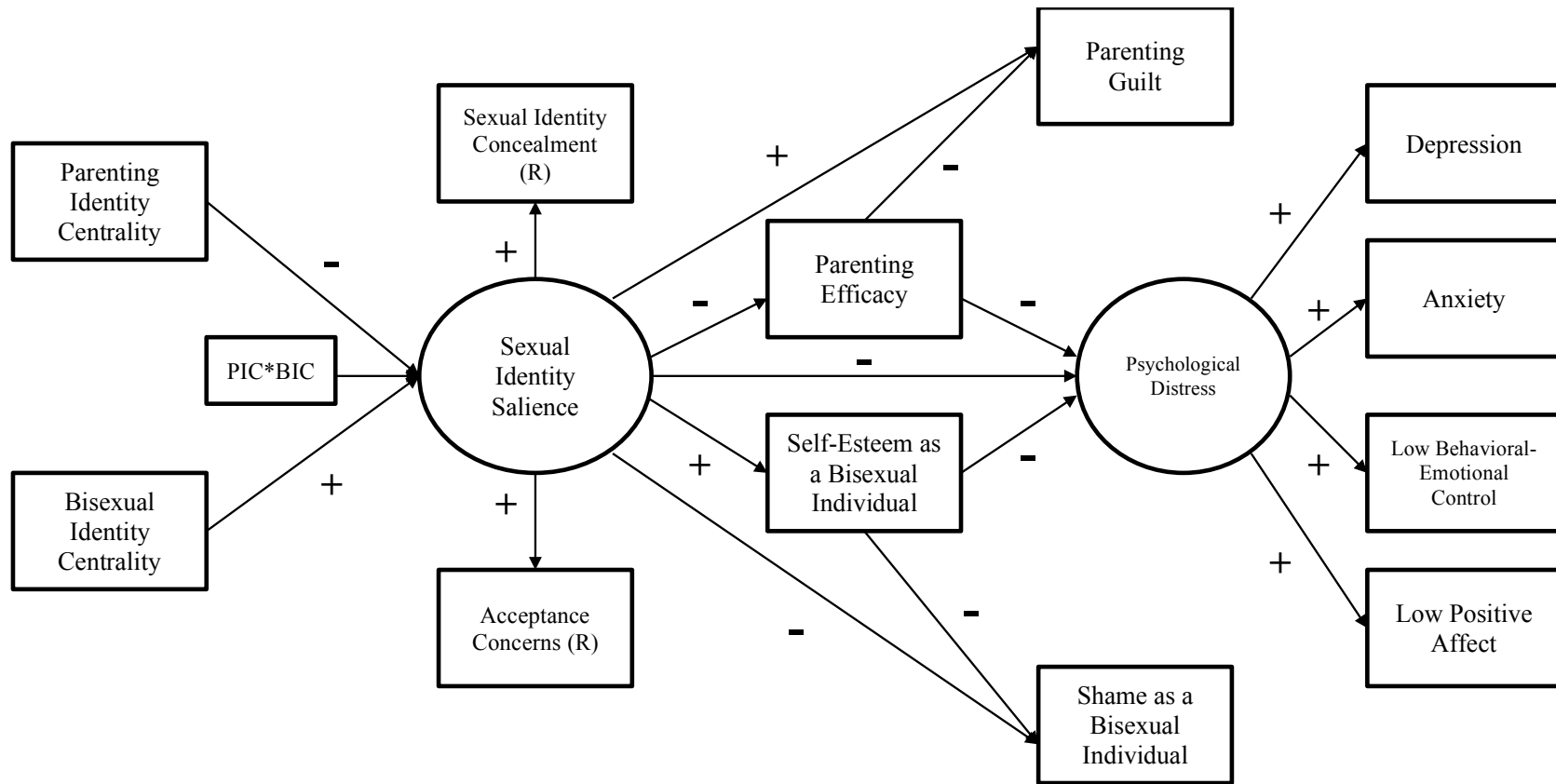


Figure 1. Hypothesized Structural Equation Model.

## CHAPTER II

### METHOD

#### Participants

Participants included women who identified as bisexual and were currently in a parenting arrangement. Specifically, in order to be eligible participants must have been 18 years old, parenting at least one child under the age of 18 who resided in their household, and must have self-identified as “female” and “bisexual.” Given the limited understanding of parenting arrangements among this population no limitations were placed regarding parenting type. That is, individuals who were single parents, married or divorced parents, step-parents, in opposite-sex and same-sex parenting relationships, and other “non-traditional” or non-heteronormative parenting arrangements (e.g., polyamorous; Firestein, 2007; Power et al., 2012), were eligible to participate in the study. Two hundred and eleven eligible individuals completed the study. The mean age of participants was 31.99 years old ( $SD = 5.79$ ). Sample race/ethnicity was largely White ( $n = 189$ ; 89.6%) and non-Hispanic ( $n = 196$ ; 92.9%). Most participants identified their relationship status as Married/Civil Union ( $n = 133$ ; 63.0%) and participants were mostly partnered with males ( $n = 177$ ; 83.9%). Detailed demographic characteristics of the sample are reported in Table 1. Demographics specific to the Sell Assessment of sexual attractions, sexual contact, and sexual identification are reported in Table 2. Finally, demographic characteristics of participants’ children (e.g., age, gender, etc.) are reported in Table 3.



Table 1

*Demographic Characteristics of Sample.*

Characteristic	<i>n</i>	%
<i>Number of Children</i>		
1	101	47.9%
2	65	30.8%
3	24	11.4%
4	15	7.1%
5	4	1.9%
6	1	0.5%
7	1	0.5%
8 or more	0	0.0%
<i>Race<sup>a</sup></i>		
American Indian or Alaskan Native	1	0.5%
Asian	2	0.9%
Black or African American	4	1.9%
Native Hawaiian or other Pacific Islander	0	0.0%
White	189	89.6%
Other	2	0.9%
Multiracial (two or more races selected)	13	6.1%
<i>Ethnicity</i>		
Hispanic/Latino/Latina	15	7.1%
Not Hispanic/Latino/Latina	196	92.9%
<i>Relationship Status</i>		
Married/Civil Union	133	63.0%
Divorced/Separated	12	5.7%
Living with Partner	26	12.3%
Widowed	1	0.5%
In a committed relationship	17	8.1%
In an open relationship	8	3.8%
Single	8	3.8%
Other	6	2.8%
<i>Gender of Dating/Relationship Partner</i>		
Female	10	4.7%
Male	177	83.9%
Other	11	5.2%
Not applicable	12	5.7%

Table 1 continued.

Characteristic	<i>n</i>	%
<i>Education</i>		
Some high school	5	2.4%
High school diploma or GED	24	11.4%
Trade school	8	3.8%
Some college	66	31.3%
Associate's degree	31	14.7%
Bachelor's degree	45	21.3%
Master's degree	27	12.8%
Doctoral degree	4	1.9%
Other	1	0.5%
<i>Employment Status<sup>a</sup></i>		
Not employed	2	0.9%
Staying at home with child(ren)	74	35.1%
Full-time student	9	4.3%
Part-time student	0	0.0%
Full-time job	32	15.2%
Part-time job	68	32.2%
Endorsed more than one employment option	25	12.0%
<i>Individual Income</i>		
Less than \$10,000	88	41.7%
\$10,000 - \$19,999	38	18.0%
\$20,000 - \$29,999	28	13.3%
\$30,000 - \$39,999	21	10.0%
\$40,000 - \$49,999	19	9.0%
\$50,000 - \$59,999	8	3.8%
\$60,000 - \$69,999	6	2.8%
More than \$70,000	3	1.4%
<i>Household Income</i>		
Less than \$10,000	6	2.8%
\$10,000 - \$19,999	20	9.5%
\$20,000 - \$29,999	38	18.0%
\$30,000 - \$39,999	27	12.8%
\$40,000 - \$49,999	22	10.4%
\$50,000 - \$59,999	22	10.4%
\$60,000 - \$69,999	18	8.5%
More than \$70,000	58	27.5%

*Table 1 continued.*

Characteristic	<i>n</i>	%
<i>Political Affiliation</i>		
Extremely Conservative	0	0.0%
Conservative	3	1.4%
Leaning Conservative	5	2.4%
Moderate	13	6.2%
Leaning Liberal	26	12.3%
Liberal	80	37.9%
Extremely Liberal	58	27.5%
Politically Uninvolved	26	12.3%
<i>Religious Affiliation<sup>a</sup></i>		
Anglican/Episcopalian	5	2.4%
Baptist	5	2.4%
Buddhist	4	1.9%
Eastern Orthodox	0	0.0%
Hindu	0	0.0%
Jewish	7	3.3%
Lutheran	1	0.5%
Methodist	0	0.0%
Mormon/LDS	0	0.0%
Muslim	0	0.0%
Christian (no denomination)	22	10.4%
Pentecostal	0	0.0%
Presbyterian	0	0.0%
Roman Catholic	9	4.3%
No religious affiliation	107	50.7%
More than one affiliation	9	4.3%
Other	42	19.9%

<sup>a</sup> Participants could endorse more than one option on these demographic items. Those who endorsed more than one item were categorized accordingly.

Table 2

*Frequencies of the Sell Assessment.*

Value	Sexual Attraction				Sexual Contact				Sexual Identification					
	Male Attraction		Female Attraction		Male Sexual Contact		Female Sexual Contact		Homosexual		Heterosexual		Bisexual	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Not at all	1	0.5%	7	3.3%	14	6.6%	143	67.8%	52	24.6%	52	24.6%	0	0
Slightly	15	7.1%	9	4.3%	96	45.5%	49	23.3%	41	19.4%	45	21.3%	9	4.3%
Moderately	52	24.6%	85	40.3%	69	32.7%	9	4.3%	96	45.5%	97	46.0%	65	30.8%
Very	137	64.9%	104	49.3%	25	11.8%	3	1.4%	13	6.2%	8	3.8%	129	61.6%

*Note.* Values are indicative of standardized sell assessment scores, see measures below for scoring information.

Table 3

*Demographic Characteristics of Participants' Children.*

Number of Children	Age of Child	Gender		Relationship to Child			
	<i>M (SD)</i>	% Female	% Male	% Biological	% Adopted	% Step-child	% Other
<i>One Child</i> <i>n = 101</i>							
Child #1	3.92 (4.43)	29.4%	16.6%	27.0%	0.9%	0.9%	0
<i>Two Children</i> <i>n = 65</i>							
Child #1	7.79 (4.36)	17.5%	11.4%	20.9%	0	1.9%	0
Child #2	3.86 (3.69)	15.2%	13.3%	20.4%	0.5%	1.4%	0.5%
<i>Three Children</i> <i>n = 24</i>							
Child #1	12.79 (6.52)	5.2%	5.2%	5.7%	0	1.4%	0
Child #2	9.63 (5.51)	3.8%	6.6%	6.2%	0	0.9%	0
Child #3	4.92 (4.47)	4.7%	5.2%	6.2%	0.5%	0.5%	0
<i>Four Children</i> <i>n = 15</i>							
Child #1	14.20 (4.65)	3.8%	2.8%	4.7%	0	0	0
Child #2	10.67 (3.90)	2.8%	3.8%	4.7%	0	0	0
Child #3	6.33 (3.89)	2.8%	3.8%	3.8%	0	0.9%	0
Child #4	3.27 (3.37)	4.3%	2.4%	4.3%	0	0	0
<i>Five Children</i> <i>n = 4</i>							
Child #1	18.75 (9.03)	0.5%	1.4%	1.4%	0	0	0
Child #2	15.75 (7.80)	0.5%	1.4%	1.4%	0	0	0
Child #3	13.25 (8.73)	0.9%	0.5%	1.4%	0	0	0
Child #4	9.00 (7.75)	0.9%	0.5%	1.4%	0	0	0
Child #5	5.75 (7.68)	0.9%	0.5%	1.4%	0	0	0

*Note.* Demographic information for six or more children not reported above due to small *n* size (six children *n* = 1, seven children *n* = 1). Percentages reflect completed responses; missing values not included in table above.

## Procedure

Participants were recruited through a variety of methods in order to optimize sample size. The primary method of data collection was completed using paid advertisements through Facebook. The survey was advertised to a targeted audience as defined by specified parameters: (1) female, (2) parents, (3) relationally interested in both males and females (i.e., bisexual). The advertisement was distributed to potential participants over five time points with variable time periods ranging between 1 and 3 days; in total it was published for 11 days. Participants were also recruited through the use of email distribution including university-based email announcements and through contact with bisexual identity community organizations. Finally, the current study utilized snowball participant collection methods whereby participants were invited to share the survey with other eligible individuals who may be interested. The majority of participants reported recruitment for the survey through Facebook advertisements ( $n = 190$ ; 90.0%).

Individuals interested in participation were directed to a study description page that provided a brief explanation of the current study, the purpose, and exclusionary criteria. Participants who elected to enroll in the study were immediately directed to an informational page describing the objectives, risks, and benefits of the study. Before continuing to complete the survey, each participant was asked to read and accept all elements of the information page. If a participant did not agree to accept the criteria, they were instructed to discontinue the study.

