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# All Bi Myself: The Relationship Between Bisexuality and Self-Essentialism

A Thesis

Presented in

Partial Fulfillment of the

Requirements for the Degree of

Master of Science

By

Madeline Sharmat

March 2023

Department of Psychology

College of Science and Health

DePaul University

Chicago, Illinois

## **Thesis Committee**

Verena Graupmann, PhD

Kimberly Quinn, PhD, Chair

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# **Biography**

Madeline Sharmat was born in Chicago Heights, on June 1<sup>st</sup>, 1996. They graduated from Munster High School in Munster, Indiana in 2014. She received her Bachelor of Science in Psychology from the University of Pittsburgh in 2018.

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#### Abstract

With growing positive representation of sexual minorities in psychological research, it is important to consider how differing identities in the LGBTQ+ community might reflect varying relationships with the self. Bisexuals might especially experience poor self-images, due to prejudice experienced both in LGBTQ+ spaces and cishet spaces (Roberts et al., 2015). There is evidence that essentializing the self has a positive relationship with emotional wellbeing (Dulaney et al., 2019). Due to the essentialist belief that an individual can only experience attraction to one gender (Roberts et al., 2015), it is possible that people with multigender attraction struggle to self-essentialize. The current study questions if those who experience bisexual attraction also have lower levels of self-essentialism, and that self-stigma could contribute to these levels. We examined orientation, self-reports of multigender attraction, selfstigma, self-essentialism, and emotional-wellbeing to explore potential relationships between these constructs. Using a mediated regression model, we measured varying levels of selfessentialism across indications of bisexual attraction. Results suggested that bisexual participants experience lower levels of self-essentialism and wellbeing compared to straight participants. We also observed a weak positive correlation between self-stigma and self-essentialism and weak negative correlations between self-stigma with wellbeing and multigender attraction. These results provide a profound lens into the wellbeing of bisexuals and uncover how orientation can influence one's sense of self. This study also emphasizes the role self-stigma plays in one's sense of self and offers a framework for illuminating self-stigma unique to multigender attraction.

### All Bi Myself: The Relationship between Bisexuality and Self-Essentialism

The time has come, I think, when we must recognize bisexuality as a normal form of human behavior.

Margaret Mead

Remember, bisexuality doesn't mean halfway between gay or straight. It is its own identity.

Evan Rachel Wood

Bisexuals comprise of more than half of sexual minorities within the LGBTQ+ community, yet they experience poorer health outcomes compared to gay and lesbian individuals (Beach & Hall, 2020). This is largely due to anti-bisexual beliefs that influence attitudes of both heterosexuals and LGBTQ+ members about bisexual existence. Despite numerous studies that demonstrate bi-specific disparities, there is a misguided belief that bisexual individuals experience less marginalization compared to gay/lesbian people (Beach & Hall, 2020). This often derives from the notion that bisexuals have access to straight privilege, due to their different-gender attraction (Beach & Hall, 2020). This mentality perpetuates a lack of bi-specific resources and subtly insinuates that bi-erasure will benefit the progression of LGBTQ+ acceptance (Beach & Hall, 2020). This phenomenon embodies how anti-bisexual attitudes maintain poor outcomes for the bisexual community by suppressing the voices of those who offer a unique standpoint. With bi-phobic rhetoric overpowering bisexual voices, learning about how bisexuals feel about their own orientation can be challenging. Do internalized anti-bisexual beliefs yield poor self-evaluation for bisexuals? Could this negative evaluation further perpetuate poor health in bisexual populations? The present research aims to take a deeper look at internalized anti-bisexual attitudes.

There is an essentialist belief called monosexism that states an individual can only be monosexual (i.e., straight or gay/lesbian; Roberts et al., 2015). Due to this dualistic framework of attraction, there are common ideas manifested to describe why someone might identify as bisexual. Some of these explanations claim bisexuality is a transitional state to a gay/lesbian identity, bisexual people are confused, or that bisexuals are lying about their multigender attraction (Roberts et al., 2015). Seeing bisexuality as a transient identity has caused bi-phobic rejection in LGBTQ+ spaces, because gay/lesbian members often believe that bisexuals will eventually adopt gay/lesbian orientations. This has even led to psychological rejection of bisexual stability. It took a ten-year longitudinal study on women to even acknowledge that bisexuality could be a longstanding sexual orientation (Diamond, 2008).

In many LGBTQ+ spaces, bisexuals are accused of feigning heterosexual attraction out of fear of losing heterosexual privileges (Roberts et al., 2015). This attitude not only alienates bisexuals from the LGBTQ+ community, but it prevents necessary bisexual advocacy (Beach & Hall, 2020; Roberts et al., 2015). This has also led to scientific distrust in self-report measures, especially in men (Jabbou et al., 2020). Across heterosexual and LGBTQ+ populations, bisexuals are seen as unfaithful, hypersexual, cowardly, and unsure about their own desires (Roberts et al., 2015).

Monosexist culture has clearly caused public disdain against plurisexual identities, especially bisexuality. This culture is also harmful against all orientations. The dualistic framework of orientation categorizes identities as "acceptable" or "unacceptable," which solidifies dominance for heterosexuality (Roberts et al., 2015). This dominance forbids any expression of same-gender attraction and restricts the fluidity of human sexuality. An especially

concerning trend for some straight-identifying individuals is a fear of acknowledging any indication of same-gender attraction, even if minimal (Roberts et al., 2015).

With our cultural rejection of bi existence, we pay little attention to how bisexuals see themselves. Monosexism has stripped many of self-determination and ease with their own thoughts. There is growing evidence that bisexuals internalize monosexist beliefs about themselves, including doubting their own attraction (Bejakovich & Flett, 2018; Paul et al., 2014). These studies suggest that monosexism can deny bisexuals a stable sense of identity and a fractured sense of self. Unfortunately, there is little research that explores the relationship between bisexuality and the self. We believe that an individual's consistent bi-phobic thoughts could lead them to feel little connection with their true self.

Self-essentialism, or the belief in a true self, is a form of self-directed psychological essentialism that is associated with higher levels of wellbeing (Dulaney et al., 2019). If an individual is more likely to internalize the discussed monosexist beliefs, are they less likely to feel connected with their true self? The present study will examine how bisexual attraction might interfere with one's ability to maintain high levels of self-essentialism. We will examine self-stigma as a potential bridge between bisexuality and self-essentialism, where negative identity evaluations turn into a poor relationship with the self.

### **Minority Stress Theory and Self-Stigma**

Bisexuality often needs an explanation. It isn't something you can often 'read' on a person, and because of that bi people sometimes feel like an invisible part of the LGBTQIA community. People's sexuality is often defined by who we're partnered with at any given moment, which can be a frustrating limitation for me.

Stephanie Beatriz

Self-stigma plays a role in a larger theory, known as the minority stress theory (MST). This theory has fostered compassionate approaches towards LGBTQ+ identities by recognizing that LGBTQ+ identity is not an inherent mental illness. This model acknowledges that LGBTQ+ individuals are more susceptible to poor mental health outcomes, but these outcomes derive from minority stress and not innate illness. Minority stress is the additional stress an individual might face due to stigma, ostracism, discrimination, or violence in their environment (Meyer, 2003). These outward sources of stress are known as distal stressors, where prejudice encompasses all types of distal stressors. When exposed to distal stressors, an environment fails to meet the basic social needs of the individual, which leads to emotional distress (Meyer, 2003). MST also encompasses proximal stressors: expectations of rejection, concealment, and self-stigma (Meyer, 2003). These stressors are internal sources of stress caused by existing in an environment that is hostile towards one's social identity.

Due to the self-reflective nature of self-stigma, we consider self-stigma as a useful tool in connecting proximal stressors to one's sense of self. We have so far not found much evidence indicating whether bi-phobic attitudes play a distinctive role in the formation of self-stigma (Paul et al., 2014). We did, however, find numerous studies that indicate that bisexuals are more likely to conceal their identity compared to their gay/lesbian counterparts (Bejakovich & Flett, 2018; Feinstein & Dyar, 2017; Maciel & Barnett, 2021; Roberts et al., 2015), and that this concealment might reflect lower self-worth. In addition, with evidence that bisexuals are more likely to ruminate compared to other sexual minorities (Timmins et al., 2020), we question whether this stems from identity-based brooding. The concept of identity rumination for the LGBTQ+ community is novel but compelling. Some researchers, such as Pulice-Farrow and colleagues (2021) have even substituted identity rumination for self-stigma. With this in mind, we believe

that examining the frequency of stigmatized thoughts better reflects what beliefs they have internalized. By examining how often an individual has a stigmatized thought, we might better understand how this could damage their self-perspective, even if they do not consciously believe these attitudes. Before we discuss how varying dimensions of self-stigma might influence someone's sense of self, we want to review the phenomenon behind an individual's ability to believe in a true self and how this ability might reflect a secure sense of self and sexuality.

#### **Self-Essentialism**

You're not yourself. You're not what [they] want. You're someone in-between.

