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Examining the Effects of Binegativity on Components of Sexual Identity and Internalizing Symptomatology among Bisexual Women using a Longitudinal Study Design

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Abstract of the Dissertation

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Recent research indicates that experiences of binegativity (stigmatization of bisexuals) have detrimental impacts on components of sexual identity (e.g., sexual identity uncertainty and internalized binegativity) and mental health (e.g., internalizing symptoms, substance abuse). The current study is the first to longitudinally examine the impact of experiences of binegativity on components of sexual identity and mental health. 180 cisgender bisexual women completed three surveys assessing a total of four timepoints. Results indicate that experiences of binegativity predict subsequent increases in internalized binegativity, which in turn, predict increases in sexual identity uncertainty and strength of identification as heterosexual and lesbian and decreases in identification as bisexual. Further, increases in identification as lesbian and heterosexual and decreases in identification as bisexual predicted increases in internalizing symptoms. These findings provide support for a proposed model of the process through which external pressure to conform to the sexual orientation binary leads to the internalization of this pressure and subsequent deidentification as bisexual and identification as lesbian or heterosexual. Given that this process requires bisexual individuals to either conceal or relinquish their bisexual identities, it is likely to result in increases in internalizing symptoms. Results also indicate that buffering and magnifying coping largely did not reduce or amplify the impact of binegativity. However, experiencing more binegativity did predict the use of more maladaptive coping, which mediated the relationship between experiences of binegativity and changes in components of sexual identity. Finally, bi-positive events were found to have a positive impact on components of sexual identity.

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Acknowledgments

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Introduction

All sexual minorities are at risk for experiencing stress related to their sexual orientation, which can undermine the development of a positive sexual identity and contribute to negative mental health outcomes (for a review, see Meyer, 2003). However, bisexuals face additional and unique stressors not experienced by lesbians/gay men, referred to as binegativity. Bisexuals are at increased risk for negative mental health and sexual identity outcomes compared to lesbians and gay men, including higher rates of internalizing symptomatology (anxious and depressive symptoms; Jorm, Korten, Rodgers, Jacomb, & Christensen, 2002; Koh & Ross, 2006; Lehavot, 2012), internalized negativity (Cox, Berghe, Dewaele, & Vincke, 2010; Rosario, Schrimshaw, Hunter, & Gwadz, 2002), sexual identity concealment (Morris, Waldo, & Rothblum, 2001; Balsam & Mohr, 2007; Kuyper & Fokkema, 2011), and sexual identity uncertainty (Balsam & Mohr, 2007). Binegativity is theorized to explain bisexuals' increased risk for negative sexual identity and mental health outcomes (Brewster & Moradi, 2010). Despite this increased risk, very little research has examined the processes through which binegativity impacts the sexual identity and mental health outcomes of bisexual individuals.

The current study examined the impact of stigmatization experiences on bisexual women's sexual identity components and mental health and the moderation of these relationships by coping strategies using a longitudinal design. Prior to discussing the current study, I briefly review the literature on binegativity and processes through which binegativity is theorized to impact sexual identity components and mental health outcomes and the moderation of these relationships by coping strategies.

Binegativity

Bisexuals experience unique forms of stereotyping and prejudice, not experienced by lesbians/gay men (Brewster & Moradi, 2010; Mohr & Rochlen, 1999). For example, research has demonstrated that binegativity has three major components, the first two of which are unique to the experience of bisexuals (compared to lesbians/gay men): 1) the stereotype that bisexuality is an illegitimate and unstable sexual identity, including perceptions of bisexuals as confused, experimenting, transitioning to a gay/lesbian identity, or in denial about their true sexual orientation, 2) the stereotype that bisexuals are sexually irresponsible individuals, including perceptions of bisexuals as promiscuous, having sexually transmitted diseases, or being unable/unwilling to have monogamous relationships, and 3) a general hostility toward bisexuals (the corollary of homonegativity; Brewster & Moradi, 2010; Mohr & Rochlen, 1999). Experiences of binegativity have been linked with increased internalized binegativity (internalized negative attitudes and beliefs about bisexuality) and internalizing symptomatology (Brewster & Moradi, 2010; Brewster, Moradi, DeBlaere, Velez, 2013).

Binegativity has several additional unique characteristics compared to other forms of sexual identity stigma. First, research on binegativity demonstrates that it is dual-sourced (i.e., expressed by both heterosexual and lesbian/gay populations) meaning that bisexuals face stigmatization from other sexual minorities as well as heterosexuals (Brewster & Moradi, 2010; Hequembourg & Brallier, 2009; Kuyper & Fokkema, 2011). Research has also demonstrated that binegativity is currently more prevalent than homonegativity among heterosexuals (Eliason, 1997; Yost & Thomas, 2012). Experiences of binegativity from lesbians and gay men and heterosexuals and the high prevalence of binegativity are theorized to negatively impact bisexuals' sexual identity development and well-being, thus placing them at increased risk for

negative mental health and sexual identity outcomes (Balsam & Mohr, 2007; Jorm et al., 2002; Koh & Ross, 2006; Rosario et al., 2002).

Differences in the Experiences of Bisexual Men and Women

Bisexual women possess two traditionally stigmatized identities (gender and sexual orientation), and as a result of this intersectionality, bisexual men and women experience distinct forms of binegativity arising from some gender-specific stereotypes (Friedman & Leaper, 2010; Hequembourg & Brallier, 2009; Kertzner, Meyer, Frost, & Stirratt, 2009). For example, bisexual women are eroticized by many heterosexual men, leading to a unique form of minority stress not experienced by bisexual men—sexual objectification and harassment by heterosexual men (Friedman & Leaper, 2010; Hequembourg & Brallier, 2009; Kertzner et al., 2009). On the other hand, bisexual men are often stereotyped as being at high risk for having sexually transmitted infections and experience unique minority stressors as a result (Herek & Capitanio, 1999; Yost & Thomas, 2012). In terms of the instability of bisexuality stereotype, bisexual men and women appear to be stereotyped as having different "true" sexual orientations, with bisexual men being stereotyped as being "really" gay and bisexual women as being "really" heterosexual (Yost & Thomas, 2012). These differences in the stereotypes about and minority stress experiences of bisexual men and women warrant studying bisexual men and women separately. This study focuses exclusively on bisexual women.

Binegativity, Sexual Identity Components, and Internalizing Symptomatology

General mediators. Research examining mediators of the relationship between experiences of homonegativity (stigmatization of lesbians and gay men) and internalizing symptomatology has demonstrated that experiences of discrimination often impact mental health through components of sexual identity (e.g., Feinstein, Goldfried, & Davila, 2012; Newcomb & Mustanski, 2010).

Two major sexual identity mechanisms have been examined which link experiences of discrimination and mental health among lesbians/gay men (e.g., internalized homonegativity and sexual orientation rejection sensitivity; e.g., Feinstein et al., 2012; Syzmanski 2006; for reviews see Hatzenbuehler, 2009; Newcomb & Mustanski, 2010).

Sexual orientation rejection sensitivity refers to anxious expectations of social rejection based on one's sexual orientation. Experiences of discrimination are theorized to lead to the development of sexual orientation rejection sensitivity (sexual orientation RS), which in turn leads to the development of vigilance for cues of potential bias and rejection and intense affective reactions to rejection (Mendoza-Denton, Downey, Purdie, Davis, & Pietrzak, 2002; London, Downey, Romero-Canyas, Rattan, & Tyson, 2012). In support of this theory, recent cross-sectional research indicates that rejection sensitivity functions as a mediator of the association between discrimination and internalizing symptomatology among lesbians and gay men and among sexual minority women (Dyar, Feinstein, Eaton, & London, under review; Feinstein et al., 2012).

Internalized homonegativity and binegativity (jointly referred to as internalized negativity) refer to the adoption of negative societal attitudes toward one's sexual identity (e.g., Mohr & Fassinger, 2000; Mohr & Kendra, 2011). Internalized homonegativity has been shown to mediate the association between experiences of discrimination and internalizing symptoms among lesbians and gay men, such that more frequent experiences of discrimination predict higher internalized homonegativity, which in turn predicts more severe internalizing symptoms (Feinstein et al., 2012; Syzmanski, 2006). Additionally, the link between internalized homonegativity and internalizing symptomatology is well documented (e.g., Newcomb & Mustanski, 2010). However, the association between internalized binegativity and internalizing

symptomatology has been examined in very few studies, and findings are inconsistent, with some studies indicating an association between mental health and internalized binegativity ([psychological distress] Brewster & Moradi, 2010; Brewster, Moradi, DeBlaere, & Velez, 2013; [eating disorder symptomatology] Brewster et al., 2014) and at least one study indicating no association between depressive symptoms and internalized binegativity (Sheets & Mohr, 2009). Therefore, the mediation of the relationship between experiences of stigmatization and internalizing symptomatology by internalized binegativity needs further examination.

Overall, the mediational roles of sexual orientation rejection sensitivity and internalized negativity in the association between experiences of discrimination and internalizing symptoms have largely been examined cross-sectionally and have not been examined specifically among bisexuals. The proposed study will longitudinally examine the mediation of the relationship between experiences of stigmatization and increased internalizing symptomatology by increased internalized binegativity and sexual orientation rejection sensitivity among bisexuals to determine if these same processes are at play among this distinct group of sexual minorities.

Bisexual Specific Mediators. Due to major differences between homonegativity and binegativity and thus the types of discrimination and stigmatization that lesbians/gay men and bisexuals experience, I propose a separate set of sexual identity components that may also play a mediational role in the relationship between experiences of binegativity and increased internalizing symptomatology among bisexuals. Recent research has demonstrated that experiences of binegativity which arise from the stereotype that bisexuality is not a legitimate or stable sexual identity contribute to the development of sexual identity uncertainty among bisexual women (Dyar, Feinstein, & London, 2015). Specifically, this study demonstrated that when individuals to whom a bisexual woman has explicitly disclosed a bisexual identity continue

to assume that the bisexually-identified woman is a lesbian, this contributes to the development of sexual identity uncertainty among bisexual women. These binegative events constitute a form of indirect challenge to the bisexual woman's identity, which can lead to the internalization of the stereotype that bisexuality is not a legitimate or stable sexual identity (referred to as internalized bi-illegitimacy) and broader negative beliefs and feeling about one's bisexual identity (internalized binegativity) and the expression of this internalization as sexual identity uncertainty. I therefore predict that experiences of binegativity will predict increased internalized bi-illegitimacy and internalized binegativity and increased sexual identity uncertainty. The associations between internalized bi-illegitimacy/internalized binegativity and sexual identity uncertainty with internalizing symptomatology have not been examined to date. However, as a result of the strong associations between internalized homonegativity and internalizing symptomatology among lesbians and gay men, internalized bi-illegitimacy and binegativity are expected to predict increased internalizing symptomatology. Given the expected associations among these variables, internalized bi-illegitimacy, internalized binegativity, and sexual identity uncertainty are expected to mediate the relationship between experiences of binegativity and internalizing symptomatology.

While no known existing research has examined the associations of centrality (i.e., degree to which one's sexual identity is important to one's overall sense of self) and strength of identification with sexual identity labels with experiences of binegative discrimination and mental health among bisexuals, I propose a process by which experiences of binegativity may impact bisexuals' mental health through these sexual identity components. Research on social identification indicates that individuals who possess stigmatized identities may be less likely to publically or privately acknowledge the stigmatized identity, partially as a result of the process

described below (Ashmore, Deaux, & McLaughlin-Volpe, 2004). A major component of strength of identification with a particular group is the extent to which one perceives oneself as a prototypical member of that group (Ashmore et al., 2004). Experiences of stigmatization can have a strong negative impact on one's internalized conceptualization of that group (Hatzenbuehler, 2009). In turn, these internalized negative attitudes may lead individuals to view themselves as non-typical members of the stigmatized group in an effort to protect their self-concept from being damaged by this internalized negativity. This leads to de-identification with the stigmatized identity (e.g., decreased identity centrality and strength of identification).

Therefore, experiences of binegativity that challenge the validity of a bisexual identification and/or perpetuate negative stereotypes about bisexuals are likely to lead bisexuals to begin to question their bisexual identification, as a result of the internalization of the belief that bisexuality is not a legitimate sexual identity and/or that bisexuals are immoral and sexually irresponsible (Weinberg, Williams, & Pryor, 1994). These internalized stereotypes may lead bisexuals to view themselves as non-typical bisexuals, leading them to de-identify from their bisexual identities and potentially increase their identification with a lesbian or heterosexual identity (Ashmore et al., 2004). Specifically, I propose that experiences of binegativity will lead to increased bi-illegitimacy, sexual identity uncertainty, and internalized binegativity, which in turn will lead to decreased bisexual identity centrality and strength of identification as bisexual and increased identification as heterosexual or lesbian. This process is expected to be associated with increased internalizing symptomatology as it represents a form of sexual identity concealment, resulting from a societal rejection of the validity of a bisexual identification and the internalization of this societal invalidation. A great deal of research has demonstrated the profound negative impact of concealing a lesbian or gay sexual identity from others (for a

review, see Pachankis, 2007), indicating that such a process is likely to have a profound negative effect on bisexuals. This process is only one of many potential processes which may explain bisexuals' higher risk for negative sexual identity and mental health outcomes. This proposed model will be tested in a multilevel structural equation model. It is important to note that the processes by which experiences of discrimination impact sexual identity components are likely to be impacted by the types of coping strategies utilized to deal with experiences of discrimination. Prior to turning to a discussion of the roles of coping strategies in these associations, I briefly discuss the stability of the sexual identity components to be examined in this proposed study.

