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The Role of Teacher Efficacy in Readiness to Support LGBTQ+ Students in Schools Andrew Levy

A research project submitted to the Graduate Faculty of

JAMES MADISON UNIVERSITY

In

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Table of Contents

List of Tables	iv
Abstract	v
I. Literature Review	1
Definitions	2
LGBTQ+ Students' Experiences in Schools	3
Microaggressions	3
Harassment	4
Discrimination	6
Mental Health Outcomes	7
Educational Outcomes	8
Best Practices in Supporting LGBTQ+ Students	8
Teachers as Support Systems for LGBTQ+ Students	9
Self-Efficacy	10
Barriers to Supporting LGBTQ+ Students	11
Teacher Candidacy and Self-Efficacy Development	13
Research Questions & Hypotheses	14
II. Methods	15
Participants	15
Participant Demographics	16
Measures	17
Procedures	18
Analysis	19
III. Results	19
Measure Reliabilities & Descriptive Statistics	19
Analyses	21
IV. Discussion	22
Limitations & Future Directions	26
Implications for School Psychologists	27
References	30
Appendices	35
Appendix A: Teacher Efficacy Scale (Tschannen-Moran & Hoy, 2001)	35

Informed Consent Letter	38
Appendix C: Demographic Information Questions	37
Appendix B: Questions Related to Supporting LGBTQ+ Students	36

List of Tables

Table 1: Participant Demographics	17
Table 2: Scale Reliabilities	20
Table 3: LGBTQ+ Confidence Item Descriptive Statistics	21

Abstract

LGBTQ+ students experience a myriad of difficulties associated specifically with their sexual or gender minority status. The current body of research has focused on negative outcomes of these difficulties, while there is a dearth of research into how schools can position stakeholders to support these students. Teachers often serve as consistent, direct points of contact for students in schools. As such, this study aims to explore teacher candidates' sense of professional self-efficacy and its relationship with their confidence in supporting LGBTQ+ students in three ways: individual interventions, developing their own knowledge and skills, and systems-level advocacy. Teacher candidates were surveyed anonymously to gauge their feelings of professional selfefficacy and confidence in implementing a variety of best practices in supporting LGBTQ+ students. Results yielded a moderate positive relationship between teacher selfefficacy and confidence in supporting LGBTQ+ students, though results were nonsignificant and cannot be generalized to the population of student teachers. Post-hoc analyses resulted in a greater sense of confidence among the sample in developing their own skills and knowledge of working with LGBTQ+ students than engaging in systemslevel advocacy. Implications of these findings indicate that working with new teachers to foster their sense of professional self-efficacy and empower their confidence may better position them to implement best practices with and support LGBTQ+ students. School psychologists are uniquely positioned to engage in this work through developing consultative relationships with new teachers, providing relevant and evidence-based professional developments, and collaborating with administration and other mental health staff in schools to support LGBTQ+ students from a team perspective.

Literature Review

The LGBTQ+ community is a diverse group of identities which, existing within a heteronormative society, shares a historically marginalized status relative to their cisgender and heterosexual peers (Institute of Medicine, 2011). Despite this commonality, the identities included within the LGBTQ+ community are diverse, vary in their experiences, and hold varying levels of privilege and protection from discrimination and harassment. While most LGBTQ+ adolescents experience harassment and/or discrimination (Kosciw et al., 2020), there are variations within the community when it comes to risk for harassment, discrimination, and microaggressions. Variables that impact risk of harassment include age, race, ethnicity, educational level, family acceptance, and socioeconomic status (IOM, 2011). According to a nationally representative study of LGBTQ+ students conducted through the Gay, Lesbian, and Straight Education Network (GLSEN), Kosciw and their colleagues found that six in ten LGBTQ+ students reported feeling unsafe at school due to their sexual orientation and four in ten reported feeling unsafe due to their gender expression (2020). A more troubling finding for educators and school psychologists is that one-third of students reported missing at least some school due to feeling as though their safety was threatened. These students also reported avoiding school functions and extracurricular activities to some extent, leading to decreased school connectedness and belonging (Kosciw et al., 2020). This review of the current literature will: a) outline current definitions of common terms related to the LGBTQ+ community; b) provide an overview of the negative experiences which LGBTQ+ students may have in school buildings; and c) position teachers as key stakeholders in both preventing incidences of harassment and

supporting students who experience harassment. An overview of this research is necessary to outline the current state of LGBTQ+ students so that the focus can be shifted to responsive and preventative strategies.

Definitions

In order to reconcile the high degree of variation in defining terms related to sexual and gender identity, the following definitions were adopted from Chappell et al. (2018). Sex is defined as "one's biological and physical attributes—external genitalia, sex chromosomes, hormones, and internal reproductive structures—that are used to assign a sex at birth" (p. 9). This is usually determined and assigned by a doctor, midwife, or other birth official. Gender identity refers to "how one feels inside. One's internal, deeply felt sense of being a girl/woman, boy/man, somewhere in between, or outside these categories" (p. 8). This may align with or vary from one's sex assigned at birth and forms over the course of childhood and adolescent development. Gender expression is "how one expresses their gender to the world" (p. 8). Gender can be expressed through clothing, language, mannerisms, habits, hobbies, and countless other factors. An individual's culture, environment, and societal factors (trends, sociopolitical factors, and local acceptance of the LGBTQ+ community) all influence one's gender expression, as well as how others perceive gender norms and roles. Lastly, sexual orientation (also referred to as *sexuality*) is defined as "who you are attracted to—physically, romantically, and/or emotionally" (p. 9). Chappell and colleagues also note that current research indicates that sexual orientation exists along a spectrum or continuum and, in some cases, can change over the course of an individual's life (2018).

All these concepts are factors that play into non-heterosexual/cisgender identity development and can be sources of both internal and external conflict for an LGBTQ+ student. To refer to the community as a whole, "LGBTQ+" will be used in order to remain concise while including room for the vast expanses of gender and sexual identities and expressions. The plus serves to encompass all identities that cannot fit into a concise acronym and is included to remain inclusive to all who claim a sexual or gender minority identity. It should be noted that, in addition to the variation between gender/sexual identities, an intersectional approach must be taken in order to appropriately address harassment and discrimination towards LGBTQ+ students. Students of color experience both sexual orientation-, gender identity-, and expression-based discrimination on top of racial discrimination (Kosciw, 2020). It is crucial to approach these issues through an intersectional lens in order to afford the appropriate nuance to individual student experiences.