Isabelle McCalla

Psychological essentialism generally refers to a lay belief that an individual or social category has an innate "essence." This can cause people to make assumptions about group dynamics, personality, or in this case, sexual desire (Haslam et al., 2006). Psychological essentialism often leads to negative perceptions against low-status groups. Social psychology has also developed a growing interest in psychological essentialism towards the individual self, or self-essentialism (Dulaney et al., 2019). Self-essentialism is the individual belief that they have a "true self," "essence," or "entity." It often helps an individual make sense of actions or beliefs that do not align with their working sense of self (Dulaney et al., 2019). People often use the true self as a way of describing who a person truly is "deep down" (Schlegel & Hicks, 2011).

Psychological studies on the true self have found morality and authenticity as reliable indicators of measuring the true self (De Freitas et al., 2017; Fleeson & Wilt, 2010; Schlegel & Hicks, 2011). In addition, there is evidence that self-essentialism has a relationship with emotional wellbeing (Dulaney et al., 2019; Schlegel & Hicks, 2011).

With promising evidence on the benefits of accessing the true self, research regarding self-essentialism also considers what thought processes an individual devises to construct this sense of a true self. Dulaney and colleagues (2019) found that individuals who believe that their self is an entity, that their self has a biological basis, and that others can make informed predictions about this individual were three important facets that constructed self-essentialist beliefs. Defining self-essentialism through these dimensions allows researchers to consider what external factors contribute towards their general belief that they have a true self. It also creates a theoretical basis to examine what aspects of psychological essentialism can encourage or deter confidence with the true self.

By examining psychological essentialism, we expect to gain a deeper understanding of an individual's relationship between their social identity and their sense of self. There is already evidence suggesting that minority stress leads to lower self-esteem and higher rates of negative rumination for bisexuals, compared to other sexual minorities (Bridge et al., 2019; Timmins et al., 2020). Essentialist thinking can help us understand the types of beliefs an individual might acquire that damages their sense of self. Perhaps the essentialist bias against bisexuality (i.e., monosexism) overrides an individual's ability to feel trust and confidence in their true self.

Prior work in psychological essentialism suggests that categorizing groups into entities influence both ingroup and outgroup beliefs. Haslam and colleagues (2006) initially measured essentialism across two dimensions: naturalness and discreteness. They found that stigmatized groups, especially homosexuals, were seen as an entity, but not natural. These beliefs manifest into harmful stereotypes for this group (Haslam et al., 2006).

A different study, conducted by Morandini and colleagues (2015), found complementary results when studying gay men. They used the same dimensions to measure essentialism and found

that increased levels in naturalness were associated with decreased homonegativity and increased wellbeing. By contrast, discreteness was associated with increased homonegativity and decreased wellbeing (Morandini et al., 2015). These combined findings suggest that attributing a biological basis to bisexuality can foster positive attitudes, whereas viewing bisexuality as an entitative category yields negative stereotypes. Throughout our literature review, we found common trends, both directly and indirectly, that reflected how psychological essentialism plays a role in stereotyping sexual minorities into discrete categories and often denaturalizing their existence. We found the study by Morandini and colleagues (2015) especially interesting, because it already demonstrates how psychological essentialism can apply to one's own social identity and even foster self-stigma. This provides strong theoretical evidence that consistent bi-phobic thoughts could override essentialist thinking towards the self.

#### Self-Stigma and Self-Essentialism

I think people are born bisexual, and it's just that our parents and society kind of veer us off into this feeling of 'Oh, I can't.' They say it's taboo. It's ingrained in our heads that it's bad, when it's not bad at all. It's a very beautiful thing.

Billie Joe Armstrong

We identified four factors of self-stigma that reflect the internalization of bi-phobic beliefs: stereotypes, morality, identity uncertainty, and acceptance. In reviewing each factor, we highlight how they could potentially override a parallel dimension of self-essentialism: self-entitativity, biological basis, and informativeness. These predictions are key in recognizing why self-stigma could play a role in fracturing the sense of self; by replacing elements of a healthy true self with harmful tropes, an individual loses their sense of authenticity and principles that promote their emotional wellbeing. As we briefly mentioned, early research about the true self derived from feelings of authenticity and a sense of a moral self. As we discuss crucial factors of

self-stigma, we will also highlight how self-stigma can tear an individual away from experienced authenticity and connection with their moral self.

#### **Stereotypes**

Exposure to anti-bisexual stereotypes leads to the internalization of stereotypes, which partially explains the increased risk for negative health in bisexuals (Feinstein & Dyar, 2017). As marginalized members of a low-status group, bisexuals risk higher exposure to bi-specific stereotypes (Brewster & Moradi, 2010; Paul et al., 2014), LGBTQ+ stereotypes (Meyer, 2003), and differing respectability politics (Szymanski & Chung, 2001).

By brooding over societal beliefs that constrain sexual minorities into an entity, we expect that LGBTQ+ members will feel stripped of authenticity. Zhang and colleagues (2019) define authenticity as "staying true to the self" and demonstrate a variety of health benefits that come from authenticity. They also stress that being inauthentic can lead to stress, depression, and emotional suppression (Zhang et al., 2019). Authenticity also demonstrates higher levels of wellbeing, compared to self-complexity (Ryan et al., 2005). When an individual internalizes traits associated with their social identity, we expect that they will feel as though their own personality is not discrete. Haslam and colleagues (2006) demonstrated that adopting a belief that a group is discrete or distinct contributes towards negative stereotypes against them. We therefore expect that frequent thoughts about stereotypes could weaken their own essentialist assessment due to discrete beliefs about their social identity.

#### Morality

Cross-cultural research on the true self shows that not only do most cultures believe in a true self, but they believe in a "good," or moral, true self (De Freitas, 2017). Further studies found that people consider moral traits to be the most essential factors in determining the self or

"soul" (Strohminger & Nichols, 2014). In addition, many believe that a formerly amoral individual can align more with their true self when engaging in moral behaviors (De Freitas et al., 2017). These studies not only reflect that it is beneficial to develop a sense of a true self, but it is also a common belief for people to view the true self as an innately moral being.

Self-essentialism implies a presence of a true moral self (De Freitas et al., 2017; Schlegel, & Hicks, 2011), yet the denaturalization of sexual minorities has painted same-gender and multigender attraction as morally deviant (Meyer, 2003; Roberts et al., 2015). This explains why Morandini and colleagues (2015) found that higher levels of the naturalness belief in psychological essentialism reduced levels of homonegativity. Internalizing bisexuality as immoral might reflect how denaturalization can corrupt a sense of morality and predict lower levels of self-essentialism. For this reason, this factor will most likely align with the biological basis dimension of self-essentialism.

#### *Identity-Uncertainty*

When trying to illuminate mixed findings about bisexuality and emotional wellbeing, Bejakovich and Fletch (2018) found that certainty about sexual identity played a crucial role in predicting better emotional outcomes. They noticed that bisexuals and questioning participants had especially lower ratings in identity-certainty and therefore had lower levels of emotional wellbeing. Since bisexual attraction is often interpreted as a state of confusion or denial, it would make sense that those experiencing multigender attraction might doubt their experiences or struggle to concisely explain their attraction (Roberts et al., 2015). Bisexuality has also caused public confusion, with some believing there must be an equal level of attraction to all genders (Feinstein & Dyar, 2017), and others believing bisexuals have a gender preference compared to other plurisexual identities (Hayfield & Křížová, 2021).

Not only does identity uncertainty significantly predict poor emotional wellbeing, but it also causes cognitive dissonance (Bejakovich & Fletch, 2018). Cognitive dissonance is often used as a method of recognizing a threat to self-consistency (Graupmann, 2018). For these reasons, we believe that identity uncertainty as a dimension of self-stigma can not only highlight bi-specific stressors but also find direct links between bi experiences and self-essentialism.

### Belonging

This aspect of self-stigma often appears in varying scales (Brewster & Moradi, 2010; Mereish et al., 2017 Syzmanski & Chung, 2001) due to the significance belonging plays in self-construal (Graupmann, 2018). Syzmanski and Chung (2001) include two facets of belonging in their Lesbian Internalized Homophobia Scale. One facet involves the proximal stress of public stigma against lesbians, while the other delves into connection with other lesbians. These distinctions reflect that all sexual minorities struggle with both ingroup and outgroup belonging. We expect that examining specific factors that alienate bisexuals in both community and public spaces can also emphasize essentialist views towards the LGBTQ+ community that harm all sexual minorities. This is because if an individual relies on categorization to develop their identity, they might struggle to from self-entitative attitudes towards the self, due to ingroup and outgroup rejection.