Stability of Sexual Identity Components

Research has rarely examined the stability of the sexual identity constructs included in this study (sexual orientation rejection sensitivity, sexual identity uncertainty, sexual identity centrality, internalized binegativity, internalized bi-illegitimacy, and strength of identification with sexual identity labels). When the stability of these constructs have been examined, they have largely been assessed in samples predominantly composed of lesbians and gay men (e.g., Mohr & Kendra, 2011). For instance, Mohr and Kendra (2011) demonstrated that the stability of identity uncertainty and identity centrality over a six-week period were high in a small sample (N = 51) of (predominately) lesbians and gay men (test-retest r = .87 and .80 respectively). However, these components may be less stable among bisexuals given the prevalence and content of binegativity and the impact of binegativity on these components (Brewster & Moradi, 2010; Dyar, Feinstein, & London, 2014). Additionally, Mohr and Kendra (2011) tested the stability of these constructs using a measure with instructions that asked about participant's general levels of these components. Given that measures which assess participants' general

levels of these components encourage participants to indicate their aggregate level on the construct, this question format may lead to less reported variation in identity components than measures that ask about identity within a specific limited time frame. In an eight week study of coping with discrimination among gay men, sexual orientation rejection sensitivity (RS) was only moderately stable (ICC = .53), with nearly half of the variance in sexual orientation RS due to variation across time (Feinstein, 2015). Additionally, experiences of discrimination predicted increases in sexual orientation RS longitudinally, with participants reporting higher RS on weeks when they concurrently reported experiencing discrimination compared to weeks when they did not experience discrimination (Feinstein, personal communication). The stability of internalized bi-illegitimacy, internalized binegativity, and strength of identification with sexual identity labels have, to date, not been examined.

Moderation of Processes by Coping Strategies

There are a plethora of cognitive and behavioral coping strategies that can be enacted to deal with experiences of discrimination and resultant negative emotions and cognitions. This study focuses on a subset of ten strategies for coping with sexual identity based discrimination and stigmatization which fit into two broad categories, those expected to buffer the impact of experiences of stigmatization on components of sexual identity (and thereby decrease the impact of experiences of discrimination on mental health; buffering coping strategies) and those expected to magnify or mediate the negative impact of experiences of stigmatization (magnifying coping strategies).

Several coping strategies have been shown to buffer the impact of minority stress on psychological distress, including sexuality related social support, group level LGB (lesbian, gay, bisexual) coping, self-acceptance, education/advocacy, and active resistance. Having access to

social support for sexuality related issues (***sexuality specific social support***) has been demonstrated to be associated with decreased psychological distress (Doty, Willoughby, Lindahl, & Malik, 2010; Sheets & Mohr, 2009; Szymanski, 2009) and to buffer the negative impact of experiences of discrimination on mental health (Doty et al., 2009). As a result, seeking sexuality specific social support to cope with experiences of stigmatization is expected to act as a buffer against the negative impact of experiences of stigmatization on components of sexual identity.

Connectedness to the LGB community has been linked to access to a variety of ***group level LGB coping*** resources that the community provides to lesbian/gay members, such as: sexual specific social support, sexual minority role models, and access to a non-stigmatizing environment, beneficial social norms, and cognitive reappraisal techniques (Cox, Berghe, Dewaele, & Vincke, 2009; Kertzner et al., 2009). Given that connectedness to the LGB community has been associated with access to several types of group level LGB coping, community connectedness will be treated as a proxy for group level LGB coping, which is consistent with Szymanski and Owens' (2009) examination of group level LGB coping. Additionally, community connectedness has been linked with increased psychological well-being among samples of lesbian, gay, and bisexual individuals (Frost & Meyer, 2012; Kertzner et al., 2009). However, given evidence that the LGB community may also be a source of binegativity, experiencing a binegative event from a lesbian or gay perpetrator is expected to predict decreases in LGB community connectedness.

Self-acceptance as a coping strategy reflects cognitively refocusing on the positive aspects of one's identity and acceptance of one's own identity (Kaysen et al., 2014). When self-acceptance was modeled as an indicator of a latent variable (adaptive LGB specific coping), this latent variable buffered the impact of internalized homonegativity on mental health (Kaysen et

al., 2014). As self-acceptance appears to buffer the impact of one minority stressor on mental health, self-acceptance is also expected to act as a buffer of the impact of experiences of stigmatization on internalizing symptomatology.

Finally, ***education/advocacy*** (coping with experiences of discrimination by educating others about discrimination and its negative impact and attempting to decrease prejudice at a societal level through advocacy) and ***resistance*** (actively confronting and challenging the perpetrators of discrimination) have been linked with positive psychological outcomes (increased life satisfaction and self-esteem) in a sample of racial/ethnic minorities (Wei, Alvarez, Ku, Russell, & Bonett, 2010). Therefore, education/advocacy and resistance are expected to buffer the impact of experiences of stigmatization on components of sexual identity.

Several other strategies for coping with discrimination have been shown to magnify or explain the negative impact of minority stressors on mental health, including, rumination, self-blame, substance use, and visibility management. These coping strategies have been treated as mediators of the minority stress-mental health relationship by some researchers (e.g., Hatzenbuehler, Nolen-Hoeksema, & Dovidio, 2009; Szymanski, Dunn, & Ikizler, 2014) and as moderators by others (e.g., Syzmanski & Owens, 2008). This debate over the mediating or moderating role of maladaptive coping strategies appears to be partially theoretical and partially a result of the differential analytic power of these two types of analyses. The theoretical aspect of this debate suggests that maladaptive coping strategies may function as mediators because they are triggered by experiences of discrimination and are not pre-existing conditions which impact the relationship between experiences of discrimination and mental health (Hatzenbuehler, 2009). However, adaptive coping strategies can also be triggered by experiences of discrimination but their associations with experiences of discrimination and internalizing symptoms do not make

them amenable as mediators of the association between discrimination and mental health. Of note, moderation analyses have less power to detect a hypothesized effect than mediation analyses given the same set of parameters and data (Aguinis, Beaty, Boik, & Pierce, 2005; Shrout & Bolger, 2002). As a result, the literature may treat maladaptive coping strategies as moderators more often than as mediators given that 1) the relationships between experiences of discrimination, these coping strategies, and internalizing symptomatology are amenable to mediation and 2) the higher power of mediation analyses to detect significant effects compared to moderation analyses (Aguinis, Beaty, Boik, & Pierce, 2005; Shrout & Bolger, 2002). Therefore, the role of these maladaptive coping strategies will be tested using both mediation and moderation. I briefly review the findings associated with each of these maladaptive/magnifying coping strategies.

Rumination, repetitively and passively focusing on negative events and one's psychological distress resulting from those negative events, has been demonstrated to mediate the association between experiences of discrimination and internalizing symptoms among LGB samples (Hatzenbuehler et al, 2009; Szymanski et al, 2014). In other words, experiences of sexual orientation based discrimination have been shown to lead to more frequent and extensive rumination about the experience of discrimination and resulting distress, which in turn leads to more severe internalizing symptoms. As a result, rumination is expected to either mediate or moderate the relationship between experiences of discrimination and changes in components of sexual identity.

Blaming oneself for the discrimination event and ***using drugs or alcohol to cope*** with the negative emotions and cognitions resulting from the experience of discrimination have been linked with poor sexual identity (increased internalized homonegativity or binegativity) and

mental health outcomes (increased internalizing symptoms) in LGB and racial/ethnic minority samples (Ngamake, Walch, & Raveepatarakul, 2015; Wei et al., 2010). As a result, self-blame and substance use are expected to either magnify the impact of experiences of discrimination on components of sexual identity or mediate this relationship.

Visibility management includes two strategies for managing the visibility of a sexual minority identity: inhibitive behavioral, which refers to avoiding disclosing one's sexual orientation, and active behavioral, which refers to explicitly disclosing one's sexual orientation to others and doing things to make one's sexual orientation visible (Lasser, Ryser, & Price, 2013). Visibility management can be used as a strategy for coping with discrimination (Lasser et al., 2013). Decreasing one's visibility by increasing inhibitive and decreasing active behavioral management strategies to avoid further experiences of discrimination is likely to magnify the impact of the experience of discrimination on components of sexual identity or to mediate the relationship between experiences of discrimination and changes in components of sexual identity. This is likely as decreasing the visibility of one's sexual identity also decreases access to four buffers of the relationship between experiences of discrimination and components of sexual identity: sexuality specific social support, group level coping, education/advocacy, and resistance. Additionally, this strategy, when taken to the extreme, is synonymous with concealing one's sexual identity, which has been linked with a variety of negative sexual identity and mental health outcomes (for a review, see Pachankis, 2007). Therefore, decreases in active behavioral and increases in inhibitive behavioral visibility management are expected to magnify the impact of experiences of discrimination on sexual identity components or to mediate this relationship.

This study will examine the moderation (and mediation for maladaptive/magnifying coping strategies) of the relationships between experiences of stigmatization and components of

sexual identity by a subset of strategies for coping with stigmatization experiences. Based on the literature, buffering coping strategies (i.e., sexuality specific social support, group level coping, education/advocacy, resistance, and self-acceptance) are expected to act as buffers of the association between discrimination and components of sexual identity, thereby decreasing the impact of experiences of stigmatization on sexual identity and mental health. Several other coping strategies (maladaptive/magnifying coping strategies: rumination, self-blame, substance use, and low active behavioral and high inhibitive behavioral visibility management) are also expected to either magnify the impact of experiences of stigmatization on components of sexual identity (and thereby, increase the impact of experiences of stigmatization on sexual identity and mental health) or mediate the relationship between experiences of stigmatization and changes in components of sexual identity. Buffering coping strategies and magnifying coping strategies will be treated as two separate latent variables in the current study.

Bi-Positive Events

Research indicates that bisexuals report a number of positive aspects of their bisexual identities, such as freedom from social labels, acceptance of diversity, and understanding privilege and oppression (Rostosky, Riggle, Pascale-Hague, McCants, 2010). However, very little research has focused on the frequency with which bisexuals experience positive events related to their bisexual identities and the impact that these positive events may have on components of bisexual identity. To examine the frequency and impact of bi-positive events, this study assessed the frequency of bi-positive events arising from two sources: internal (i.e., thinking about a positive aspect of one's identity) and external (i.e., arising from someone else's words or actions) and explored whether bi-positive experiences predicted changes in components of sexual identity.

Current Study

The goal of the current study is to longitudinally examine the impact of sexual identity stigmatization events on components of sexual identity and internalizing symptomatology and the moderating/mediating effects of coping among a sample of bisexual women. This study includes five major aims; 1) to examine the impact of experiences of stigmatization on a subset of components of sexual identity, and internalizing symptoms; 2) to test a proposed process by which experiences of stigmatization impact components of sexual identity and mental health; 3) to determine if the proposed impacts of stigmatization on sexual identity components mediate the relationships between experiencing a stigmatization event and internalizing symptomology; 4) to examine the moderating and mediating roles of a subset of coping strategies in the relationships between stigmatization, components of sexual identity, and mental health; and 5) to examine the impact of positive events related to one's bisexual identity on components of sexual identity.

Hypotheses

H1) Experiencing a stigmatization event will predict increased internalized binegativity, internalized bi-illegitimacy, sexual orientation rejection sensitivity, sexual identity uncertainty, strength of identification as lesbian and heterosexual, and internalizing symptoms and decreased bisexual identity centrality and strength of identification as bisexual.

H2) The hypothesized changes in sexual identity components outlined under hypothesis 1 will mediate the relationship between experiencing a stigmatization event and increased internalizing symptoms among bisexual women.

H3) A multilevel structural equation model will be tested in which experiences of binegativity at one timepoint will predict subsequent changes in internalized binegativity, rejection sensitivity, sexual identity uncertainty, identification as lesbian, heterosexual, and

bisexual, and internalizing symptoms. Changes in internalized binegativity will predict changes in sexual identity uncertainty. Changes in internalized binegativity and sexual identity uncertainty will predict changes in identification as lesbian, heterosexual, and bisexual and in internalizing symptoms. Finally, changes in identification as lesbian, heterosexual, and bisexual will predict changes in internalizing symptoms. See Figure 1 for a depiction of the hypothesized model.

H4) The use of buffering coping strategies (social support, self-acceptance, education/advocacy, resistance, and sexual minority specific group level coping) will reduce the impact of stigmatization on components of sexual identity among bisexual women. The use of magnifying/maladaptive coping strategies (decreased active behavioral visibility management, increased inhibitive behavioral visibility management, internalization, substance use, and rumination) will increase the impact of stigmatization on components of sexual identity.

H5) The use of magnifying/maladaptive coping strategies will mediate the relationship between experiences of stigmatization and changes in components of sexual identity.

H6) Experiencing a binegative event perpetrated by a lesbian or gay individual will predict decreases in LGBT community connectedness.

H7) Positive bisexual identity related events will predict subsequent decreases in internalized binegativity, internalized bi-illegitimacy, sexual orientation rejection sensitivity, sexual identity uncertainty, and strength of identification as lesbian or heterosexual and increased bisexual identity centrality and strength of identification as bisexual.

Methods

Procedure

Participants were recruited from websites that announce volunteer opportunities (Craigslist) as well as listservs and LGBT Facebook groups. The advertisement included a link to a screening survey that screened out participants who were not eligible for the study. Participants who were eligible and interested in the study were asked to create a unique identification code based on a set of instructions (i.e., first two letters of middle name, two number representing day of birth, two numbers representing month of birth, and first two letters of mother's maiden name). Participants were also asked to indicate the day of the week and approximate time they would complete the survey each week. Participants were required to complete surveys within 48 hours of their chosen survey time.

Surveys. On the morning of their chosen survey date/time, participants were emailed a reminder to complete the survey. The email reminded participants to wait to complete the survey until the chosen time and included their unique login id and a link to the appropriate survey. The first (T1) and last (T5) surveys included a battery of background and follow-up questionnaires. Surveys at all five timepoints included a brief event-oriented assessment of a subset of the variables assessed in background and follow-up.

Compensation. Participants were compensated $20 for completing at least three surveys. To prevent sample attrition, participants were contacted via email each week to remind them to complete the next survey and participants who complete all five surveys were entered into a raffle to win a $100.

Participants

One-hundred eighty self-identified bisexual women participated in the survey. A pre-screening for the study was administered prior to the participant being allowed to complete the background survey. Participants were required to be cisgender females (female identifying

individuals born female) between the ages of 20 and 35 who identified primarily as bisexual. Transgender and transsexual individuals were not included in the study as transgender identification is subject to distinct stigmatization. Inclusion of transgender sexual minority women would therefore require additional groups and hypotheses beyond the scope of this proposal. The age range of our sample is restricted to reduce variability in the societal level attitudes toward sexual minorities that comprised the social environment in which participants first disclosed and identified as bisexual, as sexual identity is particularly salient during early sexual identity development (e.g., first self-identification and coming out).

