SCHOOL PSYCHOLOGISTS’ AWARENESS, TRAINING, ATTITUDES, AND
SUPPORTIVE PRACTICES WITH TRANSGENDER YOUTH

by

Michele E. Stathatos

Copyright © Michele E. Stathatos 2020

A Dissertation Submitted to the Faculty of the

DEPARTMENT OF DISABILITY AND PSYCHOEDUCATIONAL STUDIES

In Partial Fulfillment of the Requirements

For the Degree of

DOCTOR OF PHILOSOPHY

WITH A MAJOR IN SCHOOL PSYCHOLOGY

2020
THE UNIVERSITY OF ARIZONA
GRADUATE COLLEGE

As members of the Dissertation Committee, we certify that we have read the dissertation prepared by: Michele Stathatos

titled:

SCHOOL PSYCHOLOGISTS’ AWARENESS, TRAINING, ATTITUDES, AND SUPPORTIVE PRACTICES WITH TRANSGENDER YOUTH

and recommend that it be accepted as fulfilling the dissertation requirement for the Degree of Doctor of Philosophy.

Desiree Vega, Ph.D. ________________________________ Date: Jun 30, 2020
Desiree Vega, Ph.D.

Jina Yoon ________________________________ Date: Jun 30, 2020
Jina Yoon

Russell B. Toomey ________________________________ Date: Jun 30, 2020
Russell B. Toomey

Final approval and acceptance of this dissertation is contingent upon the candidate’s submission of the final copies of the dissertation to the Graduate College.

I hereby certify that I have read this dissertation prepared under my direction and recommend that it be accepted as fulfilling the dissertation requirement.

Desiree Vega, Ph.D. ________________________________ Date: Jun 30, 2020
Desiree Vega, Ph.D.
Dissertation Committee Chair
Disability & Psychoeducational Studies
ACKNOWLEDGEMENTS

As I near the end of this journey, I would like to express my gratitude to all of those who continuously lifted me up and helped me across the finish line.

I would like to thank my teachers, supervisors, and committee members: Dr. Vega, Dr. Toomey, Dr. Yoon, Dr. Kirkpatrick, Dr. Magee, and Dr. Stafford. I will always carry the knowledge you have all shared with me. Thank you for your patience, kindness, and willingness to teach.

I would like to say an extra, special thank you to my advisor and mentor, Dr. Vega. I cannot thank you enough for the ways you have supported and guided me through this program. Thank you for showing up, for being present, and for your commitment to help me grow, excel, and be successful in so many ways. I appreciate you and will always be thankful for your mentorship and support.

Thank you to my friends, Charlotte, Jaclyn, James, and Lily. I cannot imagine this journey without the four of you. We truly embodied “graduate student life” and got through this craziness together. You all have a special place in my heart, and I cannot wait to see what the future holds for us all.

Thank you to my best friend, and biggest supporter, Fedra. I don’t know what these past five years would have been like if we hadn’t met, but I am sure glad that we did. From my first day of graduate school, to my last, you have been there for me every step of the way. Thank you for pushing me to keep going when I wanted to give up, and for inspiring me to be the best version of myself. You have given me a safe space to learn, grow, and become confident and proud of the person that I am. For that, I cannot thank you enough.

Thank you to my family: Mom, Dad, Laura, and Nicole. I would not be where I am, or who I am, without you. Thank you for teaching me the importance of education, and for supporting me as I have sought out to achieve my dreams. I am proud to be part of a family that has taught me to always fight for what I believe in, and to stand strong regardless of those who may oppose. Thank you for always reminding me of my strengths, and for never letting me be overcome by my weaknesses. Thank you for your open hearts, and for your unconditional love and support. I could not have done any of this without you.
DEDICATION

This work is dedicated to the transgender, gender expansive, gender queer, gender variant, nonbinary folx who have fought to survive, exist, and thrive beyond the cultural binary.
# TABLE OF CONTENTS

LIST OF TABLES ...................................................................................................................... 8
ABSTRACT ................................................................................................................................. 9
CHAPTER 1: INTRODUCTION .............................................................................................. 10
Experiences of Gender Variant Students ............................................................................ 10
School Psychology and Supporting Transgender Students .............................................. 11
Related NASP Practice Domains ..................................................................................... 15
  Domain 2: Consultation and Collaboration ................................................................. 15
  Domain 4: Interventions and Mental Health Services to Develop Social and Life Skills ... 15
  Domain 6: Preventative and Responsive Services ....................................................... 17
  Domain 7: Family-School Collaboration Services ......................................................... 18
  Domain 10: Legal, Ethical, and Professional Practice .................................................. 19
Current Study ......................................................................................................................... 22
Research Questions .............................................................................................................. 24
Definition of Terms ............................................................................................................... 26
CHAPTER 2: LITERATURE REVIEW .................................................................................... 27
Gender Identity Development ............................................................................................. 27
Environmental Factors ......................................................................................................... 29
  Family, Cultural, and Peer Influences ............................................................................ 29
  Gender Identity Formation ............................................................................................... 32
Biological Factors .................................................................................................................. 35
  The Role of Androgens ................................................................................................... 35
  Neuroanatomy of Transgender Individuals .................................................................. 37
Gender Identity Development and the Bio-Psycho-Social Framework ............................. 39
  Psychological Well-Being ................................................................................................. 39
  Family Experiences .......................................................................................................... 39
  Victimization/Marginalization ......................................................................................... 42
  Abuse/Neglect .................................................................................................................. 44
  Anxiety, Depression, and Stress ...................................................................................... 45
  Substance Use/Abuse ....................................................................................................... 47
  Suicidality ......................................................................................................................... 48
School Climate ........................................................................................................50

The Role of School Psychologists ........................................................................53
- Assessment ........................................................................................................53
- Consultation ........................................................................................................55
- Intervention ........................................................................................................56

School Psychologists’ Role in Supporting All Students ..................................57

CHAPTER 3: METHODOLOGY .............................................................................59

Participants ............................................................................................................59

Measures ................................................................................................................62
- Demographic Form ..............................................................................................62
- Attitudes Toward Transgender Individuals Scale (ATTI) ..................................63
- Music Teachers’ Attitudes Toward Supportive School Practices (ATTI-SSP) .....63
- School Psychologists’ in Practice: Working with Transgender Students .......64
- Attitudes Towards Students Who Are Transgender Scale ..............................65
- School Psychologists’ Awareness of Transgender Issues ...............................66

Data Collection Procedures .................................................................................66

Data Analysis ..........................................................................................................68

CHAPTER 4: RESULTS .........................................................................................70

Preliminary Analyses .............................................................................................70

Scale Frequencies ..................................................................................................71

Bivariate Correlations ............................................................................................75

Research Question 1: What Predicts School Psychologists’ Awareness about Transgender Issues? ........................................................................................................76

Research Question 2: What Predicts School Psychologists’ Attitudes towards Transgender Youth? ........................................................................................................77


CHAPTER 5: DISCUSSION .....................................................................................80

Practical Implications ..............................................................................................83

Study Limitations ....................................................................................................87

Future Directions .....................................................................................................89
LIST OF TABLES

TABLE 1: DESCRIPTIVE STATISTICS OF PARTICIPANT DEMOGRAPHICS ...............60
TABLE 2: DESCRIPTIVE STATISTICS OF PARTICIPANT WORK AND TRAINING ....61
TABLE 3: RESEARCH QUESTIONS, HYPOTHESES, VARIABLES, AND STATISTICAL
ANALYSES........................................................................................................68
TABLE 4: DESCRIPTIVE STATISTICS OF STUDY VARIABLES..............................70
TABLE 5: CORRELATION MATRIX.......................................................................76
TABLE 6: PREDICTING AWARENESS ..................................................................77
TABLE 7: PREDICTING ATTITUDES .....................................................................78
TABLE 8: PREDICTING CURRENT PRACTICES.......................................................79
School psychologists have an important role to ensure that schools are safe and inclusive learning environments for all students, family members, and school staff. Transgender and gender variant youth are at high risk of experiencing peer victimization, academic underachievement, lower motivation to pursue secondary education, experience of mental health problems, substance abuse, and suicidality (GLSEN, 2017). Thus, school psychologists have an ethical responsibility to meet the unique social, emotional, and academic needs of diverse populations of students, including sexual minority and gender-nonconforming youth (National Association of School Psychologists [NASP], 2010). The purpose of this study was to assess school psychologists’ awareness about the experiences of transgender youth, attitudes towards transgender individuals, and professional practices with transgender students. A series of multiple linear regression equations were used to examine predictors of school psychologists’ awareness, attitudes, and professional practices related to transgender youth. Predictor variables included training, attitudes toward supportive school practices, attitudes towards transgender youth, and current practices. Training predicted higher levels of awareness and engagement in current practices, awareness towards transgender experiences predicted current practices, attitudes towards supportive school practices predicted awareness and attitudes, and engagement in supportive practices predicted attitudes. School psychologists reported overall low levels of training experiences, positive attitudes towards supportive school practices with a moderate level of implementation, positive attitudes towards transgender youth, and moderate levels of awareness about transgender experiences. These findings call for the need to increase training opportunities and implementation of supportive school practices.
CHAPTER 1

INTRODUCTION

Gender variant and transgender youth are at-risk of victimization, have negative perceptions of school climate, and display suboptimal psychosocial outcomes (Day, Perez-Brumer, & Russell, 2018; Kosciw, Gretyak, Zongrone, Clark, & Truong, 2017). However, emerging research also indicates that transgender youth tend to have better outcomes when they feel supported by school-based personnel (McGuire, Anderson, Toomey, & Russell, 2010). Thus, school psychologists have an ethical responsibility to meet the unique social, emotional, and academic needs of diverse populations of students, including sexual minority and gender-nonconforming youth (National Association of School Psychologists [NASP], 2010). In this role, school psychologists are uniquely positioned to support these youth due to their training and skills in working with diverse populations and youth, experience with school-based mental health, and responsibility to advocate in the best interest of the children they work with.

Experiences of Gender Variant Students

Current research has established that victimized lesbian, gay, bisexual, and transgender (LGBT) youth are at-risk for academic underachievement, lower motivation to pursue secondary education, and are also more likely to experience mental health problems, substance abuse, sexual risk-taking behavior, and suicidality (GLSEN, 2017). The majority of existing studies focus on LGBT youth more generally and groups the identities together, but little research has explored the unique needs of transgender youth. This is important to consider because transgender youth have experiences that differ from LGB youth. More specifically, in addition to often having non-predominant sexual orientations, they also have gender identities that vary from the gender binary. Therefore, a need for research specifically on transgender youth is
warranted, as such youth are especially vulnerable and marginalized. Furthermore, they also experience high rates of peer victimization and harassment because of their gender identity. Thus, they are denigrated for expressing gender-nonconformity (Kosciw et al., 2016; Rose, Espelage, Aragon, & Elliott, 2011; Sulkowski, Bauman, Wright, Bixon, & Davis, 2014).

School Psychology and Supporting Transgender Students

In a review of existing studies published between 2000 and 2014, only 3% of empirical articles in the field of school psychology contained content related to LGBT youth (Graybill & Proctor, 2015). Such findings imply that the percentage of articles dedicated solely to the various needs of transgender youth is even less, and has been neglected in research produced and published by the field of school psychology. Research centering diverse experiences in the field was rated to be of low importance by individuals within the Society for the Study of School Psychology (SSP), a group that contains past and present APA Division 16 members, school psychology journal editors, senior faculty at leading school psychology programs, and influential scholars in the field (McIntosh et al., 2013). The few publications related to the diverse experiences of transgender youth is concerning and a much-needed area of growth, as school psychologists play an important role in being able to serve as important allies for supporting such youth. In this regard, existing empirical findings indicate that transgender youth experience disproportionately higher suicide attempts compared to cisgender adolescents (Toomey, Syversten, & Shramko, 2018). Toomey et al. (2018) also found disparities by gender identity in suicide attempts: female to male adolescents reported the highest rate of attempted suicide (50.8%), followed by adolescents who identified as not exclusively male or female (41.8%), male to female adolescents (28.9%), questioning adolescents (27.9%), cisgender female adolescents (17.6%), and cisgender male adolescents (9.8%). Additionally, more generally,
transgender youth are victims of physical violence, death threats, and homicide, and poor health outcomes. More specifically, research indicates that transgender and gender non-conforming (GNC) students report significantly poorer health, lower rates of preventative health checkups, and more nurse office visits than cisgender youth (Rider, McMorris, Gower, Coleman, & Eisenberg, 2018). Thus, the need for trained professionals who can competently address issues related to transgender and gender identities is greater than ever. Research related to the provision of mental and behavioral health services to transgender youth is largely underrepresented in the existing literature. Currently, school mental health professionals (counselors, social workers, and psychologists) report that their education and training has not sufficiently prepared them to meet the needs of LGBT youth (Kull, Kosciw, & Greytak, 2017), yet 51% of transgender students report talking to a school-based mental health professional at least once a year for gender identity related issues (Diaz, Kosciw, & Greytak, 2010).