### **Rationale and Hypotheses**

The proposed study intends to take a look into how sexual minority status impacts a sense of self. By focusing on self-essentialism, we can ponder how our experiences create a narrative that helps us understand ourselves. We predict that self-essentialism will mediate the relationship between minority stress, especially self-stigma, and emotional wellbeing. Specifically, higher rates of self-stigma would lower levels of self-essentialism, which would lower levels of

emotional wellbeing. We find it crucial to spotlight both multigender attraction and bisexual identification in our study to both bring more attention to this under researched population and for the unique perspective it offers for self-essentialism. By observing both multigender attraction and bisexual identification, we can review the separate roles that the sensation of attraction and minority status play in self-essentialism. Due to not finding any bisexual self-stigma scales at the time of this study, we adapt a popular measure for self-stigma in sexual minorities for exploratory purposes (Mohr & Kendra, 2011). We modified this scale and included adapted bi-specific items to capture a well-rounded assessment of self-stigma. We will also measure self-stigma related to same-gender attraction and multigender attraction separately<sup>1</sup>. We therefore have the following hypotheses:

**Hypothesis I.** Bisexual participants will experience more self-stigma compared to gay/lesbian participants and straight participants.

**Hypothesis II.** Bisexual participants will experience less self-essentialism compared to gay/lesbian participants and straight participants.

**Hypothesis III.** Bisexual participants will experience lower wellbeing compared to gay/lesbian participants and straight participants.

**Hypothesis IV.** Self-stigma will be negatively correlated with self-essentialism.

**Hypothesis V.** Self-stigma will be negatively correlated with wellbeing.

**Hypothesis VI.** Self-essentialism will be positively correlated with wellbeing.

<sup>1</sup> While we were able to identify four facets of self-stigma that we found valuable for our research, there is no self-stigma scale for multigender attraction that addresses these facets. For this reason, we chose to use a commonly accepted self-stigma scale intended for all sexual minorities. However, we found few items that included statements specific to multigender attraction. We picked 15 statements that best encompassed our criteria of self-stigma and wrote

ten additional statements that relate specifically to bisexuality.

**Hypothesis VII.** Using a mediation model, multigender attraction will predict lower levels of self-essentialism (a) & bisexual identity will predict lower levels of self-essentialism (b). In turn, lowered self-essentialism levels will predict lower wellbeing outcomes.

Hypothesis VIII. Using a serial mediation model, multigender attraction will predict higher levels of self-stigma (a) and self-stigma specific to bisexuality (b). Both types of self-stigma will predict lower levels of self-essentialism, and self-essentialism will predict wellbeing outcomes. Hypothesis IX. Using a serial mediation model, bisexual identity will predict higher levels of self-stigma (a) and self-stigma specific to bisexuality (b). Both types of self-stigma will predict lower levels of self-essentialism, and self-essentialism will predict wellbeing outcomes.

#### Method

#### **Participants**

A total of 751 participants completed this study. We recruited 563 of our participants from a Midwestern university between the ages of 18 and 64, using an online study management system through the university. With this system, we posted information about our study for recruitment purposes. We put a similar posting on Reddit, Survey Circle, and Facebook to recruit 63 participants within the same age range. The additional 125 participants were recruited through Prolific with a similar posting and fell between the ages of 18 and 85. In the post's description, participants learned that the study focused on volunteers who experience attraction to more than one gender, although participants of any orientation were eligible. If an individual was younger than 18, they could not participate in the study. The posting led participants to a Qualtrics survey, where they completed self-report questionnaires about their sexual orientation and their views on the self. Before completing the questionnaire, participants were directed to information

regarding the study and informed consent. Aligning with IRB standards, continuing to the survey reflected that the participants had read the consent and agreed to participate. Participants recruited through the Midwestern University received 0.5 credits toward their Introductory Psychology requirement as compensation. Social media recruits did not receive compensation, and Prolific recruits received 3 USD for completion of the study.

#### Procedure

Participants learned that the purpose of the research was to understand the nuance behind identity and to learn how this relates to the self. See Appendix A for the introduction paragraph informing participants about the nature of the study. Using a survey on Qualtrics, participants completed seven self-report measures and then provided demographic information; demographics are summarized in Table 1. All materials in the survey were presented in the same order for all participants.

Table 1

Demographic Characteristics of Participants in Study

	Factor	Total sample	
Gender		•	
	n	700	
	% Man	25.6%	
	% Woman	68.9%	
	% I prefer to describe myself		
	another way	5.5%	
Age			
	Mean	22.9	
	Range	18-85	
Ethnicity			
	n	637	
	% Caucasian	63.3 %	
	% African American	6.0%	
	% Hispanic or Latino/a	19.0%	
	% Asian	7.8%	
	% Other/Unknown	3.1%	
	% Prefer not to say	0.9%	
Sexual			
Orientation	n		
	n		
	% Straight	58.5%	
	% Gay/Lesbian	5.5%	
	% Bisexual	21.6%	
	% Plurisexual	9.6%	
	% Asexual	2.9%	
	% I prefer to describe myself	1.00	
	another way	1.8%	

## Materials

All materials are presented in Appendix A.

**Orientation and Multigender Attraction.** We asked participants what their sexual orientation is, clarifying to pick the identity that best describes them, even if multiple options

apply. We included a measure for romantic orientation, so asexual/aromantic participants that experience gender-based attraction were categorized accurately. There was also an option, "I prefer to describe myself another way." Participants were then asked to indicate how strongly they agreed with the statements "I experience sexual attraction to more than one gender," and "I experience romantic attraction to more than one gender," using a sliding scale. The scales ranged from 0-100, although these values were invisible for participants.

**Self-Stigma Scale.** Using the LGBIS (Mohr & Kendra, 2011), we selected 15 items that we found best captured self-reflective feelings towards sexual minority status ("I would be straight if I could," "I often wonder whether others judge me for my sexual orientation"). The remaining items fell into five subscales: acceptance concerns, concealment motivation, identity uncertainty, homonegativity, and difficult process. Participants were given an 8-point Likert scale (1= "Strongly disagree," 7= "Strongly agree," 8= "I do not experience attraction to the same/ more than one gender") to record their responses.

Multigender Self-Stigma Scale. We adapted ten of the 15 items from the LGBIS (Morh & Kendra, 2011) to add additional statements catered more towards bisexual experience ("I am careful about disclosing my 'heterosexual attraction' to LGT people") and wrote a few bispecific statements ("I worry that calling myself bisexual will make others think I am not attracted to all genders"). Participants were given an 8-point Likert scale (1= "Strongly disagree," 7= "Strongly agree," 8= "I do not experience attraction to the same/ more than one gender") for this measure.

**Self-Essentialism Scale.** To measure belief in a true self, we used the Self-Essentialism Scale developed by Dulaney and colleagues (2019). This measure includes 20 items using a 7-point Likert scale (1= "Strongly disagree," 7= "Strongly agree") for assessment. Items include

psychological essentialism applied to the self ("I have a distinct personality type") and belief in a true self ("I have a true self.") Exploratory factor analysis conducted by Dulaney and colleagues (2019) revealed a 3-factor structure: self-entitativity, informativeness, and biological basis.

**Religiosity.** We adapted the 10-Item Hoge Intrinsic Religiosity Scale (Hoge, 1972) to include statements that did not imply a specific religion ("Nothing is as important to me as serving my faith as best as I know how.") Participants completed this measure by responding to each item using a 7-point Likert scale (1= "Strongly disagree," 7= "Strongly agree"). This measure was used for exploratory purposes.

**Life-Satisfaction Scale.** To measure life-satisfaction, we used the Satisfaction with Life Questionnaire (SLQ), developed by Diener and colleagues (1985). This questionnaire contains five items (e.g., "In most ways my life is close to my ideal") using a 7-point Likert scale (1= "Strongly disagree," 7= "Strongly agree"). We also included an additional item ("I feel comfortable in my own skin").

**Meaning in Life Scale.** The Meaning in Life Questionnaire (*MLQ*; Steger et al., 2006) included ten items (e.g., "I understand my life's meaning") using a 7-point Likert scale (1= "Strongly disagree," 7= "Strongly agree"). This scale contains two subscales, presence of meaning (e.g., "My life has a clear sense of purpose") and search for meaning (e.g., "I am looking for something that makes my life meaningful").

**Subjective Happiness Scale.** The 4-item Happiness Scale (*SHS*; Lyubomirsky & Lepper, 1999) contained a 7-point numeric sliding scale (valued between 0 and 6) to allow participants to consider each statement uniquely. Participants responded to items such as "In general I consider myself..." (anchored by "not a very happy person" and "a very happy person").

#### **Results**

### Data Wrangling and Power

We completed all our data wrangling on SPSS (IBM Corp.). After removing incomplete responses from our data, we had a total of 751 participants. When using the sliding scale to assess strength of multigender attraction, some participants did not click on the slider, resulting in missing responses. However, because the slider starts at 0, it is possible that these participants assumed that by not clicking on the slider, their responses were recorded as 0. Further investigation revealed that participants who did not click on the slider often identified with monosexual and monoromantic orientations. For this reason, we replaced any missing values for this assessment with 0. Our self-stigma scale ranged from a score of 1-7, with the 8<sup>th</sup> option indicating that the participant did not experience same-gender or multigender attraction. To avoid analyzing this value on a self-stigma continuum, we recoded the 8 value as missing data. We shifted the SHS responses to fall on a 1-7 range, to stay consistent with our other scales.