LGBTQ+ Students' Experiences in Schools

Being straight and cisgender is assumed within a heteronormative society. As LGBTQ+ students deviate from these standards, they must announce and maintain their identities within the limits and expectations of said heteronormative society. Blackburn and colleagues describe this as a "paradox of visibility: the desire to be true to oneself (present oneself fully) versus the realities of being out in the heteronormative, transphobic, heterosexist world of high school" (2018, pg. 103). In having more visibility, students are at higher risk of experiencing microaggressions, discrimination, and/or harassment from intolerant peers, school staff, or community members.

Microaggressions

Microaggressions, originally conceptualized in terms of race, are "subtle, stunning, often automatic, and nonverbal exchanges which are 'put downs'" (Pierce et al., 1978, p. 66). Nadal, Rivera, and Corpus (2010) were the first to propose applying the concept of microaggressions to the LGBTQ+ community. They proposed multiple main themes of microaggressions regarding sexual orientation, including: the use of heterosexist terminology, endorsement of heteronormative or gender conforming culture and behaviors, discomfort or disapproval of the LGBTQ+ experience, denial of the reality of heterosexism, assumption of sexual pathology or deviance, and environmental microaggressions. Nadal (2019) posits that investigating and intervening in instances of microaggressions toward the LGBTQ+ community will result in a better understanding of the overall experiences of discrimination from an LGBTQ+ perspective.

Kosciw and colleagues (2020) found that up to three-quarters of LGBTQ+ students surveyed have heard the word "gay" used negatively often or frequently while at school. More than half of students surveyed reported hearing homophobic remarks from school staff, and two-thirds heard negative remarks from staff about a student's gender expression. Microaggressions towards LGBTQ+ students also presented as staff preventing students from using bathrooms which align with their gender identity, refusal to use a student's name and pronouns (which differs from their legal name), and disallowing students from wearing gender-affirming clothing (Kosciw et al., 2020). All of these experiences can be damaging for LGBTQ+ students as they invalidate their identities and contribute to the already turbulent emotions surrounding a developing LGBTQ+ identity.

Harassment

Bullying, harassment, and victimization are prevalent among middle and high school adolescents (Salmon et al., 2018). Toomey and Russell (2016), in a meta-analysis of related studies, suggest that sexual minority youth experience higher levels of victimization in middle and high school when compared to their heterosexual peers. They also suggest that school-based victimization based on sexual orientation is a persistent problem that has not abated in recent years, despite social and political advancements and increased acceptance of LGBTQ+ identities in the dominant society (Toomey & Russell, 2016). Bullying and other school-based harassment and victimization can occur verbally via taunts, threats, social exclusion, and rumor spreading; through physical assault and harassment; or through social media, known as cyberbullying (Hymel & Swearer, 2015). In a survey of LGBTQ+ students, Kosciw et al. (2020) found that more than eight in ten LGBTQ+ students experienced harassment or assault at school; two-thirds of students reported being verbally harassed due to sexual orientation, more than half because of gender expression. A quarter of students reported physical harassment due to sexual orientation, over one-fifth due to gender expression. One in seven of the students surveyed reported being physically assaulted at school in the previous year due to sexual orientation, gender identity, or gender expression (Kosciw et al., 2020). Students in this survey also reported experiencing relational aggression, including being the focus of rumors or being deliberately excluded from social events. Nearly six in ten students reported sexual harassment in the previous year (Kosciw et al., 2020).

The rates at which students report incidences of harassment to school staff is often indicative of their perceptions of support within their school. Kosciw and their colleagues (2020) found that a majority of students surveyed who experienced harassment did not

report these incidents to school staff. The most common reasons cited were doubts that effective intervention would occur and fears that reporting would only serve to make the situation worse for the student. When students did choose to report the incident to school staff, two in ten students were told to change their own behavior (e.g., to not act "so gay" or dress in a certain way; Kosciw et al., 2020). Just over a quarter reported that the problem was effectively addressed. Furthermore, there is often a disconnect in perceptions of LGBTQ+ bullying among LGBTQ+ students versus school professionals (Earnshaw et al., 2020). This may be due to school professionals not being physically present during the harassment, or a hesitancy among LGBTQ+ students to report incidences of harassment due to fears that it would "out" them. Earnshaw and colleagues (2020) also note that school staff may not see LGBTQ+ students' lived experiences of harassment due to a generational shift from physical harassment (more visible) to verbal aggressions and other non-physical harassment (i.e., more covert).

Discrimination

While harassment often occurs on the interpersonal level, discriminatory practices and policies can disparately affect LGBTQ+ students' lives in schools. Approximately six in ten students in Kosciw et al.'s (2020) survey indicated that they had experienced LGBTQ-related discriminatory policies and practices in their schools. These students were commonly restricted from expressing themselves as LGBTQ+ in school through: being disciplined for public displays of affection that were not enforced for heterosexual students, prevented from writing about LGBTQ+ topics for academic assignments, restricted in the types of clothing deemed "appropriate" for school, or prevented from bringing dates to school dances and other functions. Other forms of discriminatory

policies and practices in schools include preventing students from using locker rooms aligned with their gender identity (which may increase their risk for physical assault), restricting participation in school sports due to being LGBTQ+, or inhibiting or disallowing a Gay-Straight Alliance (also called Gender-Sexuality Alliances) from forming or engaging in organized activities (Kosciw et al., 2020).

