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PRESERVICE TEACHERS' KNOWLEDGE, ATTITUDES, AND COMFORT TOWARDS LGBTQ+ STUDENTS

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PRESERVICE TEACHERS' KNOWLEDGE, ATTITUDES, AND COMFORT TOWARDS
LGBTQ+ STUDENTS

By

CRASSANDRA MANDOJANA-DUCOT

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE
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ABSTRACT

In school settings, teachers are on the front lines for supporting lesbian, gay, bisexual, transgender, and queer (LGBTQ+) adolescents and have direct contact with students daily. Previous research establishes that LGBTQ+ adolescents are at a higher rate of experiencing mental health disorders compared to their cisgender and heterosexual peers due to high social stress from discrimination and bullying. The current study expanded upon previous literature by examining preservice teachers' knowledge, attitudes, and comfort towards LGBTQ+ students, the relationship between these factors, and teachers' intention to engage in school-based LGBTQ+ advocacy. Participants were 168 undergraduate and graduate level preservice teachers currently attending accredited teacher preparatory programs in the Northeastern United States. Results indicated that this sample of preservice teachers fostered a substantial degree of knowledge regarding the LGBTQ+ community, positive attitudes towards LGBTQ+ persons, and a high degree of comfort. These factors - knowledge, attitudes and comfort - were significantly related to each other. Levels of knowledge was also significantly associated with attitudes and comfort as well as future intent to support LGBTQ+ students. Further, their attitudes and comfort predicted future intent to advocate on behalf of LGBTQ+ students. Study implications and limitations are explored.

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PREFACE

The following dissertation was prepared using the Manuscript Format, as the author prepares this submission to the journal *Psychology of Sexual Orientation and Gender Diversity*.

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CHAPTER 1

Introduction

In the U.S. it is estimated that 11% of female adolescents identify as lesbian or bisexual, 2.5% of male adolescents identify as gay or bisexual, and 2.7% of adolescents identify as transgender or gender nonbinary (Chandra et al., 2011; Rider et al., 2018). Lesbian, Gay, Bisexual, Transgender, Queer/Questioning, Asexual, Intersex, and Two-Spirit (LGBTQAI2S, shortened to LGBTQ+ from here on) adolescents compared to their heterosexual and cisgender peers face a largely negative school environment due to bullying, social rejection, and isolation that leads to elevated rates of mental health diagnoses, substance abuse, and truancy (Chandra et al., 2011; Kosciw et al., 2016). Educator intervention in bullying and social support for LGBTQ+ students plays a critical role in influencing positive mental health outcomes for this population (Gower et al., 2017; Kosciw et al., 2016). Despite this, within the U.S. no studies have assessed educators or preservice educators' comfort towards LGBTQ+ students, particularly transgender students, and only a handful of studies have examined educators' and preservice educators' knowledge and attitudes towards lesbian and gay students (Koch, 2000; Morgan, 2003; Mudrey & Medina-Adams, 2008; Swanson & Gettinger, 2016). Thus, little is known about preservice educators' background, beliefs, feelings, and comfort level when educating LGBTQ+ youth. This gap in understanding is critical as preservice educators, during their applied training, have daily contact with LGBTQ+ students and can influence the quality of their students' school experiences. The current study surveyed preservice educators' knowledge, attitudes, and comfort with LGBTQ+

adolescents and examined how these factors influenced their future intent to support and advocate for LGBTQ+ students.

Mental health concerns are a major factor affecting the well-being LGBTQ+ youth. These youth face higher rates of internalizing disorders (i.e., anxiety, depression, and post traumatic stress disorder (PTSD)) than their heterosexual and cisgender peers (Marshall et al., 2011; Mustanski, et al., 2016). Approximately 30% of sexual minority youth meet the diagnostic criteria for anxiety, 18% for depression, and 11.3% for PTSD (Russell & Fish, 2016). While not well studied, some evidence suggests that bisexual adolescents appear to be at an elevated risk of depression (Russell & Fish, 2016). According to Becerra-Culqui and colleagues (2018), depression is very prevalent among transgender adolescents; in their sample of transgender youth, 49% of transfeminine youth and 62% of transmasculine youth were diagnosed with depressive disorders. Becerra-Culqui et al. (2018) reported a several-fold increased prevalence risk ratio for depression for transgender youth compared to an age-matched cisgender reference group. Additionally, transgender adolescents report an increased amount of traumatic events than cisgender adolescents, which elevate the rates of PTSD for transgender youth (Ellis, 2019).

In contrast, 25% of heterosexual/cisgender adolescents are diagnosed with an anxiety disorder, 8% are diagnosed with major depression, and 3.9% for PTSD (Kessler et al., 2012). These data demonstrate that LGBTQ+ youth face mental health problems at an elevated and disproportionate rate. The disparities between LGBTQ+ and heterosexual/cisgender youth mental health problems are likely attributed to the social

stress and exposure to stigma, victimization, discrimination, and unaccepting social environments faced by LGBTQ+ youth.

Minority Social Stress Theory (Meyers, 2003) suggests that conditions within the social environment are sources of stress that dramatically affect the lives of people with stigmatized identities, such as LGBTQ+ persons. Here, the concept of stress is associated with external events or conditions that are psychologically or physiologically taxing (Meyers, 2003). The theory suggests that those individuals with stigmatized backgrounds experience elevated stress as a result of their minority identity (Meyers, 2003). Meyers (2003) explains that the type of stress experienced by this population is unique, chronic, and socially based and has major implications for the development of poor mental health outcomes among transgender populations. Current research shows that LGBTQ+ adolescents exposed to unaffirming, unsupportive, and stressful social environments are at the greatest risk of experiencing negative mental health compared to LGBTQ+ adolescents who are not exposed to negative social environments (Kosciw et al., 2018; Mustanski et al., 2016). Meyer (2003) asserts that the evidence of poor mental health in LGBTQ+ populations is not due to the historical notion that homosexuality or “transgenderism” are disorders, but rather that the burden of societal stress supersedes a persons’ capacity to endure such stressors.

LGBTQ+ youth experience a variety of threats that compromise their mental health through elevated exposure to stress via victimization, bullying, and rejection. Bullying behavior can be relational, physical, verbal, sexual, or cyber-based (Swearer et al., 2009). Bullying based on sexual orientation and gender expression or identity is a threat to LGBTQ+ youth’s safety and social belongingness within schools. Studies have

shown that LGBTQ+ students exposed to moderate to high levels of bullying have a higher risk for developing depression, PTSD, and suicidal ideation than their non-bullied fellow students (Mustanski et al., 2016; Silberg et al., 2016). Transgender youth in particular face high rates of bullying within their schools. In the most recent Gay Lesbian and Straight Education Network (GLSEN) National School Climate survey, it was found that the majority (70.1%) of LGBTQ+ students experienced bullying from their peers (Kosciw et al., 2018). It is important to note that social rejection can also include not just overt bullying, but subtle peer rejection. Acting unsupportive or unaccepting towards LGBTQ+ youth can also lead to feelings of isolation and stress. Even subtler behaviors such as misgendering or denying the use of a preferred pronoun or name can convey rejection to the LGBTQ+ youth (Kosciw et al., 2018).

Other than the school environment, LGBTQ+ youth experience social stress within their home. For transgender adolescents in particular, family rejection is the most salient risk factor for negative mental health (Grossman et al., 2011; Klien & Golub, 2016). Familial rejection can lead to homelessness and survival sex work for LGBTQ+ youth (Klien & Golub, 2016). McConnell et al. (2015) examined different aspects of social support for a sample of transgender youth aged 16-20 years and clustered these into low, medium, and high social support within each identified social relationship: peer, family, and significant other. Among these social relationships, family support was particularly important for transgender adolescents and young adults for addressing mental health outcomes. Transgender youth with medium or high levels of supports were much less likely to endorse depressive symptoms compared to transgender youth with low levels of family support. Further, Klien and Golub (2016) indicated that when they

controlled for age, race/ethnicity, sex assigned at birth, binary gender identity, income, education, and employment status, only family rejection was significantly related to depression, suicide ideation and attempts. This illustrates the importance of family acceptance on transgender youth's mental health status and family rejection as a salient social stressor.

In schools LGBTQ+ youth can experience social stress that can lead to negative mental health. One source of information about the K-12 school experience of LGBTQ+ students - the GLSEN National School Climate Survey - has attempted to measure the social experiences of LGBTQ+ students utilizing a biyearly National School Climate Survey for youth attending K-12 educational settings. Data from the most recent GLSEN survey indicates that LGBTQ+ students face a largely negative school social environment (Kosciw et al., 2018). The majority (70.1%) of LGBTQ+ youth who participated in GLSEN's survey reported being verbally harassed at school (Kosciw et al., 2016). Fewer (28.9%) students indicated that they were physically harassed at school based on their sexual orientation (actual or perceived sexual orientation) and 12.4% of LGBTQ+ youth were assaulted at school for their identity (Kosciw et al., 2018). Transgender students were more likely to report feeling unsafe based on their gender compared to cisgender peers (83% versus 8%), reported higher rates of physical assault than their cisgender peers (83.7% versus 36%), and 46.5% had been denied appropriate access to a bathroom that matched their gender identity (Kosciw et al., 2018). These data indicate that bullying - verbal and physical - is a safety problem LGBTQ+ students experience at an alarming rate within their schools.

Positive social environments can act as a protective factor for LGBTQ+ youth. Research suggests that LGBTQ+ youth who have affirming social support experiences fare significantly better than youth who are subjected to social rejection, bullying, or unsupportive environments (Gower et al., 2017). LGB students exposed to supportive, safe school environments reported greater levels of school belongingness (56.1% versus 21.3%) and greater self-esteem compared to their peers exposed to unsupportive or unsafe environments (53.5% versus 34.1%; Kosciw et al., 2018). Transgender students who experienced low levels of bullying reported greater levels of school belongingness (70.5% versus 31.3%) and greater self-esteem (59.6% versus 34%) compared to transgender youth who experienced moderate to high levels of bullying (Kosciw et al., 2018). Some features of supportive schools include Gay-Straight-Alliances (GSA), inclusive curricula, anti-bullying policies, and supportive teachers (Kosciw et al., 2018).

LGBTQ+ students' school climates can be influenced by the inclusion of LGBTQ+-related materials or information in their curriculum. Kosciw et al. (2018) reported that an inclusive curriculum can include learning about LGBTQ+ historical events, LGBTQ+ positive role models, or access to curricular resources on LGBTQ+ related topics. However, in the U.S., states vary in regard to ways teachers can support and advocate to include LGBTQ+ students and LGBTQ+ topics (Swanson & Gettinger, 2016). For example, Massachusetts' curricular guidelines attempt to include gay and lesbian topics into sexual health curricula and California's FAIR Education Act mandates teaching materials (i.e., textbooks) to incorporate LGBTQ+ historical events or persons. In stark comparison, Alabama explicitly tells teachers to not promote this "lifestyle choice," a misnomer that serves to reinforce inaccurate information about LGBTQ+

youth (Swanson & Gettinger, 2016). Currently, the majority of students surveyed in the National School Climate Survey reported not being taught about any LGBTQ+ historical events or positive role models (Kosciw et al., 2018).