Using G\*Power (Erdfelder et al., 2009), we conducted a post hoc analysis to determine the sample size required to compare the means between differing orientations. A two-tailed test required at least 50 participants per group to detect statistical power. This meant that only participants who indicated being heterosexual/straight (N=425), and bisexual/pansexual/omnisexual/polysexual (N=227)<sup>2</sup> demonstrated statistical power. Only 40 participants identified with homosexual/gay/lesbian orientations. We therefore were not able to explore all aspects of our hypotheses, which compared the outcomes of multigender attraction to

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<sup>&</sup>lt;sup>2</sup> Upon comparing mean scores between bisexual participants and other plurisexual participants, we did not find any significant statistical difference. We therefore combined mean scores for all plurisexual participants.

other sexual minority experiences. Throughout our analyses, we referred to our two groups as straight and multisexual.

#### Factor Analysis and Data Reduction

We conducted confirmatory factor analysis on our measures for general self-stigma (five factors), self-essentialism (three factors), life satisfaction (one factor), meaning in life (two factors), and general happiness (one factor) using jamovi (the jamovi project, 2021). Table 2 includes the results of these analyses. General self-stigma and self-essentialism demonstrated poor results by not meeting the combinational cutoff criteria (Hu & Bentler, 2009). For these measures, we conducted additional exploratory factor analyses to examine scale structure and unfit items. We also conducted exploratory factor analysis for the multigender self-stigma scale. We used oblimin rotation for our exploratory factor analysis and based our number of factors on eigenvalue values greater than 1 and factor loadings higher than 0.40.

Table 2

Goodness-of-Fit Summaries for Confirmatory Factor Analyses

			CFI	RMSEA	SMSR
Scale Measure	$\chi^2$	df	(>.9)	(< .06)	(< .09)
1. General Self-Stigma	380***	67	0.839	0.0915	0.109
2. Self-Essentialism Scale	1353***	167	0.832	0.101	0.0881
3. Life Satisfaction Questionnaire	47.4***	9	0.982	0.0781	0.0244
4. Meaning in Life Questionnaire	265***	34	0.947	0.0985	0.0706
5. Subjective Happiness Scale	2.48	2	1.000	0.0186	0.00907

*Note*. CFI = comparative fit index; RMSEA = root-mean-square error of approximation; SMSR = squared mean square residual.

Table 3 displays our factor analysis for self-stigma, which tested significant in Bartlett's test of sphericity and had a KMO value of 0.78. Our analysis presented two factors that

<sup>\*\*\*</sup>p < .001, p<.01, p<.05

demonstrate theoretical consistency. The first factor, minority status, included statements regarding outward perceptions of sexual orientation (i.e., "Being an LGB person makes me feel insecure around straight people") and LGB development (i.e., "I have felt comfortable with my sexual identity just about from the start"). The second factor, homonegativity, addressed attitudes about participants' own sexual orientation, such as "I am glad to be an LGB person." Based on low factor loading, we also removed one item ("My private sexual behavior is nobody's business"). We then evaluated the reliability of all general self-stigma items except the removed item ( $\omega = .82$ ). Finally, we computed a composite variable to measure general self-stigma.

Table 3

Adapted LGBIS Factor Loadings

	F	Factor			
	1	2	Uniqueness		
h_private_n		0.35	0.80		
h_straight_n		0.63	0.51		
h_comingout_n	0.63		0.60		
h_control_n	0.60		0.61		
h_business_nD			0.97		
h_admitting_n	0.74		0.43		
h_insecure_n	0.47		0.78		
h_judge_n	0.53		0.71		
h_careful_n	0.69		0.51		
h_slow_n	0.60		0.62		
h_wish_n		0.65	0.47		
h_glad_n		0.93	0.14		
h_proud_n		0.90	0.19		
h_natural_n	0.39	0.44	0.63		
h_comfortable_n	0.47		0.79		

*Note.* 'Minimum residual' extraction method was used in combination with a 'oblimin' rotation

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Table 4 displays our factor analysis for multigender self-stigma. This measure also tested significant in Bartlett's test of sphericity, with a KMO value of 0.76. The analysis suggested a unidimensional model and demonstrated poor factor loading for a single item ("I would rather keep my different-sex relationships private"). After removing this item from our factor, we ran a reliability check ( $\omega = .82$ ) and computed a composite variable to measure multigender self-stigma.

Table 4

Multigender Self-Stigma Factor Loadings

	Factor	
	1	Uniqueness
b_opposite_n	0.64	0.59
b_enough_n	0.67	0.55
b_attention_n	0.65	0.58
b_genders_n	0.38	0.85
b_gay_n	0.57	0.67
b_private_n		0.92
b_wish_n	0.53	0.72
b_more_n	0.44	0.81
b_insecure_n	0.64	0.60
b_careful_n	0.61	0.63

*Note.* 'Minimum residual' extraction method was used in combination with a 'oblimin' rotation

Our self-essentialism analysis, shown in Table 5, also had theoretically consistent factors, while demonstrating adequate sampling (KMO = 0.88) and significance in Bartlett's test of sphericity. Instead of three factors, we found four factors, with statements related to the true self

defining this fourth factor. We labeled the fourth factor internal essence to reflect a stable true self across varying behaviors. The original three factors will keep their given names, with self-entitativity containing fewer items. The four factors are self-entitativity ("I either have a certain attribute or I do not"), informativeness ("It is possible to know about many aspects of me once you come familiar with a few of my basic traits"), biological basis ("The kind of person I am can be largely attributed to my genetic inheritance"), and internal essence ("I have a true self even if I don't always act in accordance with it"). The item "The person I am deep down changes from situation to situation" demonstrated poor factor loading. We excluded this low factor loading item from our reliability analysis ( $\omega = .89$ ), resulting in 19 items to measure overall self-essentialism.

Table 5
Self-Essentialism Scale Factor Loadings

		Factor				
	1	2	3	4	Uniqueness	
e_boundaries	0.62				0.62	
e_attribute	0.82				0.37	
e_type	0.90				0.24	
e_defined	0.70				0.40	
e_either	0.78				0.26	
e_distinct	0.31				0.66	
e_predict			0.84		0.32	
e_possible			0.75		0.39	
e_quickly			0.70		0.43	
e_accurate			0.80		0.31	
e_gene		0.75			0.41	
e_bio		0.88			0.23	
e_trace		0.89			0.21	
e_inheritance		0.84			0.28	
e_true				0.83	0.33	
e_deep				0.69	0.50	
e_act				0.68	0.55	
e_guide				0.56	0.65	
e_identifiable			0.42		0.86	
e_situation					0.90	

*Note.* 'Minimum residual' extraction method was used in combination with a 'oblimin' rotation

Finally, we ran reliability analyses to compute composite variables for multigender attraction and wellbeing. We found that the items "I experience sexual attraction to more than one gender," and "I experience romantic attraction to more than one gender" demonstrated sufficient reliability. We computed a composite variable with these two items called multigender attraction. We also evaluated the combined reliability of life satisfaction, subjective happiness, and presence of meaning in life. We chose to not include the searching subscale of meaning in life, due to it not meeting our theoretical criteria of experiencing a sense of meaning or purpose.

We found sufficient reliability for our outcome measures ( $\omega$ =.93) and computed a wellbeing variable using these 15 items.

### Mean Comparisons across Identity

Using jamovi (the jamovi project, 2021) we conducted independent-samples t-tests to test Hypotheses 1-3. These hypotheses state that multisexual individuals experience (1) higher levels of both general and multigender self-stigma, (2) lower levels of self-essentialism, and (3) lower levels of wellbeing compared to gay/lesbian and straight individuals. Table 6 contains a descriptive table comparing the scores between straight and multisexual groups. We were unable to test our first hypothesis due to the small amount of monosexual participants completing the self-stigma assessments. Overall self-essentialism scores were significantly higher for straight participants (M = 4.31, SD = 0.88) compared to multisexual participants (M = 3.78, SD = 0.77); t(576) = 7.22, p < .001). These findings align with our second hypothesis that straight identified individuals experience a stronger belief in a true self. We also assessed wellbeing and found significantly higher scores for straight participants (M = 4.36, SD = 1.14) compared to multisexual participants (M = 3.99, SD = 1.07); t(574) = 3.72, p < .001). These results partially support our second and third hypotheses that multisexual individuals experience lower selfessentialism and wellbeing levels compared to straight individuals. Due to our small gay/lesbian sample size, we could not test the aspect of these hypotheses comparing multisexual scores with gay/lesbian scores.

Table 6

Descriptives of Straight and Multisexual Participants

	Group	N	Mean	Median	SD	SE
General Self-Stigma	Straight	51	3.99	4	0.761	0.1066
	Multisexual	190	3.5	3.46	0.997	0.0723
Multisexual Self-Stigma	Straight	75	3.52	4	1.126	0.1301
ben bugina	Multisexual	200	3.26	3.33	1.21	0.0856
Well-Being	Straight	380	4.36	4.37	1.137	0.0583
Well-Bellig	Multisexual	196	3.99	4	1.07	0.0764
Self- Essentialism	Straight	380	4.31	4.32	0.875	0.0449
	Multisexual	198	3.78	3.84	0.77	0.0547

### Correlations and Regression Analyses

Table 7 contains a bivariate correlation matrix examining bi attraction, self-stigma, multigender self-stigma, self-essentialism, and wellbeing. Hypotheses 4 and 5 state that both types of self-stigma would have negative associations with self-essentialism and wellbeing. Both types of self-stigma partially supported Hypothesis 5 but not 4. While self-stigma and multigender self-stigma had weak negative associations with wellbeing (r = -.15, p < .05); (r = -.18, p < .01), they demonstrated weak positive associations with self-essentialism (r = .16, p < .01); (r = .18, p < .01). Hypothesis 6 states that self-essentialism will positively correlate with

wellbeing. In support of Dulaney and colleagues' (2019) findings, we found self-essentialism positively correlated with wellbeing (r = .29, p < .001).