Approximately 150,000 American adolescents between the ages of 13 and 17 years old identify as transgender (Herman, Flores, Brown, Wilson, & Coron, 2017). This is approximately 2% of the high-school-aged population in the U.S. (Johns et al., 2017). In addition to the 2% of students who endorsed the statement “Yes, I am transgender”, 1.6% of students responded to the statement “I am not sure if I am transgender” (Johns et al., 2017). These reported percentages are likely an underestimate of individuals who identify as transgender, as they do not take into consideration students who are fearful to disclose their identity along with the 1.6% who reported that they are unsure. The uncertainty of identity may indicate that they are unsure of what it means to be transgender, may be hesitant to identify as transgender, or may identify as non-binary, but not specifically as transgender. In the 2017 National School Climate Survey, 51% of transgender students reported that their school prohibited them from using their chosen
names and pronouns, 60% were required to use the bathroom or locker room corresponding to the gender on their government identification, and 27% of transgender students were prevented from wearing clothes because they were considered inappropriate based on the gender on their government identification (GLSEN, 2017). These reports indicate that most transgender students attend schools that are unsupportive or actively discriminate against them.

Currently, the extent to which school psychologists work with transgender youth is unknown. However, in recent years, national recognition of issues related to transgender youth and providing support in schools to transgender youth and their families has created an increase in best practice related resources. In this vein, the National Association of School Psychologists (NASP) and the American Psychological Association (APA) have both provided research-based materials for psychologists on how to help transgender students succeed academically, how to create inclusive school environments, how to implement nondiscrimination and equal opportunity policies, and how to work with parents of youth who identify as transgender. Moreover, the NASP released a position statement about creating safe schools for transgender and gender diverse students (National Association of School Psychologists, 2014). In this statement, the organization places an onus on school psychologists to ensure that schools are safe and inclusive learning environments for all students, family members, and school staff.

The APA recently published a document titled “Resolution of Supporting Sexual/Gender Diverse Children and Adolescents in Schools,” which supports that all persons, including children and adolescents who are diverse in their sexuality and gender identities, expression, and/or presentation, have the inherent human right to equal opportunity and a physically and psychologically safe environment within all institutions (APA, 2020). The resolutions included in this document state that both the APA and the NASP affirm that a) “same-sex physical,
sexual, and romantic attractions, feelings, and behaviors are normal and positive variations of human sexuality regardless of sexual orientation identity,” and b) “diverse gender expressions and presentations, regardless of gender identity, and diverse gender identities, beyond a binary classification, are normal and positive variations of the human experience” (APA, 2020). In this resolution, the APA and NASP both recommend school based mental health professionals serve as allies, encourage school staff to honor self-determination by supporting the decisions of students, assist administrators create safer environments for gender diverse, transgender, and intersex/disorders of sex development (DSD) students, adhere to established ethical principles that support the physical and psychological safety of gender and sexual diverse students, and work with other professional and community-based organizations in efforts to improve the safety and health of sexual and gender diverse students (APA, 2020). The NASP and APA both emphasize and acknowledge that having a transgender identity or being perceived as gender diverse is not a disorder, as well as that efforts to change a person’s gender identity are ineffective, harmful, discriminatory, and psychologically damaging. For school psychologists to provide support and address the needs of transgender youth, they must first understand the needs of this population and understand their own attitudes and biases toward them.

Considering the former—and as part of their ethical practice—school psychologists must evaluate their biases in general, yet also specifically toward transgender youth. Furthermore, consistent with guidelines from NASP, the ten domains of the NASP Model for Comprehensive and Integrated School Psychological Services speak to the importance of supporting transgender youth (NASP, 2010). These practice applications permeate all aspects of service delivery and highlight the versatile role of being a school psychologist. Specifically, the following domains of practice relate to creating and maintain a safe and supportive school climate for all students:
Domain 2 Consultation and Collaboration; Domain 4 Interventions and Mental Health Services to Develop Social and Life Skills; Domain 6 Preventative and Responsive Services; Domain 7 Family-School Collaboration Services; and Domain 10 Legal, Ethical, and Professional Practice. Although all ten NASP practice domains are important and relevant to practice, these specific domains best outline the wide range of services, knowledge, and skills that school psychologists can actualize when working with transgender youth. Below, the aforementioned domains are discussed in depth as they relate to the variety of services school psychologists can provide to transgender youth.

**Related NASP Practice Domains**

**Domain 2: Consultation and Collaboration.** Domain 2 of the NASP Practice Model requires school psychologists to be able to effectively consult, collaborate, communicate, and implement instructional, behavioral, and mental health services. Being able to communicate with students, families, and school staff regarding the needs of transgender youth will be especially important when discussing gendered activities and rules that are implemented by the school. Such activities and rules may include how bathroom use is managed, locker room usage and storage, and how sports team participation and the wearing of school uniforms is determined. Additionally, school psychologists must be able to communicate and advocate for effective policies when working at the individual, classroom, school, or systems levels (NASP, 2010). Lastly, school psychologists should be responsible for consulting with teachers to develop inclusive curricula so that all students can learn about LGBTQ+ individuals and their experiences.

**Domain 4: Interventions and Mental Health Services to Develop Social and Life Skills.** Domain 4 of the NASP Practice Model requires that school psychologists provide a
continuum of mental and behavioral health services. This may involve providing individual or group counseling, behavioral counseling, instruction on the provision of positive behavioral supports, and providing parent and teacher education (NASP, 2010). Providing support for such skills is especially important when working with transgender students. In a study, 90% of transgender students reported hearing anti-LGBTQ slurs and negative comments about gender expression sometimes, often, or frequently in school (Greytek, Kosciw, & Diaz, 2009). In addition, 87% of transgender students reported verbal harassment, 53% reported physical harassment, and 26% reported physical assault due to their gender identity and expression. These pervasive transphobic experiences were linked to higher rates of dropping out of school to avoid instances of victimization (Greytek et al., 2009). Additionally, they have also been related to higher rates of drug use and abuse (Herbst et al., 2008).

The need for social support is highly prevalent among transgender youth. This can be achieved through individual or group counseling, and by providing parent and teacher education regarding ways to implement support and intervention. The development of mental health services may be advanced through implementing support groups, such as a small group for LGBTQ+ individuals, or the establishment of Gay-Straight Alliance (GSA) groups on campus. GSAs can function as support groups in which LGBTQ students can receive social support, feel accepted, and develop friendships. They also act as a way to build a sense of belongingness and decrease the sense of social isolation. Schools with GSAs have been found to have higher perceived levels of safety and lower rates of harassment and victimization for LGBTQ youth (GLSEN, 2017). Students at schools with GSAs have reported higher levels of school belongingness and higher grade point averages (GPAs), they were less likely to have dropped out of high school, experience depression, and more likely to have attended college (Toomey, Ryan,
Diaz, & Russell, 2011). School psychologists can collaborate with teachers, administrators, and school staff to establish GSAs as a critical way to support LGBT students (Stathatos, Sulkowski, & Ryan, 2017).

In addition to providing mental health services and support groups to transgender youth, school psychologists have the responsibility of providing support to teachers and staff with resources regarding intervention during instances of peer victimization. These policies should be promoted at the school level and implemented within classrooms and across all contexts at school to fully support victimized students and effectively discipline students perpetuating transphobic victimization. School psychologists can disseminate resources to school staff through professional development meetings, staff meetings, and individual meetings with school staff. In this regard, the following resources may be particularly relevant: Gay, Lesbian, and Straight Education Network (GLSEN), GSA Network, Parents, Families, and Friends of Lesbians and Gays (PFLAG), The Gender Spectrum, The Family Acceptance Project, and The National LGBTQ Task Force’s Institute for Welcoming Resources.

**Domain 6: Preventative and Responsive Services.** Domain 6 of the NASP Practice Model requires school psychologists understand the relationship between risk and resilience, as well as how such factors impact learning and mental health outcomes. School psychologists can actively work to foster more supportive environments for transgender youth so that the stressors they face are mitigated and managed more effectively. Several protective factors may serve to buffer these stressors, such as social support and supportive educational systems. In one study, transgender youth reported that staff with knowledge of transgender issues served as a source of support and enabled them to successfully manage the stressors they faced (Singh & Meng, 2013). In another study, having staff that were knowledgeable about transgender issues was associated
with greater feelings of connection to school staff and feelings of safety among transgender youth in another study (McGuire et al., 2010). Furthermore, transgender youth experienced lower rates of absenteeism and victimization when they perceived school staff to be supportive (e.g., intervening when they hear gender-discriminatory remarks and implementation of LGBTQ curricula) (McGuire et al., 2010). Lastly, transgender youth largely benefit from organizations for LGBTQ youth or ones that focus on transgender issues because of increases in perceived peer and staff social support as well as perceived advocacy on their behalf (Singh, 2013). Research has found these factors to mitigate stressful and adverse experiences, but many transgender students report that they do not have resources associated with supportive school environments. For example, less than half of transgender youth report having a LGBTQ club at school or ability to find information about LGBT people or history, which results in them feeling like they do not belong at school (Greytek et al., 2009). Although indicators of supportive school environments and protective factors that benefit transgender youth are known, schools have been slow in the uptake of such resources. Considering this information, school psychologists must act as catalysts for change in the dissemination of such knowledge and resources. Additionally, they are responsible for collaborating with school staff, parents, and students to enhance learning experiences, mental and behavioral health, safety, and physical wellbeing of the student.

**Domain 7: Family-School Collaboration Services.** Domain 7 of the NASP Practice Model requires school psychologists to collaborate with families and engage with parents to help in the decision-making process regarding educational, behavioral, and mental health services they receive, or concerns related to their educational programming. In this role, collaboration with families may include providing families with information about gender identity and gender expression. School psychologists support families by helping them learn how to talk with their
children about these topics, by encouraging them to support their child’s identity, and by assisting them in developing the skills needed to advocate for their child (Ryan, Russell, Huebner, Diaz, & Sanchez, 2010). Often, school psychologists may need to mediate between differences in what the student and family members want. For example, within the context of supporting transgender youth, a student may want their teachers, classmates, and peers to address them by a certain name and pronoun that goes against how the family addresses their youth. In these instances, it is most important for school psychologists to consider what is in the best interest of the student. Involving family input and mediation is only recommended if the family is open to such conversations. Family-school collaboration should be assessed based on a person-by-person basis, as to not expose vulnerable youth to harm. (NASP, 2010).

**Domain 10: Legal, Ethical, and Professional Practice.** Domain 10 of the NASP Practice Model requires school psychologists to remain knowledgeable about ethical and professional standards and legal regulations. Maintaining competence in legal and ethical practice requires upkeep, which includes engaging in professional development and life-long learning. Additionally, it requires knowledge of legal and ethical practice and professional standards to be shared with school administration, teachers, support staff, and others who work with students. State and federal shifts designed to provide support to the transgender community have been on the rise in recent years and include policies such as using Medicaid to cover the costs of reassignment surgery (Foden-Vencil, 2015) and the prohibition of discrimination under Title VII of the Civil Rights Act of 1964 (Office of the Attorney General, 2015).

Keeping up-to-date with state and national policy regarding transgender identities is beneficial to not only understand their legal protections at school and in the community, but also to understand the legal processes that transgender youth go through during their transitions.
Transgender youth often experience dysphoria (i.e., conflict between a person’s physical or assigned sex and the gender with which they identify; APA, 2016) with their legal name and pronouns that were given to them at birth. Different states have different legal requirements for name and birth certificate sex designations, so it is crucial for school psychologists to understand state laws pertaining to the state in which they practice. In addition, different states have their own unique policies for changing gender name markers on a driver’s license or state-issued identification card. Often, this involves the collaboration of the individual, a physician attesting to the gender-change process, an application to the Social Security Administration, and a court hearing. Knowledge of these procedures will benefit not only a school psychologist to understand the legal application process in changing gender identification on state identification cards and birth certificates but will benefit transgender youth who are seeking assistance through these processes.