One-hundred ninety-one individuals who met the study criteria completed the screening survey and indicated a day and time to complete their first survey. One-hundred and eighty of those individuals completed the required background survey and the first weekly survey. Of those 180 participants, 172 went on to complete the next two weekly surveys and 18 also completed the fourth and fifth weekly surveys. Given the small proportion of participants who completed the fourth and fifth surveys, only data from the first three surveys were analyzed. This resulted in a final sample of 180 bisexual women and a total of four waves of data collected at three timepoints. Baseline data collected at background is considered a separate timepoint from the repeated measures data collected at the end of the background survey as baseline measures assess general levels of constructs, while the repeated measures (i.e., weekly surveys) assess levels of constructs following a binegative event or over the past week.

The final sample was comprised of 180 bisexual cisgender females (individuals who were identified as female at birth and identify as female) between the ages of 20 and 35 who were living in the US at the time of this study. Participants were on average relatively open about their sexual identities (*M* of 5.41 on a scale ranging from 1 to 7, with 7 being the most out and 1 the

least). The majority of participants were relatively well educated, middle class, Caucasian/White women living with their romantic partners in suburban and urban areas of the United States. Demographic information is presented in Table 1.

Background Measures (T1)[1]

Sexual orientation rejection sensitivity was measured using the Sexual Minority Women Rejection Sensitivity Scale (SMW-RSS; Dyar, Feinstein, Eaton, & London, 2016). The SMW-RSS measures anxious expectations of rejection on the basis of one's sexual orientation among sexual minority women. The SMW-RSS measure includes 16 scenarios, each of which reflects a situation in which the potential for rejection or discrimination based on a woman's sexual identity is present. Following each scenario, participants answered two questions. Participants first indicated their level of anticipatory anxiety about the potential sexual identity-based threat depicted in the scenario by responding to the question, "How anxious/concerned would you be that you would be treated differently or experience a negative outcome because of your sexual orientation?" Responses are measured on a 6-point scale ranging from 1 (not at all anxious) to 6 (very anxious). Participants then responded to the question, "To what extent would you expect to be treated unfairly based on your sexual orientation?" using a scale from 1 (very unlikely) to 6 (very likely). The wording of each question reflects the content of the specific scenario it follows. The following is an example of a scenario and the subsequent questions: "You and your female partner are leaving a store together holding hands. A car drives by and the driver honks the horn loudly several times. How anxious/concerned would you be that the driver might have honked because of your sexual orientation? How likely is it that the driver honked because of your sexual orientation?" SMW-RSS ($\alpha = .84$) scores are computed by weighting the expectation

[1] Several additional measures were included in the background survey (e.g., experiences of binegativity, experiences of homonegativity, general measures of coping strategies). Only measures used in the current set of analyses are presented here for brevity.

of sexual identity rejection by the anxiety over its potential occurrence within each scenario and then averaging across scenarios in order to capture the heightened perceptual threat of both the affective and cognitive responses (range of 1 to 36).

Sexual identity uncertainty and bisexual identity centrality were measured using the Lesbian, Gay, and Bisexual Identity Scale (LGBIS-R)**.** The LGBIS (Mohr & Kendra, 2011) is a 27-item measure that assesses eight aspects of LGB identity, including: internalized negativity, preoccupation with stigmatization, concealment motivation, difficult process of sexual identity development, identity uncertainty, identity superiority, identity affirmation, and identity centrality. Each item is rated on a scale of 1 (strongly disagree) to 7 (strongly agree) and then subscale scores are computed by averaging the respective item scores. As changes in identity are of interest in this study, references to "LGB" were changed to "bisexual" for clarity. To reduce participant burden only two subscales were assessed: sexual identity uncertainty ($\alpha = .83$; 4 items; e.g., "I can't decide whether I am bisexual or homosexual") and sexual identity centrality ($\alpha = .68$; 4 items; e.g., "I believe being LGB is an important part of me"). The single reverse scored item included in the measure of sexual identity centrality did not fit well with the other items and removing the item resulted in a substantial increase in Cronbach's alpha. As a result, this item was not included in the subscale score for centrality.

Internalized binegativity and illegitimacy of bisexuality was measured using the Bisexual Identity Inventory (Paul, Smith, Mohr, & Ross, 2014). The Bisexual Identity Inventory is a 24 item measure of four aspects of bisexual identity: internalized binegativity, bi-illegitimacy (reflects the internalization of the stereotype that bisexuality is not a legitimate or stable sexual orientation), identity affirmation, and anticipated binegativity. Each item is rated on a scale of 1 (strongly disagree) to 7 (strongly agree) and then subscale scores are computed by averaging the

respective item scores. To reduce participant burden only two subscales were assessed: bi-illegitimacy (α = .94; 8 items; "I think that being bisexual is just a temporary identity") and internalized binegativity (α = .87; 5 items; "It's unfair that I'm attracted to men and women"). Given a high correlation between these two subscales (r = .87), the items for these two subscales were combined to create a composite internalized binegativity subscale (α = .95) to reduce multicollinearity in hypothesized models.

Strength of identification with bisexual, heterosexual, and lesbian identity labels were measured with three items developed for this study. All items were measured on a scale of 1 (not at all) to 7 (very strongly). Example item: "How strongly do you identify as bisexual?". The word bisexual was replaced by heterosexual and lesbian in the two other questions. Each item was treated as a separate variable.

Level of attraction to same and different gender individuals was measured using the following item: "How would you describe your level of attraction to members of the same and opposite sexes?". The scale ranged from 1 (only attracted to the opposite sex) to 7 (only attracted to the same sex).

Disclosure level was measured using the Outness Inventory (OI; Mohr & Fassinger, 2000). The OI assesses the extent to which individuals have disclosed their sexual identity/orientation to a variety of people and groups, including family, heterosexual friends, coworkers, supervisors, religious community members and leaders, and strangers. Each person or group is rated on a scale of 1 (person <u>definitely</u> does NOT know about your sexual orientation status) to 7 (person definitely knows about your sexual orientation status, and it is OPENLY talked about). A "not applicable" option is also provided if there is no such person or group of people in the respondent's life. The OI has been adapted to more accurately measure bisexual

individuals' outness by modifying the instructions and scale labels to refer specifically to one's bisexual identity and by adding three additional individuals/groups to the measure (i.e., my new LGBTQ friends, my old LGBTQ friends, my current relationship partner; Dyar et al., 2014). An overall score was computed by averaging the responses across all of the 14 items ($\alpha = .71$).

LGBT community connectedness was measured by the membership subscales of the Psychological Sense of Community Scale (Lin & Israel, 2012; Proescholdbell, Roosa, & Nemeroff, 2006). This scale was originally developed to measure sense of community among gay men (Proescholdbell et al., 2006), but was expanded to capture sense of community among LGBT individuals (Lin & Israel, 2012). The membership ($\alpha = .78$; e.g., "Feel that you are a part of the LGBT community") subscale is measured by three items and subscale items were averaged to create subscale scores. Items were measured on a scale of 1(none) to 5 (a great deal).

Depressive symptoms were measured using the Center for Epidemiological Studies Depression Scale – Short Form (CESD-SF; Radloff, 1977; Levine, 2013). The CESD-SF is a 7 item version of the original 20 item CES-D. This brief version of the CES-D performs as well as the full version of the CES-D (Levine, 2013). The CESD-SF is a measure of the severity of depression symptoms measured on a scale of 0 (rarely or none of the time) to 3 (most or all of the time), including items such as, "I felt depressed." CES-D items were averaged to create a score representing baseline levels of depression ($\alpha = .80$).

Generalized anxiety symptoms were measured using the Generalized Anxiety Disorder 7 Item (GAD-7; Spitzer, Kroenke, Williams, & Lowe, 2006). The GAD-7 is a seven item measure of generalized anxiety symptoms experienced over the past two weeks. Participants are asked to rate how often they experience each of the symptoms (i.e., "Feeling nervous, anxious, or on edge.") on a scale of 0 (not at all) to 3 (nearly every day). GAD items were averaged to create a

score representing baseline levels of anxiety ($\alpha = .80$).

Weekly Surveys

*Stressful events***.** Within each weekly survey, participants were asked if they experienced any stressful events related to their bisexual identity over the past week and to indicate type(s) of event(s), frequency, and perpetrator(s) from lists of common binegative experiences (derived from ABES and literature on binegativity) and potential perpetrators (e.g., specific family members, (fe)male heterosexual friend, female coworker, etc.). If they experienced more than one binegative event, they were asked to indicate the event that was most stressful and refer to that event throughout the concurrent weekly survey. If their experience was not adequately captured by the items listed, they were asked to provide a brief description of the event. No participants indicated that they had experienced a binegativity event that was not captured by the list of binegative events.

Participants who indicated that they did not experience a binegative event over the course of the past week were asked if they experienced a homonegative event over the past week as a result of others' assumptions that she is a lesbian. Participants who did not experience a binegative event were asked to indicate type(s) of event(s), frequency, and perpetrator(s) from lists of common homonegative experiences (derived from HHRDS and literature on homonegativity) and potential perpetrators (e.g., specific family members, (fe)male heterosexual friend, female coworker, etc.). If they experienced more than one homonegative event, they were be asked to indicate the event that was most stressful and refer to that event throughout the concurrent weekly survey. If their experience was not adequately captured by the items listed, they were asked to provide a brief description of the event. Of note, no participants reported experiencing a homonegative event over the past week.

Participants who did not experience a binegative or homonegative event over the past week were asked to briefly describe the most stressful event that occurred over the past week that was not related to their sexual orientation. Participants were asked to refer to that event throughout the concurrent weekly survey.

Over the three weekly surveys, the majority of participants reported that they experienced at least one binegative event over the previous week (T1: 171 [95.0%]; T2: 164 [95.3%]; T3: 158 [91.9%]). Therefore, the occurrence of a binegative event was nearly a constant. Experiences of binegativity were operationalized as the frequency of binegative events experienced over the course of the past week. Frequency of binegative events were assessed by first asking participants to report which binegative events they experienced over the past week and then asking participants to indicate how frequently each of those events had occurred in the past week on a scale of 1 (once), 2 (two or three times), 3 (four or more times). To calculate the frequency of reported binegative events, the frequencies of all reported events were summed. Participants who reported experiencing no binegative events in a particular week were assigned a score of 0.

The number of individuals who reported each type of binegative event at each timepoint and the average frequency of each type of binegative event is reported in Table 2. Binegative events were split into 5 categories based on their content: instability/illegitimacy of bisexuality (e.g., "People have assumed my bisexuality is just a phase"), sexual irresponsibility (e.g., "People have assumed I will cheat in a relationship), hostility (e.g., "People have acted uncomfortable around me"), vicarious (e.g., "I heard negative remarks about bisexuals"), and binegative atmosphere (e.g., "I felt that my bisexuality was not seen as valid").

*Bi-positive events***.** At the end of each weekly survey, participants were asked if they experienced any positive events related to their bisexual identity over the past week and to

indicate type(s) of event(s) and frequency from lists of common bi-positive experiences (derived from Rostosky and colleagues [2010] list of positive aspects of a bisexual identity). If they experienced more than one bi-positive event, they were asked to indicate the event that was most positive and refer to that event throughout the concurrent weekly survey. If their experience was not adequately captured by the items listed, they were asked to provide a brief description of the event.

The number of individuals who reported each type of bi-positive event at each timepoint and the average frequency of each type of bi-positive event is reported in Table 3. Bi-positive events were split into 2 categories based their source: internal bi-positive events (arising from internal sources; aspects of one's bisexual identity that has made them feel positive about their bisexuality; e.g., "I have a unique perspective as a bisexual") and external bi-positive events (arising from external sources; e.g., "People have seen my bisexuality as valid").

Participants' were asked to complete brief measures of several components of sexual identity and internalizing symptoms. They responded to each brief measure twice, once with reference to the time period since the most stressful event and once since the most positive event. Stressful events, coping with stressful events, and components of sexual identity and internalizing symptoms in the period since the most stressful event were assessed first. Then bi-positive events and components of sexual identity and internalizing symptoms in the period since the most stressful event were assessed.

Sexual orientation rejection sensitivity was measured using two items. One item assessed anxiety about potential rejection (i.e., "How worried or anxious were you about being rejected because of your bisexual identity since the event you described?") and was measured on a scale of 1 (very unconcerned) to 7 (very concerned]). The second item assessed expectations of

rejection (i.e., “How frequently did you expect to experience rejection as a result of your sexual identity since the event you described?”) and was measured on a scale of 1 (never) to 7 (almost all the time). The responses to these two questions were multiplied to obtain a sexual orientation rejection sensitivity score.

Sexual identity uncertainty and *bisexual identity centrality* were measured using brief two item versions of their respective subscales in the LGBIS-R. Instructions were adapted to specifically ask participants to think about how they’ve felt in the time since the event. Sexual identity uncertainty items (α = .57 to .73) included: “I keep changing my mind about what my sexual orientation is” and “I’m not totally sure what my sexual orientation is.” Bisexual identity centrality items included: “My bisexual identity is a central part of my identity” and “I believe being bisexual is an important part of me.” Given low Cronbach’s alphas for the two bisexual identity central items (α = .23 to .33), only the first item was used.

Internalized binegativity and *illegitimacy of bisexuality* were measured using brief two item versions of their respective subscales in the Bisexual Identity Inventory. Instructions were adapted to specifically ask participants to think about how they’ve felt in the time since the event. Internalized binegativity (α = .70 to .85) items included: “I wish I could control my feelings and aim them at either men or women, not both” and “I would be better off if I would identify as gay or straight, rather than bisexual”. Illegitimacy of bisexuality (α = .83 to .92) items included: “I think that bisexual individuals are just indecisive” and “I think that being bisexual is just a temporary identity.” As with the baseline measure, the four items assessing internalized binegativity and bi-illegitimacy were combined to create a composite subscale (α = .78 to .89) assessing internalized binegativity due to high correlations between subscales within the same timepoint (r = .49 to .69).

Strength of identification with bisexual, heterosexual, and lesbian identities were measured using versions of the items used to assess these variables at T1 adapted to refer to the period since the event (e.g., "Since the event you described, how strongly have you identified as bisexual?")