Upon agreeing to the elements of the information page, the participant was prompted to complete a series of questions designed to screen for eligibility for the survey. Specifically, individuals were asked to identify their age, gender, sexual identity, parenting status, and whether or not they were currently parenting a child under the age of 18 who resided in their

household. Individuals who did not meet the eligibility requirements were screened out from the survey. Participants were then directed to complete additional demographic items regarding their parental status including number of children, age(s) of child(ren), and relationship to child(ren) (e.g., biological, adoptive, step-parent, etc.). Next, participants completed a series of questions assessing for additional demographic information such as race/ethnicity, relationship status, education, individual and household income, political ideology, country and/or state of residence, and religious affiliation. Lastly, participants were instructed to complete a series of questionnaires for the current study, which were presented to each participant in the following order: a measurement of parenting identity centrality (adapted from the Multidimensional Inventory of Black Identity; Sellers; 1997), the Lesbian, Gay, and Bisexual Identity Scale (LGBIS; Mohr & Kendra, 2011), the Nebraska Outness Inventory (NOS; Meidlinger & Hope, 2014), the Parenting Sense of Competence Scale (PSOC; Johnston & Mash 1989), the modified Collective Self Esteem Scale (CSES; Luhtanen & Crocker, 1992); measures of parenting guilt and shame as a bisexual individual (Harder Personal Feelings Questionnaire 2; HPF-2; Harder & Zalma, 1990), the Mental Health Inventory (MHI; Viet & Ware, 1983), and the Self Assessment (Sell, 1996). Upon completion of the survey, all participants were thanked and directed to a screen in which they could elect to enter their email into a separate survey for a gift card raffle. The current study was approved by the Human Subjects Committee at Old Dominion University.

## **Measures**

**Demographics.** Participants were asked to complete a demographics questionnaire created for the purposes of this study (see Appendix A). The questionnaire included items assessing the following demographic information: age, gender, race, ethnicity, sexual identification, relationship status, education, employment status, personal and household income,

parental status, parent-child household status, child demographics (e.g., number of children, child(ren) ages, child(ren) gender, relationship to children), religious affiliation, and political ideology.

To obtain additional information regarding sexuality, participants were also asked to complete The Sell Assessment (Sell, 1996; see Appendix B). The Sell Assessment is a 12-item questionnaire designed to assess three dimensions of sexuality: sexual attractions (items 1, 2, 3, 4, 5, 6), sexual behavior (items 7, 8, 9, 10), and sexual identity (items 11, 12). On items of sexual attractions, participants were asked to report the frequency with which they have been sexually attracted to both men and women in the past year. On items of sexual behavior, participants were asked to report the frequency of sexual contact with both men and women in the past year. Finally, on items of sexual identity, participants were asked to self-report their sexual identity on spectrums of homosexuality and heterosexuality. For the purposes of the current study, an additional item was added to assess participants' sexual identity on the spectrum of bisexuality (item 13).

Scoring of The Sell Assessment followed the standardization guidelines given by Sell (1996). First, responses for each of the individual items were standardized by recoding raw-score responses to values of 1 (*not at all*), 2 (*slightly*), 3 (*moderately*), or 4 (*very*). For instance on item one, answer choice "none" is recoded to 1 (*not at all*), answer choices "1," "2," and "3-5" are recoded to 2 (*slightly*), answer choices "6-10" and "11-49" are recoded to 3 (*moderately*), and answer choices "50-99" and "100 or more" are recoded to 4 (*very*). Next, participants received scores on four dimensions including sexual attractions to males, sexual attractions to females, sexual contact with males, and sexual contact with females. Scores on these dimensions are reflective of the maximum standardized value among the items contributing to that index



(i.e., sexual attraction to males is indicated by items 1, 2, and 3). Identity items (i.e., items 11, 12, and 13) are examined separately. The Sell Assessment has demonstrated sufficient test-retest reliability over a two-week interval, with correlation coefficients for each item ranging from 0.93 to 0.98 (Sell, n.d.). The measure has also demonstrated good construct validity, positively correlating with a Kinsey-type measure of sexual attraction ( $r = 0.86$  to  $0.92$ ), sexual contact ( $r = 0.96$ ), and sexual orientation identity ( $r = 0.85$ ; Sell, n.d.). In the current study, internal consistency reliability was examined for each of the four dimensions (i.e., sexual attraction to males,  $\alpha = .62$ ; sexual attraction to females,  $\alpha = .78$ ; sexual contact with males,  $\alpha = .48$ ; sexual contact with females,  $\alpha = .92$ ). The low observed alpha value for sexual contact with males may be reflective of the inconsistency with which the sample may answer the two questions that comprise this subscale. Specifically, the two questions ask participants to identify the number of different men they have had sexual contact with in the past year as well as the number of times they have had sexual contact with a man. The current sample largely comprises of women who reported being in marital relationships with men, and thus may have identified consistently low numbers on the first male sexual contact item, however their responses to the number of times with which they had sexual contact with a man likely had greater variance. Thus, when considering the internal consistency of the two items together, it is unlikely that responses would remain consistently low or high across both questions given demographic makeup of the current sample. Further supporting this hypothesis is the high alpha value for sexual contact with females. This would suggest that participants are responding consistently to both the number of women with whom they have had sexual contact and the number of times they have had sexual contact with a woman (i.e., both likely low numbered responses).

**Parenting identity centrality.** Parenting identity centrality was measured using an adaptation of the Multidimensional Model of Black Identity (MIBI) Centrality subscale (Sellers et al., 1997, see Appendix C). The MIBI Centrality subscale is a measure of identity centrality that, while originally developed to assess Black identity centrality, has been adapted in research to assess several other identities such as gender identity centrality (i.e., woman centrality) and role identity centrality (i.e., scientist centrality; Settles, 2004). The MIBI centrality scale includes eight items that assess the importance of one's identity to the self. Participants were asked to report the level of agreement with each of the items on a seven-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Higher scores on the measure are indicative of higher levels of identity centrality. Modified centrality items included statements such as "Being a *parent* is an important reflection of who I am" and "In general, being a *parent* is an important part of my self-image." Adaptations from previous research (i.e., Settles, 2004) have demonstrated excellent internal consistency reliability, with Cronbach's alpha values of .86 for gender identity centrality and .79 for scientist role identity centrality. Further, the modified subscale demonstrated small, but significant correlations between woman identity centrality and self-esteem ( $r = .12, p < .05$ ) and life satisfaction ( $r = .12, p < .05$ ; Settles, 2004). The modified scientist identity centrality scale demonstrated significant positive correlations with performance in science courses ( $r = .47, p < .01$ ), self-esteem ( $r = .19, p < .01$ ), and life satisfaction ( $r = .26, p < .01$ ; Settles, 2004). In the current study, the modified 8-item MIBI identity centrality subscale demonstrated acceptable internal consistency ( $\alpha = .77$ ).

**Sexual identity centrality.** In order to assess bisexual identity centrality participants completed the revised Lesbian, Gay, and Bisexual Identity Scale (LGBIS; Mohr & Kendra, 2011; see Appendix D). The LGBIS is a 27-item instrument assessing eight dimensions of LGB

identity including (1) acceptance concerns (items 5, 9, 16), (2) concealment motivation (items 1, 4, 19), (3) identity uncertainty (items 3, 8, 14, 22), (4) internalized homonegativity (items 2, 20, 27), (5) difficult process (items 12, 17, 23), (6) identity superiority (items 7, 10, 18), (7) identity affirmation (items 6, 13, 26), and (8) identity centrality (items 11, 15, 21, 24, 25). For the current study, the identity centrality subscale of the LGBIS was used as an indicator of participants' bisexual identity centrality. Higher scores on the identity centrality subscale reflect higher levels of sexual identity centrality. Example questions for the identity centrality subscale include "My sexual orientation is a central part of my identity" and "To understand who I am as a person, you have to know that I'm LGB" (Mohr & Kendra, 2011). Participants were asked to rate their level of agreement with items using a six-point Likert-type scale ranging from 1 (*disagree strongly*) to 6 (*agree strongly*). The revised LGBIS has demonstrated adequate reliability and validity. Specifically, six-week test-retest correlation coefficients for each of the LGBIS subscales ranged from .70 to .92 (Mohr & Kendra, 2011). Furthermore, convergent validity evidence was demonstrated for each of the subscales, with correlation coefficient magnitudes above .50 (Mohr & Kendra, 2011). In the current study, each of the subscales of the LGBIS demonstrated adequate or good internal consistency with Cronbach's alphas ranging from .71 to .86.

**Sexual identity salience.** Sexual identity salience was measured using a latent-variable informed by participants' sexual identity concealment and acceptance concerns about their sexual identity. Participants' acceptance concerns was measured through the acceptance concerns scale of the LGBIS (LGBIS-AC; Mohr & Kendra, 2011). The LGBIS-AC measures participants' preoccupation with stigmatization or concerns for rejection based upon one's sexual identity. Example items include "I often wonder whether others judge me for my sexual orientation" and "I think a lot about how my sexual orientation affects the way people see me"

(Mohr & Kendra, 2011). Higher scores on the LGBIS-AC are reflective of higher concerns about acceptance of sexual orientation. Concealment of participants' bisexual identity was measured through the Nebraska Outness Scale, concealment subscale (NOS-C; Meidlinger & Hope, 2014, see Appendix E). The NOS is a 10-item scale, with two 5-item subscales examining differential components of sexual orientation openness: disclosure (NOS-D) and concealment (NOS-C). For the concealment subscale, participants are asked to indicate the level at which they avoid talking about topics related to their sexual orientation with the following groups: (1) immediate family, (2) extended family, (3) friends and acquaintances, (4) coworkers/school, (5) strangers. Responses were collected on an 11-point Likert-type scale, ranging from 0 (*never avoid*) to 10 (*always avoid*). Higher scores on the NOS-C are reflective of greater levels of sexual identity concealment. The NOS has demonstrated good internal consistency, with Cronbach alpha values of .89, .80, and .82 for the NOS full scale (NOS-FS), NOS-C subscale, and NOS-D subscale, respectively (Meidlinger & Hope, 2014). The NOS has also demonstrated excellent convergent validity with other measures of sexual identity outness. Specifically, the NOS showed strong correlations with the Outness Inventory (OI) (NOS-FS  $r = 0.84$ , NOS-C  $r = -0.74$ , NOS-D  $r = 0.83$ ) and a single item measure of outness (NOS-FS  $r = 0.73$ , NOS-C  $r = -0.63$ , NOS-D  $r = 0.74$ ; Meidlinger & Hope, 2014). Furthermore, evidence for discriminant validity was demonstrated using the Internalized Homophobia Scale (IHS) through significant correlations in the expected directions (NOS-FS  $r = -0.45$ , NOS-C  $r = 0.43$ , NOS-D  $r = -0.40$ ). For the purposes of the current study, both the sexual identity concealment (NOS-C) and acceptance concerns (LGBIS-AC) scales were re-coded after data collection such that lower levels of sexual identity concealment and lower levels of acceptance concerns will reflect higher levels of sexual identity salience. In the current study, both scales demonstrated acceptable to

good levels of internal consistency with Cronbach's alpha coefficients of .75 and .86 for LGBIS\_AC and NOS-C, respectively.

**Parenting self-efficacy.** In order to assess feelings of self-efficacy in the parenting role, participants completed the Parenting Sense of Competence scale (PSOC; Johnston & Mash 1989, see Appendix F). The PSOC is a 17-item scale that assesses two factors including parenting satisfaction (items 2, 3, 4, 5, 8, 9, 12, 14, 16) and parenting efficacy (items 1, 6, 7, 10, 11, 13, 15, 17). Respondents were asked to indicate their level of agreement with each of the items on a 6-point Likert-type scale ranging from 1 (*strongly agree*) to 6 (*strongly disagree*). Lower scores on the two subscales and total scale indicate higher parenting satisfaction, parenting efficacy, and overall sense of competence, respectively. For the purposes of the current study, participants' scores on the efficacy subscale were utilized for the measurement of parenting efficacy. Furthermore, this scale was re-coded such that higher scores were reflective of higher parenting efficacy. Example items on the efficacy subscale include "Being a parent is manageable, and any problems are easily solved" and "If anyone can find the answer to what is troubling my child, I am the one" (Johnston & Mash, 1989). The PSOC has demonstrated good reliability with Cronbach's alpha values of .79 (total scale), .75 (satisfaction subscale), and .76 (efficacy subscale; Johnston & Mash, 1989). Furthermore, the measure has demonstrated evidence of convergent validity through strong correlations with Child Behavior Checklist (CBCL) internalizing problems (Total PSOC  $r = -0.21, p < .01$ ) and externalizing problems (Total PSOC  $r = -0.24, p < .01$ ; Johnston & Mash, 1989). In the current study, the PSOC total scale, satisfaction, and efficacy subscales demonstrated adequate to good internal consistency reliability, with Cronbach's alpha values of .84, .75, and .80, respectively.

**Self-esteem as a bisexual individual.** Participants' self-esteem as a bisexual individual was measured using a modified version of the Collective Self-Esteem Scale (CSES; Luhtanen & Crocker, 1992, see Appendix G). The CSES is a 16-item scale that measures four subscales of collective self-esteem based upon social groups including membership (items 1, 3, 9, 13), private (items 2, 6, 10, 14), public (items 3, 7, 11, 15), and identity esteem (items 4, 8, 12, 16). For the purposes of the current study, participants' total scores on the modified CSES will reflect self-esteem as a bisexual individual. On the measure, participants are asked to rate their level of agreement with each of the statements on a seven-point Likert-type scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Example items include "I am a worthy member of the social groups I belong to" and "I often regret that I belong to some of the social groups I do" (Luhtanen & Crocker, 1992). In order to measure collective self-esteem specific to the bisexual community and bisexual identity, items were modified accordingly. For instance, sample items were modified to "I am a worthy member of the *bisexual community*" and "I often regret that I belong to the *bisexual community*." Higher scores on the modified CSES reflect higher levels of self-esteem as a bisexual individual. The CSES has been modified and tested with a variety of social groups, including sexual minority communities (e.g., Boyle & Omato, 2014; Herek & Glunt, 1995). The original and modified scales have demonstrated excellent reliability, with Cronbach's alpha values of .80 and .84, respectively (Herek & Glunt, 1995; Luhtanen & Crocker, 1992). Furthermore, the scale has demonstrated evidence for convergent validity through strong correlations with the Rosenberg Self-Esteem Scale (RSE, magnitudes ranging from .14 to .43 for subscales, .38 for total scale) and the Self-Esteem Inventory (SEI, magnitudes ranging from .08 to .48 for subscales, .33 for total scale; Luhtanen & Crocker, 1992). In the current study, the CSES total scale demonstrated good internal consistency ( $\alpha = .86$ ).