Table 7

Correlation Matrix

	Multigender Attraction	General Self- Stigma	Multigender Self-Stigma	Well- Being	Self- Essentialism
Multigender Attraction	_				
General Self- Stigma	-0.18 **	_			
Multigender Self-Stigma	-0.13 *	0.45 ***	_		
Well-Being	-0.10 *	-0.15 *	-0.18 **	_	
Self- Essentialism	-0.25 ***	0.16 **	0.18 **	0.29 ***	_

Note. \* p < .05, \*\* p < .01, \*\*\* p < .001. p values are uncorrected for multiple comparisons.

Before exploring our mediation models, we noticed that multigender attraction demonstrated a weak negative correlation with both general self-stigma and multigender self-stigma. Our correlation matrix demonstrated a moderate negative correlation between multigender attraction and self-essentialism and a weak negative correlation between multigender attraction and wellbeing. We therefore expect that higher scores of multigender attraction or identification with a multisexual identity will decrease levels of self-essentialism, therefore decreasing wellbeing outcomes, which aligns with our final hypotheses.

We used the medmod package on jamovi (Galluci, 2021) to assess these final three hypotheses. Hypothesis 7 states that self-essentialism would mediate the relationships between

multigender attraction & wellbeing and identity & well-being. We first tested Hypothesis 7a with a mediation model. See *Figure 1*. for a display of this model's pathway. We found a significant indirect ( $\beta$  = -.05, p < .01) and total effect ( $\beta$  = -.12, p = .04) with this model. Our direct effect was nonsignificant ( $\beta$  = -.07, p = .22). We also found significant effects for the relationship between multigender attraction & self-essentialism and self-essentialism & wellbeing. The significant indirect and total effects support our hypothesis that multigender attraction would negatively affect self-essentialism, while self-essentialism would positively affect wellbeing. To test Hypothesis 7b, we replaced our predictor, multigender attraction, with identity. *Figure 2*. displays this model's pathways. We found a significant indirect ( $\beta$  = -.08, p < .001), direct ( $\beta$  = -.09, p = .05), and total effect ( $\beta$  = -.16, p < .001) with this model and a significant pathway between identity and self-essentialism. This model also supports our hypothesis that identity would negatively affect self-essentialism.

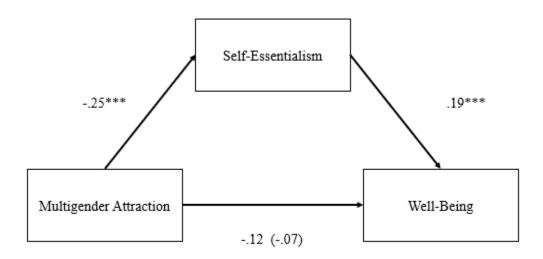


Figure 1. Standardized regression coefficients for the relationship between multigender attraction and wellbeing mediated by self-essentialism. Direct effect is indicated in parentheses. Note. \* p < .05, \*\* p < .01, \*\*\* p < .001.

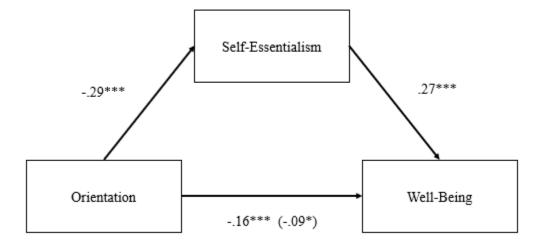


Figure 2. Standardized regression coefficients for the relationship between orientation and wellbeing mediated by self-essentialism. Direct effect is indicated in parentheses. Note. \* p < .05, \*\* p < .01, \*\*\* p < .001.

Hypothesis 8 states that multigender attraction will positively predict both general and multigender self-stigma. For Hypothesis 8a., we used a serial mediation model with multigender attraction as our predictor, general self-stigma and self-essentialism as our mediators, and wellbeing as our outcome. *Figure 3*. shows our path model for this analysis. We did not find a significant indirect effect of multigender attraction on well-being with the presence of both general self-stigma and self-essentialism ( $\beta = 0$ , p = .18). Multigender attraction showed a significant, negative effect on general self-stigma, which is opposite to our prediction that multigender attraction would increase general self-stigma. Additionally, when controlling for multigender attraction, general self-stigma does not have a significant effect on self-essentialism.

Although insignificant, the positive coefficient in this relationship also contrasts our prediction that general self-stigma would reduce self-essentialism levels.

When controlling for multigender attraction and general self-stigma, we see that self-essentialism has a positive effect on wellbeing, which aligns with our previous findings and predictions. When controlling for multigender attraction, we also see that general self-stigma has a negative effect on wellbeing, which we predicted. ( $\beta$  = .03, p = .07). In turn, both the direct effect ( $\beta$  = -.05, p = .48) and total effect ( $\beta$  = -.02, p = .75) of this model are insignificant. Therefore, this overall model examining the mediating role of general self-stigma does not support hypothesis 8a.

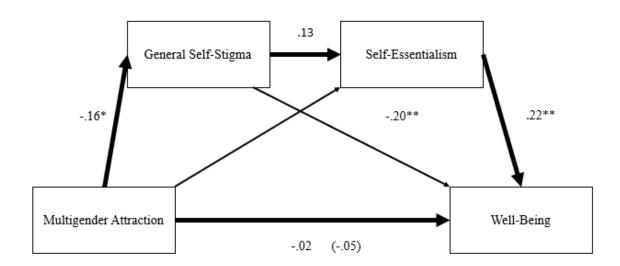


Figure 3. Standardized regression coefficients for the relationship between multigender attraction and wellbeing mediated by general self-stigma and self-essentialism. Direct effect is indicated in parentheses. Note. \* p < .05, \*\* p < .01, \*\*\* p < .001.

Next, we tested Hypothesis 8b., where we replaced general self-stigma with multigender self-stigma as our first mediator. *Figure 4.* shows the pathways for this model. The indirect effect

of this overall model was insignificant ( $\beta$  = -.0, p = .15) and did not support our hypothesis. We found a significant, negative effect of multigender attraction on multigender self-stigma, which is contrary to our prediction that multigender attraction would positively predict multigender self-stigma. When controlling for multigender attraction, we also found a significant positive effect of multigender self-stigma on self-essentialism, which is also contrary to our prediction that multigender self-stigma would reduce self-essentialism levels. However, both the direct effect ( $\beta$  = -.10, p = .14) and total effect ( $\beta$  = -.08, p = .25) of this model were insignificant. This model, which examines the mediating role multigender self-stigma does not support hypothesis 8b.

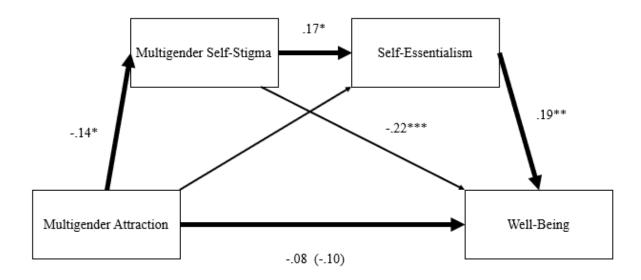


Figure 4. Standardized regression coefficients for the relationship between multigender attraction and wellbeing mediated by multigender self-stigma and self-essentialism. Direct effect is indicated in parentheses. Note. \* p < .05, \*\* p < .01, \*\*\* p < .001.

Hypothesis 9 states that a multisexual identity will play a similar role that multigender attraction plays in our model. Both hypotheses then predict that both types of self-stigma will negatively predict self-essentialism, which will negatively predict wellbeing. For Hypothesis 9a.,

we constructed a serial mediation model with identity as the predictor, general self-stigma and self-essentialism as mediators, and wellbeing as the outcome. See *Figure 5*. for this model's pathways. The indirect effect of identity on wellbeing in the presence of general self-stigma and self-essentialism was insignificant ( $\beta = -.01$ , p = .07). Identity had a negative effect on self-stigma, whereas we anticipated a positive effect. General self-stigma had a positive effect on self-essentialism when controlling for identity, like our models for hypothesis 8. General self-stigma demonstrated a negative effect on wellbeing when controlling for identity, while self-essentialism's effect on wellbeing was positive when controlling for identity. The direct effect of identity on wellbeing was significant ( $\beta = -.15$ , p = .03), while the total model was not ( $\beta = -.11$ , p = .12). Because of insignificant indirect and totally effects combined with the inverse relationship that identity had with general self-stigma, this model does not support hypothesis 9a.