Mental Health Outcomes

Higher levels of in-school victimization have been shown to be related to lower self-esteem and higher rates of depressive symptomology and clinical cases of depression in LGBTQ+ students (Kosciw et al., 2020). Higher degrees of outness—or being publicly known as LGBTQ+—to both staff and other students have been shown to result in higher rates of in-school victimization, but also higher self-esteem and decreased rates of depression (Kosciw et al., 2014). Most of the research surrounding mental health outcomes for LGBTQ+ children and adolescents has looked into the presence of distress symptoms related to mood and anxiety disorders, depression, and risk for suicidality (IOM, 2011). For example, in a 2010 population-based sample of LGBTQ+ students, Mustanski and colleagues found that one third of participants met diagnostic criteria for at least one diagnosis (2010).

The Institute of Medicine found elevated rates of disordered eating behaviors and clinically significant eating disorders among LGBTQ+ students, citing that they most often wanted to look like the people they saw in the media (2011). In an analysis of a decade's worth of research, the Institute of Medicine (2011) found that lesbian, gay, and bisexual youth are at an increased risk for suicidal ideation and attempts, as well as depressive symptoms, in comparison with their heterosexual counterparts. Family

rejection due to sexual orientation may be associated with increased risk of suicidality (IOM, 2011). Students with intersecting sexual minority (e.g., lesbian, gay, bisexual, queer, etc.) and gender diverse (e.g., transgender, gender non-conforming, non-binary, agender, etc.) identities have been found to be at greater risk for emotional distress and bullying victimization compared to those who claim just one of those identities (Eisenberg et al., 2019). Thus, it is crucial to consider the effects of victimization on students with both sexual and gender minority identities and their mental health statuses.

Educational Outcomes

Research has found that LGBTQ+ students who experience harassment tend to have more difficulties in various markers of academic success compared to their heterosexual and cisgender peers (Kosciw et al., 2020). Higher levels of in-school victimization are correlated with lower GPAs than heterosexual students, a lower likelihood to pursue post-secondary education, a higher likelihood to be disciplined at school, and a lower likelihood to feel a sense of school belonging (Kosciw et al., 2020). While higher degrees of outness contributed to higher rates of victimization—presumably because these students are more visibly LGBTQ+ presenting—outness was also positively associated with higher GPA and fewer missed days school via lower rates of depression (Kosciw et al., 2014). From this, it can be inferred that students who have not yet come to terms with their LGBTQ+ identity or come out publicly as LGBTQ+ in their schools might experience more negative educational outcomes than their already-out peers.

Best Practices in Supporting LGBTQ+ Students

Students report feeling safer at and more positive towards school when the school had a Gay-Straight Alliance (or equivalent club); were taught positive representations of LGBTQ+ people, history, and events in classes; had supportive school staff who frequently intervened in biased remarks and effectively responded to reports of harassment/assault; and had anti-bullying and anti-harassment policies that specifically included protections for sexual orientation, gender identity, and gender expression (Kosciw et al., 2020). Boyland and colleagues (2018) summarize and identify best practices which have been verified by previous research to aid in the support of LGBTQ+ students. These best practices include anti-bullying policies which enumerate sexual orientation and gender identity, implementing reporting systems for harassment, providing training to staff, evaluating current practices to ensure they are not discriminatory, requiring the use of a student's chosen name and correct pronouns, and implementing inclusive curricula. While this list is not exhaustive, it provides individualand systems-level strategies for supporting LGBTQ+ students in schools. These practices also position teachers as primary stakeholders in preventing sexual orientation- and gender identity-based harassment as well as supporting LGBTQ+ students who have experienced harassment in school.

Teachers as Support Systems for LGBTQ+ Students

Teachers often hold diverse definitions of "teaching," as well as diverse views of what their roles encompass in the school building. These roles include the foundational aspects of teaching, such as transmission of content-area knowledge and skills, as well as more abstract roles such as shaping the life trajectory of students (Blackburn et al., 2018). Almost all students in Kosciw and colleagues' (2020) survey were able to identify at least

one school staff member whom they believed were supportive of LGBTQ+ students; 42.3% could identify many (eleven or more) supportive school staff. Just over two-fifths of students reported that they perceived administration to be supportive of LGBTQ+ students (Kosciw et al., 2020).

Teachers are in a unique position to support LGBTQ+ students in a variety of ways, large and small, as activists (Blackburn et al., 2018). School belonging is an important factor in preventing suicidality and other negative outcomes among LGBTQ+ youth (Hatchel et al., 2019). Blackburn and colleagues argue that, for teachers, advocating for social change regarding gender and sexual diversity is a complicated and ongoing process. They assert that, for teachers to advocate for LGBTQ+ students, they must claim the authority to take action when opportunities for change arise. Blackburn and colleagues (2018) hypothesized that a teacher's professional self-efficacy may influence their ability and willingness to act when LGBTQ+ students face harassment or discrimination.

Self-Efficacy

Self-efficacy is a concept rooted in Albert Bandura's Social Cognitive Theory and is defined as the "belief in one's capacity to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3). In other words, he asserted that our beliefs about our ability to do something have significant consequences as to whether or not we will persist and actually accomplish the task (Clark & Newberry, 2019). Tschannen-Moran and Hoy (2001) sought to apply the concept of self-efficacy to a teacher's profession. A teacher's efficacy belief is a judgment of their capabilities to

bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated (Tschannen-Moran & Hoy, 2001).

Teacher self-efficacy develops and fluctuates across a teacher's career and is influenced by both extrinsic and intrinsic factors (Klassen & Chiu, 2010). Klassen and Chiu (2010) found that self-efficacy gradually increases from the beginning of a teacher's career through around twenty-three years of experience, and then begins to decline as the number of years of experience continues to increase. Teachers in higher grade levels reported lower self-efficacy than teachers in lower grade levels (Wolters & Daugherty, 2007), but there is also within-building and within-grade level variation regarding selfefficacy (Klassen & Chiu, 2010). Tschannen-Moran & Hoy (2001) conceptualize teacher self-efficacy as pertaining to three larger domains, which are enumerated through the Teacher Self-Efficacy Scale they developed. These domains are classroom management, student engagement, and instructional strategies. Klassen & Chiu (2010) found that there was more between-teacher variation in self-efficacy regarding classroom management and student engagement than there was in terms of instructional strategies. Given that lower levels of self-efficacy have been seen in higher grade levels, where LGBTQ+ students are more likely to experience anti-LGBTQ+ harassment, it is crucial to consider teacher self-efficacy as part of larger, systems-wide harassment intervention and prevention efforts.