Cronbach's alphas of the CSES subscales ranged from .73 to .83, suggesting adequate to good internal consistency.

**Guilt and shame.** Participants' feelings of guilt as a parent and feelings of shame as a bisexual individual were collected through the Harden Personal Feelings Questionnaire – 2 (PFQ-2; Harder & Zalma, 1990, see Appendix H). The PFQ-2 is a 16-item, two dimensional measurement that assesses feelings of guilt (six items) and shame (ten items). The measure presented participants with various emotion words or phrases that are linked with guilt (e.g., regret, mild guilt) and shame (e.g., embarrassed, self-consciousness). Participants were asked to indicate the frequency to which they experience feelings associated with the two factors on a 4-point Likert-type scale from 0 (*you never experience the feeling*) to 4 (*you experience the feeling continuously or almost continuously*). For the purposes of the current study, participants were first presented with the six items for guilt and asked to reflect upon their *identity as a parent* when selecting the feeling frequencies. Then, participants were presented separately with the ten items for shame and asked similarly to reflect upon their *identity as a bisexual individual*. Scores on the two factors (i.e., guilt and shame) were utilized to indicate participants' feelings of parenting guilt and feelings of shame as a bisexual individual. The PFQ-2 has demonstrated adequate internal consistency reliability, with Cronbach's alpha values of .78 for the shame subscale and .72 for the guilt subscale (Harder & Zalma, 1990). Additionally, the measurement has shown sufficient test-retest reliability across the shame ( $r = 0.91$ ) and guilt ( $r = .85$ ) subscales (Harder & Zalma, 1990). Finally, the measure has demonstrated evidence for construct validity through strong, significant correlations with the Beck Depression Inventory (BDI; PFQ-2 shame  $r = .41, p < .001$ ; PFQ-2 guilt  $r = .39, p < .01$ ), the Kaplan Self-Derogation Scale (shame  $r = .39, p < .01$ ; guilt  $r = .46, p < .001$ ), private self-consciousness (shame  $r = .29,$

$p < .05$ ; guilt  $r = .46, p < .001$ ), and public self-consciousness (shame  $r = .20, p < .05$ ; guilt  $r = .37, p < .01$ ; Harder & Zalma, 1990). In the current study, the PFQ-2 guilt subscale demonstrated good internal consistency reliability ( $\alpha = .84$ ) and the PFQ-2 shame subscale demonstrated excellent internal consistency reliability ( $\alpha = .91$ ).

**Psychological distress.** Psychological distress was assessed using the Mental Health Inventory – 18 item version (MHI-18; Rivto et al., 1997; Viet & Ware, 1983, see Appendix I). The MHI-18 is a measure of participants' level of psychological distress through the examination of feelings of anxiety (items 4, 6, 10, 11, 18), depression (items 2, 3, 9, 12, 14), positive affect (items 1, 7, 13, 15), and behavioral emotional control (items 5, 8, 16, 17). For the purposes of the current study, the four subscales were used as indicators of a latent variable of psychological distress. Participants were asked to indicate how they have felt over the past four weeks with respect to each of the items using a six-point Likert-type scale ranging from 1 (*all of the time*) to 6 (*none of the time*). Example items include “during the past 4 weeks, how much of the time did you feel depressed?” and “during the past 4 weeks, how much of the time have you been a very nervous person?” (Ritvo et al., 1997; Viet & Ware, 1983). The MHI has demonstrated sufficient internal consistency reliability, with subscale Cronbach's alphas ranging from .83 to .91 and full scale Cronbach's alpha at .93 (Viet & Ware, 1983). In the current study, the MHI demonstrated good internal consistency reliability, with subscale Chronbach's alphas of .87 for anxiety, .92 for depression, .79 for loss of behavioral emotional control, and .84 for positive affect. Furthermore, the MHI full scale demonstrated excellent internal consistency reliability ( $\alpha = .94$ ). For the purposes of the current study, scores on each of the subscales were reverse coded such that higher scores reflected greater levels of psychological distress (i.e., high anxiety, high depression, low levels of behavioral/emotional control, and low positive affect).



## CHAPTER III

### RESULTS

Prior to conducting main analyses, data were examined for accuracy and cleaned.

Histograms and descriptive statistics were used to assess normality, skewness, and kurtosis of variables; results did not suggest non-normality of variables of interest. Descriptive statistics for each of the measures of interest are presented in Table 4. The results of correlations between exogenous and endogenous variables can be found in Table 5.

Table 4

*Descriptive Statistics of Study Measures.*

Measure	<i>M</i> ( <i>SD</i> )	Range [Min, Max]	Skewness ( <i>SE</i> )	Kurtosis ( <i>SE</i> )
PID-C	4.39 (0.94)	4.63 [1.88, 6.50]	-0.26 (0.17)	-0.15 (0.33)
LGBIS-IC	3.79 (0.98)	5 [1, 6]	-0.25 (0.17)	0.07 (0.33)
LGBIS-AC	4.20 (1.14)	5 [1, 6]	-0.24 (0.17)	-0.51 (0.33)
NOS-C	7.04 (2.66)	10 [0, 10]	-0.49 (0.17)	-0.95 (0.33)
PSOC-E	4.47 (0.79)	4.50 [1.50, 6.00]	-0.82 (0.17)	1.22 (0.33)
CSES	68.04 (13.92)	76 [28, 104]	0.09 (0.17)	0.09 (0.33)
PFQ-G	2.53 (0.80)	4 [1, 5]	0.41 (0.17)	0.14 (0.33)
PFQ-S	2.00 (0.78)	3.60 [1.00, 4.60]	0.78 (0.17)	0.03 (0.33)
MHI-A	51.20 (21.73)	96 [4, 100]	0.12 (0.17)	-0.58 (0.33)
MHI-D	39.91 (22.33)	100 [0, 100]	0.57 (0.17)	-0.45 (0.33)
MHI-B	31.28 (19.31)	90 [0, 90]	0.57 (0.17)	-0.24 (0.33)
MHI-P	49.48 (18.42)	95 [0, 95]	0.07 (0.17)	-0.56 (0.33)

N = 211

*Note.* PID-C = Parenting Identity Centrality; LGBIS-IC = Lesbian, Gay, and Bisexual Identity Scale – Identity Centrality subscale; LGBIS-AC = Lesbian, Gay, and Bisexual Identity Scale – Acceptance Concerns subscale; NOS-C = Nebraska Outness Scale Concealment Subscale; PSOC-E = Parenting Sense of Competence Scale – Efficacy Subscale; CSES = Collective Self-Esteem Scale; PFQ-G = Harder Personal Feelings Scale – Guilt; PFQ-S = Harder Personal Feelings Scale – Shame; MHI-A = Mental Health Inventory – Anxiety subscale; MHI-D = Mental Health Inventory – Depression subscale; MHI-B = Mental Health Inventory – Loss of Behavioral/Emotional Control subscale; MHI-P = Mental Health Inventory – Low Positive Affect subscale.

Table 5

*Intercorrelations of Variables.*

Variable	1	2	3	4	5	6	7	8	9
1. Age	--								
2. Children	.18**	--							
3. Education	.30***	-.18*	--						
4. Sell-MA	-.17*	-.07	-.02	--					
5. Sell-FA	-.16*	-.04	-.09	.10	--				
6. Sell-MC	-.21**	.04	-.07	.39***	.02	--			
7. Sell-FC	-.06	-.01	-.003	-.15*	.26***	-.04	--		
8. PID-C	.05	-.01	.14*	-.08	.01	-.01	.004	--	
9. LGB-IC	.12	-.02	.15*	-.03	.32***	-.08	.16*	.15*	--
10. LGB-AC <sub>R</sub>	.06	.05	-.16*	.13	-.11	.05	-.05	-.17*	-.19**
11. NOS-C <sub>R</sub>	-.02	.03	-.22**	.04	-.01	.02	.02	-.08	.08
12. PSOC-E	.08	.06	-.002	-.02	-.10	.04	-.03	.23*	.02
13. CSES	-.07	.05	-.12	.14	.21**	.01	.21**	.02	.43***
14. PFQ-G	.12	-.003	-.01	.02	.05	-.16*	-.14*	-.02	.004
15. PFQ-S	.10	-.002	.01	-.03	.05	-.10	-.07	-.04	.03
16. MHI-A	-.05	-.03	-.16*	.03	.06	.00	-.05	.002	.04
17. MHI-D	.05	.04	-.14*	-.02	.01	-.03	-.02	-.03	-.02
18. MHI-B	-.02	-.02	-.16*	-.02	-.02	-.10	.04	-.03	-.04
19. MHI-P	.07	-.03	-.14*	-.12	-.03	-.12	-.12	-.02	-.03
<i>N</i>	211	211	211	205	205	204	204	211	211

*Note.* Sell-MA = Sell Survey Male Attractions; Sell-FA = Sell Survey Female Attractions; Sell-MC = Sell Survey Male Sexual Contact; Sell-FC = Sell Survey Female Sexual Contact; PID-C = Parenting Identity Centrality; LGB-IC = Lesbian, Gay, and Bisexual Identity Scale – Identity Centrality subscale; LGB-AC = Lesbian, Gay, and Bisexual Identity Scale – Acceptance Concerns subscale; NOS-C = Nebraska Outness Scale Concealment Subscale; PSOC-E = Parenting Sense of Competence- Efficacy Subscale; CSES = Collective Self-Esteem Scale; PFQ-G = Harder Personal Feelings Scale – Guilt; PFQ-S = Harder Personal Feelings Scale – Shame; MHI-A = Mental Health Inventory – Anxiety subscale; MHI-D = Mental Health Inventory – Depression subscale; MHI-B = Mental Health Inventory – Loss of Behavioral/Emotional Control subscale; MHI-P = Mental Health Inventory – Low Positive Affect subscale; R = reverse coded scales. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Table 5 continued.

Variable	10	11	12	13	14	15	16	17	18	19
1. Age										
2. Children										
3. Education										
4. Sell-MA										
5. Sell-FA										
6. Sell-MC										
7. Sell-FC										
8. PID-C										
9. LGB-IC										
10. LGB-AC <sub>R</sub>	--									
11. NOS-C <sub>R</sub>	.48***	--								
12. PSOC-E	.08	.01	--							
13. CSES	.13	.23**	.10	--						
14. PFQ-G	-.17*	-.07	-.47***	-.13	--					
15. PFQ-S	-.39***	-.29***	-.13	-.15*	.42***	--				
16. MHI-A	-.18**	-.07	-.16*	-.03	.48***	.34***	--			
17. MHI-D	-.16*	-.07	-.26***	-.07	.52***	.34***	.67***	--		
18. MHI-B	-.15*	-.03	-.30***	-.11	.55***	.35***	.62***	.83***	--	
19. MHI-P	-.21**	-.10	-.35***	-.22**	.49***	.36***	.62***	.73***	.72***	--
<i>N</i>	211	211	211	211	211	211	211	211	211	211

*Note.* Sell-MA = Sell Survey Male Attractions; Sell-FA = Sell Survey Female Attractions; Sell-MC = Sell Survey Male Sexual Contact; Sell-FC = Sell Survey Female Sexual Contact; PID-C = Parenting Identity Centrality; LGB-IC = Lesbian, Gay, and Bisexual Identity Scale – Identity Centrality subscale; LGB-AC = Lesbian, Gay, and Bisexual Identity Scale – Acceptance Concerns subscale; NOS-C = Nebraska Outness Scale Concealment Subscale; PSOC-E = Parenting Sense of Competence- Efficacy Subscale; CSES = Collective Self-Esteem Scale; PFQ-G = Harder Personal Feelings Scale – Guilt; PFQ-S = Harder Personal Feelings Scale – Shame; MHI-A = Mental Health Inventory – Anxiety subscale; MHI-D = Mental Health Inventory – Depression subscale; MHI-B = Mental Health Inventory – Loss of Behavioral/Emotional Control subscale; MHI-P = Mental Health Inventory – Low Positive Affect subscale; R = reverse coded scales. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

## Measurement Model

The proposed latent variable of psychological distress was examined through a Confirmatory Factor Analyses (CFA) using Mplus software (Version 8; Muthén & Muthén, 2017). Factor loadings were derived from the Mental Health Inventory (MHI) to include measures of anxiety, depression, low behavioral/emotional control, and low positive affect. Results demonstrated excellent model fit,  $\chi^2(2) = 4.45$ ,  $p = 0.108$ , RMSEA = 0.08, CFI = 0.996, SRMR = 0.01. Standardized factor loadings for the psychological distress latent variable were strong ranging from 0.73 to 0.92 (see Table 6). Given that the proposed latent variable of sexual identity salience was informed by only two factors, it was not examined separately from the full model. Specifically, estimation of a latent variable with two factors would result in an under identified model (i.e.,  $df = -1$ ), which implies parameters cannot be estimated appropriately. According to Kline (2011), an identified model requires that there are at least two indicators per latent variable *unless* the model only has one latent variable, in which case three indicators are needed. Given that the full model for the current study includes both sexual identity salience and psychological distress, the model can be identified with these two proposed latent variables. Thus, factor loadings for the sexual identity salience latent variable are derived from the full model, which is discussed below.