One of the most important features of a positive school climate for LGBTQ+ youth are affirming and supportive teachers. Teachers are on the front lines to intervene in harassment and provide school-based support to LGBTQ+ students. Swanson and Gettinger (2016) surveyed 98 secondary school teachers to examine their knowledge, attitudes, roles and perceived barriers to supporting LGBTQ+ students. Teachers' knowledge and attitudes were correlated with the frequency they participated in activities that supported LGBTQ+ youth; teachers who were involved in or supported their school's GSA and knew of their comprehensive anti-bullying policies exhibited greater levels of knowledge and more positive attitudes than teachers who were not.

The majority of teachers appear to understand the need to support LGBTQ+ students, but felt ineffective or limited in their ways to do so (Swanson & Gettinger, 2016). Interestingly, teachers' levels of knowledge about LGBTQ+ youth did not differ between schools with GSAs, comprehensive anti-bullying policies, or LGBTQ+-specific professional development for teachers. However, for teachers who were in schools with very active GSAs and reported receiving a high level of training regarding LGBTQ+ issues, they were most likely to endorse engaging in supportive behaviors compared to teachers who did not have an active GSA or did not receive high levels of training (Swanson & Gettinger, 2016). Teachers overall reported a lack of training and skills in regard to working with LGBTQ+ youth (87.4%), a lack of knowledge of the needs in this population (83.2%), and personal issues/discomfort with working with LGBTQ+ youth

(63.2%; Swanson & Gettinger, 2016). In sum, the most recent evidence suggests that educators appear to have a lack of knowledge regarding LGBTQ+ students' needs, hold slightly negative views towards LGBTQ+ youth, and the majority have some level of discomfort towards LGBTQ+ students.

Affirming and supportive teachers dramatically influence LGBTQ+ students' well-being at school. Data from the National School Climate Survey suggests that supportive staff members serve a vital role in creating positive school experiences, which influence students' academic aspirations (Kosciw et al., 2018). Overall, students who endorsed they had supportive school staff were more likely to plan to complete high school, to consider post-secondary education, and reported higher GPAs (3.5 vs. 3.0) than students who had no supportive staff (Kosciw et al., 2018). LGBTQ+ students reported better attendance and felt safer when staff consistently intervened when biased remarks (i.e., slurs) or gender/sexuality-based bullying occurred in their schools in comparison to students without educator intervention (Kosciw et al., 2018).

An effective method for teachers to demonstrate their support for LGBTQ+ students is to display Safe Zone/Space stickers or similar posters. Students report feeling more comfortable discussing LGBTQ+ related topics with teachers displaying these affirming messages compared to teachers who did not display these messages (53.2% vs. 30.4%; Kosciw et al., 2018). These data show that when educators exhibit supportive attitudes and appear to be comfortable with LGBTQ+ students, these affirming messages directly affect students' well-being and school functioning.

Although preservice educators' knowledge, attitudes, and comfort towards LGBTQ+ students are not well known, a careful review of the literature revealed some

studies that examined their knowledge and attitudes towards lesbian and gay students. Some data suggests that preservice teachers do not view topics of social justice, in particular sexuality and gender identity, as paramount for establishing supportive school environments and positive school climates (Robinson & Ferfolja, 2001). In interviews with preservice educators attending a university in Australia, Robinson and Ferfolja (2001) reported that preservice educators were resistant to discuss topics about sexuality and did not want to seek out training concerning LGBTQ+ issues. Participants were enrolled in a mandatory 12-week multicultural course to learn about societal inequities and diversity as a part of their educational degree curriculum. Preservice teachers reported that sexuality was not the concern of schools or teachers, and such topics could be controversial in certain communities. In contrast, preservice teachers showed less resistance when discussing other diversity topics in the course, such as multiculturalism or ethnic diversity (Robinson & Ferfolja, 2001). There were also reported differences based on educators' discipline, with humanities teachers more likely to acknowledge social justice issues as important to discuss in educational settings, whereas STEM educators felt these issues were irrelevant to their courses (Robinson & Ferfolja, 2001). These preservice educators felt "lifestyle choices" would not arise in their classroom because it was not related to their subject matter content.

A dissertation conducted by Koch (2000) surveyed 813 preservice educators in Illinois to examine differences in attitudes towards lesbian and gay youth between general and special educators. Koch (2000) reported no differences in levels of knowledge or attitudes towards gay or lesbian students between general and special educators. The majority of preservice educators (57%) endorsed a need for more training

on LGBTQ+ issues. Differences in knowledge and attitudes regarding lesbian and gay youth were found based on gender, previous instruction on homosexuality, locus of institutional setting (public versus private schools), and educational level.

Females/women and teachers in private schools reported more positive attitudes than males or preservice teachers in public schools (Koch, 2000). Additionally, higher levels of education, possessing a teaching certificate, and having previous instruction on gay/lesbian issues contributed to higher levels of knowledge and positive attitudes.

Ultimately, having friends with diverse sexualities was the strongest predictor of positive attitudes and greater levels of knowledge (Koch, 2000).

Morgan (2003) reported some similar findings to Koch (2000) in their sample of 408 preservice regular and special education teachers attending colleges in the Mid-Atlantic U.S. Morgan (2003) found that preservice educators held slightly negative attitudes towards the lesbian and gay population and a lack of knowledge about lesbian and gay issues. There were no differences in levels of knowledge or attitudes towards lesbian and gay students between the types of preservice teachers (by subject, general or special education; Morgan, 2003). Comparably, Mudrey and Medina-Adams' (2008) sample of 200 preservice educators in a Midwestern university reported that over half of participants held negative views about lesbian and gay students. Preservice teachers of color on average endorsed greater amounts of homophobia and less knowledge about sexuality compared to White preservice teachers. While these findings are illuminating, the results may not be applicable to the current generation of preservice educators, especially given changes in society throughout the past 20 years, including expansion of LGB civil rights, changing societal attitudes, and related social activism.

As yet, no studies offer insight into preservice educators' levels of comfort with LGBTQ+ youth, and how comfort impacts their knowledge, attitudes, or behaviors with LGBTQ+ students. It is important to know about comfort as teachers interact closely and regularly with sexual minority youth; their level of comfort may implicitly influence their interactions with LGBTQ+ youth. There is also no data on the relationship between knowledge and attitudes of preservice educators and their future intent to advocate for LGBTQ+ youth. Further, the studies that have examined preservice teachers' attitudes or knowledge on this topic have not included measures regarding transgender, gender nonbinary, and bisexual students (Morgan, 2003; Mudrey & Medina-Adams, 2008; Robinson, & Ferfolja, 2001; Szalacha, 2004). Given the impact that affirming, supportive educators can make for LGBTQ+ students, examining current preservice teachers' knowledge, attitudes, and comfort, and if these factors relate to future intent to advocate for LGBTQ+ students, is important.

Purpose of Present Study

The purpose of this study was to explore preservice educators' knowledge, attitudes, and comfort towards lesbian, gay, bisexual, and transgender (LGBTQ+) students. A secondary purpose was to examine if greater levels of knowledge regarding school-based LGBTQ+ issues are associated with more positive attitudes and greater levels of comfort. Finally, this study examined if knowledge, positive attitudes, and comfort influence educators' future intent to provide support and to advocate for school-based supports for LGBTQ+ students. Preservice teachers, enrolled in college at either the undergraduate or graduate level, were surveyed utilizing the Transgender Attitudes and Beliefs Scale (TABS), Lesbian, Gay, and Bisexual Knowledge and Attitudes Scale

(LGB-KAS), a researcher developed measure of advocacy intent (Teacher LGBTQ+ Advocacy Questionnaire), and the Homonegativity as Discomfort Scale (HADS).

Research Questions

The following research questions were explored in the present study:

1. What are pre-service educators' knowledge, attitudes, and comfort about LGBTQ+ students? In this exploratory question, the variables knowledge, attitudes, and comfort were measured utilizing the TABS, LGB-KAS, and HADS.

2a. Are levels of knowledge about LGBTQ+ issues associated with attitudes and comfort towards LGBTQ+ students? The results of the LGB-KAS Knowledge subscale and TABS subscales (Interpersonal Comfort, Sex/Gender Beliefs, and Human Value), LGB-KAS subscales (Internalized Affirmativeness, Civil Rights Attitudes, Religious Conflict, and Hate), and HADS score served as the variables in calculating correlations.

2b. Are levels of knowledge about LGBTQ+ issues associated with intent to support and advocate for LGBTQ+ students? The results of the LGB-KAS Knowledge subscale and participants' endorsement of future supportive behavior (as measured by the researcher-developed advocacy scale) functioned as the variables under study in calculating correlations.

3. Are attitudes and comfort levels towards LGBTQ+ people associated with future intent to support and advocate for LGBTQ+ students? The results of the LGB-KAS, TABS, and HADS functioned as independent variables while participants' endorsement of future supportive behavior (as measured by the researcher-developed advocacy scale) functioned as the dependent variable in a multiple regression analysis.

CHAPTER 2

Method

Participants

Students enrolled in undergraduate and graduate teaching preparation programs were recruited from the following universities in the Northeastern U.S.: University of Rhode Island, Rhode Island College, Providence College, Roger Williams University, University of Connecticut, Western Connecticut State University, Southern Connecticut State University, Central Connecticut State University, Eastern Connecticut State University, and Boston University: Wheelock College of Education. Participants were required to be at least 18 years of age and enrolled in an accredited teacher preparation program.

Although 208 participants initially responded, due to incomplete responses, 40 were excluded yielding a sample of 168 participants. One-hundred sixty-eight (168) participants responded to demographic inquiries, such as gender identity, sexual orientation, race/ethnicity, and age (see Table 1). The majority of participants attended university or college in Rhode Island ($n = 78$, 46.4%), followed by Connecticut ($n = 67$, 39.9%), and Massachusetts ($n = 22$, 13.1%). Most respondents were women ($n = 111$, 66.1%), followed by men ($n = 39$, 23.2%), and one individual identifying as transgender and nonbinary (0.6%). Ages ranged from 18 years ($n = 31$, 18.5%) to 42 years ($n = 1$, .6%). The average participant was 20 years old ($M = 20$). More than half of the participants identified as straight or heterosexual ($n = 118$, 70.2%). However, a considerable number ($n = 50$, 29.7%) of participants identified as part of the LGBTQ+ community; 26 participants reported being bisexual (15.5%), seven participants were

pansexual (4.2%), six identified as lesbian (3.6%), four identified as gay (2.4%), two identified as asexual/aromantic (1.2%), and one individual identified as queer (0.6%). A few participants ($n = 4$, 2.4%) selected multiple sexual orientations. Similar to current demographic data on U.S. teachers, the majority in this sample were White/Caucasian ($n = 112$, 66.7%) and within almost equal numbers identifying as Asian/Pacific Islander ($n = 22$, 13.1%) or African American/Black ($n = 21$, 12.5%). Several participants identified as biracial or mixed of three or more races ($n = 10$, 6.0%). Twenty-eight individuals (16.7%) identified as Latinx/Hispanic. The majority of participants knew someone who identified as LGBTQ+ ($n = 157$, 93.5%).