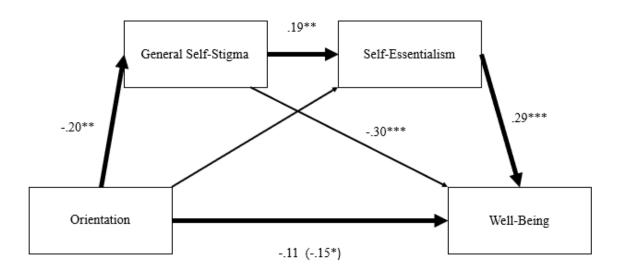


Figure 5. Standardized regression coefficients for the relationship between orientation and wellbeing mediated by general self-stigma and self-essentialism. Direct effect is indicated in parentheses. Note. \* p < .05, \*\* p < .01, \*\*\* p < .001.

Finally, we replaced general self-stigma as our first mediator with multigender self-stigma to test Hypothesis 9b. *Figure 6*. displays this model and its pathways. We found the indirect effect of identity on wellbeing with the presence of multigender self-stigma and self-essentialism to be insignificant ( $\beta = -.01$ , p = .16). Identity did not have a significant effect on multigender self-stigma, nor did it have a significant effect on self-essentialism when controlling for multigender self-stigma and did not support our predictions. We found a positive effect of multigender self-stigma on self-essentialism when controlling for identity, which is an inverse effect from our predictions. We also see a negative effect of self-stigma on wellbeing and a positive effect of self-essentialism on wellbeing when controlling for identity. The direct effect of identity on wellbeing is significant ( $\beta = -.13$ , p = .04), while the total model is not ( $\beta = -.12$ , p = .07). Because of the inverse relationships identity had on multigender self-stigma and that multigender self-stigma had on self-essentialism, this model does not support hypothesis 9a.

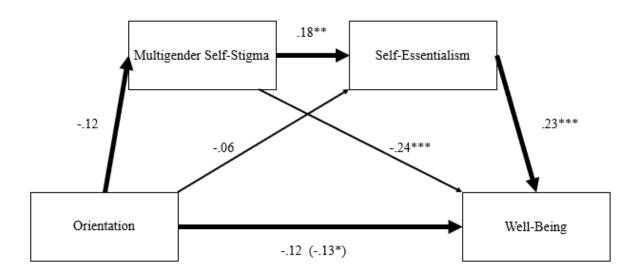


Figure 6. Standardized regression coefficients for the relationship between orientation and wellbeing mediated by multigender self-stigma and self-essentialism. Direct effect is indicated in parentheses.; Note. \* p < .05, \*\* p < .01, \*\*\* p < .001.

### **General Discussion**

### Major Findings

We used this study as a way to examine the relationship between sexual minority status and an individual's sense of self. Based on prior literature, we found evidence that minority status could hinder an individual's ability to believe they have a true self. Because current evidence suggests that believing in a true self can yield better emotional outcomes (Dulaney et al., 2019), we wanted to examine if this sense of self could provide insight into the relationship between minority stress and poor emotional health (Meyer, 2003). Evidence suggested that the proximal stressor, self-stigma, could especially influence a poor sense of self, since it causes an induvial to associate themselves with harmful misconceptions about their minority status (Meyer, 2003). We predicted that this phenomenon could affect bisexuals the most, due to cultural beliefs that this orientation is unstable (Roberts et al., 2015).

We developed nine hypotheses to address these predictions. Our first three hypotheses used mean comparisons between differing orientations to examine if bisexuals scored uniquely compared to other sexual minorities. Our specific assumption was that bisexuals would exhibit lower levels of self-essentialism and wellbeing compared to both straight and gay/lesbian participants. We were unable to fully test these hypotheses due to the small number of gay/lesbian participants in our study. Our data supported prior evidence that bisexuals experience poorer emotional outcomes compared to straight individuals (Bridge et al., 2019; Feinstein & Dyar, 2017). We also found lower self-essentialism scores for our bisexual participants compared to our straight participants. These scores suggest that sexual minority status might play a role in the relationship between self-essentialism and emotional wellbeing. However, we were unable to measure if this relationship stems solely from same-gender attraction, or if there is a

unique factor regarding multigender attraction. We were also unable to compare self-stigma scores, due to a low number of straight participants experiencing self-stigma and our small number of gay/lesbian participants. This prevented us from comparing different types of self-stigma deriving from either same-gender or multigender attraction.

Our next three hypotheses examined correlations between our variables. These helped us focus on the individual relationships between our variables before testing our final models. Our correlations mostly aligned with our predictions. We found positive correlations between self-essentialism and wellbeing, which supports Dulaney and colleagues' (2019) findings. We also found a negative association between self-essentialism and multigender attraction. Our data did not demonstrate a direct relationship between multigender attraction and wellbeing, but we nonetheless found that members of a low-status orientation scored lower in wellbeing. This suggests that other factors associated with multigender attraction might contribute to poor outcomes.

Our mediation analyses better illustrate this suggestion. We found significant indirect and total effects using self-essentialism as a mediator between multigender attraction and wellbeing, but we did not find a significant direct effect between multigender attraction and wellbeing. This demonstrates that experiencing multigender attraction could reduce self-essentialism, which could eventually impact wellbeing. We also found similar results when we used identity as a predictor instead of multigender attraction. However, this model also displayed a direct effect between identity and wellbeing. This further supports the notion that minority status, not attraction itself, plays a role in wellbeing.

We found those with multigender attraction to experience less self-essentialism. We predicted that self-stigma could mediate this account, because an individual would internalize

false beliefs about their orientation. Although our findings did not support this prediction, we believed self-stigma could hinder the ability to believe in a true self for several reasons. One reason is that monosexist stigma assumes that multigender attraction is unstable and inconsistent (Roberts et al., 2015), which could make it difficult to feel in touch with a true self. Another reason is that negative perceptions often paint same-gender and multigender attraction as immoral (Morandini et al., 2015), which could hinder the ability to feel in touch with a moral, true self (De Freitas et al., 2017). Finally, essentialist beliefs about sexual minority status could conflate with an individual's perception of themselves, resulting in a threat to their consistency (Graupmann, 2018).

We predicted that self-stigma, whether multigender or same gender, would predict lower levels of self-essentialism. However, our data mostly demonstrated an inverse relationship between both types of self-stigma and our constructs. Experiencing multigender attraction showed a negative association with self-stigma, not positive. We also found that both types of self-stigma positively predicted self-essentialism. Despite these unexpected results, we still found a negative relationship between self-stigma and wellbeing, which aligns with prior literature and our predicted model.

There are a few possible explanations behind our unpredicted results. Our main explanation is that the self-stigma measures used in this study did not properly measure the concept of self-stigma we established in our initial assessment. We used the *LBGIS* (Mohr & Kendra, 2011) due to the accessibility and popularity of this scale. However, we found that this scale measures all three proximal stressors, not just self-stigma. Even after removing statements that did not align with our definition of self-stigma, most statements in this scale did not encompass our established criteria. Several of these items addressed individual development as a

sexual minority, which might not reflect participants' current relationship with their orientation. There were also a few items that addressed identity concealment, which does not necessarily indicate a presence of self-stigma (Maciel & Barnett, 2021).

When developing our research questions, we predicted that specific facets of self-stigma could deter parallel facets of self-essentialism. However, this scale did not demonstrate any of the four facets of self-stigma that we found important in the literature. Our exploratory factor analysis suggested only two factors, neither of which properly reflected our anticipated factors. For these reasons, we believe that the measures used to reflect general and multigender self-stigma were inadequate. Self-stigma might be a key proximal stressor involved in our outcomes, but we did not properly measure self-stigma. We were therefore unable to identify if this trend exists.

Another possible reason behind our unexpected results is that self-stigma is not an underlying explanation behind low self-essentialism and wellbeing outcomes in bisexuals.

Instead, different proximal stressors or even distal stressors could better explain these results.

Feinstein and Dyer (2017) found that while many factors contribute to poor emotional and physical health outcomes for bisexuals, the leading cause of these outcomes is discrimination and prejudice. Timmins and colleagues (2020) also found that bisexual women experience more distal stressors when they are open about their orientation. Since our sample size consisted of mostly women, it is possible that an unmeasured distal stressor largely contributed to poor outcomes.

This assessment might explain why we did not find our anticipated results, but it does not address why our data displayed opposite relationships between self-stigma and other variables. It is possible that participants use both types of self-stigma to develop a sense of a true self. While

we did not measure if this is the case, there are a few noise variables to consider that might support this explanation. One potential noise variable is group commitment, which finds that higher commitment to a high threat group usually leads an individual to self-stereotype (Ellemers et al., 2002). Pulice-Farrow and colleagues (2021) further support commitment playing a key role in self-stigmatizing in their study that finds high involvement in LGBTQ+ spaces increased the likelihood of identity-based rumination. This is due to people often using rumination as a coping mechanism in high distress. Another potential variable is self-verification theory, which states that an individual will want others to view them the way they see themselves, even if this view is negative (Swann, 2012). Either variable suggests that our participants used internalized prejudice to shape their true selves. Perhaps by using self-essentialist thinking, they were able to buffer their wellbeing outcomes.