## Structural Equation Model

Prior to model estimation a series of analyses were completed to assess for potential covariates to include in the model. First, bivariate correlations between continuous demographic variables and factors of psychological distress were examined (see Table 5). The results suggested that participants' level of education was significantly correlated with each of the factors informing psychological distress, whereby higher levels of education were negatively

related to anxiety, depression, low behavioral/emotional control, and low positive affect. Thus, education was modeled as a covariate with psychological distress.

Next, a series of ANOVAs were completed to examine the relationship between categorical variables with factors of psychological distress. All ANOVA tests were non-significant with the exception of two: the effect of employment status on participants' reported depression,  $F(5) = 2.67, p = .023$ , and participants' level of positive affect,  $F(5) = 2.43, p = .037$ . Post-hoc tests were completed to further understand the relationship between employment and depression and employment and positive affect, as well as to inform potential coding for analyses. The post-hoc analyses did not reveal significant differences among employment groups on participants' level of positive affect. Furthermore, post-hoc analyses for the relationship of employment on depression suggested that those who were unemployed reported higher levels of depression compared to those with a full-time job ( $M_D = 46.25, p = .047$ ), and those with a part-time job ( $M_D = 46.69, p = .039$ ). While these findings were significant, the difference in sample sizes among the groups (unemployed,  $n = 2$ ; full-time job,  $n = 32$ ; part-time job,  $n = 68$ ) suggest comparisons may be inappropriate and therefore the variable was not considered as a covariate for the final analysis. Finally, prior to model estimation, variables were centered as appropriate to address hypothesized moderation effects. Specifically, parenting identity centrality and bisexual identity centrality were centered based upon their group means, and an interaction term between the two variables was modeled for the moderation hypothesis.

**Model estimation.** The hypothesized structural equation model was estimated in MPLUS (Version 8; Muthén & Muthén, 2017) using the Full-Information Maximum Likelihood (FIML) method. The chi-square goodness-of-fit (GOF) test, root mean square error of approximation (RMSEA), standardized root-mean-square residual (SRMR), and comparative fit

index (CFI) were used to examine model fit. Specifically, a non-significant  $\chi^2$  GOF test, an RMSEA value less than .08, and a SRMR value less than .05, and a CFI value greater than or equal to 0.95 are considered indicators of good model fit within the social sciences (Hooper, Coughlan, & Mullen, 2008; Hu & Bentler, 1999; Schumacker & Lomax, 2016). The model results revealed less than adequate fit,  $\chi^2(63) = 176.88, p < .001$ , RMSEA = 0.09, CFI = 0.88, SRMR = 0.07, thus modification indices were examined to determine if any paths should be added to improve overall fit (see Table 7). Modification indices suggested the model include a direct path from bisexual identity centrality (LGBIS-IC) to self-esteem as a bisexual individual (CSES). In the context of research on identity theory, which suggests that centrality plays a role in informing verification and potentially guiding emotion-based outcomes (e.g., Brenner et al., 2014; Burke & Stets, 2009), a direct path from a measurement of identity centrality to an emotion-based outcome was determined to be appropriate for the model. Thus, a path from LGBIS-IC to CSES was added and the full model was again estimated.

The second model demonstrated some improvements in model fit, however the  $\chi^2$  GOF test and two of the three examined fit indices (SRMR and CFI) did not fall within recommended guidelines,  $\chi^2(62) = 124.18, p < .001$ , RMSEA = 0.07, CFI = 0.94, SRMR = 0.06. Therefore modification indices were again reviewed to determine if any additional paths should be added to improve model specification (see Table 8). Similar to above, the modification indices suggested a direct path from parenting identity centrality (PID-C) to parenting efficacy (PSOC-E) be modeled. This pathway aligned with theoretical expectations as previously discussed, and thus the direct effect was added and the full model was estimated.

Examination of fit indices of the third model indicated improved fit with both the CFI and RMSEA fit indices falling above or below recommended cutoffs,  $\chi^2(61) = 110.65, p < .001$ ,

RMSEA = 0.06, CFI = 0.95, SRMR = 0.05. Given adequate model fit and no modification indices above the recommended cutoff (i.e., M.I. = 10), no further paths were specified. The final model accounted for 21.9% of variance in parenting guilt, 18.7% of variance in shame as a bisexual individual, and 17.1% of variance in psychological distress (see Figure 2). The results of each of the proposed hypothesis are discussed below (see Tables 9 – 12).

Table 6

*Psychological Distress Latent Variable CFA Standardized Factor Pattern Loadings.*

Item	Estimate	SE	<i>p</i>
MHI Anxiety	0.73	0.04	< .001
MHI Depression	0.92	0.02	< .001
MHI Low B/E Control	0.89	0.02	< .001
MHI Low Positive Affect	0.81	0.03	< .001

N = 211, FIML estimation.

Psychological Distress Null:  $\chi^2(6, N = 211) = 566.79$ , Model AIC = 6941.24

Table 7

*Model 1 Modification Indices.*

Parameter	M.I.	E.P.C.
Salience on CSES	14.57	0.09
PSOC-E on PID-C	12.42	0.21
CSES on LGBIS-IC	45.95	6.71
CSES with Salience	14.57	16.23
PID-C with PSOC-E	11.95	0.17
LGBIS-IC with CSES	48.28	6.43

N = 211, FIML estimation.

*Note.* PSOC-E = Parenting Sense of Competence – Efficacy Subscale; CSES = Collective Self-Esteem Scale; LGBIS-IC = Lesbian, Gay, and Bisexual Identity Scale – Identity Centrality Subscale; PID-C = Parenting Identity Centrality.

Table 8

*Model 2 Modification Indices.*

Parameter	M.I.	E.P.C.
PSOC-E on PID-C	13.06	0.21
PID-C with PSOC-E	12.47	0.18

N = 211, FIML estimation.

*Note.* PSOC-E = Parenting Sense of Competence – Efficacy Subscale; PID-C = Parenting Identity Centrality.



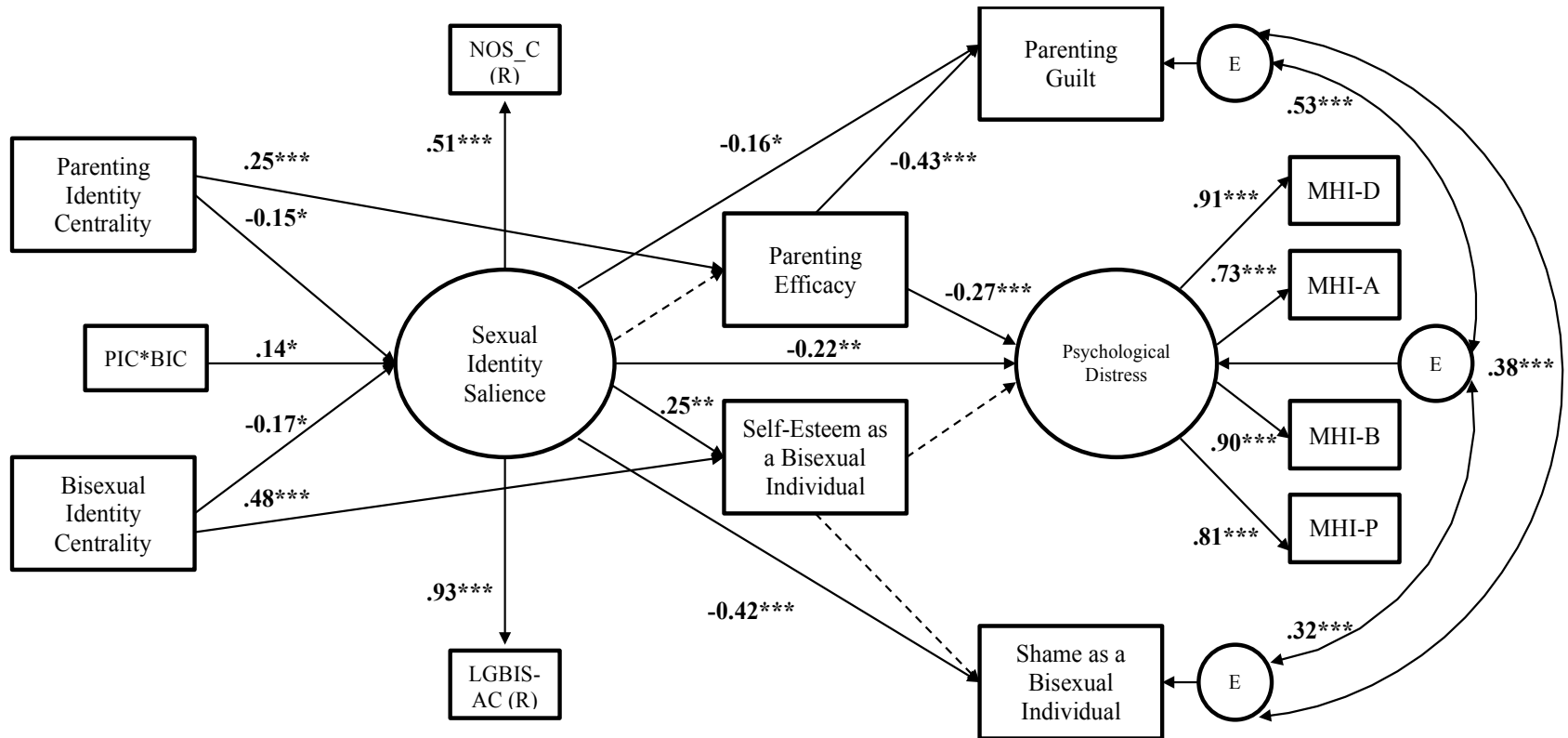


Figure 2. Results of the Final Hypothesized Structural Equation Model.

Note. Covariates not pictured for simplicity. Non-significant paths are represented by dashed lines.

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

### **Identity centrality and identity salience.**

*Hypothesis 1.* It was hypothesized that bisexual identity centrality would be positively related to participants' sexual identity salience. However, results revealed that bisexual identity centrality was negatively related to participants' sexual identity salience,  $\beta = -0.17$ ,  $SE = 0.07$ ,  $p = .024$ , 95% CI [-0.31, -0.02]. Thus, higher levels of bisexual identity centrality were related to lower levels of sexual identity salience.

*Hypothesis 2.* It was hypothesized that parenting identity centrality would be negatively related to participants' sexual identity salience. Indeed, the results revealed that higher levels of parenting identity centrality were related to lower levels of sexual identity salience,  $\beta = -0.15$ ,  $SE = 0.07$ ,  $p = .032$ , 95% CI [-0.29, -0.01].

*Hypothesis 3.* It was hypothesized that parenting identity centrality would moderate the relationship between bisexual identity centrality and sexual identity salience. Specifically, it was expected that the relationship between high bisexual identity centrality and high levels of sexual identity salience would be weakened when participants' report high levels of parenting identity centrality. The results revealed a significant moderating effect of parenting identity centrality on the relationship between bisexual identity centrality and sexual identity salience,  $\beta = 0.14$ ,  $SE = 0.07$ ,  $p = .047$ , 95% CI [0.002, 0.28]. However, simple slopes revealed that the impact of the moderation effect was different than hypothesized (see Table 11 and Figures 3 and 4). That is, at high levels of parenting identity centrality, the negative relationship between bisexual identity centrality and sexual identity salience was non-significant,  $B = -0.04$ ,  $SE = 0.11$ ,  $p = .726$ , 95% CI [-0.25, 0.17]. Furthermore, at low levels of parenting identity centrality, the negative relationship between bisexual identity centrality and sexual identity salience was strengthened,  $B = -0.32$ ,  $SE = 0.12$ ,  $p = .007$ , 95% CI [-0.55, -0.09].

Examination of the simple slopes given bisexual identity centrality as a moderator revealed similar effects. Specifically, at high levels of bisexual identity centrality, the negative relationship between parenting identity centrality and sexual identity salience was non-significant,  $B = -0.03$ ,  $SE = 0.11$ ,  $p = .818$ , 95% CI [-0.24, 0.19]. Finally, at low levels of bisexual identity centrality, the negative relationship between parenting identity centrality and sexual identity salience was strengthened,  $B = -0.32$ ,  $SE = 0.12$ ,  $p = .006$ , 95% CI [-0.54, -0.09].

#### **Identity verification and emotion-based outcomes.**

*Hypothesis 4.* It was hypothesized that sexual identity salience would be positively related to participants' feelings of self-esteem as a bisexual individual. The results supported this hypothesis such that higher levels of sexual identity salience were related to higher levels of participants' self-esteem as a bisexual individual,  $\beta = 0.25$ ,  $SE = 0.07$ ,  $p = .001$ , 95% CI [0.11, 0.40].

*Hypothesis 5.* It was hypothesized that sexual identity salience would be negatively related to participants' shame as a bisexual individual. Indeed, the results demonstrated that higher levels of sexual identity salience were negatively related to participants' shame as a bisexual individual,  $\beta = -0.42$ ,  $SE = 0.08$ ,  $p < .001$ , 95% CI [-0.58, -0.26].