Table 1

Sample Characteristics

| Characteristic | <i>n</i> | % | Cumulative percentage |
|------------------------|-----------------|----------|------------------------------|
| Gender | | | |
| (Cis)Woman | 111 | 66.1 | 66.1 |
| (Cis)Man | 39 | 23.2 | 89.3 |
| Nonbinary/Transgender | 1 | 0.6 | 89.9 |
| Missing | 17 | 10.1 | 100 |
| Race | | | |
| White/Caucasian | 112 | 66.7 | 93.9 |
| Asian/Pacific Islander | 22 | 13.1 | 79.8 |
| Black/African American | 21 | 12.5 | 92.3 |
| Biracial/Mixed | 10 | 6.0 | 98.3 |
| Missing | 3 | 1.8 | 100 |

| Ethnicity | | | |
|-----------------------|-----|------|------|
| Not Hispanic/Latinx | 139 | 82.7 | 83.2 |
| Hispanic/Latinx | 28 | 16.7 | 99.9 |
| Missing | 1 | .6 | 100 |
| Sexual Orientation | | | |
| Heterosexual/Straight | 118 | 70.2 | 70.2 |
| Bisexual | 26 | 15.5 | 85.7 |
| Pansexual | 7 | 4.2 | 89.9 |
| Lesbian | 6 | 3.6 | 93.5 |
| Gay | 4 | 2.4 | 95.9 |
| Asexual/Aromantic | 2 | 1.2 | 97.1 |
| Queer | 1 | .6 | 97.7 |
| Multiple | 4 | 2.4 | 100 |
| Location | | | |
| Rhode Island | 78 | 46.4 | 46.4 |
| Connecticut | 67 | 39.9 | 86.3 |
| Massachusetts | 22 | 13.1 | 99.4 |
| Missing | 1 | .6 | 100 |
| Know LGBTQ+ Person | | | |
| Yes | 157 | 93.5 | 93.5 |
| No | 11 | 6.5 | 100 |
| Age | | | |
| 18 | 31 | 18.5 | 18.5 |
| 19 | 23 | 13.7 | 32.2 |
| 20 | 26 | 15.5 | 47.7 |

| | | | |
|---------|----|------|------|
| 21 | 35 | 20.8 | 68.5 |
| 22 | 17 | 10.1 | 78.9 |
| 23 | 13 | 7.7 | 86.3 |
| 24 | 5 | 3.0 | 89.3 |
| 25 | 4 | 2.4 | 91.4 |
| 26 | 3 | 1.8 | 93.5 |
| 28 | 1 | .6 | 94.1 |
| 29 | 1 | .6 | 94.7 |
| 41 | 1 | .6 | 95.3 |
| 42 | 1 | .6 | 95.9 |
| Missing | 7 | 4.2 | 100 |

Questions regarding participant’s educational status, such as location and type of degree they were pursuing or their program, are reported in Table 2. The majority of participants were undergraduates ($n = 135, 80.4\%$) compared to graduate students ($n = 28, 16.7\%$), with five missing responses. Many participants were students pursuing a Bachelor’s degree ($n = 135, 46.4\%$) and there were several graduate students who participated ($n = 22, 13.1\%$), five participants were pursuing an Associate’s degree in education. Most of the participants desired to teach primary grade level ($n = 65, 38.7\%$) or secondary grade levels ($n = 61, 36.6\%$).

Table 2
Sample’s Educational Status and Teaching Interests

| Characteristic | <i>n</i> | % | Cumulative percentage |
|-----------------------|-----------------|----------|------------------------------|
|-----------------------|-----------------|----------|------------------------------|

| Level of Education | | | |
|----------------------|-----|------|------|
| Undergraduate | 135 | 80.4 | 80.4 |
| Graduate | 28 | 16.7 | 97.1 |
| Missing | 5 | 3 | 100 |
| Degree Type | | | |
| Bachelors' | 135 | 46.4 | 80.4 |
| Masters' | 28 | 39.9 | 97.0 |
| Associates | 5 | 3.0 | 100 |
| Teaching Level | | | |
| Secondary | 61 | 36.6 | 36.6 |
| Primary | 65 | 38.7 | 75.3 |
| PreK/Early Education | 19 | 11.3 | 86.6 |
| Post-Secondary | 12 | 7.1 | 93.7 |
| Missing | 11 | 6.5 | 100 |

Measures

Participants were asked to respond to demographic and educational background questions in addition to the four additional measures. Data was collected on demographic and educational background characteristics such as gender identity, sexual orientation, race/ethnicity, age, whether they know someone who is LGBTQ+, their level of education (i.e., undergraduate, graduate), type of degree program enrolled in, state in which they were attending college, and age level they plan to teach upon graduation (see Tables 1 and 2).

Participants also responded to four questionnaires to measure knowledge, attitudes, and comfort towards LGBTQ+ people, as well as their intent to advocate for LGBTQ+ students. The Lesbian, Gay, Bisexual Knowledge and Attitude Scale (LGB-KAS), developed by Worthington et al. (2005), was utilized to measure participants' knowledge and attitudes towards LGBTQ+ people (Appendix C). This scale, containing 28 items, assesses attitudes and knowledge levels regarding LGB individuals. Heterosexual or LGB participants can complete the LGB-KAS. All items are measured on a six-point Likert type scale (1= very uncharacteristic of me, 6 = very characteristic of me).

The LGB-KAS has five subscales; each subscale has adequate internal consistency ($\alpha >.70$; Fisher et al., 2011). The *Internalized Affirmativeness* subscale (5 items) assesses willingness to engage in proactive social activism for LGB issues and an internalized sense of comfort with same sex attraction. Higher scores in this domain indicated greater levels of comfort regarding same sex attraction and activism for LGB rights. The *Civil Rights Attitudes* subscale (five items) measures beliefs about the civil rights of LGB individuals with respect to marriage, child rearing, health care, and insurance benefits. Elevated scores on this subscale indicates liberal or affirming attitudes towards LGB civil rights. The *Knowledge* subscale (five items) measures basic knowledge about the history, symbols, and organizations related to the LGB civil rights movement. Higher scores in this domain indicates greater knowledge about LGB civil rights issues. The *Religious Conflict* subscale (seven items) measures opposing religious beliefs and homonegativity. Low scores on this subscale indicate opposing religious views towards LGB rights and high levels of homonegativity. The *Hate* subscale (six

items) measures attitudes about violence, avoidance, and hatred towards LGB persons. High scores in this domain indicates that a participant fosters violent or excessive negative attitudes towards LGB persons. The LGB-KAS is reported to have good discriminant validity, construct validity, and convergent validity (Fisher et al., 2011).

The Transgender Attitudes and Beliefs Scale (TABS), developed by Kanamori et al. (2017) was utilized to measure participants' attitudes and comfort towards transgender people, knowledge about sex and gender, and human value of transgender persons (see Appendix D). This measure has three subscales and contains 29 items, with adequate internal consistency ($\alpha = .97$). The first subscale, *Interpersonal Comfort* (14 items), relates to how comfortable socially a participant indicates they are around someone who is transgender. Higher scores on this subscale indicates greater comfort with transgender people. The second subscale is *Sex and Gender Beliefs* (10 items). In this subscale, participants endorse their level of agreement with conventional or progressive views of sex and gender. For example, participants are asked to rate their agreement with statements such as: "A person who is unsure of their gender is mentally ill" (Kanamori et al., 2017; this item is reverse coded). Higher scores on this subscale may indicate that the participant has liberal or progressive views of sex and gender. The third subscale is the *Human Value* subscale (five items). For *Human Value*, this subscale assesses the value participants have for people who are transgender, regardless of their own opinions of transgender topics or sex and gender. A high score on this subscale indicates that the participant values someone who is transgender regardless of their views on transgender issues or rights.

The Homonegativity as Discomfort Scale (HADS) was used to measure participants' comfort towards LGB people (Monto & Supinski, 2014; Appendix E). This scale was designed to measure the level of discomfort (or comfort) of being in close proximity to LGB people (Monto & Supinski, 2014). In this measure, participants respond to 12 vignettes describing situations in which people may experience discomfort in the presence of sexual minorities. Participants rate their level of comfort with each situation on a five-point Likert scale (1 = very comfortable, 5 = very uncomfortable). For example, participants are asked to rate their level of comfort with this situation: "You are eating dinner with a close male friend who you have always assumed was heterosexual. During the conversation, he reveals to you that he is gay and has a long-term partner. How does this make you feel?" (Monto & Supinski, 2014). Total scores ranged from 12 to 60 points, in which lower scores indicate greater comfort (Monto & Supinski, 2014). The HADS demonstrates adequate internal consistency ($\alpha = .92$), criterion related validity, and construct validity when compared to existing scales measuring homonegativity (Monto & Supinski, 2014).

Finally, participants completed a researcher-developed questionnaire, the Teacher LGBTQ+ Advocacy Questionnaire, to assess future intent to advocate for LGBTQ+ students (see Appendix F). The Teacher LGBTQ+ Advocacy Questionnaire was constructed based on a review of current social justice advocacy scales used by social workers, counselors, and teachers (Barazanji, 2012; Chen-Hayes, 2001). The researcher also included common themes from the National School Climate Survey such as pronoun use, bullying interventions, and anti-bullying policy (Kosciw et al., 2018). During item development, a panel of experts (three faculty associated with the University of Rhode

Island with an academic interest in sexuality and gender diversity) reviewed the initial pool of items regarding their content validity. Experts rated the 16 items based on their representativeness, clarity, and relevance to areas of advocacy teachers can engage in within schools regarding LGBTQ+ students. Based on expert input, changes were made to the final version of the scale was expanded to include 18 items asking about preservice teachers' intent to advocate for LGBTQ+ students. For example, an item asked participants to endorse how strongly they agree they could advocate for a GSA (or similar group) to be established or to be an advocate as a faculty advisor (see Appendix J). Higher scores in this measure indicated a teacher intends to advocate on behalf of their LGBTQ+ students, whereas lower scores indicated less of a likelihood to advocate. Analyses reveal adequate internal consistency ($\alpha = .97$) in the present sample.