### **Implications**

The conducted study advances our understanding of self-essentialism, MST, and bisexuality. It is unlikely that multigender attraction directly leads to lower levels of self-essentialism, but our findings indicate that there is a significant link between these two constructs. By incorporating MST, especially self-stigma, into our analysis, we also recognize the varying mechanisms involved in poor health outcomes in bisexual communities.

Having a stable sense of self is vital to healthy emotional outcomes (Ryan et al., 2005; Schlegel & Hicks, 2011). When we feel secure in our sense of self, we can better predict our motives and behaviors (Ryan et al., 2005; Schlegel & Hicks, 2011). Self-essentialism is an especially helpful tool, because the "true self" informs the individual about their personality, its origins, and their actions (Dulaney et al., 2019; Schlegel & Hicks, 2011). As a novel construct in

essentialist literature, we have further contributed to early work demonstrating an important relationship between self-essentialism and wellbeing (Dulaney et al., 2019).

Our integration of self-essentialism with social identity also creates a new direction in this literature. We suggest that social identity and status can contribute to the attitudes and beliefs an individual develops about their core self. Our study asks what aspect of social identity could affect an individual's ability to self-essentialize. Because self-stigma is self-reflective, we believed it would have a substantial impact on how sexual minorities view their overall selves. This makes sense, because essentialist views about a social identity can influence how an individual perceives their own identity (Morandini et al., 2015).

Based on our literature review, we are cautious about our results indicating that self-stigma has a positive relationship with self-essentialism. While distal stressors could partially explain our results, we argue that this study highlighted the necessity for a reassessment in self-stigma measures. The *LGBIS* (Mohr & Kendra, 2011) claims to accommodate all sexual minorities, yet the inclusion of a 'B' in this acronym hardly addresses the unique instances of stigma that bisexuals and other plurisexuals could internalize (Paul et al., 2014). Instead, it only focuses on stigma related to same-gender attraction; this is only a piece of the puzzle in recognizing bisexual prejudice and its potential self-stigma. In addition, our self-stigma measure contained several items regarding concealment (Mohr & Kendra, 2011), despite recent evidence suggesting that identity concealment and self-stigma affect bisexuals differently (Maciel & Barnett, 2021),

Our failed efforts to properly measure bisexual and other plurisexual related self-stigma is a result of bi-erasure existing in LGBTQ+ literature. Even when studies examine how self-stigma affects bisexuals differently compared to gay/lesbian individuals, they do not account for

different messages that bisexuals may interalize. At the time of our data collection, only one study, conducted by Paul and colleagues (2014) has introduced self-stigma items related to bisexuality. Although unsuccessful, our attempt to create items regarding multigender attraction was crucial to set a basis for future studies that create plurisexual related self-stigma scales.

Monosexism harms not just plurisexual communities, but monosexual individuals as well (Roberts et al., 2015). It constructs a rigid understanding of desire and limits the ability in which we can explore human sexuality (Roberts et al., 2015). It also establishes a hierarchy of sexual desire, where heterosexuality is considered the most natural and acceptable orientation (Roberts et al., 2015). We believe that to fully comprehend the harm manifested from monosexism, we must incorporate these misconceptions into all self-stigma assessments. This study recognizes the importance of examining monosexism for all orientations by presenting all measures to all participants, regardless of identification.

### Limitations & Future Directions

The major limitations in our study involve not properly measuring the constructs we expected to analyze. Our study intended to separate bisexuality from other sexual minorities to extract unique relationships derived from multigender attraction, not just same-gender attraction. However, due to the small sample size of gay/lesbian participants, we inadvertently replicated other studies that do not primarily focus on bisexual experience. Without having a gay/lesbian group to compare with a bisexual group, it is impossible to infer if our results reflect the experiences of all sexual minorities, or if they specifically relate to multigender attraction. In future studies that highlight bisexual experiences, there should be a gay/lesbian group to analyze separately. Any future studies that examine sexual minority status and self-essentialism should

be mindful of the monosexist thoughts we outlined and consider comparing bisexuality with homosexuality.

Our study also intended to find a negative link between self-stigma and self-essentialism. Our literature review included a breakdown of which facets of self-stigma could directly impact established facets of self-essentialism. However, we could not find a self-stigma scale that fully encompassed our definition of self-stigma. For this reason, we used a popular measure of self-stigma that we found insufficient for this study. Based on our review, we believe that creating a new self-stigma measure would be the best way to capture bisexual self-stigma. To develop this new measure, a future study would need to create a large set of items and use exploratory factor analysis to determine which items would best measure bisexual self-stigma. We consider stereotypes, amorality, identity uncertainty, and belongingness to be crucial components of bisexual self-stigma. We have a few recommended sources to begin the development of such a scale.

When examining bi-specific stereotypes, we found studies conducted by Brewster & Moradi (2010) and Paul & colleagues (2014) were great starting points. We also found research by Szymanski & Chung (2001) delved into the complexities lacking a sense of belonging within the LGBTQ+ community while also not wanting to appear associated with negative perceptions of the community. Their research did not focus on bisexuality, but it still encompasses a dualistic identity that should play an important role in measuring self-stigma. Many self-stigma scales address the ethics of same-gender attraction, and we recommend also including statements that question bisexuals' ability to remain faithful in a relationship, their honesty, and their sexual drive (Roberts et al., 2015).

Identity uncertainty is another important and under-researched facet of bisexuality (Bejakovich & Flett, 2018). Even using a one-item measure to analyze uncertainty, Bejakovich & Flett (2018) found an insightful trend between uncertainty and emotional wellbeing. In our own review, we found that the *Self-Concept Clarity Scale* (Campbell et al., 1996) could be a profitable tool when adapting statements regarding sexual orientation. Paul and colleagues (2014) also created a few items related to an individual's relationship with their bisexuality and its stability.

Another element of bisexual identity that we hardly addressed is the different experiences between bisexuality and other plurisexual identities such as pansexuality and omnisexuality. Research differentiating these identities is novel and largely qualitative (Hayfield & Křížová, 2021). Our adapted self-stigma scale contained only one item addressing the misconceptions between these identities. With more qualitative research, we hope that future research can identify the dynamics these identities might play in self-stigmatization. We believe that given the similarities between these identities' misconceptions could contribute to identity uncertainty for plurisexuals.

We also believe that the best way to assess self-stigma is not to measure the weight of each statement but to measure the frequency that an individual worries or thinks about each statement. This can allow the study to assess if a participant broods over certain elements of their orientation. Recent literature has used rumination in place of self-stigma (Pulice-Farrow, 2021), and we find value in this perspective. Instead of determining how strongly a participant agrees with a statement, we can see how often a statement occupies a participant's mind. This type of self-reporting can provide a better lens into understanding how emotionally charged a statement is to a participant, regardless of the opinion they may hold about a statement. In addition, this

method of measurement can also allow us to see if self-stigma harms individuals who do not identify as bisexual. By doing so, we can examine if monosexist beliefs harm those with monosexual orientations. We also believe that this method of assessment can apply to gay/lesbian self-stigma scales that currently exist.

Our final limitation in our study was the colorblind methods we used. Despite attempting to naturalize bisexuality in psychological literature, we failed to acknowledge the intersections between racial/ethnic minority status and bisexuality. Because bisexuality is vastly underresearched, erasing racial and ethnic minorities further perpetuates misinformation about bisexuality (Muñoz-Laboy, 2019). In our study, we did not compare wellbeing outcomes between varying racial and ethnic groups. However, evidence suggests that both physical and emotional wellbeing across POC remain the same, regardless of specific LGBTQ+ identity (Mizra, 2019). In addition, POC are more likely to be LGBTQ+ than White people (Mizra, 2019). This can lead to large oversight when accounting for over half of the LGBTQ+ community identifying as bisexual (Beach & Hall, 2020; Mizra, 2019).

Limited research addressing bisexual experiences might blur the lines between the social context of bisexuality and the social context of racial minority status. Muñoz-Laboy (2019) recommends either taking a comparative approach between racial/ethnic groups or to first examine vulnerable groups. Any study aiming to replicate our findings, or similar findings, should be mindful of racial/ethnic minority status altering our found results. We also believe that any future self-stigma scales should include statements that address the intersection of bisexuality and racial/ethnic minority status.

#### **Conclusion**

A culture of monosexism has led to institutional doubt over the ability to experience attraction to more than one gender (Beach & Hall, 2020). This has led to mistrust in those who identify as bisexual and has even bled into doubt within the scientific community (Jabbou et al., 2020). To counter the erasure and mistrust of bisexuality, we assessed the perspectives and outcomes of this identity by considering the minority stress they experience (Meyer, 2003). We believed the best way to uplift bisexual voices in psychological spaces was to focus on their self-perspectives. We predicted that instances of minority stress could prevent bisexuals from feeling in touch with their "true selves," thus they experience a decline in their emotional health.