The ways that school psychologists provide support to transgender and gender diverse youth and their families are likely influenced by the attitudes surrounding gender identity and gender diverse students they harbor. It is also likely that they are influenced by the knowledge they hold towards transgender experiences. In effect, this may be related to the knowledge they have sought to learn for themselves as practitioners or may be based on the experiences that they have had in graduate training or in their professional careers. The role of training in working with sexual minority and gender diverse youth is highly important and is a largely under-reported training experience. According to one study, only 58% of school psychologists report having received education in working with LGBT students, with as little as 30% receiving graduate training in a diversity course, 21.5% attending workshops at conferences, and 1.1% reporting having taken a full graduate course related to LGBT issues (Arora, Kelly, & Goldstein, 2016).
Therefore, it is evident school psychologists are provided with minimal training to work with sexual minority and gender diverse youth, and it is likely that having a lack of training experiences may also impact the ways that school psychologists work with sexual minority and gender diverse youth.

Another study indicates that 85% of school psychologists received no education regarding the needs of LGBT youth during their graduate training program (Savage, Prout, & Chard, 2004). Therefore, with such a small percentage of school psychologists reporting explicit training in LGBT issues, are school psychologists prepared to serve the needs of LGB or transgender youth? In a study that assessed school psychologists’ likelihood to intervene when hearing offensive statements such as “that’s so gay” among faculty and students, 43-45% of school psychologists reported that they ignored such statements when they were not directed at particular people (McCabe, Dragowski, & Rubinson, 2013). This is similar to tacitly condoning such statements, which can be hurtful, alienating, and threatening. The lack of intervention in these instances likely comes from a lack of understanding of the impact of such derogatory statements, which highlights a need for additional training to understand the needs of LGBT youth as well as how school psychologists can better support such youth. Further, it is likely that the 85% of school psychologists who report not being trained in LGBT issues during graduate school would benefit from coursework that outlines how to address and support the issues these youth face at school (Savage et al., 2004). Overall, current research illuminates the lack of training opportunities, lack of intervention during name-calling, bullying and peer victimization, and the need for further training experiences in graduate school.

In the first study of its kind, researchers investigated school psychologists’ attitudes toward transgender students and found that school psychologists with more experience working
with transgender students are more comfortable addressing the needs of those students (Bowers, Lewandowski, Savage, & Woitaszewski, 2015). Results from this study also suggest that school psychologists who were more comfortable addressing the needs of these students tend to hold more positive attitudes toward this population. For example, on the adapted scale “Attitudes Towards Transgender Students,” (Bowers et al., 2015) school psychologists were more likely to agree that school policy should explicitly prohibit harassment related to gender identity and gender expression, and that they would feel comfortable working with a transgender student who came out regarding their gender identity. Lastly, most of the school psychologists who participated in this study (84%) reported that they were willing to address the needs of transgender students in school.

Although it is promising that school psychologists are willing to address the needs of transgender students in school, and while this study (Bowers et al., 2015) paved the way to understand the perceptions and beliefs school psychologists hold, the presented study and current related body of research does not explore school psychologists’ knowledge about transgender issues, or their relevant training experiences. Because minimal research has been conducted in this area, it is imperative for researchers within the field of school psychology to continue exploring the underlying factors that affect the multidimensional relationships and interactions between school psychologists and transgender youth. Therefore, further research related to the relationship among these variables is important for the field to continue moving forward with best practices according to NASP.

Current Study

The purpose of this proposed study is: 1) to assess school psychologists’ awareness about the experiences of transgender youth; 2) to assess school psychologists’ attitudes, perceptions,
and beliefs about transgender youth; and 3) to assess school psychologists’ professional practices with transgender students. A comprehensive review of current literature found no studies that have investigated the relationships between school psychologists training experiences, awareness about transgender issues, and attitudes perceptions and beliefs towards transgender youth concomitantly. The current study examined the relationships among these variables and explored practical implications for future training and practice.

Based on existing research, scholarship, and practice guidelines, it is important for school psychologists to understand the unique needs of transgender and gender variant youth. Moreover, it is critically important for such professionals to provide appropriate and non-discriminatory services that consider, are consistent with, and support a student’s gender identity. Previous research has found that 85% of school psychologists report minimal training in LGBT issues (Savage et al., 2004), and 76% of school psychologists report not being trained in transgender issues (Bowers et al., 2015). Therefore, it is important to further explore what school psychologists do know about transgender youth and the issues they face. In addition, exploring the attitudes of school psychologists towards transgender youth may be a valuable link between their attitudes and their current awareness about transgender youth. By further investigating and understanding school psychologists’ awareness about transgender issues, attitudes, and current practices, this study aimed to contribute valuable information that addresses the needs of transgender students and encourages school psychologists to engage in best practices. Moreover, by further understanding school psychologists’ perceptions and awareness of transgender issues, the field of school psychology can more specifically target best practices and supports that should be provided to transgender youth.
Research Questions

Consistent with the established need for research on school psychologists’ awareness, beliefs, and practices associated with working with transgender youth, this study involves investigating the following research questions and hypotheses:

Question 1: What predicts school psychologists’ awareness about transgender issues?

1. School psychologists’ awareness of transgender issues is predicted by their training experiences.
2. School psychologists’ awareness of transgender issues is predicted by their current practices.
3. School psychologists’ awareness of transgender issues is predicted by their attitudes towards transgender youth.

Question 2: What predicts school psychologists’ attitudes towards transgender youth?

1. School psychologists’ attitudes towards transgender youth is predicted by training experiences.
2. School psychologists’ attitudes towards transgender youth is predicted by awareness of transgender issues.
3. School psychologists’ attitudes towards transgender youth is predicted by their current practices.

Question 3: What predicts school psychologists’ current practices with transgender youth?

1. School psychologists’ current practices with transgender youth is predicted by their attitudes towards transgender youth.
2. School psychologists’ current practices with transgender youth is predicted by their awareness of transgender youth.
3. School psychologists’ current practices with transgender youth is predicted by their training experiences related to transgender youth.
Definition of Terms

**Cisgender**: Used to describe an individual whose identity and gender expression align with the sex assigned at birth (APA, 2018).

**Transgender**: An umbrella term for persons whose gender identity, gender expression, or behavior does not conform to that typically associated with the sex which they were assigned at birth (APA, 2018).

**Gender Variant**: An umbrella term used to describe gender identity, expression, or behavior that falls outside of culturally defined norms associated with a specific gender (APA, 2018).

**Nonbinary**: Gender identities that do not fall exclusively in male or female categories. Some examples include *genderqueer, gender nonconforming, gender diverse, or gender expansive* (Gender Spectrum, 2017).

**Gender Nonconforming**: Describes those who do not conform with the prescribed social expectations associated with the gender that matches a person’s sex assigned at birth (APA, 2018).

**Gender Expansive**: A broad term referring to aspects of gender expression, identity, and interests that go beyond cultural binary prescriptions of behaviors and interests associated primarily with boys or girls. Gender expansive includes people may include those with transgender and non-binary identities, as well as those whose gender in some way is seen to be stretching society’s notions of gender (Westheimer, Persinger, Cannava, & Koltz, 2016).
Gender Identity Development

Individuals with gender behaviors, expressions, and identities that depart from cultural norms and expectations implied by sex assigned at birth have been labeled using the following terms: gender variant, gender expansive, or transgender. Many but not all transgender individuals experience Gender Dysphoria, which is defined by the Diagnostic and Statistical Manual of Mental Disorders 5th Edition (DSM-5), as the “ongoing distress that arises from the incongruity of assigned sex at birth and internal experience of gender” (American Psychiatric Association, 2013). Extensive research is needed to improve the understanding of transgender identity development and transgender experiences among youth. At the onset of puberty, transgender youth are accompanied with anatomic dysphoria marked by increasing levels of distress evoked by the incongruence between experienced gender identity and developing secondary sex characteristics (Hembree et al., 2009).

Gender identity development occurs as an interplay between biological factors and environmental factors. Developmental research on gender identity typically focuses on the age and the process by which children develop understanding in three major domains: categorical sex differences, self-awareness and constancy of biological sex, and gender-congruent role behaviors (Kohlberg, 1966). Children begin to participate in gendered play at 17 months of age (Thompson, 1975) indicating the beginning of a child’s ability to differentiate between gendered behaviors. The emergence of gender identity begins around 18 months, when infants are able to recognize themselves as individuals (Lewis & Brooks-Gunn, 1979). Prior to being able to identify one’s own gender, children are able to discriminate gender labels for boys and girls by
pointing to appropriate photos when prompted (Leinbach & Fagot, 1986) at 24 months of age. At this time, they are able to identify other children’s genders and the gender of their parents in relation to stereotypic gender activities. Beginning at around 36 months, children can label others, are aware of gender-role stereotypes, and can self-categorize their own gender (Thompson, 1975). Between 24 and 60 months, children seek to achieve a clear, consistent, and enduring sense of gender identity (Diamond, Pardo, & Butterworth, 2011). In this developmental period, the differences in gender identity development and expression of cisgender (i.e., children whose sense of personal gender identity corresponds with their sex assigned at birth) children and transgender children becomes apparent. Zoslus, Ruble, and Tamis-LeMonda (2009) found that the preference for certain play behaviors (rough-and-tumble play in boys and cooperative play in girls) and the gradual increase in the preference for same sex playmates begins at this stage of identity development. Often, but not always, children who are aware of the inconsistencies between their biological sex and gender identity spontaneously state these feelings as early as 2 or 3 years of age (Strong, Singh, & Randall, 2000).

The development of transgender identity has been investigated across many fields of research. However, models that attempt to address the development of transgender identities are scarce—the most commonly cited model of transgender identity development is that of Devor (2004). Devor’s 14-stage developmental model outlines a progression from early confusion and persistent attempts at social comparisons to gradual self-acceptance, identity synthesis, and pride. Although the model clearly outlines the process of experiencing discomfort with one’s own biological sex and discrepant gender identity, exploration of one’s own gender identity and engagement in gender role activities, and identification as a transgender individual to oneself and to others, it has been critiqued for its lack of empirical validation (Pardo, 2009). Further
investigation of potential developmental sequences of transgender identity development may shed light on the nature, etiology, and general trajectory of transgender identities and clarify the extent and source of variability in this experience.

**Environmental Factors**

**Family, Cultural, and Peer Influences**

Children’s understanding of gender roles and identity develops through influences of many interrelated systems such as the family system, peer interactions, and cultural influences. Gender role development is often explained by social-cognitive theory, which suggests that individuals learn behaviors through imitation of models and through extending these observations to more general understandings (Endendijk, Groeneveld, & Mesman, 2018). Different behaviors are modeled by different-gendered individuals, which teaches children gender appropriate behaviors that they tend to conform with through modeling, reinforcing or punishing behavior, selecting child environments, shaping opportunities within environments, and scaffolding skill development (Croft, Schmader, Block, & Baron, 2014; Lawson, Crouter, & McHale, 2015; Weinraub et al., 1984).

Not only do children observe the differences in behavior between male and female adult figures, but they are also influenced by gendered direction and treatment. Parents exert a strong influence on children’s development of gender concepts by directly instructing their children in gender labeling. By labeling a child’s gender based on the child’s sex assigned at birth, the child then learns to label themselves and others (e.g., “boy” or “girl”). Stennes, Burch, Sen, and Bauer (2005) found that gender labeling is more prominent within family systems that hold more traditional gender views (e.g., mothers working fewer hours outside the home, household task
division along gendered lines, and discouragement of gender atypical behaviors) compared to families that espouse more egalitarian values.