Barriers to Supporting LGBTQ+ Students

There are many factors which serve as potential barriers to teachers intervening in harassment towards LGBTQ+ students or supporting these students after the students have experienced some form of discrimination. These barriers exist on both individual

and systems levels. In terms of a system-level barrier, few students report that their school has a comprehensive anti-bullying/harassment policy which specifically includes sexual orientation, gender identity, and gender expression (Kosciw et al., 2020). Only one-tenth of students report having official polices which support transgender or non-binary students. Individually, teachers face increasing demands from administration, parents, and students; including curriculum teacher evaluations, special education considerations, and a myriad of other responsibilities that may make it easier to ignore a homophobic comment or instance of harassment (Blackburn et al., 2018). Blackburn and colleagues also note that current, out LGBTQ+ students should not be relied upon for allyship or advocacy for other LGBTQ+ students, as this places an undue burden on these students.

Promoting positive school climates through a systems approach is one way to engage school districts and individual schools to better support LGBTQ+ students.

Fantus and Newman (2021) cite a lack of knowledge around LGBTQ+ issues as a factor for teachers enabling homophobic victimization of LGBTQ+ students through lack of intervention. In their study, participants reported that educators lacked awareness and training on how their own personal values and beliefs inform classroom discussions and responses to bias-based bullying against LGBTQ+ students. In a survey of school staff, Dragowski and colleagues (2015) found that thirty-one percent of participants intervened consistently after witnessing LGBTQ+ bias and harassment. This is consistent with findings by Kosciw and colleagues (2020), in which seventy-two percent of LGBTQ+ students perceived school staff's responses to incidences of harassment to be "not at all effective" or "somewhat ineffective." Kosciw and colleagues (2020) posit that a lack of

consistent intervention sends a message that bias and harassment towards the LGBTQ+ community is acceptable. This is not consistent with promoting positive school climates and can be used as a broaching topic with administration to begin making systemic changes to improve outcomes for LGBTQ+ students.

Critical inclusion is a building- or system-wide philosophy which would allow for more equitable support of LGBTQ+ students, as well as a reduction in harassment incidences. Kokozos and Gonzalez (2020) define critical inclusion as both "critiquing normative conceptualizations of inclusion and imagining new ways of supporting LGBTQ+ youth" (p. 152). They root their conceptualization of critical inclusion in the Individuals with Disabilities Education Act (IDEA, 2004) which advocates for and requires the least restrictive environment for students in schools. Kokozos and Gonzalez (2020) critique this slightly, however, by pointing out the lack of consideration for equity and the inability of IDEA (2004) to change structures, practices, and traditions which promote exclusion. This critical inclusion—the changing of structures and traditions which deprioritize equity and protection from harassment—for LGBTQ+ students is a way to create long-lasting positive change in school systems, which will further serve to protect and promote LGBTQ+ student well-being. School psychologists are positioned to work closely with teachers to provide critical inclusion for LGBTQ+ students, though teacher self-efficacy must be bolstered to support these students in their day-to-day lives.

Teacher Candidacy and Self-Efficacy Development

One of the central tenets of teacher preparation programs is to prepare highquality special education and general education teachers (Smothers, Colson, & Keown, 2020). A teacher candidate's experiences through their training, as well as their observations of others, social influences, and emotional well-being all contribute to the candidate's degree of resilience, choices, effort, and persistence in the face of adversity (Bandura, 1997). Self-efficacy, despite Bandura's position that it remains a relatively stable quality across time (1997), fluctuates significantly throughout a teacher candidate's preparation program and their first year of teaching. Woolfolk Hoy and Burke Spero (2005) found that teacher candidates often had inflated senses of self-efficacy in their last year of teaching, often when they are student teaching, which then sharply declines by the end of the first year of teaching out of their preparation programs. They attributed this to the "reality check" of the first year of teaching without supports from a preparation program.

These data indicate that, while teacher candidates may have generally inflated senses of professional self-efficacy, there is a great amount of variability in how and when that self-efficacy develops. These student teachers' experiences of self-efficacy development do not seem to vary significantly across teacher training programs (Davis, Bolyard, Zhang, Livers, Sydnor, & Daley, 2019). Therefore, teacher candidates with a high degree of professional experience through clinical experiences with LGBTQ+ students may feel more confident in their ability to support those students.

Research Questions & Hypotheses

The documented literature has shown that the rates and quality of teacher involvement in instances of LGBTQ+-related harassment are well below where students perceive they need to be. Teacher self-efficacy impacts student outcomes both academically and interpersonally. In order to better understand the influence of teacher

self-efficacy on the prevention and intervention in instances of LGBTQ+ student harassment, the following research questions and hypotheses were investigated.

1. Do teachers who have higher professional self-efficacy feel as though they are better able to support LGBTQ+ students in schools?

Given that teachers who feel higher levels of self-efficacy feel more confident, competent, and motivated to engage with students and deliver instruction effectively, self-efficacy may also serve as an indicator for a teacher's willingness and motivation to intervene in situations of harassment they see in schools. It was hypothesized that teachers with higher levels of professional self-efficacy will report that they feel better able to intervene with and support LGBTQ+ students who have experienced harassment than those with lower levels of professional self-efficacy.

2. Do teachers feel more efficacious in implementing certain best practices (e.g., competence around LGBTQ+ issues, individual intervention and support of LGBTQ+ students, systems-level advocacy for LGBTQ+ issues, etc.) than others?

Teachers tend to report feeling more efficacious in delivering instruction and other, more one-on-one, individualized opportunities to support students. As such, it is hypothesized that teacher candidates surveyed will feel more efficacious in developing their competence regarding supporting LGBTQ+ students and intervening on an individual basis with students than systems-wide interventions such as advocating for anti-harassment policies.