Social Support Coping was measured using a brief measure of the use of social support to cope with the stressful event. Two items assessed the use of emotional support (α = .57 to .74; "I have talked with someone about the event" and "I have talked with someone about my feelings about the event") and two items assessed the use of problem-focused social support (α = .60 to .77; "I have gotten advice from someone about what to do about the event" and "I have talked to someone about how to deal with the event"). Items were measured on a scale of 1(strongly disagree) to 7 (strongly agree). Responses were averaged to create a social support score.

Rumination was measured using a two item version of the Brooding subscale of the Ruminative Response Scale (α = .56 to .74; Treynor, Gonzalez, & Nolen-Hoeksema, 2003). Items included: 'Think "What am I doing to deserve this?"' and "I have thought about the event, wishing it had gone better". The instructions for this scale were modified to specifically measure participants' rumination about the stressful event.

Visibility management was measured using two items versions of the active and inhibitive behavioral subscales of the Lesbian, Gay, Bisexual Visibility Management Scale (LGB-VMS; Lasser et al., 2013). As active behavioral measures are predicted to decrease following binegative events, active behavioral items wording was changed to reflect less use of active behavioral strategies ("I stopped drawing attention to my sexual orientation" and "I don't go out of my way to let people know about my sexual orientation"). Two items were used to measure the use of inhibitive behavioral strategies ("I made an effort to pass or appear straight" and "I

have avoided talking about my sexual orientation with others"). Instructions were modified to ask participants to respond to items thinking about the time since the event. The four items were averaged to create a total visibility management score (α = .58 to .68).

Self-acceptance was measured two items (i.e., "I have focused on the positive aspects of my bisexual identity" and "I have dismissed others' negative views of my bisexual identity"). Due to low Cronbach's alpha for these two items (α = .35 to .45), only the first item was used to capture self-acceptance.

Other methods of *coping with discrimination* were measured using two item versions of the five Coping with Discrimination subscales (Wei, Alvarez, Ku, Russell, & Bonett, 2010). Instructions were modified to ask participants to refer to the time since the event when responding to items. Items were adapted to the past tense and to refer to the event when appropriate. The following items will be used to measure: education/advocacy (α = .48 to .67; "I've tried to educate people so that they are aware of discrimination" and "I tried to help others be better prepared to deal with discrimination"), internalization (α = .68 to .80; "I've wondered if I did something wrong" and "I've wondered if I did something to provoke the event"), substance use (α = .70 to .77; "I've used drugs or alcohol to take my mind off the event" and "I've used drugs or alcohol to numb my feelings about the event"), and resistance (α = .59 to .61; "I directly challenged the person/people who perpetrated the negative event" and "I've directly challenged others' (not the perpetrator(s) of the event) ignorant beliefs").

Sexual minority group level coping was measured by the fulfillment of needs (e.g., "Felt that you can get help from the LGBT community if you need it?") and membership (e.g., "Felt that you are a part of the LGBT community") subscales of the Psychological Sense of Community Scale, each of which consist of three items (α = .61 to .80; Lin & Israel, 2012;

Proescholdbell et al., 2006). Items were measured on a scale of 1(none) to 5 (a great deal).

LGBT community connectedness was measured by the membership subscale of the Psychological Sense of Community Scale (Lin & Israel, 2012; Proescholdbell et al., 2006). The membership (α = .72 to .76; e.g., "Felt that you are a part of the LGBT community") subscale is measured by three items and subscale items were averaged to create subscale scores. Items were measured on a scale of 1(none) to 5 (a great deal).

Internalizing symptomology was measured using two items ("How depressed/anxious have you felt since the event you described?") and was assessed on a scale of 1 (very slightly or not at all) to 7 (extremely).

Statistical Analyses

All analyses were conducted in Mplus version 7 using robust maximum likelihood estimation (MLR), which is robust to violations of normality. 5.8% of data was missing and was handled using full information maximum likelihood. Multi-level structural equation modeling was used to examine all hypotheses. Multilevel structural equation modeling appropriately separates within and between variance components, making it ideal for analyzing longitudinal data. Due to its appropriate separate modeling of between and within level variance, multilevel structural equation modeling is also the most accurate way to test mediation and moderation hypotheses in longitudinal data (Preacher, Zyphur, & Zhang, 2010; Preacher, Zhang, & Zyphur, 2011; Preacher, Zhang, & Zyphur, in press).

The data includes four timepoints for outcome variables (baseline, T1, T2, T3) and three timepoints for predictors (e.g., experiences of binegativity; T1, T2, T3) and predictors at one timepoint (e.g., T1) are used to predict changes in outcome variables (e.g., baseline to T1). Given this data format, there are two potential approaches to analyzing this data using MLM. The first

option is to split the outcome variables into two sets of three timepoints (baseline, T1, T2) and (T1, T2, T3) and use the predictor to predict the outcome at the same timepoint, controlling for the previous timepoint. However, this approach leads to high levels of multicollinearity in the MLM models, which is associated with a number of statistical problems (Tabachnick & Fidell, 2013). The second approach is to compute a set of standardized residuals resulting from the prediction of the outcome variable at T by the outcome variable at T-1 (i.e., baseline predicting T1, T1 predicting T2). These standardized residuals represent the change in the outcome from T-1 to T. The predictor is then used to directly predict the standardized residuals of these outcomes. The use of standardized residuals is considered superior to the use of more straightforward change scores (e.g., T1-T2; Zimmerman & Williams, 1982). Other techniques for examining change over time (e.g., modeling change as outcome predicted by time as a random slope) require that both predictor and outcome are measured the same number of timepoints (e.g., Bolger & Laurenceau, 2013; Hoffman, 2015). Therefore, using these methods with the current data would reduce the number of timepoints for the outcome and thus the number predictor to outcome relationships at level 1 from 3 to 2. Therefore, the most appropriate method for modeling change in the outcome over time in this data is through the use of standardized residuals.

Results

First, standardized residuals were computed for all outcome variables (i.e., sexual identity uncertainty, internalized binegativity, bisexual identity centrality and pride, rejection sensitivity, anxiety and depression, and identification with bisexual, lesbian, and heterosexual identity labels) by using the T-1 version of the variable to predict the T1 version of the variable and saving the standardized residuals as a variable. Therefore, three standardized residuals were

computed for each individual, including the standardized residuals of: T1 controlling for T0, T2 controlling for T1, and T3 controlling for T2. When variables were measured differently at baseline (T0) and T1-T3, variables were transformed into z-scores prior to creating standardized residuals. Changes in coping variables and frequency of binegative events were not examined, so coping variables and binegative events measured at T1, T2, and T3 were used in analyses. Means and standard deviations, and intraclass correlations for all variables are reported in Table 4.

Impact of Experiences of Binegativity on Components of Sexual Identity and Internalizing Symptoms

The relationships between the frequency of binegative events experienced in one week (e.g., T2) and changes in components of sexual identity and internalizing symptoms[2] from the previous timepoint to the time since the most stressful binegative event experienced during that week (e.g., T1 to T2) were examined first. As suggested by Preacher and colleagues (2010, 2011), the relationship between experiences of discrimination and the outcome was modeled at both the within and between level to allow for the appropriate parsing of between and within variance (see Table 5). As hypothesized experiencing more binegative events predicted subsequent increases in sexual identity uncertainty, internalized binegativity, and rejection sensitivity. Contrary to H1, experiencing more binegative events predicted subsequent increases in strength of identification as bisexual. Additionally, contrary to H1, more frequent experiences of binegativity did not predict subsequent increases in heterosexual and lesbian identity or internalizing symptoms nor decreases in bisexual identity centrality or affirmation. At the between level, experiencing more binegative events throughout the study was associated with

[2] Internalizing symptoms were treated as separate but correlated variables and examined in a single model for each hypothesis. While a measurement model of a latent internalizing symptoms variable demonstrated good fit (RMSEA < .001; CFI = .96, TLI = 1.00), the latent variable did not perform well in MSEM models including binegative events and components of sexual identity. In the context of these models, factor loadings for anxiety and depression were often non-significant and fixing factor loadings to the measurement model resulted in very poor fit indices.

increases in sexual identity uncertainty, internalized binegativity, rejection sensitivity, heterosexual and (marginally) lesbian identity, bisexual identity pride, and internalizing symptoms. Of note, the association between experiencing more binegativity events throughout the study was associated with increases in bisexual identity affirmation, the opposite of the expected direction.

Next, the indirect effects of binegative experiences on internalizing symptoms through components of sexual identity were examined. A separate model was constructed for each component of sexual identity, and the mediation of the relationship between experiences of discrimination and symptoms of anxiety were modeled separately from the relationship between experiences of discrimination and depression. As suggested by Preacher and colleagues (2010, 2011), the indirect effects of binegative events on internalizing symptoms through components of sexual identity and the direct effects of binegative events on internalizing symptoms were simultaneously modeled at the within and between levels. None of the hypothesized indirect effects were significant at either the within or between levels (see Tables 6 and 7).

Model of Hypothesized Process

The hypothesized model of was tested in a multilevel structural equation model constructed entirely at the within level. In this hypothesized model, experiences of discrimination predict changes in components of sexual identity (i.e., increases in internalized binegativity and sexual identity uncertainty), which predict subsequent changes in identification with different sexual identity labels (i.e., increases in identification as lesbian and heterosexual and decreases in identification as bisexual), which finally predict increases in internalizing symptoms. Results indicate that experiencing more frequent binegative events one week predicted subsequent increases in internalized binegativity and sexual identity uncertainty. Increases in internalized

binegativity, in turn, predict increases in strength of identification as lesbian and heterosexual and decreases in identification as bisexual. Increases in identification as heterosexual predicted increases in anxiety, increases in identification as lesbian predicted increases in depression, and decreases in bisexual identity (marginally) predicted increases in depression. Paths from sexual identity uncertainty and experiences of binegativity to changes in identification and internalizing symptoms were not significant. See Figure 2 for standardized path coefficients, Table 8 for all standardized path coefficients, and Table 9 for indirect effects.

Examination of the indirect effects indicates that several indirect effects were significant. First, the indirect effect of experiences of binegativity on increases in sexual identity uncertainty through increases in internalized binegativity was significant, indicating that internalized binegativity mediates the relationship between experiences of discrimination and subsequent increases in sexual identity uncertainty. Second, all three indirect effects of experiences of binegativity on changes in identification with different sexual identity labels (i.e., through increases in internalized binegativity) were significant or marginally significant. This indicates that increases in internalized binegativity mediate the relationship between experiences of binegativity and changes in identification. The indirect effect of internalized binegativity on depression through increases in lesbian identification was marginally significant, while the indirect effect through decreases in binegativity was not. Finally, the indirect effect of internalized binegativity on anxiety through increases in heterosexual identification was marginally significant.

Coping Effects

The moderation of the relationships between experiences of binegativity and components of sexual identity were examined next. Prior to testing these MSEMs, measurement models of

buffering coping and magnifying coping were tested. In the measurement model for buffering coping, LGBT group-level coping, sexuality-specific emotional and instrumental social support, education, resistance, and self-acceptance loaded onto a single buffering coping latent variable. The measurement model fit the data well ($\chi^2(18) = 22.19$, $p = .22$; CFI = .98; TLI = .97; RMSEA = .02). However, self-acceptance did not load significantly at either the within ($\beta = .16$; $b = .11$, $SE = .08$, $z = 1.36$, $p = .17$) or the between level ($\beta = .62$; $b = .21$, $SE = .12$, $z = 1.74$, $p = .08$) and R^2 indicated that only 2.4% of self-acceptance at the within level ($R^2 = .024$, $SE = .04$, $z = .68$, $p = .50$) and 38.5% at the between level were captured by the latent variable ($R^2 = .385$, $SE = .32$, $z = 1.22$, $p = .22$). Although other variables also demonstrated low loadings at the within level, all other variables had a high standardized factor loading on at least one level and between 46.5 and 99.9% of their variance was captured at the between level (see Table 10 for standardized and unstandardized factor loadings and R^2 values for all variables). As a result of its low factor loadings and R^2, self-acceptance was removed as an indicator of buffering coping and the measurement model was re-run. The final measurement model for buffering coping also fit the data well ($\chi^2(10) = 9.09$, $p = .52$; CFI = 1.00; TLI = 1.01; RMSEA < .001).

In the measurement model for magnifying coping, rumination, internalization (self-blame), visibility management, and substance abuse loaded onto a single latent variable. The measurement model fit the data adequately well ($\chi^2(5) = 14.49$, $p = .01$; CFI = .98; TLI = .96; RMSEA = .07; see Table 11).

The latent variables for buffering coping and magnifying coping were then used as moderators of the relationships between experiences of binegativity and changes in components of sexual identity. To insure that factor loadings for latent variables did not vary from model to model (thereby changing the latent concept captured), factor loadings for buffering coping and

magnifying coping were fixed to the loadings from the measurement model in all moderation MSEMs. To reduce the number of latent variable interactions estimated in each model and thereby reduce computation time, moderations by buffering coping and magnifying coping were examined separately. The interaction of the within level of the frequency of binegative events with the within level of coping (coping at the same timepoint as the binegative event) and the interaction between the within level frequency of binegative events and the between level of coping (the aggregate of coping over the three weeks of the study) predicting the within level change in the dependent variable were estimated simultaneously. This is considered to be the most appropriate way to model these two interactions, while appropriately parsing the between and within level variances (Preacher et al., in press).[3]

Neither within level or between level buffering coping moderated the relationships between binegative experiences and changes in components of sexual identity (see Table 12). However, the use of magnifying coping to deal with binegative events in a particular week (within level magnifying coping) did moderate the relationship between experiences of binegativity and subsequent changes in sexual identity uncertainty and internalized binegativity (see Table 13). Examination of the simple slopes indicates that experiences of binegativity predicted subsequent increases in sexual identity uncertainty at high levels of magnifying coping (b = .15, SE = .06, z = 2.42, p = .015), but not at mean (b = .05, SE = .04, z = 1.08, p = .28) or low levels of magnifying coping (b = -.05, SE = .06, z = -.86, p = .39; see Figure 3). Simple slopes for the interaction predicting internalized binegativity indicated that experiences of binegativity predicted subsequent increases in internalized binegativity at low levels of magnifying coping (b = .12, SE = .06, z = 2.10, p = .03), but not at mean (b = .04, SE = .04, z =

[3] Analyses were also run controlling for the effects of the stressfulness on buffering coping and outcomes. None of the interactions were significant.