The presence of gender-socialization in childhood and adolescence has been discussed in abundance. Fagot (1978) found that parents responded to their children differently based on their child’s gender. For example, parents were observed providing girls with more negative feedback when they engaged in large and active motor activities, which were defined by Fagot (1978) as running, jumping, climbing, roughhouse play, riding trikes and scooters, etc. In addition, parents gave girls more positive feedback when they engaged in adult-oriented and dependent behavior, which was defined as asking for help, following the parent around, and helping the parent with a task. Boys were encouraged to engage in large active motor activities and discouraged when they were observed playing with dolls. Lastly, fathers more than mothers were more likely to give negative feedback to boys when they played with dolls or other soft toys. Terenbaum and Leaper (2002) found that parents also teach children the appropriateness of engaging in specific activities such as playing with certain toys or expressing their emotions in certain ways. Instructions such as “that’s not a boy’s toy” or “boys don’t cry” are more impactful from fathers than from mothers and are more often more poignant for boys than for girls (Friedman, Leaper, & Bigler, 2007). Although children in early years may not see a link between their gender identity and the way they engage with the world through activities, play, and emotional expression, parents are largely influenced by outside cultural and gendered norms. Therefore, it is not surprising that children develop this knowledge at an early age when growing up in gender-stereotypic families.

Family systems are unique and children are affected differently by gender-socialization. Croft et al. (2014) investigated how implicit and explicit gender beliefs predict children’s future
aspirations. They found that mothers explicit gender beliefs predicted the beliefs of their children. When fathers engaged in an egalitarian distribution of household activities, their daughters were more likely to express greater interests related to working outside of the home and having a less stereotyped occupation. Additionally, fathers implicit gender role beliefs predicted their daughters’ occupational preferences. Lawson, Crouter, and McHale (2015) similarly investigated the links between family gender socialization and occupational attainment in young adulthood. They found that mothers who held traditional attitudes towards women’s roles had sons who attained more gender-typed occupations. Additionally, spending more time in childhood and adolescence with fathers predicted daughters attaining less gender-typed occupations, as well as sons having more gender-typed occupations in young adulthood.

Contemporary and cultural influences of gender socialization play an instrumental part in gender identity development and understanding. Media is one of the many powerful influences on how people view the roles of men and women in society. The portrayal of men and women in most forms of media (television, radio, books, and movies) are gender stereotypic. Clothing styles, jobs, and personality characteristics are highly influenced by the gender of each character. The gender of child actors in television is also heightened by gender differentiated activities that are designated either for boys or for girls. Boys demonstrate their preference for action-oriented and aggressive activities, and girls demonstrate their preference for nurturing activities directed towards dolls, fashion, and beauty products (Signorielli, 2001). Research has investigated the role of video game characters, television characters, and book characters on their impact of the socialization of gender roles. Greater television viewing is typically associated with greater exposure to stereotypic gender behavior and with subsequent development of more gender-stereotypic conceptions (Anderson, Huston, Schmitt, Linebarger, & Wright, 2001; Davies,
Spencer, Quinn, & Gerhardstein, 2002; Ward, 2003). The media’s depiction of males and females engaging in gender-stereotypic behavior increases the salience of gender and influences people’s beliefs about others’ reactions, their own reactions, and self-efficacy beliefs for conduct based on gender. For example, after being shown gender-stereotypic commercials, women performed more poorly on a math test than women who watched counter-stereotypic commercials (Davies et al., 2002). These results are consistent with stereotype threat research (Steele & Aronson, 1995), which has shown that both adults and children underperform in difficult tests when a negative in-group stereotype is made salient. Between the ages of 3 and 4 years, children become aware of social categories such as gender, and develop personal stereotypic beliefs about gender differences in toy preferences, dressing, and aggressive versus prosocial behaviors (Martin & Ruble, 2010). In congruence with stereotypic beliefs, research has found that boys are more likely to spend time playing computer games, watching sports and highly aggressive action programs, whereas girls spend more time watching relationship-focused programs (Lemish, Liebes, & Seidmann, 2001). The more central gender is to one’s self concept, the more likely one will seek out gender-stereotypic media, and the less pervasive influence gender has on one’s self-conceptions, the less engagement in stereotypical media (Ward & Friedman, 2006).

**Gender Identity Formation.** Egan and Perry’s (2001) construct of Gender Identity (GI) is composed of four variables which have been instrumental in gender identity research. The four variables include gender typicality (the degree to which one is happy with one’s gender group), gender connectedness (the degree to which one is happy with one’s gender group), intergroup bias (the extent to which one believes one’s own gender is superior to the other), and pressure to conform to gender norms (the degree to which one feels pressure from parents, peers, and self for...
conformity to gender stereotypes). They posit that young children develop a single component (membership knowledge) of GI within the normal developmental period of gender identity development and awareness (starting at 3 years of age). However, the four components do not develop until middle childhood. Peers have been theorized to have major impacts on children’s gender development. However, few studies have tested their influence using Egan and Perry’s (2001) gender identity model. In an investigation of peer influence on gender development, Kornieko, Santos, Martin, and Granger (2016) sought to understand the influence of peer interactions with the four components of gender identity. They found a significant peer influence on intergroup bias and pressure for gender conformity, but did not find evidence of significant relations among peer influence, gender typicality, and connectedness. Therefore, results of this study indicate that peer interactions contribute to a) the extent to which one feels pressure from parents, peers, and self for conformity to gender stereotypes and b) the degree to which one believes one’s own gender is superior to the other. However, they do not account for a) the degree to which one feels as a typical member of one’s gender group or b) the degree to which one is happy with one’s gender group.

Many studies have investigated the role of gender typicality and its impact on popularity, self-esteem, psychosocial well-being, and peer victimization and bullying. Adolescents who are content with their gender identity and rate themselves as being gender typical are accepted by and popular with their peers. Conversely, those who report being gender atypical are more likely to be teased and victimized by their peers (Egan & Perry, 2001; Jewell & Brown, 2014; Young & Sweeting, 2004). To assess gender typicality, Jewell et al. (2014) asked participants between 11 and 15 years of age to write five words that described a popular boy, five words that described a popular girl, five words that described a boy that gets picked on or left out, and five
words that described a girl that gets picked on or left out. These descriptions were then coded as either being stereotypical or counter-stereotypical for both boys and girls based on two indices. Descriptions were categorized based on the adjectives and behaviors listed on a validated gender stereotype measure, Child-Ocupations, Activities, Traits (C-OAT, Liben & Bigler, 2002). If the description was not included in C-OAT, it was independently rated by eight research assistants blind to the study, rating each description on a scale from highly masculine (-10) to neutral (0) to highly feminine (+10). Typicality was calculated by summing the total number of stereotypical words used to describe boys and girls. Atypicality was calculated by summing the number of counter-stereotypical words given per participant. Results indicated that low gender typicality predicts higher levels of psychopathology (e.g. depression, anxiety) for boys, which is mediated by experiences with gender-based teasing. The lower participants rated themselves for gender typicality, the more instances of rejection and teasing they experienced. Jewell and Brown (2014) concluded that negative mental health outcomes (e.g. anxiety, depression) may be a result of the social repercussions of gender atypicality rather than a direct result of not conforming to gender norms.

Similarly, Young and Sweeting (2004) investigated adolescent bullying, peer relationships, psychological well-being, and gender-atypical behavior. Gender was assessed using a modified version of Lippa and Connelly’s procedures of gender diagnosticity (Lippa, 1991, 1995; Lippa & Connelly, 1990). Results indicated that gender atypical boys experienced more victimization, loneliness, greater distress, and had fewer male friends than their gender typical peers. Additionally, they found that “femaleness,” which includes gender atypical boys and extremely gender-typed girls, was associated with greater psychological distress.
Studies of gender identity and self-esteem have found similar directional results as those that investigate the relationship between psychosocial outcomes and gender identity. Yunger, Carver, and Perry (2004) found that individuals with low gender typicality were also likely to experience lower feelings of gender connectedness and higher amounts of pressure to conform. These experiences foreshadowed deterioration on one or more indexes of adjustment: self-esteem, internalizing symptoms, externalizing symptom, and acceptance by peers. Furthermore, Smith and Leaper (2006) found that adolescents who reported gender typical identities had greater feelings of self-worth, and those who did not feel typical for their gender had a negative view of the self. The combination of low gender typicality with high pressure to conform was connected to higher rates of internalizing problems. Lastly, they found that a strong pressure to conform tended to result in less feelings of acceptance by peers.

Biological Factors

The Role of Androgens. Current research has unveiled the impact of biological factors in gender identity development and has found evidence for transgender development based in genetic, endocrine, and neuroanatomical studies (e.g., Rosenthal, 2014; Saraswat & Safer, 2015). Results of these studies support that gender identity is not a psychosocial construct, but a combination of biological, environmental, and cultural factors. Studies of individuals with disorders of sex differentiation (DSD) have shed light on the understanding of gender identity and have helped inform the role of prenatal and postnatal androgens in gender identity development (Doreleijers, & Cohen-Kettenis, 2007). DSDs are defined as congenital conditions associated with atypical development of chromosomal, gonadal, or anatomical sex (Hughes, Houk, Ahmed, & Lee, 2006). The role of prenatal and postnatal androgens (male sex hormones: testosterone) have been found to impact gender identity development. Across three studies, the
presence of pre-and-postnatal androgens demonstrated a greater than expected number of patients with gender dysphoria, atypical gender identity, or who are transgender (Berenbaum & Baily, 2003; Dessens, Slijper, & Drop, 2003; Meyer-Bahlburg, Dolezal, Baker, Ehrhard, & New, 2006).

Berenbaum and Bailey (2003) investigated the role of prenatal androgens in biological female participants (46-XX chromosomes) who were born with congenital adrenal hyperplasia (CAH) and 21-hydroxylase deficiency. CAH is a genetic disorder that affects the adrenal glands that produces hormones, regulates metabolism, the immune system, blood pressure, and other essential functions (Berenbaum & Bailey, 2003). In chromosomal females, the classical form of the disorder results in the excess production of male sex hormones (androgens/testosterone) and causes genital masculinization (Speiser & White, 2003). Similarly, 21-hydroxylase deficiency is another inherited disorder that affects the adrenal glands, resulting in the excess production of androgens. Berenbaum and Bailey (2003) found that most females with CAH have female-typical gender identity, but a small number have cross-sex identification can be expected to live comfortably as males. Gender identity scores indicated that 11.6% of patients rated discomfort with their gender identity (e.g., discomfort as a girl, wish to be a boy). Furthermore, study findings showed that degree of genital virilization is not associated with gender identity (Berenbaum & Bailey, 2003). Dessens et al. (2005) found a surprisingly larger than expected percentage of their participant population to report problems with their gender identity. Although the majority of their patients developed gender identity as girls and women and did not feel gender dysphoric, 5% of their patients endorsed gender dysphoria and did not associate with the female gender. This may appear to be a seemingly small percentage, but it is significantly higher than the prevalence of transgender individuals in the general population (less than 1%). Lastly,
Meyer-Bahlburg et al. (2006) found that out of 42 patients with 21-hydroxylase deficiency who participated in their study, 7.1% of them had gender dysphoria or had changed their gender to male. In addition, they found a relationship between severity of the chromosomal disorder and gender identity outcome. These three studies indicate that there is a biological role for prenatal/postnatal androgens in gender identity outcome of 5.2% to 11.6% of patients who experience gender dysphoria, atypical gender identity, or are transgender (Berenbaum & Baily, 2003; Dessens et al., 2003; Meyer-Bahlburg et al., 2006).

**Neuroanatomy of Transgender Individuals.** Studies that investigate the neuroanatomy of transgender individuals prior to gender affirming hormone therapy have found that there may be neurological morphology and activation patterns that are congruent with gender identity rather than expression of the sex assigned at birth in transgender individuals prior to receiving hormone therapy. More specifically, structural observations have been made among transgender individuals in studies with gender dysphoria and have concluded that the differences in cortical thickness, gray matter volume, white matter microstructure, structural connectivity, and corpus callosum shape, are congruent with the individuals gender identity rather than with their sex assigned at birth (Hahn et al., 2014; Kranz et al., 2014; ). Additionally, Hahn et al. (2014) found that the neuroanatomy of male to female (MtF) participants showed an increase in interhemispheric connectivity between the subcortical/limbic and cortical regions. Previous research has shown that women exhibit stronger interhemispheric connections than men (Ingalhalikar et al., 2014), suggesting that the findings presented by Hahn et al. (2014) indicate MtF participants and cisgender females have similar connectivity between the subcortical/limbic and cortical regions.
In addition to research surrounding neuroanatomical structural and morphological similarities, findings indicate that cognitive tasks among female to male (FtM) and MtF participants often match with the cognitive strengths of the gender groups transgender individuals identify with. When differentiating cognitive strengths between men and women, on average, women outperform men on particular verbal tasks (Halpern, 1992), and men outperform women on certain visuospatial tasks (Gordon & Kravetz, 1991). Early research conducted by Cohen-Kettenis, Van Goozen, Doorn, and Gooren (1998) found that FtM participants performed significantly worse than cisgender female control participants on verbal tests. More recently, Soleman et al. (2013) assessed sex differences in verbal fluency performance and in cisgender and transgender adolescents. Results indicate that participants produced similar amounts of words, and MtF participants produced significantly more words in the phonetic condition compared to control groups. Overall, Soleman et al. (2013) concluded that MtF adolescents performed better on verbal fluency tasks, which is consistent with research that finds women to perform better on verbal tasks.