Methods

Participants

Participants for this study were comprised of teacher candidates (also referred to as student teachers) enrolled in James Madison University's teacher preparation program. They were recruited with assistance from one member of the leadership in that department. All students in this program were eligible to participate in the survey except those who were student teaching in the same district as the principal examiner's internship. The participants were given the researcher's direct contact information prior to taking the survey should they have questions. No direct communication occurred between the examiners and participants except if participants chose to reach out with a question. Survey responses were kept anonymous as to maintain participants' professional dignity and to encourage honesty in responding.

Participant Demographics

This survey was distributed to 270 teacher candidates completing their student teaching semesters, recruited through James Madison University's teacher training program. Initially, 27 individuals responded to the survey, yielding an initial response rate of 10%. Of these responses, six were incomplete and, thus, could not be used as part of the analyses. The final sample size for this study was n = 21, or a 7.78% response rate. Given the small sample size, any conclusions drawn from these results must be interpreted with caution. Of the 21 teacher candidates who completed the survey, 52.4% (n = 11) were completing their student teaching at the elementary school level, 23.8% (n = 5) were completing their student teaching at the middle school level, 19.0% (n = 4) were completing their student teaching at the high school level, and 4.8% (n = 1) were at the preschool level. The ages of participants ranged from 21 to 54, with a median age of 22 years old.

One-third of the sample (33.3%, n = 7) reported that they identify as part of the LGBTQ+ community, while 66.7% (n = 14) reported that they did not. Sample responses indicated that 19.0% (n = 4) reported that they identify as part of another marginalized group, while 76.2% (n = 16) reported that they did not. One participant was unsure.

Table 1 $Participant\ Demographics\ (N = 21)$

Description	Frequency	Percentage
Age		
20-22	14	66.7%
23-25	5	23.8%
26+	2	9.6%
Teaching Level		
Elementary School	11	52.4%
Middle School	5	23.8%
High School	4	19.0%
Pre-School	1	4.8%
LGBTQ+ Identity		
Yes	7	33.3%
No	14	66.7%
Marginalized Community		
Yes	4	19.0%
No	16	76.2%
Unsure	1	4.8%

Measures

Data was collected using the Teacher Efficacy Scale (Tschannen-Moran & Hoy, 2001; Appendix A), a researcher-developed set of questions regarding teachers' confidence in implementing best practices for supporting LGBTQ+ students (Appendix B), and a demographic survey (Appendix C).

The Teacher Efficacy Scale (TES) was developed to gauge a global sense of a teacher's professional efficacy (Tschannen-Moran & Hoy, 2001). The long form of the

scale, which contains twenty-four items measured on a Likert-scale from 1 (Nothing) to 9 (A Great Deal), was used. Items are phrased as questions, with either "How much can you do to..." and "To what extent can you..." as stems. Items load onto three factors: Efficacy in Student Engagement, Efficacy in Instructional Strategies, and Efficacy in Classroom Management. Each factor contains eight items of the overall twenty-four. The three factors all have internal consistency reliabilities with alpha values between .87 and .91, indicating strong internal consistency (Tschannen-Moran & Hoy, 2001). The overall measure has an internal consistency reliability with an alpha value of .94 (Tschannen-Moran & Hoy, 2001).

The researcher developed questions related specifically to LGBTQ+ students and best practices in supporting them to supplement the Teacher Efficacy Scale. The questions were phrased as statements about the participants (e.g., "I feel confident in my ability to...") and included statements about teachers' confidence in intervening in instances of anti-LGBTQ+ harassment, supporting students through the coming out process, and advocating for LGBTQ+-inclusive anti-bullying and anti-harassment policies. A global confidence item was included: "I feel confident in my ability to support LGBTQ+ students in schools." These items were also measured using a Likert scale, with five response items ranging from 1 (not at all confident) to 5 (very confident).

Procedures

The survey was administered online through the JMU class of student teachers using Qualtrics, an online survey tool provided to graduate students by their university. Information about the purpose of the survey, the intended findings and aims of the survey, benefits, and risks were provided prior to the start of the survey. In addition, the

researcher provided the researcher's contact information and that of the researcher's faculty advisor. Institutional Review Board approval was sought through the researcher's university and approval for the current study was given on February 1, 2022.

Analysis

Primary analysis consisted of descriptive statistics regarding the participants' years of experience teaching and what level of school they teach, as well as whether they identify as part of the LGBTQ+ community. Correlations were explored between global teacher efficacy (from the TES) and the participants' responses to LGBTQ+ specific confidence items, including the global LGBTQ+ support item. Additional exploration of which competencies (individual competencies, intervention, systems level advocacy) teacher candidates were more confident in was conducted using hypothesis testing.

Results

For the purposes of this study, analyses focused on exploring relationships between teacher professional self-efficacy and their confidence in supporting LGBTQ+ students through specific difficulties that these students may face. This was accomplished through first presenting the demographic data for the survey respondents, the sample reliabilities for the various measures used, then lastly the correlational and inferential analyses related to the two research questions.

Measure Reliabilities & Descriptive Statistics

Reliability analyses were conducted on the sample responses to the Teacher Efficacy Scale (Tschannen-Moran & Hoy, 2001), the LGBTQ+ Confidence Items total, as well as three hypothesized subscales of these confidence items: items related to individual competence on LGBTQ+ issues ("Competence"), individual support and

intervention with LGBTQ+ students ("Intervention"), and systems advocacy ("Systems"). The Teacher Efficacy Scale sample reliability was excellent, with a Cronbach's alpha of $\alpha=0.920$. This is comparable to its exploratory reliabilities when it was first published. The LGBTQ+ Confidence Items total yielded a total sample reliability of $\alpha=.717$, which is acceptable for the purposes of this study. The three subscales all yielded poor sample reliabilities, with the Competence subscale $\alpha=0.360$, the Intervention subscale $\alpha=0.481$, and the Systems subscale $\alpha=0.110$.