1.19, p = .23) or high levels of magnifying coping (b = -.03, SE = .05, z = -.62, p = .54; see Figure 4). This is contrary to the hypothesis that magnifying coping would increase the impact of experiences of binegativity on internalized binegativity. Given the unexpected direction of this finding, follow-up interactions between experiences of binegativity and each individual aspect of magnifying coping (visibility management, self-blame, substance abuse, and rumination) were examined separately. None of the within level interactions were significant predictors of changes in internalized binegativity (ps = .23 to .84). Magnifying coping did not moderate the relationships between experiences of binegativity and changes in any other components of sexual identity.

Given that maladaptive coping is also modeled as a mediator of the relationship between experiences of discrimination and negative psychosocial outcomes, the role of maladaptive coping as a mediator of the relationship between experiences of binegativity and components of sexual identity were tested next. As in the previous indirect effects models, the indirect and direct effects were simultaneously modeled at the within and between levels. Of note, several mediations were significant or approached significance, but only at the between level (see Table 13). These models indicate that the aggregate level of experiences of binegativity across the three weeks of the survey predicted aggregate level changes in components of sexual identity through higher aggregate levels of magnifying coping. In each of these models, more frequent experiences of binegativity predicted more use of magnifying coping, which in turn predicted increases in sexual identity uncertainty, internalized binegativity, rejection sensitivity, and identification as lesbian and heterosexual. The indirect effects for sexual identity uncertainty and internalized binegativity were only marginally significant, but the indirect effects for identification as lesbian and heterosexual were significant.

Binegativity from Lesbian and Gay Perpetrators Impact on LGBT Community Connectedness

The fifth hypothesis, that experiencing binegative events perpetrated by lesbian or gay individuals would predict decreases in LGBT community connectedness, was tested by examining the prediction of change in LGBT community connectedness by experiencing a binegative event perpetrated by a lesbian or gay individual. As in previous models, this relationship was modeled simultaneously at both within and between levels. Having experienced a binegative event perpetrated by a lesbian or gay individual did not predict changes in LGBT community connectedness at either within (b = .05, SE = .17, z = .27, p = .78) or between (b = .12, SE = .47, z = .25, p = .80) levels.

Impact of Bi-Positive Events on Components of Sexual Identity and Mental Health

To examine the impact of bi-positive events on components of sexual identity and mental health a number of MSEMs were estimated in which the frequency of bi-positive events predicted changes in components of sexual identity and mental health at both the within and between levels (see Table 14). At the within level, more frequent bi-positive experiences predicted subsequent decreases in sexual identity uncertainty and marginally significant increases in identification as bisexual. At the between level, more frequent bi-positive experiences predicted aggregate increases in identification as bisexual and bisexual identity centrality and affirmation, decreases in sexual identity uncertainty, and marginally significant increases in identification as lesbian.

Discussion

The results of the current study substantially further our knowledge of the impact of binegativity on components of sexual identity and mental health among bisexual women. Results

indicate that more frequent experiences of binegativity predict subsequent changes in a number of components of sexual identity. The relationships between experiences of binegativity and changes in components of sexual identity were not moderated by buffering coping; however, magnifying coping did increase the impact of binegative experiences on sexual identity uncertainty. Notably, magnifying coping also mediated the relationship between experiences of binegativity and changes in several components of sexual identity but only at the between level. Finally, bi-positive events predicted positive changes in several components of sexual identity. Each set of findings is discussed in turn.

Binegative Events Predicting Changes in Sexual Identity and Mental Health

As hypothesized, more frequent experiences of binegativity in a particular week predicted subsequent increases in sexual identity uncertainty, internalized binegativity, and rejection sensitivity. This suggests that experiences of binegativity may lead bisexuals to question their bisexual identification and to internalize negative beliefs and feelings about their own bisexuality. Additionally, experiencing binegative events appears to increase the extent to which bisexuals anxiously expect future rejection and discrimination based on their bisexual identities. Existing cross-sectional research indicated links between more experiences of binegativity and higher sexual identity uncertainty, internalized binegativity, and rejection sensitivity (e.g., Brewster & Moradi, 2010; Dyar, Feinstein, Eaton, & London, 2016; Dyar, Feinstein, Schick, & Davila, in prep), but this is the first study to provide evidence that experiences of binegativity precede, and therefore may cause, changes in these components of sexual identity and rejection sensitivity.

Contrary to hypotheses, more frequent experiences of binegativity predicted *increases* in strength of identification as bisexual. It was hypothesized that experiences of binegativity would

predict decreases in strength of identification as bisexual and increases in strength of identification as lesbian or heterosexual. These changes were expected given that binegativity often functions to pressure bisexual individuals to identify within the sexual orientation binary (as lesbian or heterosexual). These counterintuitive increases in bisexual identification may reflect resilience in the form of resistance to external pressure to relinquish one's bisexual identity. However, experiences of binegativity did not predict subsequent increases in bisexual identity affirmation or centrality at the within level. Therefore, while this may indicate some resilience to binegativity, this resilience did not extend to increases in pride for one's bisexual identity or in the centrality of one's bisexual identity. This study was the first to examine the associations between bisexual identity centrality, pride, or strength of identification as bisexual with experiences of binegativity, so future research is needed to further examine this unexpected association.

At the between level, more frequent experiences of binegativity throughout the study also predicted overall increases in sexual identity uncertainty, internalized binegativity, rejection sensitivity, strength of identification as heterosexual (and marginally as lesbian), bisexual identity affirmation, and symptoms of anxiety and depression. Therefore, at the between level, nearly all aspects of hypothesis 1 were confirmed. Of note, experiences of binegativity predicted increases in strength of identification as heterosexual, bisexual identity affirmation, and internalizing symptoms only at the between level. The restriction of these effects to the between level may indicate that it takes longer for binegative experiences to affect these components of sexual identity and mental health than originally expected. It may also indicate that these components of sexual identity and mental health are affected by the accumulation of binegative experiences. In other words, while the binegative experiences an individual has in a particular

week may not affect these outcomes immediately, the accumulation of experiences of binegativity over the course of three weeks does appear to predict changes in these outcomes. These findings are consistent with previous cross-sectional research indicating that more frequent experiences of binegativity are associated with higher sexual identity uncertainty, internalized binegativity, rejection sensitivity, and internalizing symptoms (Brewster & Moradi, 2010; Dyar, Feinstein, & London, 2014, 2015; Dyar, Feinstein, Eaton, & London, 2016; Dyar, Feinstein, Schick, & Davila, in prep) and extend the existing research by indicating associations between more frequent experiences of binegativity and increases in bisexual identity affirmation and strength of identification as heterosexual.

A structural equation model was used to examine a series of hypotheses relating to the associations among changes in components of sexual identity and internalizing symptoms. The model indicates that, as hypothesized, increases in internalized binegativity mediate the relationship between experiences of binegativity and subsequent increases in sexual identity uncertainty. This suggests that increased internalized binegativity may be a mechanism through which experiences of binegativity impact sexual identity uncertainty. This is the first study to examine this model longitudinally. A recent study proposed and tested the mediation of the relationship between experiences of binegativity and sexual identity uncertainty by internalized binegativity (Dyar, Feinstein, Schick, & Davila, in prep). The current study extends this finding by providing support for the temporal order of this proposed process.

However, contrary to hypotheses, only internalized binegativity, not sexual identity uncertainty, predicted changes in strength of identification as lesbian, heterosexual, and bisexual. Specifically, increases in internalized binegativity predicted simultaneous increases in identification as lesbian and heterosexual and decreases in identification as bisexual. This finding

suggests that internalized binegativity may be a mechanism through which experiences of binegativity predict changes in identification. Therefore, experiences of binegativity and subsequent increases in internalized binegativity predict changes in identification that place one's identity more in line with binary notions of sexual identity (e.g., increasing identification as lesbian or heterosexual and decreasing bisexual identities). As such, this pattern of changes in identification supports the theory that experiencing pressure to conform to the sexual orientation binary (communicated through binegative experiences) triggers changes in identification with different sexual identity labels, which may eventually lead to the concealment of a bisexual identity or even to identification with a lesbian or heterosexual identity.

Interestingly, changes in identification with different sexual identity labels did not uniformly predict changes in anxious and depressive symptoms. As predicted, increases in identification as lesbian and heterosexual and decreases in identification as bisexual did predict increases in internalizing symptoms, but each effect was confined to increases in one type of internalizing symptoms (either anxiety or depression). This suggests that changing one's identification following external (experiences of binegativity) and internal pressure (increased internalized binegativity) to conform to the sexual orientation binary has detrimental effects on mental health. This was the first study to examine changes in identification and their impact on internalizing symptoms.

Coping with Experiences of Discrimination

This study examined three major hypotheses pertaining to coping with experiences of discrimination: 1) buffering coping would reduce the impact of experiences of binegativity on components of sexual identity, 2) magnifying coping would increase the impact of experiences of binegativity on components of sexual identity, and 3) magnifying coping would mediate the

relationship between experiences of binegativity and changes in components of sexual identity. Contrary to hypotheses, buffering coping did not reduce the impact of experiences of discrimination on any components of sexual identity. This may have been the result of the low power of moderation analyses, which tend to have much lower power than non-moderation analyses (Aguinis, Beaty, Boik, & Pierce, 2005). Alternatively, the ways that these coping strategies were implemented by participants may not have been effective and adaptive responses to all binegative experiences. For example, social support is known to reduce the impact of stressors in some contexts and increase the impact of stressors in other contexts (Bolger, Zuckerman, & Kessler, 2000). This is not the first study to fail to find positive effects of buffering coping. In a large cross-sectional study, Kaysen and colleagues (2014) also failed to find an effect of either general buffering coping or sexual minority specific buffering coping on psychological distress among sexual minority women. Similarly, Syzmanski and Henrichs-Beck (2014) did not find an association between problem-solving coping and psychological distress, when experiences of homonegativity were controlled for, in a sample of sexual minority women.

Of note, a number of the main effects for buffering coping were significant at the between level, with mixed directionality. Higher use of buffering coping predicted some negative changes in components of sexual identity, including increases in sexual identity uncertainty and internalized binegativity, and some positive changes, including increases in bisexual identity centrality and pride. A more nuanced and detailed study focused on examining the implementation, the intention of the individual when enacting a particular form of coping, and more fine grained details of the context in which particular coping strategies are used to deal with experiences of binegativity is necessary to develop a more accurate understanding of when particular buffering coping strategies do decrease the impact of experiences of discrimination

and when their use may be counterproductive.

Magnifying coping techniques also did not moderate the impact of experiences of binegativity on changes in components of sexual identity, with two notable exceptions. Magnifying coping did moderate the relationship between experiences of binegativity and increases in sexual identity uncertainty and internalized binegativity at the within level. The use of more maladaptive coping magnified the impact of experiences of binegativity on sexual identity uncertainty, while it *reduced* the impact of experiences of binegativity on internalized binegativity. This second interaction is contrary to the majority of literature on coping. So the interaction was run separately for each of the four magnifying coping strategies to follow-up this interaction. As none of these interactions were significant, this significant latent variable interaction should be interpreted with caution.

Given that maladaptive coping is also treated as a mediator of the relationships between stressors and outcomes, magnifying coping was also examined as a mediator of the association between experiences of binegativity and changes in components of sexual identity. While none of these mediations were significant at the within level, several were significant or marginally significant at the between level. Within these mediations, experiencing more binegativity over the course of the study predicted more use of magnifying coping techniques. Higher use of magnifying coping techniques throughout the study predicted cumulative increases in identification as lesbian and heterosexual, sexual identity uncertainty, and internalized binegativity. This indicates that the use of more frequent maladaptive coping is one mechanism through which experiences of binegativity have a cumulative impact on components of sexual identity. These findings are consistent with existing research indicating that magnifying coping strategies mediate the relationship between experiences of discrimination and sexual identity and

mental health outcomes among sexual minorities (e.g., Hatzenbuehler, Nolen-Hoeksema, & Dovidio, 2009; Kaysen et al., 2014; Szymanski, Dunn, & Ikizler, 2014; Syzmanski & Henrichs-Beck, 2014) and extend these findings to indicate that magnifying coping also mediates the relationship between experiences of binegativity and sexual identity (and ultimately, mental health outcomes) among bisexual women.

Impact of Experiences of Binegativity Perpetrated by Lesbians and Gay Men on LGBT Community Connectedness

Contrary to hypotheses, experiencing binegativity perpetrated by lesbians and gay men did not predict subsequent decreases in LGBT community connectedness. There are two potential reasons for this finding. First, this study only captured whether or not participants experienced binegativity from lesbian and gay perpetrators during the previous week, not how frequently these experiences occurred. It is possible that experiencing frequent binegativity from lesbians and gay men may predict decreases in LGBT community connectedness over time. When a bisexual individual experiences infrequent or isolated binegativity from lesbian and gay perpetrators, it is unlikely that these experiences will impact their overall sense of belonging in the LGBT community. Second, bisexual individuals may have been thinking of their sense of belonging in specific LGBT community spaces and in bisexual and queer communities. Experiences of binegativity from lesbian and gay individuals outside of these communities are unlikely to impact their sense of belonging within these specific communities. This was the first study to examine the relationship between experiences of binegativity from within the LGBT community and feelings of LGBT community connectedness. More nuanced and detailed examination of the impact of binegativity from lesbian and gay sources is necessary, but was beyond the scope of this study's brief examination of this topic.

Impact of Bi-Positive Experiences on Components of Sexual Identity and Mental Health

Finally, this was also the first study to examine the impact of bi-positive experiences on components of sexual identity and mental health. Results indicate that experiencing more bi-positive events predicted subsequent decreases in sexual identity uncertainty and predicted marginally significant increases in strength of identification as bisexual. At the between level, the frequency of bi-positive experiences throughout the study predicted decreases in sexual identity uncertainty and increases in strength of identification as bisexual, bisexual identity centrality, and bisexual identity affirmation. These finding suggest that experiencing bi-positive events that arise from internal and external sources have the opposite effects of binegative events and may help to counteract the effects of binegative events on components of sexual identity. This study was not able to examine if bi-positive and binegative experiences interacted to predict components of sexual identity and mental health, given that these outcomes were assessed separately after bi-positive and binegative events. Bi-positive events may represent a particular form of coping with binegative events for bisexual individuals, so future research should examine this possibility.