Procedure

After the present study was submitted to and approved by the University of Rhode Island Institutional Review Board, preservice teachers were recruited from teacher preparatory programs at universities and colleges in the Northeastern U.S. (i.e., Rhode Island, Connecticut, and Massachusetts) during the Fall and Spring of the 2020-2021 school year. Researchers communicated with professors and directors of the teacher preparatory programs to distribute the online survey link to their students (see Appendix H for recruitment script). One-hundred sixty-eight preservice educators who elected to respond to the study's recruitment call constituted the final sample.

Within the online portal, upon following the anonymous link provided by their professors, participants were directed to the informed consent and study description page. Following an endorsement that a participant was above the age of 18, understood and

agreed to the informed consent procedure, and was enrolled in a teacher preparatory program, they were directed to the demographic and background questions. Then, measures assessing knowledge, attitudes, and comfort levels towards LGBTQ+ persons (LGB-KAS, TABS, HADS) and the measure assessing future intention of advocacy (Teacher LGBTQ+ Advocacy Questionnaire) were presented in randomized order to the participant. After completing all measures, participants were invited to enter an email address to participate in a raffle drawing to win one of three \$25 Amazon gift cards; the emails were not linked to the responses and only used for the raffle drawing. A random number generator was used for three numbers, which corresponded to a participant email. At the conclusion of the data collection, three participants were sent a gift card for \$25. Finally, the responses were collected, with email addresses removed, and coded for analysis. Approximately 40 surveys containing significantly incomplete responses (meaning no items were completed) were not included in the analysis, yielding a final total of 168 participants.

CHAPTER 3

Results

To address the research questions, this study explored the relationships between knowledge, attitudes, and comfort utilizing descriptive statistics, correlation coefficient analyses, and multiple regression analyses using SPSS version 27. A power analysis utilizing G*Power was conducted, which revealed between 109 to 308 participants were necessary to detect either a medium or small effect size, if such an effect was present. As data collection was undertaken during the COVID-19 pandemic, recruiting participants proved challenging due to the high demands potential participants faced.

Content Validity Examination

Prior to the survey administration, a panel of experts examined the Teacher LGBTQ+ Advocacy Questionnaire for its content and face validity. Responses were gathered and analyzed and items were altered based on direct feedback from the expert panel (see the Measures subsection for a description of that process and Appendix K for summary of feedback and revision data).

Preliminary Analyses

Preliminary analyses were conducted for all independent and dependent variables to ensure that assumptions of normality, linearity, and homoscedasticity were met. The majority of variables were normally distributed, with skewness values falling between -1 and 1, kurtosis values falling between -1 and 1.5. However, the variables *Human Value* (which assessed humane attitudes towards transgender individuals from the LGB-KAS) and attitudes towards Lesbian, Gay, and Bisexual individuals which was assessed by the *Civil Rights Scale* of the LGB-KAS were negatively skewed. This indicates largely

positive humane beliefs towards transgender persons and positive attitudes regarding civil rights for the LGBTQ+ community. In addition, the *Hate* subscale from the LGB-KAS was positively skewed, indicating the majority of participants denied violent thinking towards LGBTQ+ individuals. For these three variables a square root transformation was conducted to create a more normal distribution of data. Furthermore, an examination of scatter plots revealed that the assumptions of linearity between variables and homoscedasticity were met. Descriptive data for the primary study variables are provided in Table 3.

Table 3

Descriptive Statistics

| Scale | N | Minimum | Maximum | <i>M</i> | <i>SD</i> | Range of Scores |
|-----------------------------------|----------|----------------|----------------|-----------------|------------------|--------------------------------|
| TABS: Interpersonal Comfort | 165 | 24 | 98 | 81.38 | 18.00 | 14 – 98 |
| TABS: Sex and Gender Beliefs | 165 | 16 | 68 | 55.48 | 11.97 | 10 – 70 |
| TABS: Human Value | 164 | 17 | 35 | 32.17 | 4.53 | 5 – 35 |
| HADS | 168 | 12 | 48 | 21.16 | 8.86 | 12 – 60 |

| | | | | | | |
|-----------------|-----|----|-----|-------|-------|--------|
| Teacher LGBTQ+ | 166 | 35 | 102 | 80.05 | 19.05 | 18 – |
| Advocacy | | | | | | 108 |
| Questionnaire | | | | | | |
| LGB-KAS Total | 163 | 47 | 119 | 89.39 | 13.51 | 28 – |
| | | | | | | 168 |
| LGB-KAS | 168 | 5 | 30 | 16.57 | 6.28 | 5 – 30 |
| Knowledge | | | | | | |
| LGB-KAS | 165 | 8 | 30 | 26.17 | 5.56 | 5 – 30 |
| Civil Rights | | | | | | |
| Attitudes | | | | | | |
| LGB-KAS | 167 | 5 | 30 | 20.60 | 7.06 | 5 – 30 |
| Affirmativeness | | | | | | |
| LGB-KAS Hate | 166 | 6 | 24 | 8.67 | 4.04 | 6 – 36 |

Primary Analyses

Research Questions

The following results are organized based on the primary research questions.

Research question 1: What are pre-service educators’ knowledge, attitudes, and comfort about LGBTQ+ students? The first research question explored pre-service educators’ knowledge, attitudes, and comfort about LGBTQ+ students. In this exploratory question, the variables knowledge, attitudes, and comfort were measured utilizing the LGB-KAS, HADS, and TABS. Knowledge of LGB issues, assessed in the LGB-KAS *Knowledge* subscale, indicated moderate levels of knowledge regarding issues

or content important to LGBT rights ($M = 16.57, SD = 6.28$). The majority of preservice teachers expressed positive attitudes towards LGB persons, as assessed by liberal/progressive views regarding civil rights issues, as seen in the average responses of the *Civil Rights* subscale of the LGB-KAS ($M = 26.17, SD = 5.56$). Results of the *Internalized Affirmativeness* subscale indicate that most participants scored in the higher range with a small standard deviation, suggesting comfort with their own and others' sexuality ($M = 20.60, SD = 7.06$). Relatively low levels of extreme negativity were reported in the *Hate* subscale, such as violent thoughts or actions directed towards LGBTQ+ persons, as most respondents scored in the lower level with a small variation ($M = 8.67, SD = 4.04$). The overall range of scores of the LGB-KAS indicated variability (Minimum = 47, Maximum 119, $M = 89, SD = 13.15$).

Results of the HADS scales assessed levels of homonegativity, or discomfort with LGBTQ+ persons. The results of the HADS scale reveal the mean response was within the lower bound of the scale, which meant high levels of comfort ($M = 21.16, SD = 8.86$). Overall responses to this scale indicated participants endorsed a high degree of comfort with lesbian and gay people.

Preservice teachers' knowledge, attitudes, and comfort towards transgender persons were also explored, utilizing the TABS subscales *Interpersonal Comfort*, *Sex and Gender Beliefs*, and *Human Value*. Results of the *Interpersonal Comfort* subscale, which assesses a person's comfort being with and interacting with transgender individuals, indicated responses averaged in the upper bound of the scale, but there was moderate variation in the data as seen with a larger standard deviation ($M = 81.38, SD = 18.00$). Participants levels of knowledge varied regarding sex and gender as seen by the larger

spread of responses in the *Sex and Gender Beliefs* subscale ($M = 55.48, SD = 11.97$). Results from the *Human Value* subscale indicated the sample fostered high levels of humanity towards transgender individuals, as seen in the higher average scores and small variation ($M = 32.17, SD = 4.53$).

Research question 2A: Are levels of knowledge about LGBTQ+ issues associated with attitudes and comfort towards LGBTQ+ students? This question assessed if a relationship was evident regarding levels of knowledge about LGBTQ+ issues and attitudes and comfort towards LGBTQ+ students, using a correlation analysis (see Table 4 for Cross Correlation). Findings indicated a significant association between levels of knowledge of LGBTQ+ issues and attitudes towards LGBTQ+ individuals (as measured by the *Civil Rights, Affirmativeness* subscales). Results suggest knowledge is moderately associated with attitudes; progressive or liberal-leaning views regarding rights for LGBTQ+ persons ($r = .42, p < .001$) is associated with increased knowledge and internalized affirmativeness regarding sexuality and is strongly associated with knowledge ($r = .64, p < .001$).

A negative relationship was observed between HADS (which assessed general comfort around gay or lesbian people) and levels of knowledge; higher levels of knowledge were associated with feeling more comfortable around lesbian or gay persons ($r = -.40, p < .001$). Increased levels of knowledge were also slightly associated with lower levels in the *Hate* subscale ($r = -.21, p = .005$), indicating lower ratings of violent ideation towards LGBTQ+ persons. In general, the sample reported very low levels of violent hatred as the raw data were negatively skewed. Finally, there were a moderate association between high levels of humane feelings towards transgender individuals

(*Human Value* subscale) along with increased levels of knowledge about LGBTQ+ issues ($r = .33, p < .001$).

Table 4

Cross Correlations Between Study Variables

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--|--------|--------|--------|--------|-------|--------|--------|--------|--------|------|
| 1. TABS: Interpersonal Comfort | 1.00 | | | | | | | | | |
| 2. TABS: Sex/Gender Beliefs | .82** | 1.00 | | | | | | | | |
| 3. TABS: Human Value | .64** | .62** | 1.00 | | | | | | | |
| 4. HADS | -.74** | -.65** | -.48** | 1.00 | | | | | | |
| 5. LGB-KAS Total | .37** | .43** | .30** | -.35** | 1.00 | | | | | |
| 6. LGB-KAS: Hate | -.74** | -.64** | -.69** | .56 | -.10 | 1.00 | | | | |
| 7. LGB-KAS: Civil Rights | .76 | .67** | .70** | -.65** | .48** | -.79** | 1.00 | | | |
| 8. LGB-KAS: Internalized Affirmativeness | .73** | .80** | .52** | -.60** | .70** | -.53** | .66** | 1.00 | | |
| 9. LGB-KAS: Religious Conflict | -.62** | -.59** | -.42** | .49** | .17* | .58** | -.46** | -.47** | 1.00 | |
| 10. LGB-KAS: Knowledge | .46** | .52** | .33** | -.40** | .80** | -.22** | .42** | .64** | -.21** | 1.00 |

Note. * $p < .01$, ** $p < .001$

Research question 2B: Are levels of knowledge about LGBTQ+ issues associated with intent to support and advocate for LGBTQ+ students?

This sub-question assessed whether knowledge is associated with preservice teacher’s intent to support and advocate for LGBTQ+ students. The results of the LGB-KAS *Knowledge* subscale and the participants’ endorsement of future supportive

behavior, as measured by the Teacher LGBTQ+ Advocacy Questionnaire, were correlated. Correlation analysis results of participant responses indicated higher levels of knowledge were strongly associated with high levels of reported intention to advocate on behalf of LGBTQ+ students ($r = .67, p < .001$).