Table 2Scale Reliabilities

Scale	Cronbach's α	Number of Items
Teacher Efficacy Scale (Tschannen- Moran & Hoy, 2001)	0.920	24
LGBTQ+ Confidence Items (Total)	0.717	7
Competence Subscale	0.360	2
Intervention Subscale	0.481	3
Systems Subscale	0.110	2

Descriptive statistics were examined for responses to the seven LGBTQ+ Confidence items. The item with the least amount of variance in responding ($\sigma^2 = 0.257$) relates to a participant's confidence in their ability to educate themselves about unfamiliar terms or identities (Competence subscale). This item had a minimum response of 4.0 and a maximum of 5.0. The item with the most variance in responding ($\sigma^2 = 1.462$) relates to a participant's confidence in their ability to begin conversations with their administration about systems policies which may affect LGBTQ+ students (Systems subscale). This item had a minimum response of 1.0 and a maximum of 5.0.

Table 3LGBTQ+ Confidence Item Descriptive Statistics

Item	Mean	SD	Range
I feel confident in my ability to intervene in instances of anti-LGBTQ+ harassment.	3.76	.944	2.0 - 5.0
I feel confident in my ability to show empathy and kindness to students through their personal coming out process	4.52	.750	3.0 - 5.0
I feel confident in my ability to remain nonjudgmental when interacting with LGBTQ+ students.	4.71	.561	3.0 - 5.0
I feel confident in my ability to advocate for LGBTQ+ inclusive antibullying and anti-harassment policies.	4.48	.814	3.0 - 5.0
I feel confident in my ability to educate myself about unfamiliar terms, identities, or labels (e.g., "LGBTQ+", pronouns, etc.).	4.57	.507	4.0 - 5.0
I feel confident in my ability to begin conversations with my administration about system policies which may adversely affect LGBTQ+ students.	3.48	1.209	1.0 - 5.0
I feel confident in my ability to promote better outcomes for LGBTQ+ students in schools.	4.05	.921	2.0 - 5.0

Analyses

A Spearman's Rho correlational analysis was conducted to analyze the data for research question one: Do teachers who have higher total professional self-efficacy have higher confidence in supporting LGBTQ+ students? The results indicated that there is a moderate positive relationship in this sample ($\rho = 0.362$, p = .107). The non-statistical significance of this finding indicates that these relationships are not necessarily indicative of the whole population of teacher candidates. In this sample, the higher a teacher

candidate's perceived professional self-efficacy, the greater confidence they felt in supporting LGBTQ+ students through group-specific difficulties.

A one-way, within-subjects Analysis of Variance (ANOVA) was conducted to analyze the data for research question two: Do teachers feel more efficacious in implementing certain best practices (e.g., competence around LGBTQ+ issues, individual intervention and support of LGBTQ+ students, systems-level advocacy for LGBTQ+ issues, etc.) than others? Given that the data did not meet the assumption of sphericity, the Huynh-Feldt adjustment was used to conduct these analyses. Results yielded a significant difference between at least two of the LGBTQ+ confidence subscales, F(1.648, 32.961) = 4.934, p = 0.018. Post-hoc pairwise comparisons were made using the Bonferroni adjustment to determine which subscales differed significantly from each other. There was a significant difference in responding between the Competence subscale and the Systems subscale, p = 0.010. This indicates that participants felt significantly more confident in their ability to educate themselves on LGBTQ+ specific issues than engage in systems-level advocacy.

Discussion

The goal of the present study was to explore the function of teacher efficacy as it relates to their confidence in supporting LGBTQ+ students. Another aim was to identify potential areas of teacher education which need to be bolstered in order to increase the efficacy of these new teachers entering their profession. While many of the responses indicated that teacher candidates have some level of confidence supporting LGBTQ+ students in a variety of ways, there was variation across and within specific competencies as to how ready teacher candidates are to support LGBTQ+ students effectively. These

findings suggest that there are gaps in training and practical experiences which can be filled, as well as opportunities for collaboration between professionals in schools.

Teacher self-efficacy is a fluid construct which can determine how effective a teacher is in their service delivery and in their ability to support students. The average reported self-efficacy among respondents indicated that teacher candidates feel generally efficacious in their service delivery in the areas of classroom management, instruction, and student engagement. This aligns with previous research that teacher candidates often feel efficacious in their professional abilities. While a moderate positive relationship was found between participant ratings of their own global professional self-efficacy and their confidence in supporting LGBTQ+ students, statistical significance was not achieved. Thus, these results fail to reject that there is no association between these two variables in the this sample. Despite this finding, conclusions can be drawn related to sample demographics. Supportive teachers serve an important function in the lives of LGBTQ+ youth in helping them feel safer, promoting their sense of school belonging, and supporting their psychological well-being (Kosciw et al., 2020). Kosciw and their colleagues (2020) also assert that having LGBTO+ personnel in schools who are out or open about their sexual orientation and gender identity may provide another source of support for LGBTQ+ students. It may also indicate a more supportive and accepting school climate. This sample contained a disproportionately high amount of LGBTQ+ respondents (33.3%) relative to the larger national population, which estimates LGBTQ+ individuals make up approximately 7.1% of American adults (Jones, 2022). Oversampling of LGBTO+ teacher candidates may have inflated the sample's overall confidence supporting LGBTO+ students. This indicates that, while results could not be

extrapolated to the larger population of teacher candidates, they could indicate that a queerer teacher candidate population may lead to students feeling more accepted or that their school environments are more inclusive of sexual and gender minority populations.

In terms of this sample's Total Confidence in supporting LGBTQ+ students, respondents reported that they felt highly confident in their ability to support students individually, develop their own competence surrounding LGBTQ+ issues, and advocate on a systems level for LGBTQ+ students. In looking at responses to the LGBTQ+ Confidence items specifically, response patterns indicated that there was an overall level of confidence in supporting LGBTQ+ students. Despite this, higher levels of confidence were endorsed for some items than others. Systems advocacy seemed to be the source of most variation in responding, as some respondents rated their confidence in this area highly while others rated that they had little to no confidence in engaging in systems level advocacy. Conversely, individual competence related to LGBTQ+ terminology and issues was rated as relatively high throughout all respondents, with all participants reporting they felt mostly or very confident in their ability to educate themselves on unfamiliar terminology. These data indicate that, while current efforts to educate teacher candidates on issues of diversity pertaining to the LGBTQ+ population seem to be effective, education related to effective systems-level advocacy may not translate to practice during the student teaching experience.