*Hypothesis 6.* It was hypothesized that self-esteem as a bisexual individual would be negatively related to participants' shame as a bisexual individual. However, the relationship between self-esteem and participants' shame as a bisexual individual was not significant,  $\beta = -0.06$ ,  $SE = 0.06$ ,  $p = .363$ , 95% CI [-0.18, 0.07].

*Hypothesis 7.* It was hypothesized that sexual identity salience would be negatively related to participants' parenting self-efficacy. This hypothesis was not supported, as sexual

identity salience was not related to participants' level of parenting self-efficacy,  $\beta = 0.14$ ,  $SE = 0.08$ ,  $p = 0.69$ , 95% CI [-0.01, 0.29].

*Hypothesis 8.* It was hypothesized that sexual identity salience would be positively related to participants' parenting guilt. However, the results demonstrated a significant negative relationship between sexual identity salience and participants' parenting guilt,  $\beta = -0.16$ ,  $SE = 0.07$ ,  $p = .022$ , 95% CI [-0.29, -0.02].

*Hypothesis 9.* It was hypothesized that parenting efficacy would be negatively related to participants' parenting guilt. The results supported this hypothesis such that higher levels of parenting efficacy were significantly related to lower levels of participants' parenting guilt,  $\beta = -0.43$ ,  $SE = 0.05$ ,  $p < .001$ , 95% CI [-0.53, -0.32].

#### **Identity verification, emotion-based outcomes, and psychological distress.**

*Hypothesis 10.* It was hypothesized that sexual identity salience would be negatively related to participants' psychological distress. Indeed, higher levels of sexual identity salience were related to lower levels of psychological distress among participants,  $\beta = -0.22$ ,  $SE = 0.07$ ,  $p = .003$ , 95% CI [-0.36, -0.07].

*Hypothesis 11.* It was hypothesized that parenting efficacy would be negatively related to participants' psychological distress. The results supported this hypothesis such that higher levels of parenting efficacy were related to lower levels of psychological distress,  $\beta = -0.27$ ,  $SE = 0.06$ ,  $p < .001$ , 95% CI [-0.39, -0.14].

*Hypothesis 12.* It was hypothesized that self-esteem as a bisexual individual would be negatively related to participants' psychological distress. However, the results did not support this hypothesis,  $\beta = -0.05$ ,  $SE = 0.06$ ,  $p = .403$ , 95% CI [-0.17, 0.07].

*Hypothesis 13.* It was hypothesized that parenting self-efficacy would mediate the relationship between sexual identity salience and psychological distress. Results did not support this hypothesis, as the examined indirect effect was not significant,  $\beta = -0.04$ ,  $SE = 0.02$ ,  $p = .092$ , 95% CI [-0.08, 0.01].

*Hypothesis 14.* It was hypothesized that self-esteem as a bisexual individual would mediate the relationship between sexual identity salience and psychological distress. However, the results did not support this hypothesis given that the examined indirect effect was not significant,  $\beta = -0.01$ ,  $SE = 0.02$ ,  $p = .408$ , 95% CI [-0.04, 0.02].

Table 9

*Factor Loadings for Latent Variables within the Final Model.*

Psychological Distress				Sexual Identity Salience			
Item	Estimate	SE	<i>p</i>	Item	Estimate	SE	<i>p</i>
MHI-A	0.73	0.04	< .001	LGBIS-AC	0.93	0.10	< .001
MHI-D	0.91	0.02	< .001	NOS-C	0.51	0.07	< .001
MHI-B	0.90	0.02	< .001				
MHI-P	0.81	0.03	< .001				

N = 211, FIML estimation.

*Note.* MHI-A = Mental Health Inventory – Anxiety subscale; MHI-D = Mental Health Inventory – Depression subscale; MHI-B = Mental Health Inventory – Loss of Behavioral/Emotional Control subscale; MHI-P = Mental Health Inventory – Low Positive Affect subscale; LGBIS-AC = Lesbian, Gay, and Bisexual Identity Scale – Acceptance Concerns subscale; NOS-C = Nebraska Outness Scale – Concealment subscale.

Table 10

*Direct Path Estimates for the Final Model.*

	$\beta$	<i>B</i>	<i>SE</i>	<i>p</i>	95% CI
Psychological Distress <sub>1</sub>					
Saliency	-0.22	-3.25	0.07	.003	[-0.36, -0.07]
PSOC-E	-0.27	-5.30	0.06	<.001	[-0.39, -0.14]
CSES	-0.05	-0.06	0.06	.403	[-0.17, 0.07]
Education	-0.19	-1.79	0.06	.001	[-0.30, -0.08]
PFQ-G <sub>2</sub>					
Saliency	-0.16	-0.12	0.07	.022	[-0.29, -0.02]
PSOC-E	-0.43	-0.42	0.05	<.001	[-0.53, -0.32]
PFQ-S <sub>3</sub>					
Saliency	-0.42	-0.31	0.08	<.001	[-0.58, -0.26]
CSES	-0.06	-0.003	0.06	.363	[-0.18, 0.07]
CSES					
Saliency	0.25	3.34	0.08	.001	[0.11, 0.40]
LGBIS-IC	0.48	6.81	0.06	<.001	[0.37, 0.59]
PSOC-E					
Saliency	0.14	0.10	0.08	.069	[-0.01, 0.29]
PID-C	0.25	0.21	0.07	<.001	[0.12, 0.38]
Saliency					
LGBIS-IC	-0.17	-0.18	0.07	.024	[-0.31, -0.02]
PID-C	-0.15	-0.17	0.07	.032	[-0.29, -0.13]
PID-C*LGBIS-IC	0.14	0.15	0.07	.047	[0.002, 0.28]

N = 211, FIML Estimation.

 $\emptyset_{12} = 0.53, p < .001$ ;  $\emptyset_{13} = 0.32, p < .001$ ;  $\emptyset_{23} = 0.38, p < .001$ 

*Note.* PSOC-E = Parenting Sense of Competence – Efficacy Subscale; CSES = Collective Self-Esteem Scale; PFQ-G = Harder Personal Feelings Scale – Guilt; PFQ-S = Harder Personal Feelings Scale – Shame; LGBIS-IC = Lesbian, Gay, and Bisexual Identity Scale – Identity Centrality Subscale; PID-C = Parenting Identity Centrality; PID-C\*LGBIS-IC = Interaction of Parenting Identity Centrality and Bisexual Identity Centrality.

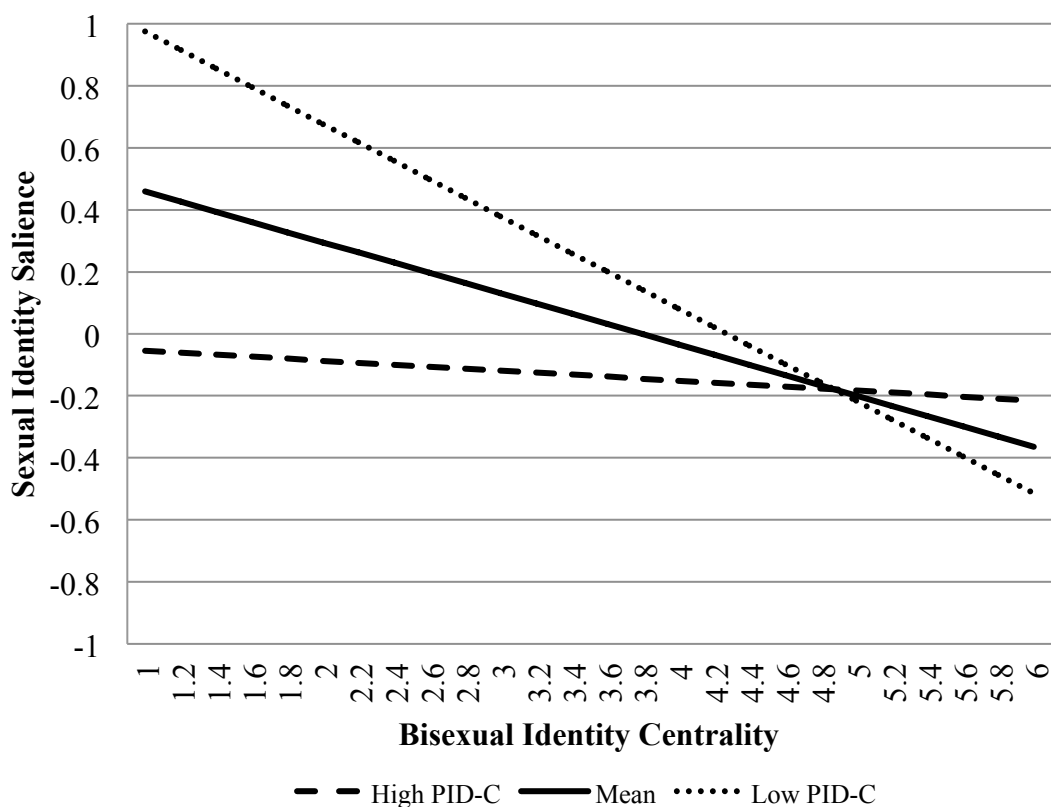
Table 11

*Simple Slope Estimates for Moderation Effect.*

Value of Moderator	<i>B</i>	<i>SE</i>	<i>p</i>	95% CI
Parenting Identity Centrality				
PID-C <sub>low</sub>	-0.32	0.12	.007	[-0.55, -0.09]
PID-C <sub>mean</sub>	-0.18	0.09	.038	[-0.35, -0.01]
PID-C <sub>high</sub>	-0.04	0.11	.726	[-0.25, 0.17]
Bisexual Identity Centrality				
LGBIS-IC <sub>low</sub>	-0.32	0.12	.006	[-0.54, -0.09]
LGBIS-IC <sub>mean</sub>	-0.17	0.08	.037	[-0.33, -0.01]
LGBIS-IC <sub>high</sub>	-0.03	0.11	.818	[-0.24, 0.19]

N = 211, FIML Estimation.

*Note.* PID-C = Parenting Identity Centrality; LGBIS-IC = Lesbian, Gay, Bisexual Identity Scale – Identity Centrality Subscale.



*Figure 3.* Simple Slopes of Sexual Identity Saliency on Bisexual Identity Centrality at Different Levels of Parenting Identity Centrality.

*Note.* PID-C = Parenting Identity Centrality. High PID-C = 1 *SD* above mean; Low PID-C = 1 *SD* below mean.

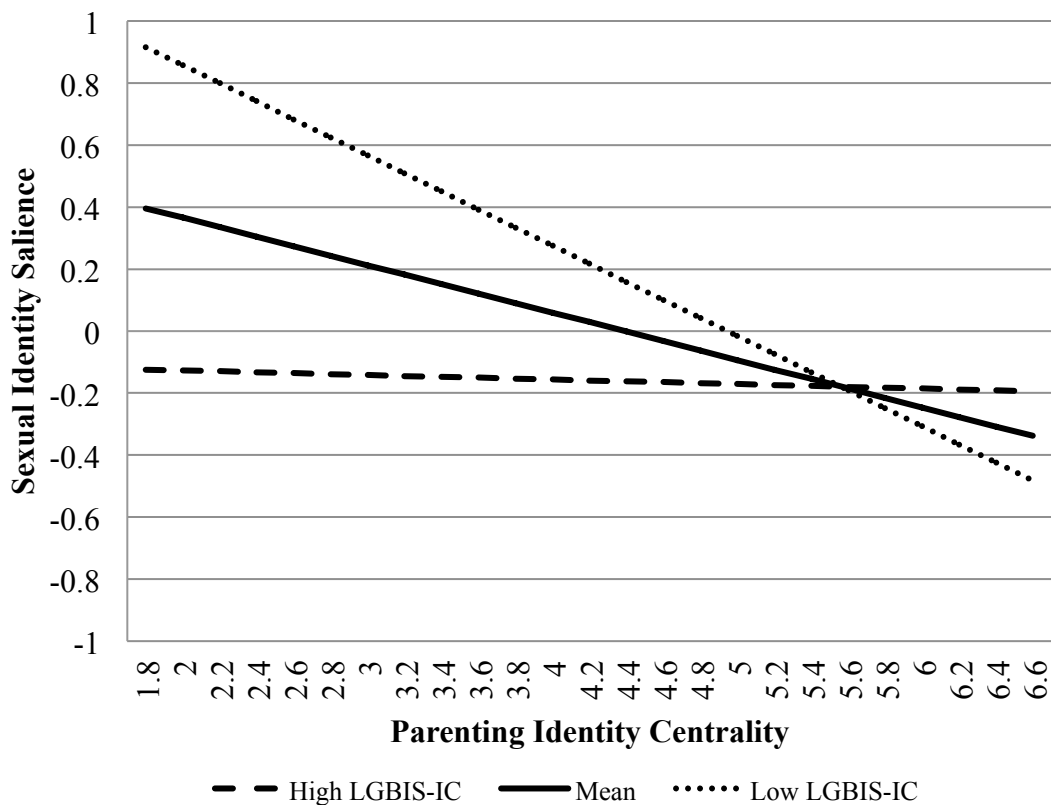


Figure 4. Simple Slopes of Sexual Identity Saliency on Parenting Identity Centrality at Different Levels of Bisexual Identity Centrality.

Note. LGBIS-IC = Lesbian, Gay, Bisexual Identity Scale – Identity Centrality Subscale. High LGBIS-IC = 1 *SD* above mean; Low LGBIS-IC = 1 *SD* below mean.