By highlighting the perspective of bisexuals and others that experience multigender attraction, we hope our research will bring more attention to substantial gaps in bisexual advocacy compared to other sexual minorities. We have demonstrated that our focus on multigender attraction can shed light on essentialist thinking that harms people of any sexual orientation, but especially bisexuals. We also outlined how several aspects of erasure in psychological research has created additional hurdles for those looking to provide bisexual advocacy.

Finally, we have introduced a theoretical bridge between social identity and self-essentialism. This offers one avenue of investigation when outlining the intrinsic processes used to form self-essentialist thought. Social identity plays a large role in our environment and emotional welfare. Our emphasis on an identity that has high vulnerability in varying environments helped us identify inner conflicts that could deter a stable sense of a true self.

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## **Appendix A: Study Materials**

### Introduction

The following survey aims to observe people who experience attraction to more than one gender in any capacity, although we welcome people of all sexual and romantic orientations to participate in this study. Some people have clear-cut terms or definitions to describe their orientation, while others have more fluid ways of identifying. We are trying to capture this nuance. We understand you might not 100% identify with certain labels or descriptions included in this survey, but we ask that you respond to these questions to the best of your ability.

#### **Orientation Assessment**

Which of these terms best describes your sexual orientation? There are a great variety of terms that people prefer. Here we want to do our best to capture what identity best describes your orientation. There may be more than one term that accurately describes your orientation, so please choose the term that you prefer the most (drop down box options below):

Heterosexual

Straight

Homosexual

Gay (attraction to men)

Gay (attraction to women)

Lesbian

Bisexual

Pansexual

Omnisexual

Polysexual

Asexual

Oueer

I prefer to describe myself another way:

What is your romantic orientation? (drop-down box)

Heteroromantic

Homoromantic

Biromantic

**Panromantic** 

**Omniromantic** 

Polyromantic

Aromantic

Oueer

I prefer to describe myself another way:

### **Sliding Scale Questions**

I am sexually attracted to more than one gender.

I consider myself to be bisexual.

I am romantically attracted to more than one gender.

I consider myself to be biromantic.

I experience sexual attraction to more than one gender but do not identify with bisexuality.

I experience romantic attraction to more than one gender but do not identify with biromanticism.

# Self-Stigma Items Adapted from Lesbian Gay and Bisexual Inventory (Mohr & Kendra, 2011)

- 1. I prefer to keep my same-sex romantic relationships rather private.
- 2. I would rather be straight if I could.
- 3. Coming out to my friends and family has been a very lengthy process.
- 4. I keep careful control over who knows about my same-sex romantic relationships.
- 5. I am glad to be an LGB person.<sup>3</sup>
- 6. My private sexual behavior is nobody's business.
- 7. Admitting to myself that I'm an LGB person has been a very painful process.
- 8. Being an LGB person makes me feel insecure around straight people.
- 9. I'm proud to be part of the LGB community.

## 10. Developing as an LGB person has been a fairly natural process for me.

- 11. I often wonder whether others judge me for my sexual orientation.
- 12. I think very carefully before coming out to someone.
- 13. Admitting to myself that I'm an LGB person has been a very slow process.
- 14. I wish I were heterosexual

### 15. I have felt comfortable with my sexual identity just about from the start.

Responses made on 8-point rating scale (1 = Does not describe me at all, 7 = describes me perfectly, 8 = I do not experience attraction to the same gender)

Acceptance Concerns= 7, 8, 11 Concealment Motivation= 1, 4, 6, 12 Identity Uncertainty= **5**, **9** Homonegativity= 2, 14 Difficult Process= 3, 7, 8, **10**, **15** 

<sup>&</sup>lt;sup>3</sup> Bolded items indicate reverse-coded statements

## The following questions are for people who experience attraction to more than one gender.

- 1. My attraction to the opposite sex makes me feel like I am not a true member of the LGBT community.
- 2. When I am in a different-sex relationship, I feel like I am not "gay enough" to be in the LGBT community.
- 3. I often wonder if I am only acting bisexual for attention.
- 4. I worry that calling myself bisexual will make others think I am not attracted to all genders.
- 5. I would rather be gay if I could.
- 6. I would rather keep my different-sex relationships private.
- 7. I wish that I were gay.
- 8. I can't decide whether I am attracted to one gender or more.
- 9. Being attracted to more than one gender makes me feel insecure around LGT people.
- 10. I am careful about disclosing my "heterosexual attraction" to LGT people.

Responses made on 8-point rating scale (1 =  $Strongly\ disagree$ , 7 =  $Strongly\ agree$ , 8 =  $I\ do\ not\ experience\ attraction\ to\ more\ than\ one\ gender$ )

Acceptance Concerns= 1, 2, 4, 9 Concealment Motivation= 5, 10 Identity Uncertainty= 3, 8 Binegativity= 5, 7

# **Hoge Intrinsic Religiosity Scale (Hoge, 1972)**

- 1. My faith involves all of my life
- 2. In my life, I experience the presence of the Divine (e.g., God)
- 3. Religious considerations influence my everyday affairs.
- 4. Nothing is as important to me as serving my faith as best as I know how.
- 5. My faith sometimes restricts my actions.
- 6. My religious beliefs are what really lie behind my whole approach to life.
- 7. I try hard to carry my religion over to my other dealings in life.
- 8. One should seek religious guidance when making every important decision.
- 9. There are more important things in life than religion.
- 10. It does not matter so much what I believe as long as I lead a moral life.

Responses made on 7-point rating scale (1 = Does not describe me at all, 7 = describes me perfectly)

### Self-Essentialism Scale (Dulaney et al., 2017)

- 1. The boundaries that define the differences between myself and others are clear-cut.
- 2. I either have a certain attribute or I do not.
- 3. I am either a certain type of person or I am not.
- 4. There are different 'types' of people and the 'type' of person I am can be easily defined.
- 5. The kind of person I am is clearly defined, I either am a certain kind of person or I am not.
- 6. I have a distinct personality type.
- 7. Generally speaking, once you know me in one or two contexts it is possible to predict how I will behave in most other contexts.
- 8. It is possible to know about many aspects of me once you become familiar with a few of my basic traits.
- 9. When getting to know me it is possible to get a picture of the kind of person I am very quickly.
- 10. Knowing about a few of the basic traits that I have can lead to accurate predictions of my future behavior.

# 11. Although I may have some basic identifiable traits, it is never easy to make accurate judgments about how I will behave in different situations.

- 12. There are different types of people and with enough scientific knowledge the 'type' of person I am can be traced back to genetic causes.
- 13. Whether I am one kind of person or another is determined by my biological make-up.
- 14. With enough scientific knowledge, the basic qualities that I have could be traced back to, and explained by, my biological make-up.
- 15. The kind of person I am can be largely attributed to my genetic inheritance.
- 16. I have a true self
- 17. Even if parts of me change over time, who I really am deep down stays the same
- 18. I have a true self even if I don't always act in accordance with it

## 19. The person I am deep down changes from situation to situation

20. My actions are guided by who I really am deep down

Responses made on 7-point rating scale (1 = Does not describe me at all, 7 = describes me perfectly)

Self-Entitativity= 1, 2, 3, 4, 5, 6, 16, 17, 18, **19**, 20

Informativeness= 7, 8, 9, 10, **11** 

Biological Basis= 12, 13, 14, 15

## Satisfaction with Life Questionnaire (Diener et al., 1985)

- 1. In most ways my life is close to my ideal
- 2. The conditions of my life are excellent
- 3. I am satisfied with my life
- 4. So far I have gotten the important things I want in life
- 5. If I could live my life over, I would change almost nothing
- 6. I feel comfortable in my own skin

Responses made on 7-point rating scale (1 = Does not describe me at all, 7 = describes me perfectly)

# The Meaning in Life Questionnaire (Steger et al., 2006)

- 1. I understand my life's meaning.
- 2. I am looking for something that makes my life feel meaningful.
- 3. I am always looking to find my life's purpose.
- 4. My life has a clear sense of purpose.
- 5. I have a good sense of what makes my life meaningful.
- 6. I have discovered a satisfying life purpose.
- 7. I am always searching for something that makes my life feel significant.
- 8. I am seeking a purpose or mission for my life.
- 9. My life has no clear purpose.
- 10. I am searching for meaning in my life.

Responses made on 7-point rating scale (1 = Does not describe me at all, 7 = describes me perfectly)

Presence= 1, 4, 5, 6, 9

Search= 2, 3, 7, 8, 10

	<b>ppiness</b> In gener	•	•	·	& Lepp	er, 1999)
0 1 2 3 4 5 Not a very happy person			4	5	6 a very happy person	
2.	Compar	ed to m	ost of n	ny peers	s, I cons	ider myself:
	0 1 2 3 4 5 Less Happy				5	6 more happy
3.	_	_	_	-		7. They enjoy life regardless of what is going on, what extend does this characterization describe you?
0 No All	1 t at	2	3	4	5	6 a great deal
4.	_	_	_	•	•	happy. Although they are not depressed, they never what extent does this characterization describe
0 No All	1 t at	2	3	4	5	6 a great deal