In constructing the measure used to assess teacher candidate confidence in supporting LGBTQ+ students, items were written based on the current needs and lived experiences of LGBTQ+ students in schools. These two scales met acceptable benchmarks for internal consistency within the sample, indicating that they are both

reliable measures of their respective concepts. In looking at the subscales of the LGBTQ+ Confidence items, these were generally weak measures of their respective concepts. This could be due to the number of items and the lack of empirical evidence that the skills needed to address the difficulties in each item within each subscale are related in their constructs. Overall, however, results indicated that teacher candidates are generally more confident in their ability to increase their knowledge and skills related to LGBTQ+ issues than their ability to engage in systems-level advocacy on behalf of their sexual and gender minority students. This may be due to a variety of factors, including that teacher candidates often are not established enough in their systems to feel as though they can play a role in systems change. Teacher candidates are often young professionals, as seen in the sample demographics of this study, and thus are often at a systemic disadvantage when compared to their older colleagues and professional superiors (e.g., administrators, school board members, etc.). This may dissuade a teacher candidate or early-career professional from advocating for change while they are still exploring their system's dynamics, values, and capabilities.

In assessing which competencies in supporting LGBTQ+ students were areas of confidence for participants, it was clear through sample descriptive statistics and hypothesis testing that respondents felt they had stronger skills in bettering their own skills than trying to make change in their systems. This is often a difficult set of skills to develop in young professionals, as one must first adapt to a school system before beginning to make changes to it. Respondents reported varying levels of confidence in their ability to initiate conversations with their administration about anti-bullying or harassment policies, which may be due to a teacher candidate's position being one of

learning and observing rather than acting as change agents in a system. It may also be attributable to teacher-administrator relationships still being developed and rapport with colleagues still being established. Fairman and Mackenzie (2014) describe that teachers use strategies such as creating collegial climates and building trusting relationships to demonstrate leadership and act as change agents in their buildings, which are skills which take time to build and take time to implement. As these skills develop and teachers become ingrained in their systems, their confidence in engaging in building- and district-level advocacy on behalf of the LGBTQ+ student population may increase.

Limitations & Future Directions

Due to the scope of the current study and the methods used, there are limitations to the current study. The first of these is the response rate for the survey distributed. A ten percent response rate (7.78% after the dataset was cleaned) is quite small for a survey. This low response rate is hypothesized to be due to the level of work teacher candidates are typically engaged in including theoretical and experiential learning, classes, and supervisory obligations. This may leave little time to complete a survey they received through email. The characteristics of the sample who did respond may also have limited conclusions drawn. Respondents to the survey skewed younger, in their early twenties, and did not identify as members of marginalized communities. A majority of respondents also did not identify as LGBTQ+ individuals, which indicates that they may have quite variable experiences interacting with, opportunities to work with, and developed attitudes or biases towards LGBTQ+ students. Thus, further exploration into training programs and experiential knowledge which may affect teacher candidate confidence may be warranted.

The LGBTQ+ Confidence items subscales also serve as a limitation in this study, as the internal consistency ratings for each of the derived subscales were low. This limits any conclusions drawn from these scales in particular. Further elaboration on this scale may be warranted to ensure measurement of specific skills that teachers may need to support LGBTQ+ students, particularly in terms of systems-level advocacy. To expand on this measure, a factor analysis may prove useful. Also, exploring more items to add to the scale to make it a more comprehensive set of questions may prove beneficial in improving its reliability. Further research into best practices in supporting LGBTQ+ students and practical application of those best practices may also be beneficial.

Further research replicating this study (with better-developed measures) with current teachers across the lifespan of their careers may be illuminating to the effect of experience in self-efficacy and confidence supporting LGBTQ+ students. Another future point of study could focus on gaining a nationally representative sample of teacher or teacher candidates. Conducting a similar study with a cohort of only LGBTQ+ teachers may also yield valuable information regarding relating to students, systemic difficulties in identifying as LGBTQ+ within a school system and serving as advocates for the LGBTQ+ community; this study may benefit from including a qualitative component exploring participants' training and practical experiences. Focusing on ways to support LGBTQ+ students that are already ingrained in our school systems (i.e., teachers, administrators, policies, etc.) in addition to the current state of LGBTQ+ students is crucial to effecting change in young queer students' lives.

Implications for School Psychologists

School psychologists are in a unique, advantageous position to serve as consultants, change agents, and advocates for LGBTQ+ youth. They are able to work with students, teachers, and administrators to provide continuing education and updated best practices on working with LGBTQ+ students. School psychologists have an ethical obligation to promote systems change in a way that will benefit all children and to advocate for school policies and practices that are in the best interests of children (National Association of School Psychologists, 2020). School psychologists can use their skills, advocacy, and connections within school buildings and school systems to promote positive change for LGBTQ+ students. This position extends to new teachers as well school psychologists can support the efficacy of new teachers through providing consultative services, engaging with them in conversations about their experiences, and conducting observations of classrooms and providing recommendations. These classroom observations may be beneficial in collaborating to provide recommendations for classroom behavioral management and student engagement, as school psychologists often work with students who may demonstrate behaviors or lowered engagement in the classroom. As mental health and behavioral professionals in school buildings, school psychologists are able to support new teachers and engage them in their own skill-growth through ongoing relationship building and support.

School psychologists are positioned to provide trainings, professional developments, and consultative support for teachers who find themselves in the position to support LGBTQ+ students directly. Many LGBTQ+ students experience a variety of mental health difficulties such as depression, anxiety, eating disorders, and self-harm/suicidal ideation. Teachers are not equipped nor are they the appropriate parties to

intervene. Thus, school psychologists must network with teachers in supporting LGBTQ+ students as part of their mental health service delivery.

In ideal situations, LGBTQ+ students have vast networks of support in school systems, consisting of teachers, administrators, school psychologists, and other mental health support staff. Teachers are often seen as trusted adults when they are viewed as supportive and inclusive of sexual and gender minority students and may serve as the first contact for LGBTQ+ students who need support. Fostering efficacious and confident teachers who feel ready to support LGBTQ+ students as caring adults is one method to promote better outcomes for these students. This study hopes to begin a trend in research which places less emphasis on assessing negative outcomes for LGBTQ+ students (which is still important research) and seeks to elucidate best practices and practical applications of best practices in supporting all students.