Conclusions

This study was the first to examine the impact of experiences of binegativity on components of sexual identity and mental health longitudinally and substantially contributes to the growing literature in this area. Results provide partial support for a proposed model of one mechanistic process through which experiences of binegativity impact components of sexual identity and mental health. Experiencing more binegative events in one week predicted subsequent increases in internalized binegativity, which in turn predicted increases in sexual identity uncertainty. Increases in internalized binegativity predicted simultaneous increases in

strength of identification as lesbian and heterosexual and decreases in identification as bisexual. In turn, increased identification as lesbian predicted increases in depressive symptoms, increased heterosexual identity predicted increases in anxiety symptoms, and decreased identification as bisexual predicted marginally significant increases in depression.

This indicates that experiences of binegativity may lead to increased internalization of negative thoughts and beliefs about one's bisexual identity, which may lead to questioning of one's bisexual identification and increases in the strength of one's identification with binary sexual identities (i.e., lesbian or heterosexual). These changes in identification may represent a broader process of concealing one's bisexual identity and changing one's identity to lesbian or heterosexual as a result of external pressure to conform to the sexual orientation binary and increased internalization of negative beliefs and feelings about one's own bisexual identity. This process appears to have negative impacts on mental health, increasing internalizing symptoms.

Of note, buffer coping did not reduce the impact of experiences of binegativity on components of sexual identity; however, this does not indicate that specific types of coping are not effective in reducing the impact of experiences of binegativity in specific contexts. Future more nuanced and detailed research examining the role of buffer coping in these relationships is necessary. Magnifying coping did increase the impact of experiences of binegativity on sexual identity uncertainty and also mediated the relationship between experiences of binegativity and changes in several components of sexual identity. This indicates that magnifying coping may be one mechanism through which experiences of binegativity impact components of sexual identity. Finally, experiencing more frequent positive events related to one's bisexual identity predicted positive changes in several components of sexual identity. In total, this study has substantially

furthered research on the impact of binegative and bi-positive experiences and the roles of coping in amplifying, reducing, and mediating these impacts.

Limitations and Future Research

Despite its many strengths, this study also had several limitations, and findings should be considered in light these. First, due to the limited amount of funding available for this study, the study was originally limited to five timepoints spaced one week apart. However, the format of participant compensation, while developed with an eye toward increasing participant retention, inadvertently led to a reduction in the number of timepoints. Participants were compensated $20 for completing at least three surveys and were entered into a raffle for $100 if they completed all five surveys. While raffle entries have served as a reliable form of compensation for samples of sexual minority women in my research (e.g., Dyar et al., 2014, 2015, 2016, in prep), they appear to be inadequate to retain participants in a longitudinal study. Fortunately, the participants who completed only three surveys all completed the first three surveys, and therefore, I was able to exclude the second two timepoints and run analyses on the first three timepoints. However, this did not have a notable effect on the power of the study as bisexual women reported frequent experiences of binegativity, with the majority of participants reporting at least one binegative event each week of the study.

Second, due to the limited space available in the weekly surveys, brief and broad measures of the use of coping strategies to deal with experiences of binegativity were used. The effectiveness of coping strategies, in particular buffering coping strategies, are often contingent on a number of factors, including how the strategies were implemented and the context in which strategies were implemented (e.g., Bolger, Zuckerman, & Kessler, 2000). Given this complexity, a longitudinal study completely devoted to the use of coping strategies would be necessary to

develop a fuller understanding of the circumstances under which buffering coping strategies are effective in reducing the impact of experiences of discrimination and experiences of binegativity in particular.

Third, the sample of bisexual women who completed this study was very homogeneous and the generalizability of these findings to bisexual women with different demographics is unknown. This sample was, by design, comprised of bisexual cisgender females (individuals who were identified as female at birth and identify as female) between the ages of 20 and 35 who were living in the US at the time of this study. The sample was also relatively open about their sexual identities and was comprised of predominantly well educated, middle class, Caucasian/White women living with their cisgender, heterosexual male romantic partners in suburban and urban areas of the United States. The generalizability of these findings to bisexual women of other age groups, transgender and genderqueer bisexual women, less educated, non-middle class bisexual women, bisexual women with minority racial/ethnic identities, and bisexual women not in current relationships, in same-sex relationships, in relationships with transgender/genderqueer individuals, or in relationships with other bisexual individuals remains unknown. Future research examining the impact of experiences of binegativity among these populations is necessary as their experiences and potentially the impact of their experiences of binegativity may differ from the experiences of the women in this sample.

Finally, due to limited funding, this study did not include comparison groups of lesbians, bisexual men, and gay men. Therefore, this study was unable to address how the impact of binegativity may differ between bisexual men and women or how the impact of binegativity may differ from the impact of homonegativity. Future longitudinal studies that include these

comparison groups are necessary to develop a broader understanding of how the impact of experiences of discrimination differ among subgroups of sexual minorities.

Despite these limitations, this study substantially extends our knowledge of the impact of experiences of binegativity by using a longitudinal study design, which allowed for the examination of the temporal order of experiences of binegativity and changes in components of sexual identity and mental health. Future research will build on the results of this ground-breaking study and develop a more nuanced picture of how the impact of experiences of discrimination is similar and different for subgroups of sexual minorities and for subgroups of bisexual women and how coping may reduce, amplify, and mediate these impacts.

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Table 1

Participant Demographics

	% or *M(SD)*
Age	28.66 (3.78)
Bisexual Identity Disclosure	5.41 (.75)
Race/Ethnicity	
Caucasian/White	92.2%
African American/Black	2.8%
Latina/Hispanic	3.3%
Other	1.8%
Urbanicity of Residence	
Urban	30.0%
Suburban	67.2%
Rural	2.8%
Residential Status	
Living with Romantic Partner	86.7%
Living with Roomate(s)	5.6%
Living with Parents/Relatives	4.4%
Living Alone	2.2%
Other	1.2%
Level of Education	
Graduated High School	0.6%
Some College	8.9%
Associate's Degree	16.7%
BA/BS	66.1%
Some Graduate School	6.7%
Graduate Degree	1.1%
Current College Students	11.1%
Current Annual Income	
> $10,000	6.1%
$10,000 - $24,999	5.0%
$25,000 - $49,999	72.8%
$50,000 - $74,999	16.1%
Region of US	
Northwest	21.8%
South	31.3%
Mid-West	18.4%
West	24.6%
Alaska/Hawaii	3.9%

Table 2

Frequency of Binegative Events

	Reported Binegative Event								Average Frequency			
	T1		T2		T3		Overall		T1	T2	T3	Overall
Instability/Illegitimacy of Bisexuality	**160**	**88.9%**	**132**	**76.7%**	**115**	**66.9%**	**171**	**95.0%**	**2.29**	**1.35**	**1.02**	**1.55**
Assumed my bisexuality is "just a phase"	10	5.6%	4	2.3%	5	2.9%	16	8.9%	1.50	1.25	1.00	1.56
Assumed my bisexuality is only a sexual curiosity or experimentation	32	17.8%	25	14.5%	18	10.5%	68	37.8%	1.72	1.20	1.28	1.59
Assumed I am simply confused about my sexual orientation	74	41.1%	57	33.1%	45	26.2%	121	67.2%	1.57	1.32	1.31	2.07
Assumed I am really heterosexual	58	32.2%	42	24.4%	36	20.9%	107	59.4%	1.72	1.38	1.39	1.94
Assumed I am really a lesbian	66	36.7%	45	26.2%	30	17.4%	109	60.6%	1.91	1.67	1.53	2.27
Sexual Irresponsibility of Bisexuals	**160**	**88.9%**	**143**	**83.1%**	**132**	**76.7%**	**163**	**90.6%**	**2.88**	**2.28**	**1.61**	**2.25**
Assumed I will cheat in a relationship	62	34.4%	64	37.2%	44	25.6%	121	67.2%	1.95	1.84	1.77	2.62
Assumed I am likely to have an STD/HIV	63	35.0%	47	27.3%	31	18.0%	107	59.4%	2.00	1.98	1.84	2.58
Assumed I am obsessed with sex	70	38.9%	57	33.1%	45	26.2%	124	68.9%	2.01	1.91	1.67	2.62
Assumed I've had many sexual partners	57	31.7%	46	26.7%	43	25.0%	113	62.8%	2.28	1.96	1.84	2.65
Hostility	**164**	**91.1%**	**156**	**90.7%**	**155**	**90.1%**	**164**	**91.1%**	**4.64**	**4.49**	**3.94**	**4.36**
Acted uncomfortable around me	68	37.8%	64	37.2%	53	30.8%	130	72.2%	2.28	2.16	1.92	3.04
Avoided talking about my bisexual identity or past relationships	56	31.1%	47	27.3%	41	23.8%	103	57.2%	2.13	2.04	1.90	2.84
Treated me negatively	44	24.4%	56	32.6%	36	20.9%	98	54.4%	2.23	2.09	2.25	3.03
Made me feel like I don't fit in	58	32.2%	41	23.8%	37	21.5%	101	56.1%	2.10	1.95	2.27	2.83
Excluded me	42	23.3%	65	37.8%	76	44.2%	122	67.8%	2.07	2.15	2.20	3.23
Verbally insulted me	44	24.4%	47	27.3%	38	22.1%	99	55.0%	2.25	2.00	2.32	2.84
Made jokes at my expense	43	23.9%	24	14.0%	25	14.5%	78	43.3%	2.00	2.13	2.17	2.45
Made fun of, picked on, physically harmed or threatened to harm me	33	18.3%	44	25.6%	27	15.7%	86	47.8%	2.18	2.11	2.11	2.58
Vicarious Binegative Experience	**80**	**44.4%**	**103**	**59.9%**	**104**	**60.5%**	**154**	**85.6%**	**.96**	**1.26**	**1.39**	**1.20**
Heard negative remarks about bisexuals	42	23.3%	51	29.7%	37	21.5%	99	55.0%	2.00	1.96	2.30	2.72
Saw or heard of another bisexual individual being discriminated against, harassed, or treated unfairly because of his/her bisexual identity	42	23.3%	61	35.5%	71	41.3%	118	65.6%	2.10	2.08	2.34	3.23
Binegative Atmosphere	**18**	**10.0%**	**56**	**32.6%**	**64**	**37.2%**	**107**	**59.4%**	**.32**	**.66**	**.77**	**.58**
Felt that my bisexuality was not seen as valid	13	7.2%	48	27.9%	36	20.9%	85	47.2%	1.77	1.98	2.14	2.29
Felt excluded because of my bisexuality	8	4.4%	7	4.1%	24	14.0%	38	21.1%	2.00	2.14	2.17	2.18
Felt invisible because of my bisexuality	8	4.4%	5	2.9%	4	2.3%	13	7.2%	2.25	1.60	2.25	2.69

Averages for the frequency of categories of binegative events are the mean of the sum of the frequency of all binegative events included in that category, while averages for the overall frequency are the averages of the frequency for all timepoints. Percentages are based on the total number of individuals who completed each timepoint.

Table 3

Frequency of Bi-Positive Events

	Reported Bi-Positive Event								Average Frequency			
	T1		T2		T3		Overall		T1	T2	T3	Overall
External Positive	**163**	**90.6%**	**161**	**93.6%**	**161**	**93.6%**	**170**	**94.4%**	**2.91**	**2.96**	**2.92**	**2.94**
People have seen my bisexuality as valid	68	37.8%	105	61.0%	103	59.9%	151	83.9%	1.66	1.54	1.49	1.55
People have understood the bias I face as a bisexual	82	45.6%	69	40.1%	57	33.1%	134	74.4%	1.79	1.65	1.72	1.72
I heard someone say something positive about bisexuals	59	32.8%	77	44.8%	85	49.4%	136	75.6%	1.88	1.86	1.88	1.89
People have seen my bisexuality in a positive light	63	35.0%	41	23.8%	40	23.3%	109	60.6%	1.68	1.41	1.50	1.56
Internal Positive: Aspect of Identity	**164**	**91.1%**	**163**	**94.8%**	**164**	**95.3%**	**168**	**93.3%**	**8.49**	**2.13**	**7.65**	**8.12**
Freedom from social labels and gender and sexual orientation binaries	23	12.8%	32	18.6%	37	21.5%	75	41.7%	2.13	2.13	1.95	2.02
Freedom from social norms	61	33.9%	87	50.6%	58	33.7%	130	72.2%	2.00	1.99	2.09	2.02
Have a unique perspective as a bisexual	84	46.7%	66	38.4%	79	45.9%	142	78.9%	2.02	2.08	1.96	2.00
Have higher levels of insight and awareness about certain issues	57	31.7%	53	30.8%	38	22.1%	112	62.2%	2.32	2.08	1.87	2.11
Freedom to love without regard for sex or gender	78	43.3%	69	40.1%	56	32.6%	133	73.9%	2.18	2.04	2.20	2.14
Freedom to explore relationships	65	36.1%	69	40.1%	60	34.9%	130	72.2%	2.33	2.03	2.27	2.18
Freedom of sexual expression	58	32.2%	61	35.5%	63	36.6%	122	67.8%	2.14	1.92	2.14	2.07
Am more accepting of diversity	86	47.8%	58	33.7%	47	27.3%	132	73.3%	2.07	2.10	2.17	2.13
Belong to a community	68	37.8%	77	44.8%	72	41.9%	140	77.8%	2.04	2.13	2.10	2.11
Have a better understanding of privilege and oppression	61	33.9%	60	34.9%	73	42.4%	128	71.1%	2.18	2.03	2.10	2.09
Being an activist or advocate for bisexuals	13	7.2%	16	9.3%	17	9.9%	37	20.6%	2.23	1.94	2.12	2.09

Averages for the frequency of categories of binegative events are the mean of the sum of the frequency of all binegative events included in that category, while averages for the overall frequency are the averages of the frequency for all timepoints. Percentages are based on the total number of individuals who completed each timepoint.