Research question 3: Are attitudes and comfort levels towards LGBTQ+ people associated with future intent to support and advocate for LGBTQ+ students?

To answer this question, a multiple regression analysis was performed using the LGB-KAS, TABS (*Interpersonal Comfort* subscale, *Sex and Gender Beliefs* subscale, and *Human Value* subscale), and HADS results as independent variables. The Teacher LGBTQ+ Advocacy Questionnaire functioned as the dependent variable. As knowing a person who identified as part of the LGBTQ+ community was significantly correlated, this variable was entered as a covariate for analyses. Results of the regression model indicated that the overall model was significant ($F(5, 149) = 136.16, p < .001$). Attitudes and comfort towards LGBTQ+ persons significantly predicted future intention to advocate for LGBTQ+ students (see Table 5). Attitudes towards LGB people were a significant predictor of future advocacy, as measured by the LGB-KAS ($\beta = .33, p < .001$).

Attitudes and comfort towards transgender persons (utilizing the *Interpersonal Comfort* and *Sex and Gender Beliefs* subscales) were significant predictors regarding preservice teachers' future likelihood to advocate for their LGBTQ+ students (*Interpersonal Comfort*: $\beta = .35, p < .001$; *Sex and Gender Beliefs*: $\beta = .22, p < .001$), with absolute values from the multiple regression results close to $|.30|$ indicating statistical significance. However, responses from the *Human Value* subscale were not predictive of

future advocacy behavior regarding LGBTQ+ students (Human Value: $\beta = .08, p = .06$).

This finding is consistent with the findings that the majority of the sample regarded transgender people as worthy of dignity and basic human rights.

Comfort with gay, lesbian, and bisexual persons, as measured by low levels of homonegativity of the HADS, was examined. Results of the HADS were predictive of future advocacy behavior ($\beta = -.14, p = .01$), indicating that lower levels of homonegativity were slightly predictive of future advocacy for LGBTQ+ students.

Table 5

Regression Analyses Examining Role of Attitudes and Comfort in Advocacy Intention

| | <i>F</i> | <i>R</i> | <i>R2</i> | $\Delta R2$ | <i>B</i> | β | <i>T</i> | <i>p</i> |
|---------------|----------|----------|-----------|-------------|----------|---------|----------|----------|
| Model | 136.16 | .90 | .82 | .81 | | | | |
| LGB-KAS | | | | | .47 | .33 | 8.31 | <.001 |
| TABS: | | | | | .38 | .35 | 5.04 | <.001 |
| Interpersonal | | | | | | | | |
| Comfort | | | | | | | | |
| TABS: | | | | | .36 | .22 | 3.49 | <.001 |
| Sex/Gender | | | | | | | | |
| Beliefs | | | | | | | | |
| TABS: Human | | | | | 23.3 | .08 | 1.88 | .06 |
| Value | | | | | | | | |
| HADS | | | | | -.31 | -.14 | -2.56 | .01 |

CHAPTER 4

Discussion

The present study examined preservice teachers' knowledge of LGBTQ+ issues, attitudes and comfort levels towards LGBTQ+ students. This study had three aims: first, to assess the current knowledge level preservice teachers have regarding LGBTQ+ issues, their attitudes towards LGBTQ+ students, and their comfort levels of being around LGBTQ+ students. Second, this study investigated whether a relationship was present between preservice teachers' knowledge of LGBTQ+ issues and their attitudes and comfort with LGBTQ+ students. This study assessed the relationship between knowledge and teachers' future intent to advocate. Third, the study explored if attitudes and comfort levels regarding LGBTQ+ youth were predictive of future advocacy behavior for LGBTQ+ students.

Current Knowledge, Attitudes, and Comfort

Knowledge. The present study explored current preservice teachers' knowledge of LGBTQ+ issues. The current sample of preservice teachers held moderate levels of knowledge regarding LGB issues, as measured by knowing content relevant to LGB rights or issues according to the LGB-KAS. The majority of the preservice teachers held positive attitudes regarding LGB persons and reported progressive views regarding LGB civil rights. These findings are a significant departure from previous findings regarding preservice educators' knowledge about LGBTQ+ issues (Koch, 2000; Morgan, 2003). Previous research found that preservice teachers had limited knowledge regarding LGBTQ+ issues. This suggests that this present generation of future teachers has an increased awareness and understanding of LGBTQ+ issues.

The present study also examined specifically knowledge of sex/gender issues, relevant to knowledge regarding transgender issues using the TABS. Previous research has not explored specific knowledge relevant to transgender individuals. The current sample of preservice teachers endorsed knowing content regarding biological sex and gender identity.

Attitudes. Preservice teachers in this sample reported positive attitudes regarding LGBTQ+ persons. Preservice teachers held positive views regarding diverse sexual orientations as well as high degree of comfort with their own sexuality, as indicated in the findings of the LGB-KAS. This is in contrast to previous findings using the LGB-KAS, where preservice teachers generally fostered negative attitudes towards LGBTQ+ persons (Koch, 2000). Participants also valued transgender individuals and felt these individuals deserve equal rights such as equal access to housing, employment, and healthcare (reflected in the TABS *Human Value* subscale). Preservice teachers also endorsed very low levels of violent ideation or negativity towards LGBTQ+ individuals, observed in the LGB-KAS *Hate* subscale. Overall, this sample of preservice teachers fostered positive attitudes towards the LGBTQ+ community and indicates a positive shift in preservice teachers' perceptions regarding LGBTQ+ community.

Comfort. In the present sample, a high degree of comfort with interacting with LGB persons was reported (as seen in the LGB-KAS), but with moderate variation regarding comfort with transgender individuals (as seen in the TABS *Interpersonal Comfort* subscale). The results in this sample indicated that preservice teachers have a high degree of comfort interacting with openly LGB persons, according to findings from the HADS. However, there was moderation regarding comfort in interactions with

transgender persons; the majority of the sample indicated a moderate to high degree of comfort but a notable subset of the participants did not.

Relationships between Knowledge, Attitudes, and Comfort

Preservice teachers' levels of knowledge were associated with their reported attitudes regarding LGBTQ+ persons. A moderate relationship was observed between factors assessing knowledge and those measuring attitudes. In this sample, affirmativeness towards different sexualities is related to knowledge regarding LGBTQ+ civil rights. Knowledge of sex and gender facts was related to attitudes towards transgender individuals.

Knowledge levels regarding LGBTQ+ issues were associated with preservice teachers' perception of their comfort in interactions with LGBTQ+ persons. Preservice teachers who endorsed knowing facts about LGBTQ+ content were more likely to report high levels of comfort interacting with LGB and transgender individuals.

Advocacy for LGBTQ+ Students

This study utilized the researcher developed scale (i.e., Teacher LGBTQ+ Advocacy Questionnaire) to determine the intention of preservice teachers to advocate for LGBTQ+ affirming policies in their schools or on behalf of their LGBTQ+ students. In this sample of preservice teachers, knowledge about LGBTQ+ issues were significantly associated with intention for advocacy. Preservice teachers who knew relevant information regarding the LGBTQ+ community (such as facts of the LGBTQ+ civil rights movement) were very likely to endorse they would advocate for LGBTQ+ affirming policies in their schools and advocate for their students.

Attitudes towards LGBTQ+ persons were a significant predictor of future advocacy behavior. Participants who hold liberal/progressive views regarding the LGB community were more likely to report a high likelihood of intending to advocate. Regarding transgender persons, preservice teachers' attitudes and interpersonal comfort with transgender people were a significant predictor for future advocacy intention. Notably, the variable *Human Value* from the TABS was not predictive of future advocacy behavior, although results approached significance, which suggests preservice teachers valued transgender students' dignity but may not want to advocate for inclusive policies. Positive attitudes and greater levels of comfort towards transgender people were more associated with future intention to advocate, as reflected in the *Interpersonal Comfort* and *Sex and Gender Beliefs* subscales of the TABS.

Comfort towards LGB persons was a significant predictor of future advocacy behavior. In this study, the factor homonegativity was used to assess comfort with LGB individuals. Low levels of homonegativity, which indicates greater comfort, was predictive of future intention to advocate for LGBTQ+ students. As discussed above, interpersonal comfort with transgender persons was a significant predictor for future advocacy intention. The degree of comfort preservice teachers foster towards LGBTQ+ persons is predictive of their future advocacy.

These findings suggest that preservice teachers foster a high degree of knowledge, positive attitudes, and comfort working with LGBTQ+ students. In contrast to previous studies (Koch, 2000; Morgan 2003), preservice teachers are aware of LGBTQ+ issues and hold this community in high esteem. In the current sample, a sizable portion identified as part of the LGBTQ+ community ($n = 50, 29.5\%$) which could attribute to

the higher degree of knowledge of and comfort in this community. Further, this sample's knowledge, attitudes, and comfort are related to each other. Generally, a preservice teacher who fosters a high degree of knowledge towards the LGBTQ+ community also endorses positive attitudes and a high degree of comfort. This is critical as teachers significantly impact the culture and climate of schools and classroom and positive climates are associated with greater well-being, academic achievement, and mental health for LGBTQ+ students (Kosciw et al., 2018).

The present findings showed that knowledge, attitudes, and comfort predicted future intention to advocate for LGBTQ+ students. Preservice teachers indicated that high levels of knowledge about LGBTQ+ issues were more likely to report wanting to advocate for inclusive policies and practices in their schools and create a positive learning climate for these students. Positive attitudes and greater comfort interacting with LGBTQ+ persons were significantly predictive of preservice teacher's intention to advocate as well. This suggests preservice teachers with greater knowledge about LGBTQ+ issues and comfort in interacting with the LGBTQ+ community may be more likely to advocate for their LGBTQ+ students.

Limitations

This study endeavored to contribute to the growing literature base and evidence regarding preservice teachers' knowledge, attitudes, and comfort towards LGBTQ+ students, but several limitations emerged. This study invited participants to self-select or volunteer to participate and invest their time and energy. Potentially, a self-selection bias may be in effect. Preservice teachers already interested in LGBTQ+ rights, or somewhat progressive or liberal regarding social justice topics, may have been more likely to

participate. A majority ($n = 157, 93.5\%$) of the sample knew someone who was LGBTQ+, which could have been an additional factor impacting participation likelihood. A sizable portion ($n = 50, 29.5\%$) of the participants also identified as a part of LGBTQ+ community, again demonstrating some degree of interest or thought regarding these topics.

Social desirability in responses from the current sample of preservice teachers is another consideration that may have impacted the findings. In this sample, preservice teachers reported generally high levels of knowledge, positive attitudes, and a high degree of comfort than what has been previously documented (Koch, 2000; Morgan, 2003; Mudrey & Medina Adams, 2008). Further, these findings are in contrast to the data from the GLSEN National School Climate Survey (Kosciw et al., 2018), in which the majority of students report negativity in their school environments. Although the present study did not assess social desirability, future investigations may need to do so.