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Appendices

Appendix A: Teacher Efficacy Scale (Tschannen-Moran & Hoy, 2001)

Directions: This questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each of the statements below. Your answers are confidential.

*All items are rated on a scale from 1 to 9: 1- Nothing, 3- Very Little, 5- Some Influence, 7- Quite a Bit, 9- A Great Deal

- 1. How much can you do to get through to the most difficult students?
- 2. How much can you do to help your students think critically?
- 3. How much can you do to control disruptive behavior in the classroom?
- 4. How much can you do to motivate students who show low interest in schoolwork?
- 5. To what extent can you make your expectations clear about student behavior?
- 6. How much can you do to get students to believe they can do well in schoolwork?
- 7. How well can you respond to difficult questions from your students?
- 8. How well can you establish routines to keep activities running smoothly?
- 9. How much can you do to help your students value learning?
- 10. How much can you gauge student comprehension of what you have taught?
- 11. To what extent can you craft good questions for your students?
- 12. How much can you do to foster student creativity?
- 13. How much can you do to get children to follow classroom rules?
- 14. How much can you do to improve the understanding of a student who is failing?
- 15. How much can you do to calm a student who is disruptive or noisy?
- 16. How well can you establish a classroom management system with each group of students?
- 17. How much can you do to adjust your lessons to the proper level for individual students?
- 18. How much can you use a variety of assessment strategies?
- 19. How well can you keep a few problem students from ruining an entire lesson?
- 20. To what extent can you provide an alternative explanation or example when students are confused?
- 21. How well can you respond to defiant students?
- 22. How much can you assist families in helping their children do well in school?
- 23. How well can you implement alternative strategies in your classroom?
- 24. How well can you provide appropriate challenges for very capable students?

Appendix B: Questions Related to Supporting LGBTQ+ Students

Directions: Please rate your responses to the following items related to supporting LGBTQ+ students through relevant difficulties in schools. Answers may range from 1 (not at all confident) to 5 (very confident). Your answers will remain anonymous.

- 1. I feel confident in my ability to intervene in instances of harassment towards LGBTQ+ students.
- 2. I feel confident in my ability to show empathy and kindness to students through their personal coming out process.
- 3. I feel confident in my ability to remain non-judgmental when interacting with LGBTQ+ students.
- 4. I feel confident in my ability to advocate for LGBTQ+ inclusive anti-bullying and anti-harassment policies.
- 5. I feel confident in my ability to educate myself about unfamiliar terms, identities, or labels (e.g., "LGBTQ+", pronouns, etc.).
- 6. I feel confident in my ability to begin conversations with my administration about system policies which may adversely affect LGBTQ+ students.
- 7. I feel confident in my ability to take action to promote better outcomes for LGBTQ+ students in schools.

Appendix C: Demographic Information Questions

Direction: Please complete the following demographic items. Your answers will remain anonymous.

- 1. Do you identify as part of the LGBTQ+ community?
 - a. Yes
 - b. No
 - c. Unsure/Questioning
- 2. Do you identify as part of another marginalized/minoritized group (e.g., based on race, ability status, socio-economic status, etc.)?
 - a. Yes
 - b. No
- 3. Which school level do you wish to teach?
 - a. Elementary School
 - b. Middle School
 - c. High School
 - d. Other
 - i. (Please elaborate.)
- 4. What is your age (in years)?
 - a. 18-99

Informed Consent Letter

Identification of Investigators & Purpose of Study

You are being asked to participate in a research study conducted by Aj Levy from James Madison University. The purpose of this study is to determine if a relationship exists between a teacher candidate's sense of professional self-efficacy and their confidence in supporting LGBTQ+ students through identity-specific difficulties. This study will contribute to the researcher's completion of his Ed.S. thesis project.

Research Procedures

This study consists of an online survey that will be administered to individual participants through Qualtrics (an online survey tool). You will be asked to provide answers to a series of questions related to your professional self-efficacy and confidence in supporting LGBTQ+ students in schools.

Time Required

Participation in this study will require 10-15 minutes of your time.

Risks

The investigator does not perceive more than minimal risks from your involvement in this study (that is, no risks beyond the risks associated with everyday life).

Benefits

There are no direct benefits to participating in this study. Your participation will, however, contribute to a greater understanding of how educators and school mental health professionals can better support students who are a part of marginalized community. Information gained through participation in this study may benefit students and educators in the future related to student wellness and safety.

Incentives

You will not receive any compensation for participation in this study.

Confidentiality

While individual responses are anonymously obtained and recorded online through the Qualtrics software, data is kept in the strictest confidence. No identifiable information will be collected from the participant and no identifiable responses will be presented in the final form of this study. All data will be stored in a secure location only accessible to the researcher. The researcher retains the right to use and publish non-identifiable data. At the end of the study, all records will be destroyed. Final aggregate results will be made available to participants upon request.

Participation & Withdrawal

Your participation is entirely voluntary. You are free to choose not to participate. Should you choose to participate, you can withdraw at any time without consequences of any kind.

However, once your responses have been submitted and anonymously recorded you will not be able to withdraw from the study.

Questions about the Study

If you have questions or concerns during the time of your participation in this study, or after its completion or you would like to receive a copy of the final aggregate results of this study, please contact:

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Questions about Your Rights as a Research Subject

Dr. Lindsey Harvell-Bowman Chair, Institutional Review Board James Madison University (540) 568-2611 harve2la@jmu.edu

Giving of Consent

I have been given the opportunity to ask questions about this study. I have read this consent and I understand what is being requested of me as a participant in this study. I certify that I am at least 18 years of age. By clicking on the link below, and completing and submitting this anonymous survey, I am consenting to participate in this research.

https://jmu.co1.qualtrics.com/jfe/form/SV_a9nt6DFugPaNyIK

Andrew (Aj) Levy
Name of Researcher (Printed)

01/14/2022
Date

This study has been approved by the IRB, protocol #22-2693.