Activation patterns in FtM and MtF individuals as measured by functional neuroimaging confirms that activation patterns are more representative of participants gender identity than that of their sex assigned at birth. Cerebral activation in MtF participants is consistent with that of cisgender female control participants while viewing erotic stimuli (Gizewski et al., 2009). Additionally, when evaluating voice gender perception of male and female voices in MtF participants compared with cisgender men and cisgender women, neural activation in the superior frontal gyrus in MtF participants showed patterns that were more similar to that of cisgender women (Junger et al., 2014). Therefore, research suggests that brain activation patterns
as shown by functional neuroimaging is consistent between gender identities (cisgender and transgender individuals).

**Gender Identity Development and the Bio-Psycho-Social Framework**

As previously discussed, gender identity development is the interplay of multiple contributing factors such as environmental factors (family influence, peer influence, and cultural influence) and biological factors (neuroanatomical, endocrine, and genetic). The biosocial framework proposes that our behaviors, identities, and personalities all have a biological basis, and when interacting with a social or cultural factor, are evident and salient as a part of one’s personality. Thus, the biosocial framework can be used to explain gender identity development.

**Psychological Well-Being**

*Family Experiences.* Grossman, D’Augelli, Howell, and Hubbard (2005) investigated parent reactions to transgender youth and gender variant expression and identity. Participants reported that 59% faced negative reactions from their parents initially. Of these participants, 54% of mothers and 63% of fathers reacted negatively. However, over time, parental reactions became more positive. Interviews were scheduled three years after participants came out to their parents. Based on participant report using a Likert scale (very negatively, negatively, positively, very positively, no reaction), parental reactions decreased to 50% of mothers and 44% of fathers reacting negatively. Participants also reported that their parents were likely to assume, ask, or tell them that they were LGBTQ prior to their coming out as transgender (68% of MtF participants and 50% of FtM participants). Parents reported finding out about their children’s identities at a mean age of 16. The majority of participants indicated that their parents thought their children needed counseling regarding their sexual orientation or gender expression (70% of MtF participants and 50% of FtM participants). Lastly, Grossman et al. (2005) found that the more
gender nonconforming the youth, the more likely they reported being physically and verbally abused by parents and that gender nonconformity was less accepted by parents in their MtF children than in FtM children. Lev (2004) and Zamboni (2006) propose the idea that families view their loved one’s transgender identity disclosure as a loss, and that loss and grief were the main roadblocks to family support of transgender family members (Lev, 2004; Zamboni, 2006).

Grossman and D’Augelli (2006) continued to investigate parents’ responses of transgender youth. Participants reported being called “sissy” and “tomboy” by their parents, encouraged FtM youth to act in more traditional gender typical ways at a younger age compared to MtF participants. The majority of participants report verbal victimization and physical victimization by their parents, with comparatively more MtF youth reporting being physically victimized. Chen-Hayes (2001) purports that victimization is more likely to be experienced by transgender youth who disclose their gender identity or express gender nonconformity. Grossman et al. (2006) found that 71% of their FtM participants reported past verbal victimization, including being called names, teased, or threatened with being hurt or beaten due to their transgender identity. The mean onset of verbal victimization was 13 years old, with 93% of perpetrators being male. In contrast, 87% of transgender MtF youth were verbally victimized with the mean onset of verbal victimization being 12.6 years of age and male perpetrators were responsible for 96% of the victimization. Physical victimization was reported by 16% of the FtM youth, with equal male and female perpetrators. The mean onset of age was 13. MtF youth experienced higher rates of victimization, with 35% of participants reporting physical victimization with 90% of perpetrators being male. The mean onset occurred at 13.8 years of age. FtM youth mostly reported being shoved by boys, whereas MtF youth reported extreme
incidents of victimization such as being punched by strangers, being hit in the head with an iron by their mom, and being choked by a classmate.

The research above synthesizes negative environmental and psychological experiences by transgender children. In addition to the presented studies, elevated rates of psychopathology are likely the result of extended experiences of prejudice, discrimination, and stigma for transgender identities (Clements-Noelle, Marx, & Katx, 2006), conflict between one’s appearance and stated identity (Grossman and D’Augelli, 2007), and general rejection by people in their social environments, including parents? (Koken, Bimbi, & Parsons, 2009; Russell, Toomey, Sanchez, & Diaz, 2011). For the first time ever, Olson et al. (2016) examined mental health in a sample of socially transitioned transgender children. The study specifically focused on transgender children who were socially transitioned across all contexts (in the family, at school, and surrounding environments) and therefore implies layers of support by family and peers. Olson et al. (2016) found that socially transitioned transgender children who are supported in their gender identity by family have developmentally normal levels of depression and only minimal elevations in anxiety. Additionally, this study found that socially transitioned transgender children have lower rates of gender dysphoria than those who are not supported in their identities. These findings suggest the importance of support across contexts in minimalizing the experience of psychopathology in transgender children.

Transgender youth who receive higher levels of support from their families have been shown to experience better mental health outcomes, including lower likelihood of engaging in non-suicidal self-injury, lower rates of suicidal ideation, fewer suicidal attempts, fewer depressive symptoms, decreased sense of burdensomeness stemming from the youth’s transgender identity, higher self-esteem, and higher levels of life satisfaction (Simons, Schrager,
Clark, Belzer, & Olson, 2013) found that family support serves to be a protective factor against health risks in GNC and transgender youth. Because transgender youth experience high levels of rejection, marginalization, and victimization, they are at greater risk for poor mental health. From the investigation of relationships among parental support, quality of life, and depression in transgender adolescents, Simons et al. (2013) found that parental support was significantly associated with higher life satisfaction, and lower perceived burden of being transgender, and fewer depressive symptoms. Conversely, greater levels of depression were associated with greater perceived burden and lower life satisfaction. Consistent with these findings, Katz-Wise, Budge, Orovecz, Nguyen, and Nava-Coulter (2017) found that these youth were at greater risk for suicidality, self-harm, self-esteem, depressive symptoms, and resiliency compared to transgender youth with greater levels of family functioning and support.

Victimization/Marginalization. Marginalized students (e.g., LGBT youth, students from immigrant families, students with disabilities) have been found to be especially vulnerable to peer aggression (Rose, Espelage, Aragon, & Elliott, 2011; Sulkowski et al., 2014). However, transgender youth are at the highest risk for experiencing peer victimization and experience it at extremely high rates compared to their non-transgender peers. In a review of the Gay Lesbian Straight Education Network (GLSEN) Climate Survey from 2006-2007, Kosciw, Diaz, and Greytak (2008) found that transgender youth experienced a significant amount of peer victimization, which had direct effects on feelings of school safety, school belongingness, educational goals, and academic achievement. Participants reported that within the past year, they had heard homophobic language and negative remarks about their gender expression from other students (90%) and school staff (32%). Participants also reported that school staff rarely intervened when hearing homophobic remarks or negative remarks about gender expression.
High levels of peer victimization were reported and led transgender students to feel unsafe at school because of their sexual orientation (69%) and gender expression (65%). Verbal harassment (87%), physical harassment (53%), and physical assault (26%) due to gender expression was reported by transgender youth. Because of the cumulation of these adverse experiences, 47% of transgender youth skipped a class or missed a day of school due to feeling unsafe and uncomfortable. Additionally, individuals who reported experiencing higher levels of harassment and peer victimization, were more likely to report skipping school, had lower GPAs compared to their cisgender peers, and were more likely to report that they were not planning on going to college.

Although statistics of peer victimization are informative and essential for understanding the rate at which these experiences occur, qualitative studies bring these experiences to life and allow for a deeper understanding of what victimization and harassment looks like for transgender youth at school. In a study conducted by Wyss (2004), seven transgender youth in U.S. high schools were interviewed about the experienced violence and the impact this violence had on their self-esteem, academic achievement, substance use, and sexual lives. Of the seven participants, all participants reported experiencing peer victimization to some degree, varying from person to person. One participant described peer victimization being so severe and persistent that he/she had to change schools, and two reported dropping out of high school because of the violence they endured. Physical violence that participants experienced included being shoved, pushed, smacked, punched, kicked, and burned. From being pushed down the stairs, to being beaten up for wearing a skirt, to being held down while being hit with a leather belt, all participants shared horrifying experiences that go beyond the statistics of what is embodied by statistical reports of physical harassment. In addition to physical harassment, four
of the seven participants report acts of sexual violence committed against them. Sexual violence included being grabbed between the legs, having their skirts being lifted up, getting poked in the genital area with pens, being dragged into the bathroom and having their pants pulled down, being drugged at a party and raped, and being raped by another student. The participants described the devastating impacts of these violent acts on their physical body, emotional wellbeing, and mental health. These voiced experiences and self-reports of fear, anxiety, worthlessness, and distrust link qualitative and quantitative research and provide insight into how and why 80% of transgender students report feeling unsafe at school.

*Abuse/Neglect.* There is very little information about the prevalence of abuse and neglect among transgender individuals. Research conducted in the 1990s found that 8% of transgender men had experienced physical abuse in a romantic or sexual partnership in the preceding year. The same study found that 16% of transgender women had experienced physical abuse in a romantic or sexual partnership in the preceding year (Clements, Katz, & Marx, 1998). More recently, the 2015 U.S. Transgender Survey found that 47% of transgender people are sexually assaulted at some point in their lifetime (National Center for Transgender Equality, 2015). Among people of color, American Indian (65%), multiracial (59%), Middle Eastern (58%), and Black (53%) respondents of the 2015 U.S. Transgender Survey were most likely to have been sexually assaulted in their lifetime. More than half (54%) of respondents in the survey were sexually assaulted in the past year, and more than one third (35%) experienced physical violence by an intimate partner compared to 30% of the U.S. adult population. One-quarter of participants (24% experienced severe physical violence by their current or formal partner, compared to 18% of the U.S. population. A participant of the U.S. Transgender survey (2015) shared, “I was a victim of spousal abuse for over ten years. This grew worse when I transitioned, as my transition
became an easy justification for verbally, emotionally, and physically abusing me” (p. 201).

Another participant shared, “my trans status was used as a tool to make me stay with my former partner. She would say things such as ‘no one else would ever love you’” (p.201).

Approximately one-third (34%) of those who were sexually assaulted said that a current or former partner had sexually assaulted them. One-quarter (25%) of sexual assault survivors reported that a relative was the perpetrator and nearly one-third (30%) of sexual assault survivors reported that a stranger committed the assault.

The U.S. Transgender Survey gives light to the experiences of neglect and abuse of trans adults; however, very little information has been collected regarding the abuse and neglect of trans youth. Grossman and D’augelli (2006) attempted to address these experiences through a focus group that investigated the factors that affect the experiences of trans youth between 15 and 21 years of age. They found that trans youth often experience rejection and inconsistent caring from parents, schoolmates, teachers, and communities. One participant shared, “Throughout my whole life, I was abused physically and mentally by relatives in my family. I have marks on my body. I have things that I remember happened to me” (pp. 124). Another participant shared, “When my mother, who is a PhD, found out what I was (i.e., transgender), she used to hurt me with things. She hit me on the head with an iron once, and I had five staples. Finally, she disowned me” (pp. 125). A lack of stable housing was frequently accompanied by an absence of financial support that forced a few of the youth in the study into prostitution and “survival sex.” Of the participants, 50% lived with parents or other relatives, 29% lived in a group home, and the remainder had other living arrangements (Grossman & D’Augelli, 2006).