The demographic region of the U.S. the participants were recruited from is another potential limitation. Preservice teachers were recruited from colleges and universities in the Northeastern U.S. The dominant political cultures in these areas may be different from other areas, such as Southern or Midwestern regions of the U.S., and attitudes towards LGBTQ+ students may be more positive in the Northeast (Herek, 2007; Pew Research Center, 2014). However, while students reported the state in which they were attending school, their home state or region was not collected. Therefore, it cannot be known if the participants resided in a state different from their college/university location.

Another limitation regards the scales utilized in this study. While the scales selected (LGB-KAS, HADS and TABS) are used frequently within sexuality and gender research (with teachers in particular) and have adequate psychometric properties, the tone of several items may be viewed as offensive and miss the complexity of discrimination and prejudice LGBTQ+ people experience. For example, the *Human Value* subscale from the TABS discerns if participants felt that transgender persons were deserving of basic human rights and dignity, such as access to housing, health care, or protection from violence. This is problematic as these are all basic human rights that are illegal to deny and should be inherent to all humans regardless of *any* identity. Finally, the researcher developed the scale used to assess for future intention to advocate on behalf of LGBTQ+ students (Teacher LGBTQ+ Advocacy Questionnaire). Adequate internal consistency was observed ($\alpha = .97$) as well as a normal distribution of data, but further research is needed to clarify the psychometric properties to assess its utility.

Future Directions

Previous studies (Koch, 2000; Morgan, 2003, Mudrey & Medina-Adams, 2016) found that preservice teachers' attitudes towards LGBTQ+ students varied. This study is a departure from these findings as the majority of the present sample fostered positive attitudes regarding civil rights and affirmation, and benevolent beliefs regarding human dignity towards LGBTQ+ persons. Low levels of violent hatred and high levels of tolerance and agreement for LGBTQ+ civil rights were observed. This is consistent with U.S. data from the General Social Survey which investigated the general public's attitudes towards the LGBTQ+ community (among other variables) from 1977 to 2012; Jelen (2017) found that positive attitudes towards this community have steadily grown

throughout the U.S. regardless of political party. This finding is similar to emerging research that is examining attitudes towards the general LGBTQ+ population in other parts of the world. A recent study conducted in Taiwan found that younger people fostered more positive implicit and explicit attitudes towards LGBTQ+ persons in comparison to older Taiwanese adults (Chen & Chang, 2020). Likewise, Smith et al. (2014) analyzed data from multiple countries and found negative attitudes towards same sex partnerships had declined in the time period between 1987 and 2012. The authors assert a consistent shift towards acceptance for LGBTQ+ community rights have occurred in last few decades in the U.S. as well as in international data. Current data from the present supports the idea that attitudes towards LGBTQ+ community have become significantly more positive and accepting.

While not explored in the current study, there may be an unaccounted for difference between preservice teachers' self-reports and the perceptions of their LGBTQ+ students. Future investigations need to examine the relationship between teachers' self-reports of their knowledge, attitudes, and comfort compared to LGBTQ+ student observations of these factors. Given the complexity of teacher versus student self-report and perceptions, further research about this dimension seems warranted.

Future research in this area should also focus on the impact of teachers' who foster a high degree of knowledge regarding LGBTQ+ issues pertaining to a specific population: transgender students. Findings from the present study implicate knowledge as predictive of someone's attitudes towards this population and comfort interacting with someone who is LGBTQ+. A direction to explore is the type of knowledge a teacher, or preservice teacher, may have towards the transgender/nonbinary population. For

example, knowledge regarding transgender issues, such as knowledge of biological/anatomical sex versus gender identity, were mixed in this sample. However, this study established that a teacher's level of knowledge was significantly impactful to attitudes and comfort as well as predictive of future advocacy behavior. Future directions could explore specific knowledge related to sex and gender development of transgender children and how this impacts teachers' attitudes towards transgender students.

Future directions can also focus on advocacy. In the current sample, knowledge, attitudes, and comfort with the LGBTQ+ population were associated with future intention to advocate on behalf of their LGBTQ+ students. Other factors contributing to greater teacher advocacy need to be investigated. For example, investigating the role of greater social support between teachers who support LGBTQ+ rights as a factor related to advocacy intention would be worthwhile. Further, the entirety of the school climate may impact a teacher's intention to advocate. An unsupportive environment or climate from administration may deter teacher-based advocacy. These factors are vital to investigate as school environment is very impactful for LGBTQ+ students well-being and mental health outcomes.

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Appendix A: Statement on Diversity

The proposed study will recruit participants of various ethnic, socioeconomic, and racial backgrounds attending higher education institutions for a teacher preparatory program to assess their knowledge, attitudes, and comfort toward LGBTQ+ persons. The aim of this study is to better understand the factors that influence climate for lesbian, gay, bisexual, transgender and gender non-conforming students. The National Association of School Psychologists (NASP) published a Position Statement titled *Safe and Supportive Schools for LGBTQ+ Youth*, which details the ethical responsibilities of school psychologists to promote fairness and justice and to cultivate safe and welcoming school climates, and to work to reform system-level patterns of injustice (NASP, 2017). This study attempts to meet the goal detailed in the NASP Position Statement in regard to sexual and gender diversity to promote positive social emotional and academic development for all youth (NASP, 2017).

Appendix B: Demographic Questionnaire

1. Please indicate your gender identity (Select all that apply by checking the appropriate response(s)).

- Woman
- Man
- Cisgender woman
- Cisgender man
- Transgender
- Transwoman
- Transman
- Gender Nonbinary
- Genderqueer
- Genderfluid
- Agender/Neutrois
- Two spirit
- Prefer not to state

2. What is your race? (Check all that apply)

- African American/Black
- Caucasian/White
- Asian/Pacific Islander
- Native American/American Indian
- Other/Please specify: _____

3. Do you identify as Latinx or Hispanic? (Please check)

Yes

No

4. Please indicate your sexual orientation. (Check all that apply)

Straight/Heterosexual

Gay

Lesbian

Bisexual

Pansexual

Asexual

Aromantic

Demisexual

Queer

5. What is your age?

6. Do you know someone who is lesbian, gay, bisexual, or transgender?

Yes

No

7. Are you an undergraduate or graduate student? (Select one)

Undergraduate

Graduate

8. Please indicate what type of degree program you are enrolled in. (Select one)

Associates

Bachelors (e.g., B.A., B.S.)

Masters (e.g., M.A., M.S., M.Ed.)

Doctoral (e.g., Ed.D., Ph.D.)

9. Please indicate in which state you are attending college or university.

10. Please indicate the level you hope to be teaching upon graduation (Select all that apply)

Prekindergarten/Early Childhood

Primary

Secondary

Post Secondary

Appendix C: Lesbian, Gay, and Bisexual Knowledge and Attitudes Scale (LGB-KAS)

Please use the scale below to respond to the following items. Select the number that indicates the extent to which each statement is characteristic or uncharacteristic of you or your views. Please respond to every item.

- 1 = Very uncharacteristic of me or my views
- 2 = Uncharacteristic of me or my views
- 3 = Somewhat uncharacteristic of me or my views
- 4 = Somewhat characteristic of me or my views
- 5 = Characteristic of me or my views
- 6 = Very characteristic of me or my views

Hate

1. It is important to me to avoid LGB individuals.
2. LGB people deserve the hatred they receive.
3. I would be unsure what to do or say if I met someone openly lesbian, gay, or bisexual.
4. I sometimes think about being violent toward LGB people.
5. Hearing about a hate crime against an LGB person would not bother me.
6. I would feel self-conscious greeting a known LGB person in a public place.

Knowledge

7. I am knowledgeable about the history and mission of the PFLAG organization.
8. I am knowledgeable about the significance of the Stonewall Riot to the Gay Liberation Movement.
8. I am familiar with the work of the National Gay and Lesbian Task Force.
10. I could educate others about the history and symbolism of the “pink triangle.”
11. I feel qualified to educate others about how to be affirmative regarding LGB issues.

Civil Rights

12. Health benefits should be available equally to same-sex partners as any other couple.
13. Hospitals should acknowledge same-sex partners equally to any other next to kin.
14. I think marriage should be legal for same sex couples.
15. It is wrong for courts to make child custody decisions based on parent's sexual orientation.
16. It is important to teach children positive attitudes towards LGB people.

Religious Conflict

17. I conceal my positive attitudes towards LGB people when I am with someone who is homophobic.
18. I keep my religious views to myself in order to accept LGB people.
19. I try not to let my negative beliefs about LGB people harm my relationship with the lesbian, gay, or bisexual individuals I know.
20. I have difficulty reconciling my religious views with my interest in being accepting of LGB people.
21. I can accept LGB people even though I condemn their behavior.
22. I have conflicting attitudes or beliefs about LGB people.
23. I conceal my negative views towards LGB people when I am with someone who doesn't share my views.

Internalized Affirmativeness

24. I have close friends who are LGB
25. Feeling attracted to another person of the same sex would not make me feel uncomfortable.

26. I would display a symbol of gay pride (pride flag, pink triangle, etc.) to show my support of the LGB community.

27. I have had sexual fantasies about members of my same sex.

28. I would attend a demonstration to promote LGB civil rights.

Appendix D: Transgender Attitudes and Beliefs Scale (TABS)

This questionnaire is designed to measure your beliefs and attitudes toward transgender persons. It is not a test, so there are no right or wrong answers. Please answer each question as carefully and honestly as you can, using the 7-point scale described below. For this questionnaire, a transgender person is defined as a person whose assigned sex at birth does not match their gender identity.

- 1 = Strongly disagree
- 2 = Disagree
- 3 = Somewhat disagree
- 4 = Neither agree nor disagree
- 5 = Somewhat agree
- 6 = Agree
- 7 = Strongly agree

FACTOR 1 (Interpersonal Comfort)

Q1.1 I would feel comfortable having a transgender person into my home for a meal.

Q1.2 I would be comfortable being in a group of transgender individuals.

Q1.3 I would be uncomfortable if my boss was transgender. (Reverse coded)

Q1.4 I would feel uncomfortable working closely with a transgender person in my workplace. (Reverse coded)

Q1.5 If I knew someone was transgender, I would still be open to forming a friendship with that person.

Q1.6 I would feel comfortable if my next-door neighbor was transgender.

Q1.7 If my child brought home a transgender friend, I would be comfortable having that person into my home.

Q1.8 I would be upset if someone I'd known for a long time revealed that they used to be another gender. (Reverse coded)

Q1.9 If I knew someone was transgender, I would tend to avoid that person. (Reverse coded)

Q1.10 If a transgender person asked to be my housemate, I would want to decline.
(Reverse coded)

Q1.11 I would feel uncomfortable finding out that I was alone with a transgender person.
(Reverse coded)

Q1.12 I would be comfortable working for a company that welcomes transgender individuals.