Table 12

*Hypothesized Indirect Path Estimates for the Final Model.*

Path	$\beta$	<i>B</i>	<i>SE</i>	<i>p</i>	95% CI
Saliency → PSOC-E → Distress	-0.04	-0.54	0.02	.092	[-0.08, 0.01]
Saliency → CSES → Distress	-0.01	-0.19	0.02	.408	[-0.04, 0.02]

N = 211, FIML Estimation.

Note. PSOC-E = Parenting Sense of Competence – Efficacy Subscale; CSES = Collective Self-Esteem Scale.



## CHAPTER IV

### DISCUSSION

This study's goal was to understand the relationship between bisexual and motherhood identities, psychological distress, parenting efficacy, and self-esteem as a bisexual individual through the theoretical perspective of identity theory. Based upon the tenets of identity theory, a structural equation model was proposed which detailed three sets of hypotheses specific to (1) participants' identity centrality and identity salience, (2) identity verification and resulting emotions, and (3) identity verification and psychological distress. Results revealed that both bisexual identity centrality and parenting identity centrality were significantly related to participants' level of sexual identity salience. Additionally, parenting identity centrality moderated the relationship between bisexual identity centrality and sexual identity salience. With respect to hypotheses examining identity verification and emotion-based outcomes, sexual identity salience demonstrated a positive relationship with participants' self-esteem and a negative relationship with shame as a bisexual individual. Furthermore, sexual identity salience was significantly related to participants' feelings of parenting guilt, however the direction of the effect was counter to that hypothesized. Additionally, results did not support the hypothesis that sexual identity salience would have a direct effect on parenting efficacy. Finally, results partially supported a set of hypotheses regarding salience, emotion-based outcomes, and psychological distress. Both sexual identity salience and parenting efficacy demonstrated significant direct effects on psychological distress. In contrast, self-esteem as a bisexual individual did not relate to psychological distress. Lastly, hypotheses that parenting efficacy and self-esteem as a bisexual individual would each mediate the relationship between sexual identity salience and psychological distress, were not supported.

### Identity Centrality and Identity Salience

The first set of hypotheses sought to examine the individual and interacting impact of participants' parenting and bisexual identity centralities on levels of sexual identity salience. Guided by the tenets of identity theory, as well as a review of the literature on bisexuality and parenting, it was hypothesized that bisexual identity centrality would be positively related to participants' sexual identity salience (Hypothesis 1) and parenting identity centrality would be negatively related to participants' sexual identity salience (Hypothesis 2). Furthermore, a buffering moderation effect was expected above and beyond these direct paths, whereby high levels of parenting identity centrality would weaken the positive relationship between bisexual identity centrality and sexual identity salience (i.e.,  $\beta_1 > 0$ ,  $\beta_2 < 0$ ,  $\beta_3 > 0$ ; Hypothesis 3). The findings revealed significant paths, though the direction of some effects ran counter to what was expected. Specifically, the results demonstrated a significant *negative* effect from bisexual identity centrality to sexual identity salience, where higher levels of bisexual identity centrality were related to lower levels of sexual identity salience. As expected, higher levels of parenting identity centrality were related to lower levels of sexual identity salience. Finally, parenting identity centrality moderated the relationship between bisexual identity centrality and sexual identity salience, but the moderation effect demonstrated an *interference* pattern (i.e.,  $\beta_1 < 0$ ,  $\beta_2 < 0$ ,  $\beta_3 > 0$ ).

At first glance these results were puzzling, as they appeared to run contrary to the assumptions of identity theory. Specifically, identity theory proposes a temporal relationship among centrality and salience such that levels of identity centrality inform levels of salience, and therefore impact the probability of an identity being evoked for verification and informing one's behavior across situations (e.g., Brenner et al., 2013; Burke & Stets, 2009). This proposition

would suggest that higher levels of bisexual identity centrality would promote higher levels of sexual identity salience, as informed by lower levels of sexual identity concealment and acceptance concerns, yet the results of the current study demonstrated a negative relationship between bisexual identity centrality and sexual identity salience. However, when examining these findings it is important account for the moderation effect, as the presence of a significant moderation effect makes interpretation of main effects problematic (e.g., Cohen et al., 2003). Thus, the impact of participants' parenting identity centrality must be taken into account when considering the relationship between bisexual identity centrality and sexual identity salience.

When interpreting the moderation effect in the context of identity theory and relevant literature on bisexuality and parenting, the nuances of negotiating both a bisexual and parenting identity become apparent. As previously discussed, bisexual parents face unique experiences regarding the disclosure or concealment of their bisexual identity. Specifically, they face invisibility given assumptions of sexual identity based on their partner's gender. Additionally, their identity as a parent renders their bisexuality invisible given the participation in a traditionally heteronormative practice. Furthermore, disclosure in this context may elicit experiences of biphobia or prejudice given judgments on their "fitness" for parenting as a bisexual individual. Thus, the observed effects of bisexual identity centrality and parenting identity centrality on sexual identity salience may be reflective of the participants' concerns about acceptance, and concealment as a bisexual individual in a parenting arrangement.

In the presence of high levels of parenting identity centrality, the level of reported bisexual identity centrality does not appear to impact the likelihood that an individual would identify their sexual identity as salient. In contrast, when one's parenting identity centrality is low the salience of a sexual identity is significantly impacted by the level of reported bisexual

identity centrality, where those with higher bisexual identity centrality are demonstrating more concealment and acceptance concerns than those with lower centrality. This result may suggest that if a bisexual mother identifies her bisexuality as central to her identity above and beyond her identity as a parent, she may experience significantly greater concerns about acceptance as a bisexual person and report higher concealment given that she faces unique prejudices based upon her intersecting identities as a bisexual mother. These results align with past qualitative research examining bisexuality and motherhood which highlighted the impacts of parenthood on one's bisexual identity importance as well as the experience of biphobic attitudes (e.g., Tasker & Delvoye, 2015).

In all, the results offer some support for the expectations of identity theory with respect to the negotiation of multiple identities, particularly with regard to the impact of an identity's centrality/prominence in informing levels of salience (e.g., Burke & Stets, 2009; Stets & Serpe, 2013). Of particular importance is considering the negative association between participants' bisexual identity centrality and sexual identity salience, which ran counter to what was hypothesized given the tenets of identity theory. However, in reflecting upon the identity being examined – that is, an invisible, stigmatized sexual minority identity – greater understanding is afforded to the negative relationship between centrality and salience. For instance, research has demonstrated a negative relationship between identity centrality and psychological distress amongst participants with a variety of concealable, stigmatized identities (Quinn & Chaudoir, 2009). Furthermore, Meyer's (2003) minority stress model proposes that the more prominent a minority identity, the greater the emotional impact of stressors experienced as related to that identity. Thus, identity theory might not fully account for the ways in which stigmatized,

concealable identities may operate differently with respect to relationships between centrality and salience.

### **Identity Verification and Emotion-Based Outcomes**

The second set of hypotheses sought to examine the emotion-based outcomes expected as a function of identity verification or non-verification, informed by participants' level of sexual identity salience. Given the assumptions of identity theory, particular emotion-based outcomes were expected as related to the type of identity presenting for verification. For the purposes of this study, bisexual identity was classified as a group identity such that it is defined as a shared set of meaning placing an individual as belonging to a certain social group. Furthermore, parenting identity was defined as a role identity in that it carries a set of shared meanings that characterizes an individual's social role (e.g., Burke & Stets, 2009; Stets & Burke, 2000; Stets & Serpe, 2013; Stryker & Burke, 2000). Each of the emotion-based findings based upon verification or non-verification of bisexual and parenting identities are discussed below.

**Group identity.** First, it was hypothesized that participants' sexual identity salience would be positively related to feelings of self-esteem as a bisexual individual (Hypothesis 4). Indeed, the results revealed a significant direct effect from sexual identity salience to self-esteem, in which higher levels of sexual identity salience were related to higher levels of self-esteem as a bisexual individual. This finding aligns with the expectations of identity theory that anticipate greater feelings of self-esteem when a group identity is salient and able to be verified. In contrast, it was expected that higher levels of sexual identity salience to be negatively related to feelings of shame as a bisexual individual (Hypothesis 5). The results also supported this hypothesis given a negative direct effect between sexual identity salience and shame. Thus, when participants' verification of a bisexual identity was less probable (i.e., less salient) they

reported higher levels of shame as a bisexual individual, and vice-versa, which supports the expectations of identity theory (e.g., Burke & Stets, 2009).

Finally, it was expected that higher levels of self-esteem as a bisexual individual would be related to lower levels of shame (Hypothesis 6), however the results did not support this hypothesis. A direct effect from self-esteem to shame as a bisexual individual seems intuitive, and thus this null finding is initially perplexing. Examination of the bivariate correlation between these variables does suggest a small, but significant negative relationship. However it is likely that in the context of the full identity theory model that the variance in shame potentially explained by self-esteem was better accounted for by other variables in the model, thereby demonstrating a non-significant direct effect.

**Role identity.** With respect to the parenting as a role identity, it was hypothesized that participants' sexual identity salience would be negatively related to feelings of parenting self-efficacy (Hypothesis 7). The results did not support this hypothesis, as the direct effect was non-significant. One explanation for this null finding may be the measurement of salience with respect to participants' bisexual identity as opposed to their parenting identity. Although the assumptions of identity theory would suggest that the negotiation and verification of a parenting identity as a bisexual individual may take place in the context of sexual identity salience (i.e., concealment and acceptance concerns), the role identity emotion-based outcome of parenting efficacy may not be fully captured by this verification process. That is, one might expect a significant effect from a measurement of parenting identity salience to parenting self-efficacy.

Next, it was expected that participants' sexual identity salience would be positively related to feelings of parenting guilt (Hypothesis 8), however, the results demonstrated a significant *negative* relationship. Specifically, higher levels of sexual identity salience were

related to lower levels of parenting guilt. Although contrary to what was expected, one potential explanation for this finding is that individuals who report higher sexual identity salience (as indicated by lower levels of sexual identity concealment and acceptance concerns) may be more likely to experience feelings of security in their identity as a bisexual parent, which may then serve as a protective factor in the experience of parenting guilt. Conversely, participants who reported lower sexual identity salience (as informed by higher levels of sexual identity concealment and acceptance concerns) may feel less secure in their identity as a bisexual parent, which in turn may relate to higher feelings of parenting guilt.

Finally, it was hypothesized that higher levels of parenting self-efficacy would relate to lower levels of parenting guilt (Hypothesis 9). Indeed the results indicated a negative direct effect from parenting self-efficacy to parenting guilt, where participants who reported feeling more efficacious in their parenting role experienced less guilt as a parent. Not only does this finding offer additional support for the emotion-based outcomes in identity theory, but is also highlights an important clinical impact of role-based efficacy on experiences of guilt. Taken together, these results offer some support for the tenets of identity theory, as applicable to the salience and verification of bisexual and parenting identities.

### **Identity Verification, Emotion-Based Outcomes, and Psychological Distress**

The final set of hypotheses detailed how both sexual identity salience and specific emotion-based outcomes were expected to impact participants' level of psychological distress. As derived from the limited body of literature, bisexual mothers are reporting poorer mental health outcomes (e.g., Ross et al., 2007; 2012) and high rates of unmet needs for mental health services (Steele et al., 2008). Given the predictions of identity theory in combination with the literature discussed above, it was hypothesized that sexual identity salience would be negatively

related to participants' level of psychological distress (Hypothesis 10). Indeed, the results revealed that higher levels of sexual identity salience were related to lower levels of psychological distress, and vice versa, which highlights one of the potential mechanisms by which bisexual mothers experience psychological distress.

It was also expected that parenting efficacy would be negatively related to psychological distress (Hypothesis 11). The results supported this hypothesis such that higher levels of parenting efficacy were related to lower levels of psychological distress. It is well understood in the literature that general experiences of self-efficacy serve as a buffer against components of psychological distress such as anxiety and depression, as delineated by social cognitive theory (e.g., Bandura, 1994; 1997). Additionally, research has demonstrated parental self-efficacy as protective against impacts of adverse environments (e.g., Ardel & Eccles, 2001 as cited in Wittkowski, Dowling, & Smith, 2016) and psychological distress outcomes, such as anxiety and depression, in mothers of children with autism (Hastings & Brown, 2002). Thus, results align with both the expectations of identity theory as well as past research suggesting the protective impact of feelings of parenting self-efficacy on experiences of psychological distress among bisexual mothers.

Similarly, it was hypothesized that high levels of self-esteem as a bisexual individual would be related to lower levels of psychological distress (Hypothesis 12), however the results did not support this hypothesis. At first glance, this finding appears to contradict past research that suggests self-esteem, in general, serves a protective effect against psychological distress (e.g., Mann, Hosman, Schaalma, & de Vries, 2004). Although, reviewing the bivariate correlations revealed that self-esteem as a bisexual individual demonstrated a significant, negative correlation with low-positive affect it was not significantly correlated with the three



remaining measurements of psychological distress (e.g., depression, anxiety, loss of behavioral/emotional control). Thus, perhaps self-esteem as a bisexual individual may impact experiences of positive affect, but not necessarily protect against other variables of psychological distress. Another consideration for this null finding comes with examining how self-esteem as a bisexual individual was measured and the context of bisexual community. For instance participants were asked to reflect upon their group identity and consider their self-esteem as a member of the bisexual community. However, past research suggests that many bisexual individuals may face barriers to connecting with a sense of community given the erasure of bisexuality in the broader social context (e.g., Balsam & Mohr, 2007; Ross et al., 2010; Ross & Dobinson, 2013). Thus, potential protective factors associated with experiencing self-esteem through a group identity may not be particularly impactful when the group identity is socially constructed to be invisible, irrelevant, and illegitimate.