Table 4

Descriptive Statistics for All Variables

	Within *SD*	Between *M*	Between *SD*	Intraclass Correlation
Sexual Identity Uncertainty	.96	-.01	.26	.07
Frequency of Binegative Experiences	3.41	10.17	3.21	.47
Rejection Sensitivity	.89	-.03	.49	.24
Bisexual Identity Affirmation	.92	-.01	.39	.15
Identification as Bisexual	.92	.01	.39	.15
Identification as Lesbian	.92	-.05	.45	.19
Identification as Heterosexual	.91	-.05	.50	.23
Bisexual Identity Centrality	.90	-.02	.48	.22
Anxiety	.89	-.03	.49	.23
Depression	.87	-.03	.51	.25
Internalized Binegativity	.96	-.02	.27	.07
LGBT Group Level Coping	.32	3.53	.59	.77
Visibility Management	.43	3.51	.58	.65
Emotional Support	.44	3.34	.50	.57
Instrumental Support	.52	3.21	.56	.54
Rumination	.65	3.57	.67	.52
Education/Advocacy	.46	3.29	.63	.65
Resistance	.59	3.36	.69	.58
Internalization (Self-Blame)	.59	3.37	.80	.65
Substance Abuse	.59	3.28	.76	.62
Self-Affirmation	.71	3.58	.41	.20
BP Sexual Identity Uncertainty	.95	-.05	.37	.26
BP Internalized Binegativity	.94	-.10	.46	.13
BP Rejection Sensitivity	.88	-.16	.69	.22
BP Identification as Bisexual	.93	.03	.45	.38
Binegative Perpetrator Lesbian/Gay	.27	.11	.14	.19
BP Identification as Heterosexual	.89	-.13	.61	.15
BP Identification as Lesbian	.90	-.14	.62	.32
Bisexual Identity Centrality	.94	-.01	.39	.39
BP Bisexual Identity Affirmation	.94	-.02	.43	.15
BP Anxiety	.89	-.17	.71	.17
BP Depression	.89	-.15	.67	.36
Frequency of Bi-Positive Events	2.92	10.85	3.01	.36
LGBT Community Connectedness	.89	-.09	.66	.51

Note. All within level variables are person centered in MSEM, therefore all means are 0 for all variables at the within level. BP = bi-positive. Components of sexual identity and internalizing symptoms are the standardized residuals representing change over time.

Table 5

Experience of Binegativity Predicting Changes in Outcomes

	Within Level				Between Level			
Outcome	estimate	*SE*	*z*	*p*	estimate	*SE*	*z*	*p*
Uncertainty	.036	.014	2.671	.008	.050	.016	3.025	.002
Internalized Binegativity	.032	.014	2.370	.018	.064	.018	3.496	< .001
Rejection Sensitivity	.064	.022	2.850	.004	.106	.019	5.444	< .001
Bisexual Identity	.044	.016	2.740	.006	-.064	.039	-1.636	.102
Heterosexual Identity	-.012	.016	-.740	.459	.095	.036	2.639	.008
Lesbian Identity	-.019	.019	-.999	.318	.088	.047	1.876	.061
Bisexual Identity Centrality	-.048	.029	-1.672	.094	.082	.081	1.011	.312
Bisexual Identity Affirmation	.011	.013	.870	.385	.082	.023	2.598	< .001
Anxiety	-.002	.022	-.112	.911	.095	.040	2.338	.019
Depression	-.005	.019	-.282	.778	.105	.041	2.602	.009

Table 6

Mediations of the Experiences of Binegativity to Change in Anxiety Association

		Path A			Path B			Path C			Indirect Effect		
Mediator	Level	estimate	*SE*	*p*	estimate	*SE*	*p*	estimate	*SE*	*p*	estimate	*SE*	*p*
Uncertainty	Within	.032	.014	.027	.038	.061	.535	-.004	.022	.852	.001	.002	.554
	Between	.056	.032	.081	.534	4.305	.901	.065	.224	.773	.030	.230	.896
Internalized Binegativity	Within	.025	.023	.276	.088	.083	.286	-.006	.022	.787	.002	.002	.274
	Between	.074	.021	< .001	.647	13.677	.962	.054	1.025	.958	.048	1.012	.962
Rejection Sensitivity	Within	.153	.106	.150	-.027	.026	.299	.061	.022	.005	-.004	.005	.369
	Between	.339	.085	< .001	.019	.020	.352	.027	.020	.183	.006	.007	.393
Bisexual Identity	Within	.041	.019	.030	-.040	.056	.476	< .001	.023	.993	-.002	.002	.496
	Between	-.060	.039	.131	.287	.586	.625	.109	.052	.036	-.017	.035	.623
Heterosexual Identity	Within	-.019	.015	.226	.137	.048	.004	-.003	.021	.889	-.003	.002	.296
	Between	.108	.037	.003	.645	1.168	.581	.030	.137	.828	.070	.113	.538
Lesbian Identity	Within	-.027	.022	.211	-.001	.059	.985	-.006	.022	.803	< .001	.002	.985
	Between	.105	.049	.031	.639	1.998	.749	.034	.225	.880	.067	.187	.721
Bisexual Identity Centrality	Within	-.039	.031	.219	-.052	.052	.323	-.005	.022	.823	.002	.003	.464
	Between	.029	.059	.624	-.030	.170	.859	.094	.042	.024	-.001	.005	.855
Bisexual Identity Affirmation	Within	-.009	.014	.509	.027	.052	.608	-.003	.022	.903	< .001	.001	.685
	Between	.015	.038	.689	.185	.560	.741	.091	.041	.027	.003	.011	.789

Table 7

Mediations of the Experiences of Binegativity to Change in Depression Association

		Path A			Path B			Path C			Indirect Effect		
Mediator	Level	estimate	*SE*	*p*	estimate	*SE*	*p*	estimate	*SE*	*p*	estimate	*SE*	*p*
Uncertainty	Within	.032	.014	.027	.086	.062	.168	-.008	.019	.661	.003	.002	.238
	Between	.056	.032	.081	.466	3.719	.900	.079	.195	.685	.026	.199	.895
Internalized Binegativity	Within	.025	.023	.276	.071	.070	.314	-.008	.019	.676	.002	.002	.348
	Between	.074	.021	< .001	.629	13.342	.962	.067	.993	.946	.047	.987	.962
Rejection Sensitivity	Within	.153	.106	.150	-.043	.021	.041	.077	.025	.002	-.007	.005	.208
	Between	.339	.085	< .001	.029	.018	.100	.044	.025	.073	.010	.007	.156
Bisexual Identity	Within	.041	.019	.030	-.116	.060	.052	.002	.019	.933	-.005	.003	.142
	Between	-.060	.039	.131	.357	.579	.537	.123	.056	.028	-.021	.035	.537
Heterosexual Identity	Within	-.019	.015	.226	.198	.057	.001	-.005	.016	.784	-.004	.003	.275
	Between	.108	.037	.003	.674	1.029	.512	.037	.122	.760	.073	.098	.459
Lesbian Identity	Within	-.027	.022	.211	.406	.099	< .001	.002	.018	.890	-.011	.009	.198
	Between	.105	.049	.031	.821	1.586	.605	.026	.154	.865	.086	.143	.546
Bisexual Identity Centrality	Within	-.039	.031	.219	-.020	.048	.686	-.006	.019	.743	.001	.002	.690
	Between	.029	.059	.624	-.065	.155	.674	.105	.042	.012	-.002	.005	.689
Bisexual Identity Affirmation	Within	-.009	.014	.509	.088	.047	.059	-.005	.019	.785	-.001	.001	.526
	Between	.015	.038	.689	.176	.503	.727	.102	.041	.014	.003	.001	.526

Table 8

Path Coefficients for Model of Hypothesized Process

Regression Paths					
Predictor	Outcome	β	*SE*	*z*	*p*
Frequency of Binegativity	Internalized Binegativity	.159	.056	2.824	.005
	Sexual Identity Uncertainty	.122	.045	2.741	.006
	Heterosexual Identity	.021	.099	.213	.831
	Lesbian Identity	-.012	.100	-.118	.906
	Bisexual Identity	.089	.075	1.181	.238
	Anxiety	.085	.093	.916	.360
	Depression	.092	.076	1.211	.226
Internalized Binegativity	Sexual Identity Uncertainty	.264	.051	5.158	< .001
	Heterosexual Identity	.190	.060	3.177	.001
	Lesbian Identity	.145	.059	2.453	.014
	Bisexual Identity	-.109	.048	-2.265	.024
	Anxiety	.084	.056	1.512	.130
	Depression	.015	.083	.182	.855
Sexual Identity Uncertainty	Heterosexual Identity	.009	.050	.183	.855
	Lesbian Identity	.093	.050	1.855	.064
	Bisexual Identity	.017	.050	.343	.732
	Anxiety	.032	.057	.563	.574
	Depression	.054	.046	1.162	.245
Heterosexual Identity	Anxiety	.162	.076	2.120	.034
	Depression	.066	.106	.622	.534
Lesbian Identity	Anxiety	-.006	.063	-.095	.924
	Depression	.439	.068	6.499	< .001
Bisexual Identity	Anxiety	-.033	.068	-.486	.627
	Depression	-.101	.055	-1.826	.068
Correlations					
Heterosexual Identity	Lesbian Identity	.394	.114	3.455	.001
	Bisexual Identity	-.280	.055	-5.051	< .001
Lesbian Identity	Bisexual Identity	-.126	.066	-1.920	.055
Anxiety	Depression	.224	.194	1.156	.248

Table 9

Indirect Effects in Model of Hypothesized Process

			Indirect Effect			
Predictor	Mediator	Outcome	estimate	*SE*	*z*	*p*
Frequency of Binegativity	Internalized Binegativity	Sexual Identity Uncertainty	.012	.005	2.365	.018
		Heterosexual Identity	.008	.005	1.840	.066
		Lesbian Identity	.006	.003	1.853	.064
		Bisexual Identity	-.005	.003	-1.664	.096
Internalized Binegativity	Heterosexual Identity	Anxiety	.035	.019	1.806	.071
	Lesbian Identity	Depression	.063	.034	1.878	.060
	Bisexual Identity	Depression	.011	.007	1.569	.117

Table 10

Factor Loadings for Coping Latent Variables

Latent Variable	Indicator	Level	Standardized Factor Loading	Unstandardized Factor Loading	*SE*	*z*	*p*	R^2
Buffering Coping	LGBT Group Level Coping	Within	.60	.20	.06	3.30	.001	.36
	Emotional Support	Within	.22	.10	.05	1.80	.07	.05
	Instrumental Support	Within	.13	.07	.07	1.03	.30	.02
	Education/Advocacy	Within	.31	.15	.07	2.35	.02	.10
	Resistance	Within	.39	.24	.11	2.25	.02	.15
	LGBT Group Level Coping	Between	.68	.36	.11	3.23	.001	.46
	Emotional Support	Between	.98	.47	.08	5.77	< .001	.97
	Instrumental Support	Between	.98	.52	.08	6.27	< .001	.97
	Education/Advocacy	Between	1.00	.55	.07	7.40	< .001	1.00
	Resistance	Between	.86	.51	.11	4.76	< .001	.74
Magnifying Coping	Visibility Management	Within	.26	.12	.12	1.04	.30	.07
	Internalization (Self-Blame)	Within	.36	.22	.13	1.71	.09	.13
	Substance Abuse	Within	.22	.14	.06	2.42	.02	.05
	Rumination	Within	.62	.42	.24	1.72	.09	.39
	Visibility Management	Between	.99	.54	.09	5.83	< .001	.97
	Internalization (Self-Blame)	Between	1.00	.74	.09	8.68	< .001	1.00
	Substance Abuse	Between	.92	.62	.09	6.82	< .001	.84
	Rumination	Between	.99	.60	.09	6.67	< .001	.98

Table 11

Moderation of the Experiences of Binegativity to Change in Outcomes By Buffer Coping

		Binegative Events			Buffer Coping			Interaction		
Outcome	Coping Level	estimate	*SE*	*p*	estimate	*SE*	*p*	estimate	*SE*	*p*
Uncertainty	Within	-.053	.072	.459	-.049	.230	.830	.076	.058	.191
	Between	.143	.081	.080	.808	.115	< .001	.002	.065	.980
Internalized Binegativity	Within	.040	.037	.278	.093	.138	.498	-.054	.049	.268
	Between	-.175	.052	.001	.767	.097	< .001	-.049	.078	.531
Rejection Sensitivity	Within	-.018	.080	.825	-.030	.081	.710	-.049	.037	.176
	Between	-.317	.101	.002	.011	.164	.947	.022	.065	.732
Bisexual Identity	Within	-.036	.051	.485	.006	.226	.977	-.023	.052	.658
	Between	.137	.085	.107	-.081	.110	.459	.041	.059	.493
Heterosexual Identity	Within	-.073	.072	.310	.038	.364	.916	.025	.070	.724
	Between	.339	.099	.001	.734	.123	< .001	-.060	.056	.284
Lesbian Identity	Within	-.091	.075	.225	.102	.303	.737	.109	.068	.111
	Between	.228	.089	.010	1.092	.121	< .001	-.005	.120	.965
Bisexual Identity Centrality	Within	-.033	.052	.527	-.098	.187	.599	-.069	.056	.218
	Between	-.087	.094	.352	.994	.161	< .001	-.052	.065	.429
Bisexual Identity Affirmation	Within	-.052	.085	.537	.091	.238	.703	.020	.054	.719
	Between	.195	.089	.028	.547	.120	< .001	-.023	.083	.779

Table 12

Moderation of the Experiences of Binegativity to Change in Outcomes By Magnifying Coping

		Binegative Events			Magnifying Coping			Interaction		
Outcome	Coping Level	estimate	*SE*	*p*	estimate	*SE*	*p*	estimate	*SE*	*p*
Uncertainty	Within	.049	.045	.282	.039	.093	.672	.097	.037	.009
	Between	.260	.052	< .001	.411	.074	< .001	.031	.034	.369
Internalized Binegativity	Within	.045	.038	.233	.064	.157	.685	-.075	.038	.048
	Between	-.190	.054	< .001	.491	.092	< .001	-.053	.068	.442
Rejection Sensitivity	Within	-.007	1.135	.995	.020	2.566	.994	-.034	.042	.420
	Between	-.189	.250	.448	.700	.130	< .001	.043	.119	.719
Bisexual Identity	Within	-.055	.074	.457	.116	.339	.731	.075	.062	.226
	Between	.122	.167	.464	.468	.196	.017	.057	.130	.660
Heterosexual Identity	Within	-.090	.104	.388	.094	.596	.875	.065	.072	.371
	Between	.200	.132	.130	.799	.132	< .001	.001	.057	.980
Lesbian Identity	Within	-.047	.090	.603	.091	.424	.830	.094	.080	.237
	Between	-.061	.087	.485	1.149	.116	< .001	.005	.126	.966
Bisexual Identity Centrality	Within	-.049	.055	.375	.021	.202	.918	-.006	.060	.919
	Between	.168	.130	.196	.737	.160	< .001	-.035	.074	.630
Bisexual Identity Affirmation	Within	-.063	.306	.837	.192	.769	.803	.048	.138	.730
	Between	.175	.128	.172	.748	.138	< .001	.017	.285	.953