Q1.13 If someone I knew revealed to me that they were transgender, I would probably no longer be as close to that person. (Reverse coded)

Q1.14 If I found out my doctor was transgender, I would want to seek another doctor.
(Reverse coded)

FACTOR 2 (Sex/Gender Beliefs)

Q2.1 A person who is not sure about being male or female is mentally ill. (Reverse coded)

Q2.2 Whether a person is male or female depends upon whether they feel male or female.

Q2.3 If you are born male, nothing you do will change that. (Reverse coded)

Q2.4 Whether a person is male or female depends strictly on their external sex-parts.
(Reverse coded)

Q2.5 Humanity is only male or female; there is nothing in between. (Reverse coded)

Q2.6 If a transgender person identifies as female, she should have the right to marry a man.

Q2.7 Although most of humanity is male or female, there are also identities in between.

Q2.8 All adults should identify as either male or female. (Reverse coded)

Q2.9 A child born with ambiguous sex-parts should be assigned to be either male or female. (Reverse coded)

Q2.10 A person does not have to be clearly male or female to be normal and healthy.

FACTOR 3 (Human Value)

Q3.1 Transgender individuals are valuable human beings regardless of how I feel about transgenderism.

Q3.2 Transgender individuals should be treated with the same respect and dignity as any other person.

Q3.3 I would find it highly objectionable to see a transgender person being teased or mistreated.

Q3.4 Transgender individuals are human beings with their own struggles, just like the rest of us.

Q3.5 Transgender individuals should have the same access to housing as any other person.

Appendix E: Homonegativity as Discomfort Scale (HADS)

Using the following scale indicate how comfortable you might be in the following situations:

- 1 = Very Comfortable
- 2 = Comfortable
- 3 = Neither Comfortable or Uncomfortable
- 4 = Uncomfortable
- 5 = Very Uncomfortable

1. You are eating dinner with a close male friend who you have always assumed was heterosexual. During the conversation, he reveals to you that he is gay and has a long-term partner. How does this make you feel?

2. While getting your mail, you meet an unmarried neighbor couple, two men who have been living together in a committed relationship for three years. They tell you that they are trying to adopt a child. How does this make you feel?

3. You are in the waiting room of your dentist's office and two men in the row of chairs directly across from you playfully nibble on each other's ears. How does this make you feel?

4. You learn from your newspaper, that a local nightclub has decided to offer a special night in which male couples receive free admission. How does this make you feel?

5. You invite a coworker who you like but have never spent time with outside of work to

a party you're throwing. He shows up holding hands with a man you don't know. How does this make you feel?

6. You are riding a city bus one evening on the way to meet a friend. You are the only passenger on the bus until two men board and sit two rows in front of you. A few minutes later they kiss affectionately. How does this make you feel?

7. You are walking down an infrequently traveled sidewalk and two men holding hands are walking in the opposite direction as you and are quickly approaching. How does this make you feel?

8. You ask a male co-worker, who you frequently go to lunch with if he has plans for lunch, and he replies, "I'm going to the sandwich shop with my partner; he's picking me up at noon. Would you like to join us?" How does this make you feel?

9. A gay co-worker tells you that he and his lover have a movie night every Monday. He invites you to join them for a movie that you have wanted to watch. How does this make you feel?

10. About two weeks ago you moved in with a new roommate who you found through a mutual friend. You have met his friends, and he has met yours, and you are all getting along pretty well. Today, he comes in holding hands with man who he introduces as his boyfriend. How does this make you feel?

11. Your neighbors, two men with a daughter, invite you to go with them to a local forum about whether to add a playground to an open lot nearby. How does this make you feel?

12. You go out with some friends on a Saturday night and choose a welcoming bar that you have never been to. Once you get inside you realize that almost all of the patrons are male couples. There is a man with his arms around another man in a booth to your left. How does this make you feel?

Appendix F: Teacher LGBTQ+ Advocacy Questionnaire

Using the following scale (1 = strongly disagree, 6 = strongly agree), indicate your level of agreement with each statement.

- 1 = Strongly disagree
- 2 = Disagree
- 3 = Somewhat disagree
- 4 = Somewhat agree
- 5 = Agree
- 6 = Strongly agree

- 1) I stay up to date on current policies regarding LGBTQ+ youth.
- 2) I stay up to date on current issues regarding LGBTQ+ youth.
- 3) I inform others about issues affecting LGBTQ+ students.
- 4) I could teach my colleagues to recognize sources of bias within schools or educational settings regarding LGBTQ+ students.
- 5) Serving as a mediator between LGBTQ+ students and other school personnel is an appropriate role for a teacher.
- 6) If I witnessed homophobic bullying between students, I would intervene.
- 7) If I witnessed transphobic bullying between students, I would intervene.
- 8) I would advocate for a Gay-Straight-Alliance, or similar group, to be established in my school or educational institution.
- 9) I would incorporate important LGBTQ+ historical figures or movements into my course curriculum or classroom discussions.
- 10) I am comfortable asking for students' pronouns.
- 11) I would use students' pronouns.
- 12) I would support a student through their coming out process.

- 13) I would help develop a support plan to assist a transgender student in the process of gender transition.
- 14) I would participate in my school's Gay-Straight-Alliance, or similar group, as a faculty advisor.
- 15) I feel competent to incorporate topics such as (for example) the Supreme Court's ruling of same sex marriage into class discussions.
- 16) I would advocate for the safety of LGBTQ+ youth in my school.
- 17) I would advocate for my school's anti-bullying policy to explicitly address homophobic and transphobic bullying.
- 18) I would display a Safe Zone sign or Pride Flag (or other LGBTQ+ symbol) in my classroom.

Appendix G: Informed Consent

THE
UNIVERSITY
OF RHODE ISLAND

COLLEGE OF
HEALTH SCIENCES

THINK BIG  WE DO™

DEPARTMENT OF PSYCHOLOGY
Chafee Hall, 142 Flagg Road, Kingston, RI 02881 USA p: 401.874.2193 f: 401.874.2157 web.uri.edu/psychology



INFORMED CONSENT

The University of Rhode Island
Psychology Department
142 Flagg Rd
Kingston, RI 02881
Phone: (401) 874-2193
Fax: (401) 874-2157
Project Title: Preservice Educators' Knowledge, Attitudes, and Comfort towards
LGBTQ+ Students

CONSENT FORM FOR RESEARCH

You have been invited to participate in the research project detailed below. You are free to ask any questions you may have. If you have any concerns or questions please contact Principal Investigator, Margaret Rogers at (401) 874-7999, mrogers@uri.edu or Crassandra Mandojana-Ducot, at (401) 601-1417, cmandojana@my.uri.edu

Description of the project:

This doctoral dissertation research study involves responding anonymously to a series of scales assessing knowledge, attitudes, and comfort towards LGBTQ+ persons. Participants will also respond to questions about future behaviors involving LGBTQ+ youth, teaching, and demographic/personal background information.

What will be done:

If you decide to participate in this study, you will anonymously answer questions from the Lesbian, Gay, and Bisexual Knowledge and Attitude Scale, Homonegativity as Discomfort Scale, and Transgender Attitudes and Belief Scale. You will also respond questions about future behavior with LGBTQ+ youth, teaching, as well as questions regarding your demographic background information.

Eligibility criteria:

- Undergraduate or graduate student attending college or university who is 18 years or older
- Enrolled in a teacher education program

Risks or discomfort:

Brief discomfort may happen when answering sensitive questions about sexuality and

gender identity.

Benefits of this study:

Participants can enter a drawing to win one of three \$25 Amazon gift cards as compensation for their participation. Other benefits of participating in this study include expanded knowledge of preservice educators' knowledge, attitudes, and comfort towards LGBT youth and how these factors may influence future teaching behavior.

Confidentiality:

Your participation in this study is strictly confidential. No names or identifying information will be collected. Demographic information is collected only for background purposes. All data will be de-identified and kept under password protection. Your email will only be used for the sole purpose of the drawing for a gift card. You must be at least 18 years of age to participate in this study.

Decision to quit at any time:

If you decide to participate in this study, you can withdraw your participation at any time. There are no consequences for not participating in the study or electing to not respond to any questions.

Rights and complaints:

If you have any questions, or if you are not happy about the way this study is conducted, you may contact Principal Investigator, Margaret Rogers at (401) 874-7999, mrogers@uri.edu or Crassandra Mandojana-Ducot at (401) 601-1417, cmandojana@my.uri.edu or. If you have any further questions about your rights as a research participant, you may contact the office of the Vice President for Research, 70 Lower College Rd, Suite 2, University of Rhode Island, Kingston, Rhode Island, telephone: (401) 874-4328.

By clicking the button below, you acknowledge that your participation in the study is voluntary, you are 18 years of age, and that you are aware that you may choose to terminate your participation in the study at any time and for any reason.

Margaret Rogers, Ph.D.
Full Professor
School Psychology Program
University of Rhode Island
mrogers@uri.edu
(401) 874-7999

Crassandra Mandojana-Ducot, M.S.
Doctoral Student
School Psychology Program
University of Rhode Island
cmandojana@my.uri.edu
(401) 601-1417

Appendix H: Recruitment Letter

The University of Rhode Island
Psychology Department
142 Flagg Rd
Kingston, RI 02881
Phone: (401) 874-2193
Fax: (401) 874-2157
Project Title: Preservice Educators' Knowledge, Attitudes, and Comfort towards
LBGTQ+ Students.

Dear _____,

I am a doctoral student in the School Psychology program at the University of Rhode Island. As a part of my doctoral research requirements, Principal Investigator Dr. Margaret Rogers and I are recruiting preservice teachers to participate in a study on **Preservice Educators' Knowledge, Attitudes, and Comfort towards LBGTQ+ Students**. I am writing to ask you to refer students for participation to the study. This research was approved by the University of Rhode Island Institutional Review Board.

Students who participate will take part in an anonymous online survey inquiring about their knowledge, attitudes, and comfort towards LBGTQ+ youth. Any information a participant offers will be kept strictly confidential and all information is de-identified. This survey will last about 30-35 minutes and be taken in online format. Upon completion, participants may enter for a raffle drawing to win one of three Amazon Gift cards (\$25 each).

Individuals that meet the following criteria are invited to participate:

- Undergraduate or graduate student attending college or university who is 18 years or older
- Enrolled in a teacher education program

Please forward this announcement to students who might be interested in participating in this study. Please feel free to contact me with any questions about this study at (401) 601-1417 or cmandojana@my.uri.edu.

Thank you for your time and consideration.

Sincerely,

Margaret Rogers, Ph.D.
(401) 874-7999
Full Professor
School Psychology Program
University of Rhode Island

Crassandra Mandojana-Ducot, M.S.
(401) 601- 1417
Doctoral Student
School Psychology Program
University of Rhode Island

Appendix I: Recruitment Script

The University of Rhode Island
Psychology Department
142 Flagg Rd
Kingston, RI 02881
Phone: (401) 874-2193
Fax: (401) 874-2157
Project Title: Preservice Educators' Knowledge, Attitudes, and Comfort towards LGBT Students.