Anxiety, Depression, and Stress. The Minority Stress Model (Meyer, 2003) is a theoretical model used to explain the prevalence of mental health issues in minority groups.
Essentially, it explains the relationship between distal and proximal life stressors and mental health issues. Distal stressors include experiences such as discrimination, while proximal stressors represent internally based processes such as internalized transphobia (Meyer, 2003). Not only do transgender youth experience distal stressors by peers, school staff, and other individuals, but they also experience proximal stressors such as internalized transphobia, anticipated stigma, and expectation of victimization. A plethora of research has documented that transgender youth are at increased risk for mental health problems including depression, anxiety, self-harming behaviors, and sexual risk-taking behaviors (McGuire et al., 2010). Additionally, several studies have investigated the prevalence of depression and other mental health problems among transgender and GNC youth, providing evidence that rates of depression are higher than in their cisgender peers. Clark et al. (2014) showed that when compared to cisgender students, transgender students had a significantly higher rate of depressive symptoms (41.3% vs. 11.8%). Reisner et al. (2015) found that 35.3% of participants reported a lifetime major depressive episode. Hatchel, Valido, DePedro, Huang, and Espelage (2018) found that the majority of transgender youth experience depressive symptoms (47%), experience suicidal ideation (41%), and miss school due to feeling sad, hopeless, anxious, stressed, or angry (19%). They also found that peer victimization was significantly correlated with mental health issues. The negative impact of peer victimization on mental health has been well established in the literature. For example, Liu and Mustanski (2012) found peer victimization to be significantly correlated with a history of attempted suicide, suicidal ideation, and self-harm. Chodzen, Hidalgo, Chen, and Garofolo (2018) investigated unique factors that may predict mental illness among transgender and gender-nonconforming youth. From their overall sample of transgender youth \(N=109\), 33% met diagnostic criteria for Major Depressive Disorder (MDD) and 48% met diagnostic criteria
for Generalized Anxiety Disorder (GAD). Those with high levels of internalized transphobia were significantly more likely to meet diagnostic criteria for both MDD and GAD. Those with lower levels of gender identity appearance congruence were significantly more likely to meet diagnostic criteria for MDD but not GAD.

**Substance Use/Abuse.** Substance use and abuse among transgender students was found to be significantly higher than their non-transgendered peers. A secondary data analysis of the 2013-2015 California Healthy Kids Survey (CHKS) examined substance use rates among transgender youth and compared results to their non-transgender peers (De Pedro, Gilreath, Jackson, & Esqueda, 2017). Study results found that transgender youth are about 2.5 more likely than non-transgender youth to use cocaine in their lifetime, 2.8 times as likely to report inhalant use in the past 30 days, 2 times as likely to report using prescription pain medication in the past 30 days, and 3 times as likely to use cigarettes in school (De Pedro et al., 2017). Overall, the researchers found that transgender youth were 2.5-4 times more likely to use substances compared to their non-transgender peers. Additionally, 65% of transgender youth reported recent alcohol use (compared to 34.9% non-transgender youth), 71% reported recent marijuana use (compared to 40.7%), and 23% reported nonmarijuana illicit drugs (compared to <10%; De Pedro et al., 2017). Gender minority stress highlights the challenges and stressors that transgender youth face on a daily basis at school, at home, and in their communities. This often results in the use of cigarette, alcohol, and other drug use as a coping mechanism to the stressors they experience (Reisner, Greytak, Parsons, & Ybarra, 2015). Similarly, Day et al. (2017) found that transgender youth are at a greater risk for early age of onset for alcohol, cigarettes, marijuana (starting at 12 years of age compared to 13 years of age). They also had higher odds of lifetime alcohol, cigarette, and marijuana use. of substance use and recent substance use
compared to non-transgender youth. Overall, Day et al. (2017) found that transgender youth are at a heightened risk for substance use compared with non-transgender peers.

**Suicidality.** Suicide among adolescents within the U.S. occurs in an estimated 16.3% of youth (McIntosh & Drapeau, 2014). It is proposed that suicide among LGBTQ youth is higher than cisgender and heterosexual youth, but death by suicide estimates among LGBTQ youth is unknown because death certificates do not identify sexual orientation or transgender identity (National Center for Health Statistics, 2012). However, suicidal ideation, behavior, and attempts has been reported more frequently in LGBTQ youth compared to their heterosexual and cisgender peers (Marshal et al., 2011; Mustanski, Garofalo, & Emerson, 2010). The National Center for Health Statistics (2012) reported that 30% of LGB youth report a history of attempted suicide. Information regarding suicidal ideation, behavior, and attempts in GNC and transgender youth is limited. Previous studies have shown that gender nonconformity, interpersonal conflict regarding sexual orientation, disclosure of sexual identity, and lack of support from family members are important risk factors that may explain elevated attempts of suicide among LGB youth compared to adults. It is likely that these risk factors are also common among transgender youth that struggle with their gender and sexual identities (Clements-Noelle, Marx, & Katz, 2006).

Recent studies estimate that 47% of transgender people under the age of 25 have a history of attempted suicide (Clements-Noelle et al., 2006). Clements-Noelle et al. (2006) also found that transgender and GNC individuals under the age of 25 were at the highest risk of attempted suicide. Attempted suicide was significantly associated with depression, low self-esteem, history of alcohol or drug treatment, forced sex or rape, gender discrimination, verbal gender victimization, and physical gender victimization. In an investigation of risk and protective factors
for self-harm in a population-based sample of transgender youth, Taliaferro, McMorris, Rider, and Eisenberg (2018) found that students in 9th grade who received free and reduced lunch were more likely to report non-suicidal self-injurious behaviors than students in 12th grade who did not receive free and reduced lunch, and that students who engaged in non-suicidal self-injury reported lower levels of school engagement, and less connectedness to non-parental adults and parents. History of mental health problems (presence of depression and/or long-term mental health problems) was a leading risk factor in those who reported suicide attempt and non-suicidal self-injury, and physical and/or sexual abuse emerged as an additional risk factor. Grossman and D’Augelli (2007) found similar risk factors including experiences of past parental verbal and physical abuse, and lower body esteem. Of their participants, 35-73% of youth reported being sometimes or often being verbally abused by their parents about their gender expression, and 13-36% reported being sometimes or often being physically abused by their parents. Physical abuse included being slapped, beat, or hit very hard (25%) or being punched, kicked, and pushed very hard (13-20%). Nearly half of their participants (45%) reported having seriously thought about taking their lives, and 20% reported attempted suicide. Significant differences in verbal and physical abuse were found between those who attempted suicide and those who did not; attempters reported more verbal and physical abuse by their parents. Ages of suicide attempts ranged from 10-17 years of age, with half of the youths’ first attempt at ages 15 or 16. The most frequent methods of suicide attempts were drug overdose, slashing/cutting, hanging, and poisoning.

Lytle, Silenzio, Homan, Schneider, and Caine (2018) investigated suicidal and help seeking behaviors in a sample of xx. They found that none of their transgender-identified participants sought help from school personnel prior to a suicide attempt; 18% sought help from
professionals and mental health providers; 9% sought help from family members; 64% sought help from friends; and 36% did not seek help from anyone. The most reported reason for not seeking help was due to the discomfort they felt discussing their suicidal ideation. The majority of transgender youth are comfortable reaching out to friends, but almost all feel uncomfortable reaching out to adults (e.g. parents, teachers, school staff). Therefore, it is critical for school psychologists to build supportive school environments and collaborate with parents, teachers, and staff to ensure that transgender students feel connected and safe both at school and at home.

**School Climate.** Although little research has been conducted with a focus on academic functioning specifically in transgender youth, the existing literature highlights the importance of school climate in relation to having supportive relationships at school to buffer against negative associations between school victimization, academic achievement, and mental and physical health (Day, Perez-Brumer, & Russell, 2018). School climate theory suggest that the school’s social system, culture, and ecological structure affect student outcomes such as academic performance, delinquency, and victimization (ref). Research has found that, when compared to their non-transgender peers, transgender youth are more likely to be truant and miss school for a variety of reasons (e.g., feeling depressed, feeling unsafe, to engage in substance use, or because they were suspended), experience high rates of victimization for their sexual or gender identities, have lower grades, and perceive school climates less positively (Day et al, 2018; Gretyak et al, 2009; Kosciw et al. 2016). The 2007 National Climate Survey examined students’ sense of belonging to their school community. Compared to their non-transgender LGB peers, transgender students had the lowest sense of school belonging (Gretyak et al., 2009). Peter, Taylor, and Campbell (2016) found similar reports of school belonging in a Canadian study. They found that almost half of LGBT students report that it is hard to feel accepted at school ( ).
Trans students in this study reported even lower levels of school attachment and indicated that they experience the highest levels of depression about their experiences at school (30%) compared to other LGB participants (20%) and non-LGBTQ peers (6%).

In an investigation of perceived school climate among transgender students, Greytak et al. (2009) found that transgender peers miss more school due to feelings of being unsafe compared to their non-transgender peers. About two-thirds (65%) of transgender students felt unsafe at school because of how they expressed their gender, and more than two thirds of transgender students (69%) felt unsafe at school because of their sexual orientation. Feeling unsafe or uncomfortable in school can negatively affect students’ academic success and can lead to avoiding class or missing full days of school. When asked how many times they had missed classes or an entire day of school in the past month because of feeling uncomfortable or unsafe, almost half of all transgender students reported skipping a class at least once in the past month (47%) and missing at least one day of school in the past month (46%). Compared to their heteronormative peers who report missing at least one entire day of school for feeling unsafe or uncomfortable (27%), transgender students were more likely to feel unsafe at school and therefore miss school more frequently. Robinson and Espelage (2011) found that in the last month, 79% of transgender participants report skipping 3-5 full days of school in the past month. In a ten-month school year, this can add up to being between 30 and 50 days of missed school, which is a significant educational disparity and puts trans youth at an educational disadvantage.

Greytak et al. (2009) investigated instances of victimization and found that transgender students were verbally harassed at school due to their gender expression (87%) and sexual orientation (89%), were physically harassed because of their gender expression (53%) or sexual orientation (55%) and were physically assaulted (44%). Canadian researchers found that 64.8%
of trans students experienced verbal harassment due to their gender expression or identity, which is significantly less than verbal victimization rates within the United States (Greytek et al., 2009; Peter et al., 2016). McGuire et al. (2010) conducted a survey with transgender youth and found that harassment due to transgender identity is pervasive and associated with negative school safety perceptions for these youth. Victimization in school and the stress related to frequent harassment may affect a student’s ability to focus on their work and academic performance, as well as their willingness to show up to school. Transgender youth appear to be at the greatest risk for school failure and are often victimized because of their gender expression (Kosciw, 2004). Greytak et al. (2009) found that higher rates of peer victimization and harassment was related to missing days of school, lower academic achievement, lower educational aspirations, and higher probability of school dropout.

The GPAs of transgender students who report frequent harassment are significantly lower than those who were less often harassed (Gretyak et al., 2009). Transgender students who were frequently harassed had a mean GPA of 2.2 while transgender students who were harassed less often reported a GPA of 3.0. Similar research conducted by Day et al. (2018) investigated school climate and the experiences of trans youth at school and found that transgender youth perceived school climate more negatively, had lower self-reported grades, and had higher rates of truancy and missing school because of feeling depressed or being suspended. Kosciw, Palmer, Kull, and Greytak (2013) found relationships between in-school victimization and the decrease self-esteem, worse educational outcomes (lower GPA and more missed days of school). They also found that self-esteem was positively associated with GPA and negatively associated with missed schools. Therefore, they conclude that peer victimization is directly and indirectly related to diminished educational outcomes.
The Role of School Psychologists

The NASP defines a school psychologist as the following:

…Qualified members of school teams that support students’ ability to learn and teachers’ ability to teach. They apply expertise in mental health, learning, and behavior to help children and youth succeed academically, socially, behaviorally, and emotionally. School psychologists’ partner with families, teachers, school administrators, and other professionals to create safe, healthy, and supportive learning environments that strengthen connections between home, school, and the community” (NASP, 2014, p.1).

School psychologists are responsible for effective ways of consultation and collaboration with school personnel, students, families, and external providers in the provision of services that include academic and learning interventions, mental health interventions, behavioral interventions, instructional support, prevention and intervention services, special education services, and crisis preparedness response and recovery.