Finally, two mediation effects were expected to occur within the model. Specifically, it was hypothesized that parenting self-efficacy would mediate the relationship between sexual identity salience and psychological distress (Hypothesis 13). Additionally, it was hypothesized that self-esteem as a bisexual individual would mediate the relationship between sexual identity salience and psychological distress (Hypothesis 14); however, neither of the mediation hypotheses were supported by the results. These null findings were likely due to the presence of non-significant direct effects in each of the proposed mediation pathways. As discussed above, sexual identity salience did not relate to participants' level of parenting self-efficacy. Further, self-esteem as a bisexual individual did not relate to participants' level of psychological distress. Therefore, significant indirect pathways from sexual identity salience to psychological distress via parenting self-efficacy and self-esteem as a bisexual individual were unlikely to occur.

Taken together, these results provide some support for the applicability of identity theory as a mechanism by which to understand experiences of psychological distress in bisexual mothers, specifically with regard to the impacts of identity salience and role-based efficacy. Of particular importance is the role of parenting-efficacy, which appears to be a protective factor in participants' experience of psychological distress. Furthermore these results suggest that the salience of one's bisexual identity, as informed by lower levels of concealment and acceptance concerns, may also serve a protective role against psychological distress in a sample of bisexual mothers.

### **Limitations**

Prior to concluding it is important to highlight the limitations that exist within the current study, the first of which is sampling. Given the demographic composition of the sample, results of the study may not be generalizable to a broad range of bisexual mothers. Specifically, the sample was largely composed of White bisexual women. Furthermore, most participants reported their relationship status as married, and the majority were married to men. Thus, the sample likely captures one subset of the population of bisexual mothers and is not necessarily representative of the population as a whole. Future research should consider examining the effects reported in this study within more diverse samples of the population of bisexual mothers. This future direction is particularly important given the emerging literature on intersectionality and the potential impact of multiple minority identities on mental health outcomes (e.g., Cole, 2009; Davis, 2008). Indeed the centrality of parenting and bisexual identities, level of sexual identity salience, and experiences of parenting self-efficacy or guilt, bisexual self-esteem or shame, and psychological distress may be impacted by a number of different cultural identities or experiences.

A second limitation is the use of cross-sectional data, which limits the ability to draw conclusions of causality. Future research may benefit from completing longitudinal or experimental research to test the causality as proposed by identity theory. Specifically, researchers have begun to examine the verification and non-verification of multiple identities through both longitudinal (e.g., Burke & Harrod, 2005; Cast & Burke, 2002) and experimental (e.g., Stets, 2005; Stets & Osborne, 2008) methodologies. Thus future studies should aim to utilize these methodologies and seek to draw conclusions regarding experiences of self-esteem, shame, efficacy, guilt, and psychological distress in the presence or absence of verifying a bisexual or parenting identity.

In a similar vein, the current study was also limited by the way in which verification of a sexual identity was measured. Participants' level of sexual identity salience was informed by self-report measures of sexual identity acceptance concerns and concealment. In turn, this construct was taken to inform the likelihood in which participants' bisexual identities would be presented for verification. Although this provides an important first step in examining the hypotheses of identity theory among the population of bisexual mothers, it is limited in that experiences of identity verification were not directly measured. As highlighted above, both longitudinal and experimental methodologies in future research may offer avenues by which to naturally observe, or artificially create experiences in which a participant's bisexual or parenting identities can be verified or non-verified, thus allowing for greater ability to draw conclusions regarding verification and emotion-based outcomes.

### **Clinical Implications and Future Directions**

Despite its limitations, the current study addresses an important need within the literature on parenting and bisexuality by quantitatively examining the relationships between bisexual and

parenting identities, psychological distress, efficacy, guilt, self-esteem, and shame among a sample of bisexual mothers. A major contribution of this study is the examination of bisexuality and motherhood using quantitative analyses with a large sample. To the best of our knowledge, this is the first study to gather quantitative data from a sample of over 200 bisexual mothers. Many studies to this date have focused on qualitative analyses and included small sample sizes, which have provided important foundational steps to understanding the experience of bisexuality and motherhood. However, this study addresses an important next step in the literature by examining the phenomenon highlighted in recent qualitative studies through use of structured measurement and hypothesis testing. Examination of theoretical models, such as the one tested in Figure 2, allow for an empirical understanding of factors that may relate to experiences of parenting guilt, shame as a bisexual individual, and psychological distress among bisexual mothers.

Results of the study also highlight the importance of parenting self-efficacy as a possible protective factor against feelings of guilt and psychological distress for bisexual mothers. Thus, clinical interventions aimed at reducing guilt and psychological distress within this population could target parenting self-efficacy. Research has shown the effectiveness of targeting parenting self-efficacy through group-based parenting interventions including cognitive-behavioral, behavioral, and other education based interventions (e.g., Wittkowski, Dowling, & Smith, 2016).

Of particular importance for this population would be considering the potential impact of bisexual-specific parenting groups in developing interventions. As discussed above, bisexual mothers may face a number of invisibility experiences given that parenting is often considered a heteronormative practice, and thus renders a bisexual identity invisible. Furthermore, bisexual mothers may encounter prejudice through biphobic attitudes and judgments of “fitness” as a

parent based upon their sexual identity. Research also highlights the difficulties bisexual mothers may face in connecting with relevant community or social groups due to the erasure of bisexuality in the larger social context (e.g., Balsam & Mohr, 2007; Ross et al., 2010; Ross & Dobinson, 2013). Thus, group interventions aimed at increasing feelings of parenting self-efficacy within this population may serve best if they include bisexual-specific resources and content to address the nuances this population may experience in negotiation both a bisexual and parenting identity.

Future research should seek to replicate the findings of this study, particularly with larger and more diverse samples. Replication of the results with additional samples of the population of bisexual mothers would allow for greater confidence in understanding the role that each of the above examined factors play in impacting guilt, shame, and psychological distress.

Although this study examined a number of important factors expected to relate to experiences of psychological distress among bisexual mothers, additional variables may be important to consider when designing future studies. For instance, sexual minority stress theory alludes to potential protective factors of social connection/social support in impacting experiences of psychological distress among the LGB population (Meyer, 2003). Given the aforementioned experiences that bisexual mothers may face when seeking community connection (e.g., biphobia, bisexual invisibility/erasure in social context), it would be important for future studies to examine the experience of social support among this population and its impact on psychological distress.

Finally, extensions of this research may benefit from considering how this model of psychological distress, parenting guilt, and shame as a bisexual individual fits for bisexual mothers at different stages of motherhood identity development. Experiences of sexual and

parenting identity centrality, salience, and psychological distress or other emotion-based outcomes may differ amongst first-time, new mothers to more experienced mothers. In context of research on the transition to motherhood, one might expect significant impact on one's sense of identity as women begin to negotiate their identity as a parent (e.g., Ali et al., 2013; Laney et al., 2014). Further, studies that have examined mental health outcomes in new or expecting bisexual mothers have found higher postnatal depression scores (Ross et al., 2007), poorer scores on assessments of substance use, social support, and perceived discrimination (Ross et al., 2012), and high rates of unmet needs for mental health services (Steele et al., 2008) compared to lesbian mothers. Thus, expanding research to examine model fit as a factor of trajectories in motherhood may allow for the development of more refined, targeted clinical interventions within the population.

## CHAPTER V

### CONCLUSION

This study was the first to quantitatively examine the relationship between bisexuality and motherhood identities, psychological distress, parenting self-efficacy, and self-esteem as a bisexual individual from the theoretical perspective of identity theory. Overall, the findings provide partial support for identity theory as a mechanism by which one can understand the relationship between identity centrality, identity salience, emotional outcomes, and psychological distress in bisexual mothers. Both parenting identity and bisexual identity centrality demonstrated relationships with participants' level of sexual identity salience. Furthermore, parenting identity centrality moderated the effect of bisexual identity centrality on sexual identity salience, where the negative relationship between bisexual identity centrality and sexual identity salience was weakened in the presence of high levels of parenting identity centrality. Sexual identity salience was related to participants' levels of self-esteem as a bisexual individual as well as levels of shame as a bisexual individual. Additionally, sexual identity salience impacted participants' feelings of parenting guilt where higher levels of salience were related with lower levels of guilt. Participants who reported more feelings of efficacy in their parenting role reported lower levels of parenting guilt as well as lower levels of psychological distress. Finally, higher levels of sexual identity salience were related to lower levels of psychological distress. Future research may benefit from a replication of these findings as well as an examination of these effects in more diverse samples of the population of bisexual mothers.

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8. Please provide the following information for your child(ren).\*

Child #	Child's Gender**	Child's Age	Relationship to Child**	Does this child live with you currently?***
Child 1	Male Female	[Open Ended]	Biological Parent Adoptive Parent Step-Parent Other (please specify):	Yes No
Child 2	Male Female	[Open Ended]	Biological Parent Adoptive Parent Step-Parent Other (please specify):	Yes No
Child 3	Male Female	[Open Ended]	Biological Parent Adoptive Parent Step-Parent Other (please specify):	Yes No
Child J	Male Female	[Open Ended]	Biological Parent Adoptive Parent Step-Parent Other (please specify):	Yes No

\*Note: Participants' response to item #7 will prompt survey software to display total number of rows for total number of children. Participants who respond 8 or more will be asked to provide information for their first 8 children.

\*\*Answers will be provided in a drop-down menu option.

9. Are you a resident of the United States?

Yes

a. What is your state of residence? *(shown if answered Yes)*

\*Drop down menu of 50 states

No

b. What is your country of residence? [Open Ended] *(shown if answered No)*

10. What is your race?

American Indian and Alaskan Native

Asian

Black or African American

Native Hawaiian and other Pacific Islander

White

Other: \_\_\_\_\_

11. What is your ethnicity?

Hispanic/Latino/Latina

Not Hispanic/Latino/Latina

12. What is your relationship status?
- Married/Civil Union
  - Divorced/Separated
  - Living with Partner
  - Widowed
  - In a committed relationship
  - In an open relationship
  - Single
  - Other: \_\_\_\_\_
13. My current dating/relationship partner is:
- Female
  - Male
  - Other \_\_\_\_\_
  - Not applicable (not currently dating/in a relationship)
14. What is the highest level of education you completed?
- Some high school
  - High school diploma or GED
  - Trade school
  - Some college
  - Associate's degree
  - Bachelor's degree
  - Master's degree
  - Doctoral degree
  - Other: \_\_\_\_\_
15. Please indicate your current employment status (check all that apply):
- Not employed
  - Staying at home with child(ren)
  - Full-time student
  - Part-time student
  - Employed part-time
  - Employed full-time
16. What is your individual income?
- Less than \$10,000
  - \$10,000-\$20,000
  - \$20,000-\$30,000
  - \$30,000-\$40,000
  - \$40,000-\$50,000
  - \$50,000-\$60,000
  - \$60,000-\$70,000
  - More than \$70,000
17. What is your household income?

- Less than \$10,000
- \$10,000-\$20,000
- \$20,000-\$30,000
- \$30,000-\$40,000
- \$40,000-\$50,000
- \$50,000-\$60,000
- \$60,000-\$70,000
- More than \$70,000

18. How would you describe yourself politically?

- Extremely Conservative
- Conservative
- Leaning Conservative
- Moderate
- Leaning Liberal
- Liberal
- Extremely Liberal
- Politically Uninvolved

19. What religion, if any, do you most identify with?

- Anglican/Episcopalian
  - Baptist
  - Buddhist
  - Eastern Orthodox
  - Hindu
  - Jewish
  - Lutheran
  - Methodist
  - Mormon/LDS
  - Muslim
  - Non-denominational Christian
  - Pentecostal
  - Presbyterian
  - Roman Catholic
  - I do not affiliate with any religion
- Other: \_\_\_\_\_

**APPENDIX B**

## THE SELL ASSESSMENT (Sell, 1996)

I. Sexual Attractions- The following six questions are asked to assess how frequently and intensely you are sexually attracted to men and women. Consider times you had sexual fantasies, daydreams, or dreams about a man or woman, or have been sexually aroused by a man or woman.

1. During the past year, how many different men were you sexually attracted to (choose one answer):

- a. None.
- b. 1.
- c. 2.
- d. 3-5.
- e. 6-10.
- f. 11-49.
- g. 50-99
- h. 100 or more.

2. During the past year, on average, how often were you sexually attracted to a man (choose one answer):

- a. Never.
- b. Less than 1 time per month.
- c. 1-3 times per month.
- d. 1 time per week
- e. 2-3 times per week.
- f. 4-6 times per week.
- g. Daily.

3. During the past year, the most I was sexually attracted to a man was (choose one answer):

- a. Not at all sexually attracted.
- b. Slightly sexually attracted.
- c. Mildly sexually attracted.
- d. Moderately sexually attracted.
- e. Significantly sexually attracted.
- f. Very sexually attracted.
- g. Extremely sexually attracted.

4. During the past year, how many different women were you sexually attracted to (choose one answer):

- a. None.
- b. 1.
- c. 2.
- d. 3-5.
- e. 6-10.

- f. 11-49.
- g. 50-99.
- h. 100 or more.

5. During the past year, on average, how often were you sexually attracted to a woman (choose one answer):

- a. Never.
- b. Less than 1 time per month.
- c. 1-3 times per month.
- d. 1 time per week
- e. 2-3 times per week.
- f. 4-6 times per week.
- g. Daily.