Table 13

Mediations of the Experiences of Binegativity to Change in Outcomes by Maladaptive Coping

		Path A			Path B			Path C			Indirect Effect		
Mediator	Level	estimate	*SE*	*p*	estimate	*SE*	*p*	estimate	*SE*	*p*	estimate	*SE*	*p*
Uncertainty	Within	.013	.015	.389	.112	.046	.014	.031	.013	.018	.001	.002	.403
	Between	.195	.088	.027	.209	.044	< .001	.008	.023	.732	.041	.023	.079
Internalized Binegativity	Within	.013	.015	.387	.045	.051	.378	.026	.012	.034	.001	.001	.548
	Between	.206	.099	.037	.170	.039	< .001	.036	.011	.001	.035	.019	.062
Rejection Sensitivity	Within	.013	.015	.373	.108	.047	.021	.058	.018	.001	.001	.002	.423
	Between	.205	.088	.020	.301	.048	< .001	.044	.019	.023	.062	.031	.049
Bisexual Identity	Within	.011	.015	.454	-.015	.056	.783	.042	.014	.003	< .001	.001	.798
	Between	.200	.087	.022	-.138	.100	.170	-.038	.052	.467	-.027	.021	.183
Heterosexual Identity	Within	.013	.015	.388	.093	.047	.048	-.013	.010	.175	.001	.001	.385
	Between	.206	.088	.019	.375	.041	< .001	.016	.016	.307	.077	.031	.012
Lesbian Identity	Within	.014	.016	.377	.092	.051	.073	-.021	.013	.104	.001	.002	.435
	Between	.205	.089	.021	.318	.054	< .001	.022	.037	.554	.065	.024	.006
Bisexual Identity Centrality	Within	.017	.014	.227	.014	.056	.803	-.049	.027	.065	< .001	.001	.808
	Between	.181	.120	.132	-.210	.114	.062	.112	.073	.124	-.039	.039	.326
Bisexual Identity Affirmation	Within	.013	.015	.388	.031	.057	.586	-.008	.014	.581	< .001	.001	.673
	Between	.198	.088	.024	-.119	.107	.264	.043	.055	.441	-.024	.024	.330

Table 14

Bi-Positive Events Predicting Changes in Outcomes

	Within Level				Between Level			
Outcome	estimate	*SE*	*z*	*p*	estimate	*SE*	*z*	*p*
Uncertainty	-.029	.013	-2.285	.022	-.051	.019	-2.647	.008
Internalized Binegativity	.003	.014	.209	.834	-.042	.031	-1.360	.174
Rejection Sensitivity	-.011	.019	-.596	.551	-.073	.044	-1.667	.095
Bisexual Identity	.021	.012	1.759	.079	.118	.022	5.439	< .001
Heterosexual Identity	-.028	.019	-1.488	.137	-.081	.084	-.966	.334
Lesbian Identity	-.019	.019	-.999	.318	.088	.047	1.876	.061
Bisexual Identity Centrality	.013	.019	.668	.504	.049	.024	2.075	.038
Bisexual Identity Affirmation	.011	.013	.870	.385	.082	.023	3.598	< .001
Anxiety	.020	.022	.882	.378	-.093	.075	-1.242	.214
Depression	.005	.015	.329	.742	-.090	.057	-1.579	.114

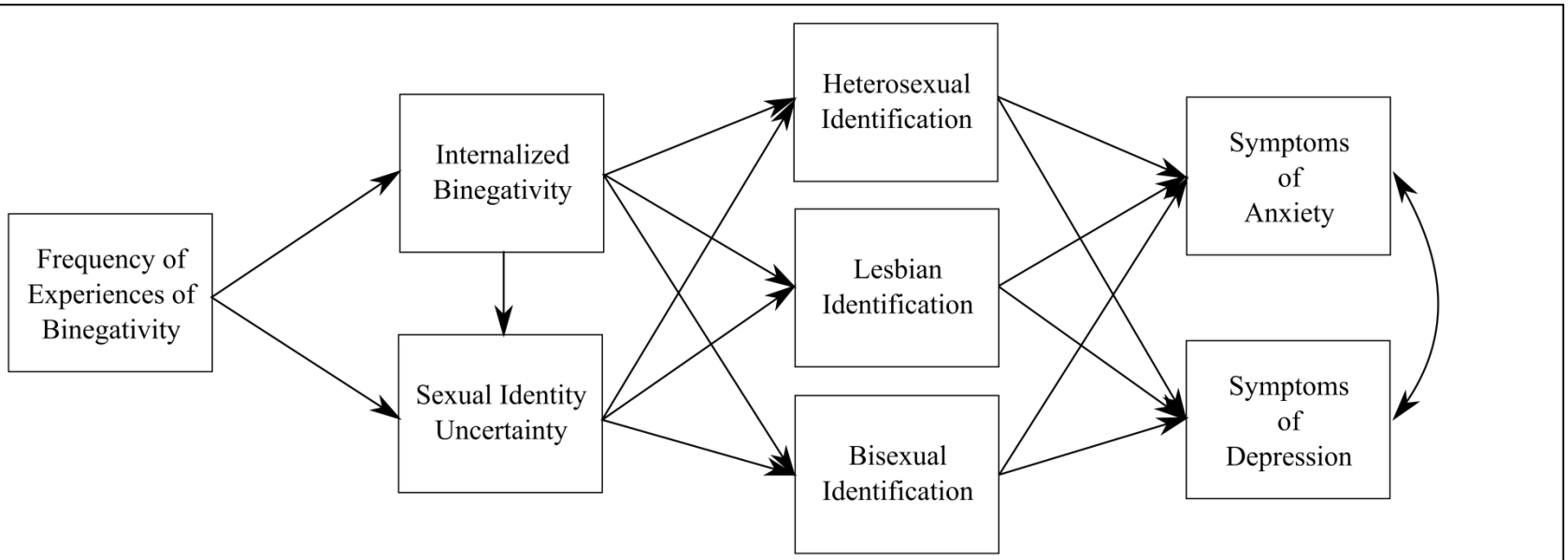

Figure 1. Hypothesized model of the process through which experiences of binegativity impact components of sexual identity and internalizing symptoms. Paths from experiences of binegativity to identification and internalizing symptoms have been omitted from the figure for clarity as have correlations among the three identification variables. All associations are expected to be positive in valence with the exception of the associations with bisexual identification, all of which are expected to be negative.

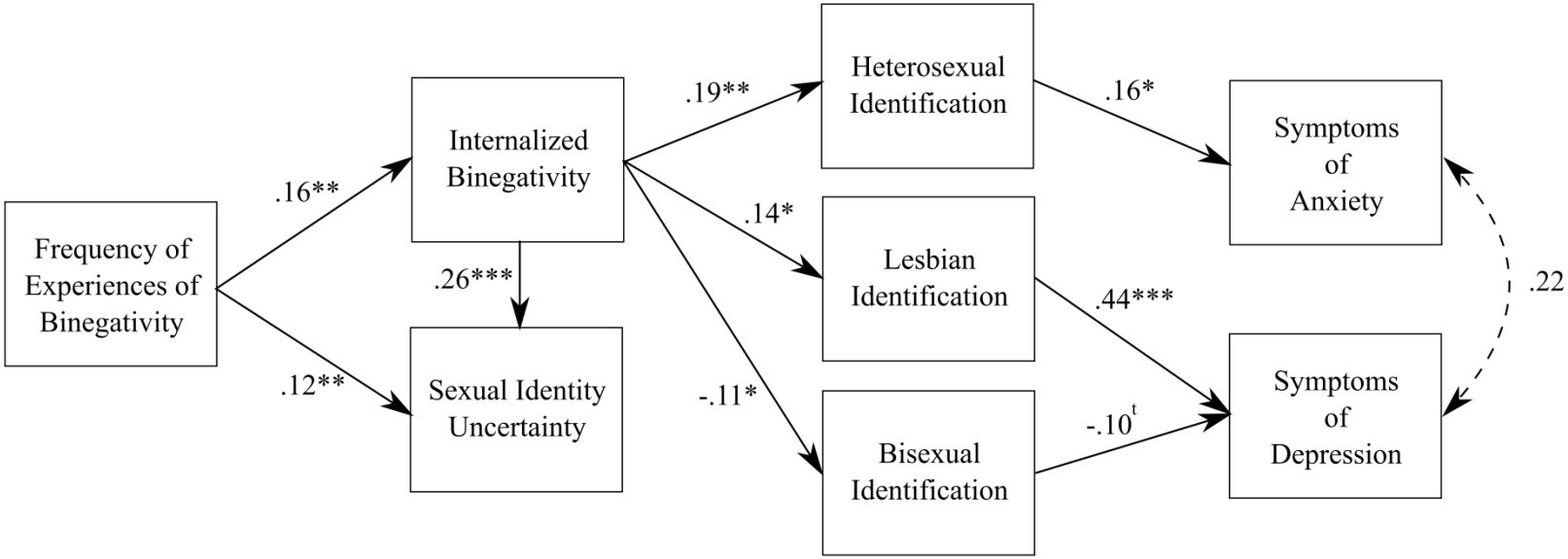

Figure 2. Model of a hypothesized process through which experiences of binegativity impact components of sexual identity and internalizing symptoms. Paths from experiences of binegativity and sexual identity uncertainty to identification and internalizing symptoms have been omitted from the figure for clarity as have correlations among the three identification variables. See Table 6 for all path coefficients.

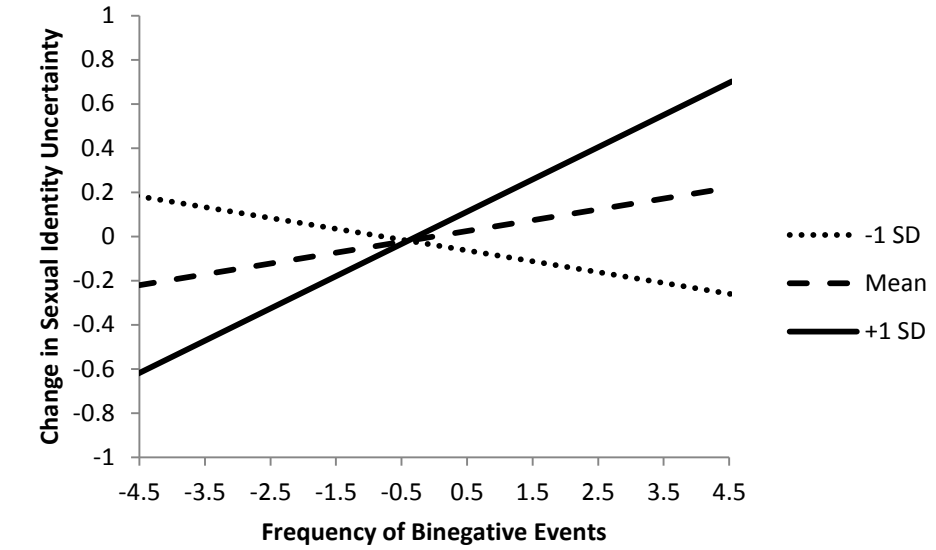

Figure 3. Simple slopes of the interaction between frequency of binegative events and maladaptive coping predicting changes in sexual identity uncertainty. Experiences of binegativity predicted subsequent increases in sexual identity uncertainty at high levels of magnifying coping (b = .15, SE = .06, z = 2.42, p = .015), but not at mean (b = .05, SE = .04, z = 1.08, p = .28) or low levels of magnifying coping (b = -.05, SE = .06, z = -.86, p = .39).

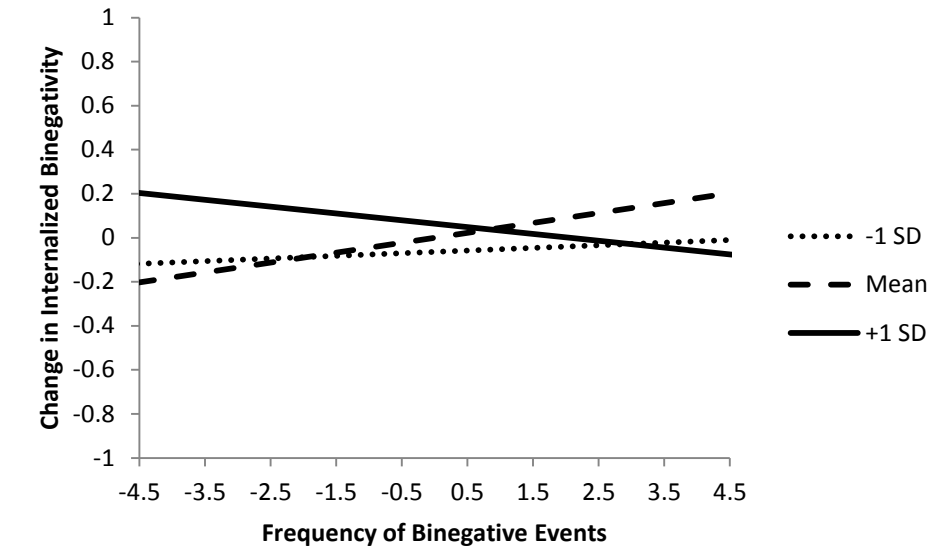

Figure 4. Simple slopes of the interaction between frequency of binegative events and maladaptive coping predicting changes in internalized binegativity. Experiences of binegativity predicted subsequent increases in internalized binegativity at low levels of magnifying coping (b = .12, SE = .06, z = 2.10, p = .03), but not at mean (b = .04, SE = .04, z = 1.19, p = .23) or high levels of magnifying coping (b = -.03, SE = .05, z = -.62, p = .54).