Consistent with the NASP Practice Model (NASP, 2010), school psychologists are responsible for providing effective and client-centered assessment, consultation, and intervention practices that are respectful of every individual’s identity. In working with transgender students, school psychologists can refer to NASP’s online resources for a better understanding of how to assess transgender youth, consult with their teachers and parents, and provide intervention services.

Assessment. Issues that arise when assessing students who are transgender often relates primarily to emotional/social scales and personality instruments, which are normed based on gender. NASP encourages that if a school psychologist is aware that a student, they are working with identifies as transgender or non-binary, or if there are discrepancies between student self-
reported biological sex, family-reported, and school records, that the school psychologist use combined sex norms. Combined sex norms identify all students with the same level of need regardless of gender. NASP also recommends that if it is necessary to use gender-specific norms that the school psychologist use the student’s gender. In all cases, it is encouraged for school psychologists to consult with supervisors and peers about best practices regarding assessment procedures with transgender or gender variant students.

Questions among school psychologists regarding qualification for special education eligibility under the Individuals with Disabilities Improvement Act (IDEA, 2004) have frequently appeared on online NASP forums. More specifically, there have been questions regarding eligibility labels under Emotional Disability to ensure that transgenders students receive special education services and protections. As previously mentioned throughout the literature review, transgender youth are at risk for academic underachievement, truancy, and dropout. Many researchers have linked these experiences to their experiences of peer victimization and feeling of belongingness and their link to experiences of depression and anxiety (e.g., Day et al., 2018; Greytak et al., 2009; Kosciw et al., 2013). It is critical in these instances to fully understand the needs of the student; a transgender or gender variant identity in itself is not suggestive of a disability condition. It is known that emotional disability can be caused by environmental circumstances. To provide effective services, school psychologists must be familiar with district policies and procedures when considering special educational eligibility in regard to mental health. Therefore, it is critical to know whether a student needs a special education label to receive mental health services. Due to differences among districts, the path taken among school psychologists will be different. It is also possible that a transgender student may have a disability as defined within IDEA, in which case it will be important to
comprehensively understand the student’s assessment data, self-report, and teacher report information to make a decision about primary eligibility status depending on what supports are most crucial for their academic and mental well-being.

**Consultation.** The NASP Practice Model requires school psychologists to be able to effectively consult, collaborate, communicate, and implement instructional, behavioral, and mental health services (Domain 2, NASP 2018). Additionally, it requires for school psychologists to collaborate with families and engage with parents to help in the decision-making process regarding educational, behavioral, and mental health services they receive, or concerns related to their educational programming (Domain 7, NASP 2018). There are specific considerations that school psychologists should take into account when consulting with parents and families. As schools becoming increasingly diverse, school psychologists must be equipped to work with families from varying cultural and religious backgrounds. Care should be taken to find connections between gender diversity and a family’s foundational heritage, traditions, and culture (NASP, 2016). It is important to provide families with resources that will help them better understand their transgender to gender expansive child. Research by Passalacqua and Cervantes (2008) highlights gender diversity found among many racial, cultural, and religious communities. In addition, the researchers highlight the support of leaders within traditional conservative religious denominations. This resource may be helpful for families who fear or experience rejection from their traditional communities. In addition, NASP provides many other resources for families such as The Gender Spectrum, The Family Acceptance Project, Parents for Lesbians and Gays, and The National LGBTQ Task Force’s Institute for Welcoming Resources. These sites offer resources for families in English, Spanish, and Chinese, and for Mormon families.
Young children whose parents do not affirm their gender identity or gender expression face considerable challenges (Toomey, Ryan, Diaz, Card, & Russell, 2013). If a family or parent is not supportive of a student’s gender expression or identity, it is important to understand that their resistance is not a fixed position and can be rooted in fear, misinformation, or grief from their perception that they have lost a child they thought they had (NASP). School psychologists play a crucial role in understanding the fears and grief they may be experiencing, and by providing accurate information about transgender individuals. It is also suggested that school psychologists connect them with outside agencies, such as with Parents and Friends of Lesbians and Gays (PFLAG). It is also crucial for the school psychologist to provide support to the student at school, as supportive adults in schools are key elements in fostering resilience and a positive sense of self as children explore and evolve their gender identities. Supportive adults can engage students in conversations about how to manage discord at home to minimize the possibility of self-destructive behaviors (NASP, 2004). Additionally, school psychologists should collaborate with teachers and school staff and share information regarding positive school climate, peer victimization, depression and anxiety, and truancy in relation to transgender youth. Interdisciplinary collaboration with external mental health providers, doctors, social workers, etc. is equally as important in the provision of services that occur both within and outside of school.

**Intervention.** School-wide intervention practices to allow for respect of gender diversity is provided by gender spectrum who suggests four entry points for creating a gender inclusive school. These four points (personal, structural, interpersonal, and instructional) account for the varying degrees in which educators, policies, students, and curriculum interact with transgender and gender variant student identities. Personal intervention involves reflection by educators about how their experiences and beliefs about gender impact the work they do with students;
structural intervention involves inclusive policies, professional development, family engagement, inclusive facilities (restrooms), visible displays modeling gender diversity, and inclusive procedures and forms; interpersonal intervention includes the intentional ways in which individual interactions and communications demonstrate alternatives to binary notions of gender, including modeling many ways to be a boy, girl, or other identities, teaching empathy and respect, and providing concrete examples of gender diversity; instructional interventions include specific ways of incorporating gender diversity into existing curriculum or using additional lesson plans to reinforce gender identity. These four points that Gender Spectrum outline are consistent with research that highlights the ways in which educators and school systems can build positive school climates and therefore foster resiliency factors among at-risk youth.

Intervention during name-calling, bullying, and peer victimization more generally is an important aspect of intervention. Participants of the Gay Lesbian Straight Education Network (GLSEN) Climate Survey from 2006-2007 reported that their teachers or other school staff did not intervene when hearing homophobic remarks or negative remarks about gender expression (Greytak et al., 2009). In addition, nearly half of school psychologists (43-45%) reported intervening when hearing statements such as “that’s so gay” in addition to other offensive statements (McCabe et al., 2013). Therefore, the need for increased intervention during name-calling, bullying, and peer victimization is evident as it directly affects the experiences of students and their perceptions of school climate.

**School Psychologists’ Role in Supporting All Students**

As discussed throughout the literature review, transgender and gender expansive youth are one of the most vulnerable and at-risk groups for peer victimization, abuse, low familial support, low academic achievement, truancy, and psychological disorders related to their
environmental experiences. School psychologists play an extremely important role in fostering resiliency among at-risk and marginalized youth, by collaborating with teachers and school staff in creating positive school climates and safe school environments for all students. NASP is committed to providing school psychologists with resources and trainings that ensure advocacy efforts from school psychologists to provide safe and inclusive learning environments for all students (NASP, 2010).

School psychologists hold unique positions that allow for support across multiple domains of student academic and psychological functioning. Given their knowledge and expertise in human development, knowledge of sociocultural and ecological influences on behavior, counseling and consultation skills, ability to reach a wide audience, and adherence to ethical principles, school psychologists are well positioned to advocate for change across their school system (Anton, 2009). School psychologists are aware of the importance of providing individualized support and providing positive school climates for all students and the risk factors associated with low feelings of school safety and belongingness. It is crucial for them to understand and hold awareness about the specific experiences of transgender youth across their development, family system, and school experiences. Fostering safe and affirming school climates for LGBTQ youth requires school psychologists to promote visibility of the LGBTQ community, identify and intervene during instances of bias and harassment, and cultivate school communities that embrace and celebrate diversity (McCabe, 2014).
CHAPTER 3

METHODOLOGY

Participants

A total of 370 school psychologists participated in the current study. The demographics of the participants are summarized in Tables 1 and 2. The majority of the participants were White (n=308), followed by Latinx/Hispanic (n=30), African American/Black (n=30), Asian/Asian American (n=7), those who identified as “Other” (n=6), Multiracial (n=6), Biracial (n=5), and Native American/Alaska Native (n=3). The mean age of participants was 47.

Participants were instructed to check all that apply for their gender identity. The majority of participants identified as Female (n=344), Male (n=24), Gender Non-Conforming (n=2), Female + (n=2), Other (n=2), Transgender Male (n=1), Non-binary (n=1), and Male+ (n=1). Male+ and Female+ represent individuals who identified as more than one gender, male or female, in addition to another descriptive category such as gender nonconforming. The majority of participants reported Female as their sex at birth (n=347), followed by those whose sex at birth was Male (n=23). Participants were also directed to check all that apply related to their identified sexual orientation(s). The majority of participants identified as Straight (n=315), followed by Bisexual (n=27), and those who identified as Lesbian (n=16), Queer (n=9), Gay (n=7), Other (n=4), and Unsure or Still Questioning (n=2).

Participants were asked to rate their levels of comfort on a scale from 1 (very uncomfortable) to 4 (very comfortable) for the following items: Knowledge about transgender and GNC issues ($M=2.76$); Advocacy for transgender and GNC students ($M=2.83$); Consultation and collaboration with staff in supporting transgender and GNC students ($M=3.29$); Providing mental health services to transgender and GNC youth ($M=3.54$). The majority of participants
WORKING WITH TRANSGENDER YOUTH: AWARENESS, ATTITUDES, AND SUPPORTIVE PRACTICES

(43%) have worked with 1-2 transgender students throughout their career as school psychologists and have practiced for an average of 10 years. The majority of participants were unsure if their school includes transgender and GNC youth in their anti-harassment and protective policies (48%), followed by 39% who indicated their school does include transgender and GNC youth, and 14% who reported their school does not include transgender and GNC youth.

Table 1

Descriptive statistics of participant demographics

<table>
<thead>
<tr>
<th>Demographic Characteristic</th>
<th>%</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Native American/Alaska Native</td>
<td>.8</td>
<td>3</td>
</tr>
<tr>
<td>Asian/Asian American</td>
<td>1.9</td>
<td>7</td>
</tr>
<tr>
<td>Latinx/Hispanic</td>
<td>8.1</td>
<td>30</td>
</tr>
<tr>
<td>African American/Black</td>
<td>8.1</td>
<td>30</td>
</tr>
<tr>
<td>Native Hawaiian or Other Pacific Islander</td>
<td>.3</td>
<td>1</td>
</tr>
<tr>
<td>White</td>
<td>83.2</td>
<td>308</td>
</tr>
<tr>
<td>Biracial</td>
<td>1.4</td>
<td>5</td>
</tr>
<tr>
<td>Multiracial</td>
<td>1.6</td>
<td>6</td>
</tr>
<tr>
<td>Other</td>
<td>1.6</td>
<td>6</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>93</td>
<td>344</td>
</tr>
<tr>
<td>Male</td>
<td>6.5</td>
<td>24</td>
</tr>
<tr>
<td>Transgender Male</td>
<td>.3</td>
<td>1</td>
</tr>
<tr>
<td>Transgender Female</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Non-binary</td>
<td>.3</td>
<td>1</td>
</tr>
<tr>
<td>Genderqueer</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Gender Non-Conforming</td>
<td>.5</td>
<td>2</td>
</tr>
<tr>
<td>Female +</td>
<td>.5</td>
<td>2</td>
</tr>
<tr>
<td>Male +</td>
<td>.3</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>.5</td>
<td>2</td>
</tr>
<tr>
<td>Sex Designated at Birth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>93.8</td>
<td>347</td>
</tr>
<tr>
<td>Male</td>
<td>6.2</td>
<td>23</td>
</tr>
<tr>
<td>Sexual Orientation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Straight</td>
<td>85.1</td>
<td>315</td>
</tr>
<tr>
<td>Gay</td>
<td>1.9</td>
<td>7</td>
</tr>
<tr>
<td>Lesbian</td>
<td>4.3</td>
<td>16</td>
</tr>
<tr>
<td>Bisexual</td>
<td>7.3</td>
<td>27</td>
</tr>
<tr>
<td>Queer</td>
<td>2.4</td>
<td>9</td>
</tr>
<tr>
<td>Pansexual</td>
<td>1.6</td>
<td>6</td>
</tr>
<tr>
<td>Unsure or Still Questioning</td>
<td>0.5</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>
Table 2
Descriptive statistics of participant training and practice.