6. During the past year, the most I was sexually attracted to a woman was (choose one answer):

- a. Not at all sexually attracted.
- b. Slightly sexually attracted.
- c. Mildly sexually attracted.
- d. Moderately sexually attracted.
- e. Significantly sexually attracted.
- f. Very sexually attracted.
- g. Extremely sexually attracted.

II. Sexual Contact – The following four questions are asked to assess your sexual contacts.

Consider times when you had contact between your body and another man or woman's body for the purpose of sexual arousal or gratification.

7. During the past year, how many different men did you have sexual contact with (choose one answer):

- a. None.
- b. 1.
- c. 2.
- d. 3-5.
- e. 6-10.
- f. 11-49.
- g. 50-99.
- h. 100 or more.

8. During the past year, on average, how often did you have sexual contact with a man (choose one answer):

- a. Never.
- b. Less than 1 time per month.
- c. 1-3 times per month
- d. 1 time per week.
- e. 2-3 times per week.
- f. 4-6 times per week.

g. Daily.

9. During the past year, how many different women did you have sexual contact with (choose one answer):

- a. None.
- b. 1.
- c. 2.
- d. 3-5.
- e. 6-10.
- f. 11-49.
- g. 50-99.
- h. 100 or more.

10. During the past year, on average, how often did you have sexual contact with a woman (choose one answer):

- a. Never.
- b. Less than 1 time per month.
- c. 1-3 times per month
- d. 1 time per week.
- e. 2-3 times per week.
- f. 4-6 times per week.
- g. Daily.

III. Sexual Orientation Identity- The following three questions are asked to assess your sexual orientation identity.

11. I consider myself (choose one answer):

- a. Not at all homosexual.
- b. Slightly homosexual.
- c. Mildly homosexual.
- d. Moderately homosexual.
- e. Significantly homosexual.
- f. Very homosexual.
- g. Extremely homosexual.

12. I consider myself (choose one answer):

- a. Not at all heterosexual.
- b. Slightly heterosexual.
- c. Mildly heterosexual.
- d. Moderately heterosexual.
- e. Significantly heterosexual.
- f. Very heterosexual.
- g. Extremely heterosexual.

13. I consider myself (choose one answer):

- a. Not at all bisexual.
- b. Slightly bisexual.



- c. Mildly bisexual.
- d. Moderately bisexual.
- e. Significantly bisexual.
- f. Very bisexual.
- g. Extremely bisexual.

**APPENDIX C****THE MULTIDIMENSIONAL INVENTORY OF BLACK IDENTITY CENTRALITY  
SUBSCALE (Sellers, 2013; modified for the current study)**

The following questions are about your current experience as a parent. For each of the following statements, please indicate your level of agreement on a scale of 1 (*strongly disagree*) to 7 (*strongly agree*).

1. Overall, being a *parent* has very little to do with how I feel about myself.
2. In general, being a *parent* is an important part of my self-image.
3. My destiny is tied to the destiny of other *parents*.
4. Being a *parent* is unimportant to my sense of what kind of person I am.
5. I have a strong sense of belonging to *parents*.
6. I have a strong attachment to other *parents*.
7. Being a *parent* is an important reflection of who I am.
8. Being a *parent* is not a major factor in my social relationships.

## APPENDIX D

### LESBIAN, GAY, AND BISEXUAL IDENTITY SCALE (Mohr & Kendra, 2011)

For each of the following questions, please mark the response that best indicates your current experience as a bisexual person. Please be as honest as possible: Indicate how you really feel now, not how you think you should feel. There is no need to think too much about any one question. Answer each question according to your initial reaction and then move on to the next.

1. I prefer to keep my same-sex romantic relationships rather private.
2. If it were possible, I would choose to be straight.
3. I'm not totally sure what my sexual orientation is.
4. I keep careful control over who knows about my same-sex romantic relationships.
5. I often wonder whether others judge me for my sexual orientation.
6. I am glad to be a *bisexual* person.
7. I look down on heterosexuals.
8. I keep changing my mind about my sexual orientation.
9. I can't feel comfortable knowing that others judge me negatively for my sexual orientation.
10. I feel that *bisexual* people are superior to heterosexuals.
11. My sexual orientation is an insignificant part of who I am.
12. Admitting to myself that I'm a *bisexual* person has been a very painful process.
13. I'm proud to be part of the *bisexual* community.
14. I can't decide whether I am bisexual or homosexual.
15. My sexual orientation is a central part of my identity.
16. I think a lot about how my sexual orientation affects the way people see me.
17. Admitting to myself that I'm a *bisexual* person has been a very slow process.
18. Straight people have boring lives compared with *bisexual* people.
19. My sexual orientation is a very personal and private matter.
20. I wish I were heterosexual.
21. To understand who I am as a person, you have to know that I'm *bisexual*.
22. I get very confused when I try to figure out my sexual orientation.
23. I have felt comfortable with my sexual identity just about from the start.
24. Being a *bisexual* person is a very important aspect of my life.
25. I believe being *bisexual* is an important part of me.
26. I am proud to be *bisexual*.
27. I believe it is unfair that I am attracted to people of the same sex.

## APPENDIX E

### THE NEBRASKA OUTNESS SCALE (Meidlinger & Hope, 2014)

*(NOS-D) What percent of the people in this group do you think are aware of your sexual orientation (meaning they are aware of whether you consider yourself straight, gay, etc.)?*

1. Members of your immediate family (e.g., parents and siblings)	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
2. Members of your extended family (e.g., aunts, uncles, grandparents, cousins)	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
3. People you socialize with (e.g., friends and acquaintances)	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
4. People at your work/school (e.g., coworkers, supervisors, instructors, students)	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
5. Strangers (e.g., someone you have a causal conversation with in line at the store)	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

*(NOS-C) How often do you avoid talking about topics related to or otherwise indicating your sexual orientation (e.g., not talking about your significant other, changing your mannerisms) when interacting with members of these groups?*

1. Members of your immediate family (e.g., parents and siblings)	Never	1	2	3	4	5	6	7	8	9	Always
2. Members of your extended family (e.g., aunts, uncles, grandparents, cousins)	Never	1	2	3	4	5	6	7	8	9	Always
3. People you socialize with (e.g., friends and acquaintances)	Never	1	2	3	4	5	6	7	8	9	Always
4. People at your work/school (e.g., coworkers, supervisors, instructors, students)	Never	1	2	3	4	5	6	7	8	9	Always
5. Strangers (e.g., someone you have a causal conversation with in line at the store)	Never	1	2	3	4	5	6	7	8	9	Always

**APPENDIX F****THE PARENTING SENSE OF COMPETENCE SCALE (Johnston & Mash, 1989)**

The following questions are about your current experience as a parent. For each of the following statements, please indicate your level of agreement on a scale of 1 (*strongly agree*) to 6 (*strongly disagree*).

1. The problems of taking care of a child are easy to solve once you know how your actions affect your child, an understanding I have acquired.
2. Even though being a parent could be rewarding, I am frustrated now while my child is at his/her present age.
3. I go to bed the same way I wake up in the morning, feeling I have not accomplished a whole lot.
4. I do not know why it is, but sometimes when I'm supposed to be in control, I feel more like the one being manipulated.
5. My mother/father was better prepared to be a good mother/father than I am.
6. I would make a fine model for a new mother/father to follow in order to learn what she/he would need to know in order to be a good parent.
7. Being a parent is manageable, and any problems are easily solved.
8. A difficult problem in being a parent is not knowing whether you're doing a good job or a bad one.
9. Sometimes I feel like I'm not getting anything done.
10. I meet my own personal expectations for expertise in caring for my child.
11. If anyone can find the answer to what is troubling my child, I am the one.
12. My talents and interests are in other areas, not in being a parent.
13. Considering how long I've been a mother/father, I feel thoroughly familiar with this role.
14. If being a mother/father of a child were only more interesting, I would be motivated to do a better job as a parent.
15. I honestly believe I have all the skills necessary to be a good mother/father to my child.
16. Being a parent makes me tense and anxious.
17. Being a good mother/father is a reward in itself.

## APPENDIX G

### THE COLLECTIVE SELF-ESTEEM SCALE (Luhtanen & Crocker, 1992, modified for the current study)

For the next set of questions, consider your experience as a bisexual individual. Indicate your level of agreement with each of the following statements based upon how you feel about being a bisexual individual and your membership in this community. There are no right or wrong answers to any of these statements; we are interested in your honest reactions and opinions. Please read each statement carefully, and respond by using the following scale from 1 (*strongly disagree*) to 7 (*strongly agree*).

1. I am a worthy member of the *bisexual community*
2. I often regret that I belong to *the bisexual community*
3. Overall, *the bisexual community* is considered good by others
4. Overall, my *membership in the bisexual community* has very little to do with how I feel about myself
5. I feel I don't have much to offer to the *bisexual community*
6. In general, I'm glad to be a member of the *bisexual community*
7. Most people consider *the bisexual community*, on the average, to be more ineffective than other social groups
8. The *bisexual community* I belong to is an important reflection of who I am
9. I am a cooperative participant in the *bisexual community*
10. Overall, I often feel that the *bisexual community* of which I am a member is not worthwhile
11. In general, others respect the *bisexual community* that I am a member of
12. The *bisexual community* I belong to is unimportant to my sense of what kind of a person I am
13. I often feel I'm a useless member of the *bisexual community*
14. I feel good about the *bisexual community* I belong to
15. In general, others think that the *bisexual community* that I am a member of is unworthy
16. In general, belonging to *the bisexual community* is an important part of my self-image

## APPENDIX H

### THE HARDER PERSONAL FEELINGS QUESTIONNAIRE 2 (Harder & Zalma, 1990).

The following questions ask about different feelings you may or may not experience. When answering each item, please think about your experience **as a parent**. Indicate the frequency with which you experience each feeling as a parent on a scale from 0 (*you never experience the feeling*) to 4 (*you experience the feeling continuously or almost continuously*).

1. Mild guilt
2. Worry about hurting or injuring someone
3. Intense guilt
4. Regret
5. Feeling you deserve criticism for what you did
6. Remorse

The following questions ask about different feelings you may or may not experience. When answering each item, please think about your experience **as a bisexual individual**. Indicate the frequency with which you experience each feeling as a bisexual individual on a scale from 0 (*you never experience the feeling*) to 4 (*you experience the feeling continuously or almost continuously*).

1. Embarrassed
2. Feeling ridiculous
3. Self-conscious
4. Feeling humiliated
5. Feeling “stupid”
6. Feeling “childish”
7. Feeling helpless, paralyzed
8. Feelings of blushing
9. Feeling laughable
10. Feeling disgusting to others

**APPENDIX I**

## THE MENTAL HEALTH INVENTORY-18 (Viet &amp; Ware, 1983)

The next set of questions are about how you feel, and how things have been for you during the past 4 weeks. Please answer every question. If you are not sure which answer to select, please choose the one answer that comes closest to describing you.

During the past 4 weeks, how much of the time...

1. Has your daily life been full of things that were interesting to you?
2. Did you feel depressed?
3. Have you felt loved and wanted?
4. Have you been a very nervous person?
5. Have you been in firm control of you behavior, thoughts, emotions, feelings?
6. Have you felt tense or high-strung?
7. Have you felt calm and peaceful?
8. Have you felt emotionally stable?
9. Have you felt downhearted and blue?
10. Were you able to relax without difficulty?
11. Have you felt restless, fidgety, or impatient?
12. Have you been moody or brooded about things?
13. Have you felt cheerful, light-hearted?
14. Have you been in low or very low spirits?
15. Were you a happy person?
16. Did you feel you had nothing to look forward to?
17. Have you felt so down in the dumps that nothing could cheer you up?
18. Have you been anxious or worried?



## VITA

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### Education

- Ph.D. Clinical Psychology (*expected August 2018*)  
Virginia Consortium Program in Clinical Psychology  
Norfolk, Virginia
- M.S. Psychology (awarded December 2015)  
Old Dominion University  
Norfolk, Virginia
- B.A. Psychology (awarded May 2012)  
Christopher Newport University  
Newport News, Virginia

### Selected Publications

- Maduro, R. S., **Roberts, L. B.**, Sheehan, B. S., & Paulson, J. F. (2017). Predicting harsh parental decisions: A prospective validation study. *The New School Psychology Bulletin*, 14(1), 12-27.
- Roberts, L. B.**, Maduro, R. S., Derlega, V. J., Peterkin, A., Hacker, D., & Ellis, K. T. (2017). Race-based rejection sensitivity and racial identity predict African American students' reactions to the fatal shooting of other African Americans: Personal threat and identification with shooting victims as mediators. *Journal of Loss and Trauma*, 22(6), 472-486.

### Selected Presentations

- Roberts, L. B.**, Parker, T. A., Martin, I. M., Parsons, A. J., & Paulson, J. F. (2016, May). *Bisexual individuals' attitudes toward marriage: The role of marital messages received from family and friends*. Poster presented at the 28<sup>th</sup> Annual Convention of the Association for Psychological Science (APS), Chicago, Illinois.
- Roberts, L. B.**, & Paulson, J. F. (2015, May). *Bisexuals' preferences for future parenting partners*. Poster presented at the Association for Psychological Science's 27<sup>th</sup> Annual Convention (APS), New York, NY.
- Roberts, L. B.**, & Paulson, J. F. (2015, April). *Biphobia in the heterosexual community: Examining the factors related to negative attitudes toward bisexuality and bisexual individuals*. Poster presented at the Virginia Psychological Association's Annual Spring Convention (VPA), Virginia Beach, VA.