I am a doctoral student in the School Psychology program at the University of Rhode Island. As a part of my doctoral research requirements, Principal Investigator Dr. Margaret Rogers and I are recruiting preservice teachers to participate in a study on Preservice Educators' Knowledge, Attitudes, and Comfort towards LGBT Students. Students who participate will take part in an anonymous online survey inquiring about their knowledge, attitudes, and comfort towards LGBT youth. Any information you offer will be kept strictly confidential and no identifying data will be collected. This survey will last about 30-35 minutes. Upon completion, you may enter an email for a raffle drawing to win one of three Amazon Gift cards (\$25 each). You are invited to participate if you meet the following eligibility criteria: you must be at least 18 years of age and enrolled in a teacher education program, at either the undergraduate or graduate level. Please feel free to contact me with any questions about this study by phone at (401) 601-1417 or via email at cmandojana@my.uri.edu.

Thank you for your time and consideration.

Appendix J: Content Validity Questionnaire

Dear _____,

I am writing to request assistance in establishing the content validity of a Teacher LGBTQ+ Advocacy Questionnaire. This scale is meant to assess the degree or inclination a participant has to engage in advocacy behaviors for LGBTQ+ students in an educational setting.

Please rate each item using the following scales for representativeness, clarity, and relevance. Please add comments regarding the revisions for each item as necessary.

Representativeness

1 = item is NOT representative, 2 = item needs major revisions to be representative, 3 = item needs minor revisions to be representative, 4 = item is representative

Clarity

1 = item is NOT clear, 2 = item needs major revisions to be clear, 3 = item needs minor revisions to be clear, 4 = item is clear

Relevance

1 = item is NOT relevant to advocacy behavior for LGBTQ+ students, 2 = item is somewhat relevant to advocacy behavior for LGBTQ+ students, 3 = item is moderately relevant to advocacy behavior for LGBTQ+ students, 4 = item is relevant to advocacy behavior for LGBTQ+ students

| Item | Representativeness | Clarity | Relevance | Comments |
|---|--------------------|---------|-----------|----------|
| I stay up to date on current policies and current issues regarding LGBT youth. | 1 2 3 4 | 1 2 3 4 | 1 2 3 4 | |
| I work to bring awareness to issues affecting LGBT students. | 1 2 3 4 | 1 2 3 4 | 1 2 3 4 | |
| I could teach my colleagues to recognize sources of bias within schools or educational settings | 1 2 3 4 | 1 2 3 4 | 1 2 3 4 | |

| | | | | |
|--|---------|---------|---------|--|
| regarding LGBT students. | | | | |
| Serving as a mediator between LGBT students and my future school or educational institution is not an appropriate role for a teacher. (R) | 1 2 3 4 | 1 2 3 4 | 1 2 3 4 | |
| If I witnessed homophobic bullying between students, I would feel competent to intervene. | 1 2 3 4 | 1 2 3 4 | 1 2 3 4 | |
| If I witnessed transphobic bullying between students, I would feel competent to intervene. | 1 2 3 4 | 1 2 3 4 | 1 2 3 4 | |
| I would feel competent to advocate for a Gay-Straight-Alliance, or similar group, to be established in my school or educational institution. | 1 2 3 4 | 1 2 3 4 | 1 2 3 4 | |
| I could incorporate important LGBT historical | 1 2 3 4 | 1 2 3 4 | 1 2 3 4 | |

| | | | | |
|--|---------|---------|---------|--|
| figures or movements into my course curriculum or classroom discussions. | | | | |
| I am comfortable asking for and using students' preferred pronouns. | 1 2 3 4 | 1 2 3 4 | 1 2 3 4 | |
| I would support a student through their coming out process. | 1 2 3 4 | 1 2 3 4 | 1 2 3 4 | |
| I would help develop a support plan to assist a transgender student in the process of gender transition. | 1 2 3 4 | 1 2 3 4 | 1 2 3 4 | |
| I would participate in my school's Gay-Straight-Alliance, or similar group, as a faculty advisor. | 1 2 3 4 | 1 2 3 4 | 1 2 3 4 | |
| I feel competent to incorporate topics such as the Supreme Court's ruling of same sex marriage into class discussions or curriculum. | 1 2 3 4 | 1 2 3 4 | 1 2 3 4 | |

| | | | | |
|--|---------|---------|---------|--|
| I feel competent to advocate for the safety of LGBT youth in my school. | 1 2 3 4 | 1 2 3 4 | 1 2 3 4 | |
| I feel competent to advocate for my school's anti-bullying policy to explicitly address homophobic and transphobic bullying. | 1 2 3 4 | 1 2 3 4 | 1 2 3 4 | |
| I would display a Safe Zone sign or Pride Flag in my classroom. | 1 2 3 4 | 1 2 3 4 | 1 2 3 4 | |

Appendix K: Content Validity Questionnaire Summary of Results

1. I stay up to date on current policies and current issues regarding LGBT youth.
Representativeness: 4, 4, 4
Clarity: 4, 4, 3
Relevance: 4, 4, 4
Comments:
 - Maybe separate policy and current issues?
 - Include Q+.

2. I work to bring awareness to issues affecting LGBT students.
Representativeness: 4, 2, 4
Clarity: 4, 2, 3
Relevance: 4, 4, 4
Comments:
 - “Awareness to issues” is awkward language.
 - “Work to bring awareness” may be unclear to some preservice teachers.

3. I could teach my colleagues to recognize sources of bias within schools or educational settings regarding LGBT students.
Representativeness: 4, 4, 4
Clarity: 4, 4, 4
Relevance: 4, 4, 4

4. Serving as a mediator between LGBT students and my future school or educational institution is not an appropriate role for a teacher. (R)
Representativeness: 3, 4, 4
Clarity: 2, 4, 3
Relevance: 3, 4, 4
Comments:
 - I would replace the word “not” and make this sentence a positive, active one.
 - Mediator between students and school/educational institution. Mediation occurs between people not the school/institution. Perhaps add personnel?

5. If I witnessed homophobic bullying between students, I would feel competent to intervene.
Representativeness: 4, 4, 4
Clarity: 4, 2, 4
Relevance: 4, 4, 4
Comments:
 - Remove competent? They might intervene even if they feel competent? Should a question of competence be separate (if included at all)?
 - Great question!

6. If I witnessed transphobic bullying between students, I would feel competent to intervene.

Representativeness: 4, 4, 4

Clarity: 4, 2, 4

Relevance: 4, 4, 4

Comments:

- Remove competent? They might intervene even if they feel competent? Should a question of competence be separate (if included at all)?

7. I would feel competent to advocate for a Gay-Straight-Alliance, or similar group, to be established in my school or educational institution.

Representativeness: 4, 4, 4

Clarity: 4, 2, 4

Relevance: 4, 4, 4

Comments:

- Remove competent? They might intervene even if they feel competent? Should a question of competence be separate (if included at all)?

8. I could incorporate important LGBT historical figures or movements into my course curriculum or classroom discussions.

Representativeness: 4, 4, 4

Clarity: 4, 4, 3

Relevance: 4, 4, 4

Comments:

- Delete discussions? End at classroom or use curriculum instead?
- Perhaps “would” instead of “could”?

9. I am comfortable asking for and using students’ preferred pronouns.

Representativeness: 4, 4, 4

Clarity: 4, 2, 4

Relevance: 4, 4, 4

Comments:

- Asking for and using are two separate things. We are moving away from “preferred”

10. I would support a student through their coming out process.

Representativeness: 4, 4, 4

Clarity: 4, 4, 4

Relevance: 4, 4, 4

11. I would help develop a support plan to assist a transgender student in the process of gender transition.

Representativeness: 4, 4, 4

Clarity: 4, 4, 4

Relevance: 4, 4, 4

12. I would participate in my school's Gay-Straight-Alliance, or similar group, as a faculty advisor.

Representativeness: 4, 4, 4

Clarity: 4, 4, 4

Relevance: 4, 4, 4

13. I feel competent to incorporate topics such as the Supreme Court's ruling of same sex marriage into class discussions or curriculum.

Representativeness: 4, 4, 4

Clarity: 4, 3, 4

Relevance: 4, 3, 4

Comments: Seems specific.

14. I feel competent to advocate for the safety of LGBT youth in my school.

Representativeness: 4, 4, 4

Clarity: 4, 4, 4

Relevance: 4, 4, 4

Comments: Again, confidence or inclination [deleted competent, change to would].

15. I feel competent to advocate for my school's anti-bullying policy to explicitly address homophobic and transphobic bullying.

Representativeness: 4, 4, 4

Clarity: 4, 1, 4

Relevance: 4, 4, 4

Comments: Language is confusing.

16. I would display a Safe Zone sign or Pride Flag in my classroom.

Representativeness: 4, 4, 4

Clarity: 4, 4, 4

Relevance: 4, 4, 4

Comments: What if the pre-service teacher does not know what Safe Zone or Pride Flag are? Perhaps two separate items?

Proposed Edits.

Bold font indicates changes.

1) I stay up to date on current policies regarding **LGBTQ+** youth. [**Changed acronym to LGBTQ+ throughout**].

2) Added question: **I stay up to date on current issues regarding LGBTQ+ youth.**

3) **I inform others about** issues affecting **LGBTQ+** students.

- 4) I could teach my colleagues to recognize sources of bias within schools or educational settings regarding LGBTQ+ students.
- 5) Serving as a mediator between LGBTQ+ students and **other school personnel** is an appropriate role for a teacher.
- 6) If I witnessed homophobic bullying between students, **I would intervene.**
- 7) If I witnessed transphobic bullying between students, **I would intervene.**
- 8) **I would advocate** for a Gay-Straight-Alliance, or similar group, to be established in my school or educational institution.
- 9) **I would** incorporate important LGBTQ+ historical figures or movements into my course curriculum or classroom discussions.
- 10) I am comfortable **asking for** students' preferred pronouns.
- 11) Added question: **I would use students' preferred pronouns.**
- 12) I would support a student through their coming out process.
- 13) I would help develop a support plan to assist a transgender student in the process of gender transition.
- 14) I would participate in my school's Gay-Straight-Alliance, or similar group, as a faculty advisor.
- 15) I feel competent to incorporate topics such as **(for example)** the Supreme Court's ruling of same sex marriage into class discussions.
- 16) **I would advocate** for the safety of LGBTQ+ youth in my school.
- 17) **I would advocate** for my school's anti-bullying policy to explicitly address homophobic and transphobic bullying.

18) I would display a Safe Zone sign or Pride Flag (**or other LGBTQ+ symbol**) in my classroom.