<table>
<thead>
<tr>
<th>Demographic Questionnaire</th>
<th>%</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest Degree Attained in S.P.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masters</td>
<td>18.9</td>
<td>170</td>
</tr>
<tr>
<td>Specialist</td>
<td>55.1</td>
<td>204</td>
</tr>
<tr>
<td>Doctorate</td>
<td>24.1</td>
<td>89</td>
</tr>
<tr>
<td>Member of NASP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>65.7</td>
<td>243</td>
</tr>
<tr>
<td>No</td>
<td>34.3</td>
<td>127</td>
</tr>
<tr>
<td>Practice Settings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early Childhood/ Preschool</td>
<td>42.4</td>
<td>157</td>
</tr>
<tr>
<td>Elementary</td>
<td>74.1</td>
<td>274</td>
</tr>
<tr>
<td>Middle School</td>
<td>60</td>
<td>222</td>
</tr>
<tr>
<td>High School</td>
<td>46.5</td>
<td>172</td>
</tr>
<tr>
<td>Adult Transition Services</td>
<td>6.2</td>
<td>23</td>
</tr>
<tr>
<td>Not Currently Practicing</td>
<td>3.8</td>
<td>14</td>
</tr>
<tr>
<td>Retired</td>
<td>1.4</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>6.2</td>
<td>23</td>
</tr>
<tr>
<td>Number of transgender youth SP has worked with</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>26</td>
<td>95</td>
</tr>
<tr>
<td>1-2</td>
<td>41</td>
<td>153</td>
</tr>
<tr>
<td>3-5</td>
<td>23</td>
<td>84</td>
</tr>
<tr>
<td>5-7</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>7+</td>
<td>7</td>
<td>24</td>
</tr>
<tr>
<td>School includes transgender and GNC youth in anti-harassment and protective policies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>39</td>
<td>144</td>
</tr>
<tr>
<td>No</td>
<td>14</td>
<td>50</td>
</tr>
<tr>
<td>Unsure</td>
<td>47</td>
<td>175</td>
</tr>
<tr>
<td>Comfort in knowledge about transgender and GNC issues and experiences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not at all comfortable</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Somewhat comfortable</td>
<td>39</td>
<td>145</td>
</tr>
<tr>
<td>Comfortable</td>
<td>34</td>
<td>127</td>
</tr>
<tr>
<td>Very comfortable</td>
<td>23</td>
<td>84</td>
</tr>
<tr>
<td>Comfort in advocacy for transgender and GNC students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not at all comfortable</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>Somewhat comfortable</td>
<td>32</td>
<td>118</td>
</tr>
<tr>
<td>Comfortable</td>
<td>36</td>
<td>133</td>
</tr>
<tr>
<td>Very comfortable</td>
<td>27</td>
<td>98</td>
</tr>
<tr>
<td>Comfort in consultation and collaboration with staff in supporting transgender and GNC students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not at all comfortable</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>Somewhat comfortable</td>
<td>33</td>
<td>122</td>
</tr>
<tr>
<td>Comfortable</td>
<td>40</td>
<td>149</td>
</tr>
<tr>
<td>Very comfortable</td>
<td>21</td>
<td>77</td>
</tr>
</tbody>
</table>
Comfort in providing mental health services to transgender and GNC youth

<table>
<thead>
<tr>
<th>Level</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very comfortable</td>
<td>54</td>
</tr>
<tr>
<td>Comfortable</td>
<td>119</td>
</tr>
<tr>
<td>Somewhat comfortable</td>
<td>149</td>
</tr>
<tr>
<td>Not at all comfortable</td>
<td>44</td>
</tr>
</tbody>
</table>

Measure

Participants completed a 75-item survey via Qualtrics consisting of five measures following the demographic questionnaire. The researcher assessed a) school psychologists’ attitudes towards transgender individuals using an adapted version of the Attitudes Towards Transgender Individuals Scale and the Attitudes Toward Students Who are Transgender Scale, b) current and supportive school practices working with transgender youth using an adapted version of the Attitudes Towards Transgender Individuals Scale Supportive School Practices and a created measure School Psychologists’ in Practice: Working with Transgender Students, and c) a scale created by the researcher to assess awareness about transgender youth using the Awareness about Transgender Youth Scale. All study measures are included in the Appendix A.

Demographic Form. On the demographic form, participants were asked to provide their age, gender, sex designated at birth, sexual orientation, race, ethnicity, geographic location in which they currently practice, the highest academic degree in school psychology obtained, whether their school psychology graduate program was NASP approved or APA accredited, whether they are a member of NASP, years of experience since internship, the settings in which they practice, level of comfort working with transgender and GNC youth, the number of transgender and GNC youth worked with throughout their career as a school psychologist, training in graduate programs related to transgender and/or GNC youth, and professional training related to working with transgender and/or GNC youth.
Attitudes Toward Transgender Individuals Scale (ATTI; Walch, Ngamake, Francisco, Stitt, & Shingler, 2012). The ATTI measures attitudes toward transgender individuals and internalized stigma in the form of transphobia. Silveira and Goff (2016) adapted the ATTI to measure music teachers’ attitudes toward transgender students (MT-ATTI). This adaptation demonstrated high internal consistency ($\alpha = .96$). In their study, items from the ATTI not relevant to the K-12 school environment were not included in their study (e.g., items relating to bars and adult romantic relationships). They adapted other items for clarity and relevance (e.g., changing “society” or “public” to “school” or “working closely with a transgender individual” to “teaching a transgender student”, and “man and woman” to “boy and girl”).

In the current study, the adapted MT-ATTI was used to assess school psychologists’ attitudes towards transgender individuals. Some language across the scale was altered for the purpose of this study (e.g., “transgenderism” to “transgender individuals”). The 22-item scale examined the attitudes that school psychologists hold towards transgender individuals. Each item consisted of a five-point Likert response scale ranging from Strongly Disagree (1) to Strongly Agree (5). Items included statements such as the following: “Being transgender is immoral”; “Transgender individuals should be barred from the teaching profession”; “Transgender students are a valuable part of our schools”; and “Anything other than boy/girl, man/woman is unnatural”. Some items on this scale were reverse coded to reflect attitudes towards transgender students. Higher scores on this instrument indicate more positive attitudes towards transgender students. Cronbach’s alpha internal consistency estimates $\alpha = .94$ indicating excellent internal consistency. See Appendix A, Section 4.

Music Teachers’ Attitudes Toward Supportive School Practices Scale (ATTI-SSP; Silveira & Goff, 2016). Silveira and Goff (2016) developed a scale that measures attitudinal
statements related to supportive school practices that support transgender students using findings in literature (Brill & Pepper, 2008; Kosciew et al., 2012; McGuire et al., 2010). This 18-item measure was adapted into a 20-item measure and was used to assess and reflect school psychologists’ attitudes toward supportive school practices for transgender youth. The two added items to this measure include the following statements: “It is the responsibility of the school psychologist to advocate for transgender students” and “it is the responsibility of the school psychologist to consult with teachers, parents, and other school staff to make accommodations for transgender students.” Additionally, language across the scale was altered from a teacher perspective to include school staff such as school psychologists (e.g., “teachers” to “teachers and school staff”). Each item consisted of a five-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (5). Items on this scale were reverse coded to reflect attitudes towards supportive school practices. Items included statements such as the following: Students should be allowed to decide what pronouns (he, she, they, them, xe, xem, etc.) are used to refer to them; It should be a low priority for school staff to become educated on issues of sexuality and gender identity; and It is unnecessary for school anti-harassment policies to specifically mention gender identity and expression. Higher scores on this instrument indicate more positive attitudes toward implementing supportive school practices. Cronbach’s alpha internal consistency estimates $\alpha = .82$ indicating good internal consistency (see Appendix A, section 3).

**School Psychologists’ in Practice: Working with Transgender Students** (Silveira & Goff, 2016). The framework of this scale was created based on the attitudinal statements from MT-ATTSP (Silveira & Goff, 2016). Statements were changed from attitudinal statements to practical statements (e.g., Students should be able to choose their preferred pronoun vs. I refer to students by their preferred pronoun). This 13-item measure assesses school psychologists’
professional practices when working with transgender students. Nine items consisted of a five-point Likert scale ranging from Never (1) to Always (5). One item on this scale was reverse coded to reflect supportive school practices. Because the scale was adapted the last four items were transformed to categorical variables. To compute the composite, we first created a scale variable for the Likert items and then added one’s total for the categorical items to the total Likert scale score. Higher scores indicate higher engagement in supportive practices (see Appendix A, section 4). Cronbach’s alpha internal consistency estimates $\alpha = .78$ indicating acceptable internal consistency.

**Attitudes Towards Students Who Are Transgender Scale (Bowers, Lewandowski, Savage, & Woitaszweski, 2015)**. The Attitudes Towards Transgender Students Scale measured participants’ attitudes toward transgender students and their willingness to work with transgender students. The questionnaire was adapted from the Attitudes Toward Lesbians and Gay Men Scale (Herek & McLemore, 2010). The attitudes questionnaire consists of ten items using a five-point Likert-type scale ranging from Strongly Disagree (1) to Strongly Agree (5). Sample items from this scale include the following: In my role in the schools, it would not bother me to work directly with a transgender student; I would feel comfortable stepping in if a transgender student came out to me regarding their gender identity; and Issues of gender identity should not be addressed in schools by school personnel (see Appendix A, section 5). Some items on this scale were reverse coded. Higher scores on this measure indicate more positive attitudes towards transgender students. Cronbach’s alpha internal consistency estimates $\alpha = .24$ indicating unacceptable internal consistency. A confirmatory factor analysis was conducted to determine if ATSTS was a strong measure of attitudes towards transgender students. The model did not fit the
dataset well and therefore did not appropriately measure attitudes towards transgender students. Therefore, this measure was omitted from the final data analysis.

**School Psychologists’ Awareness of Transgender Issues.** A survey assessing school psychologists’ awareness of transgender issues was developed by the researchers for the purpose of this study. Currently, there are no instruments that measure school psychologists’ awareness about transgender issues in the extant body of research. The survey was created based on a document created by the APA that provides information to psychologists about transgender people, gender identity, and gender expression (APA, 2014). Sample questions on this measure were multiple choice and include: “What does transgender mean?”; “What is the difference between sex and gender?”; “Is being transgender a mental health disorder”? Respondents’ total scores on the survey were calculated by adding together correct responses to each item and calculated into a proportion. Statements that indicated negative attitude toward or lack of awareness about transgender students were reverse coded. A proportion was calculated, giving points for each correct answer out of 19 total points. A score close to 0 indicates low level of awareness, and a score closer to 1 indicates a high level of awareness. Scores between 0.45 and 0.75 indicate moderate levels of awareness (see Appendix A, section 6).

**Data Collection Procedures**

Prior to data collection, the Institutional Review Board (IRB) at the university approved all procedures and measures in this study. The questionnaire was reviewed by faculty and graduate students to ensure readability and flow. To recruit participants, researchers sought participants nationwide who practice as school psychologists. The researcher individually contacted the presidents of all 50-state school psychology associations via email to request distribution of online research link to their membership rosters. Eight state associations agreed to
disseminate the study, 35 did not respond, and seven requested a monetary donation ($100-$150) or responded that they only disseminate member research. The researcher declined to pay the donation amount and opted out of disseminating the study to these groups. In addition, the researcher, colleagues, and faculty members posted on social media (e.g., Facebook and Twitter), posted in groups that were specific to school psychologists for survey dissemination, and emailed the survey link to colleagues and practitioners in the field.

School psychologists from 30 out of 50 states within the United States participated in the study. The majority of participants were from the Northeast (28%) and South (28%), followed by the West (24%), Midwest (18%), and Other (2%). Participants were provided with a brief description of the study and a link to access the survey. The survey provided an additional brief overview of the study via an information page and participants were asked if they were willing to participate. The information and consent page were presented on the first page of the Qualtrics link, prior to access to the survey. The information page informed participants about the study, risk, time required to complete study, and benefits to participating. Participants were made aware that their participation in the study was entirely voluntary and that they were allowed to skip any items or terminate their participation at any time. Participants were also informed that their participation was completely anonymous. Participants were asked if they consent or do not consent to the survey—those who clicked that they “do not consent” were not allowed access to the survey. Those who consented were able to move forward to the demographic questionnaire.

All participants were asked to complete the demographic form prior to starting the survey. The surveys were estimated to take 15-20 minutes to answer in its entirety. To ensure anonymity, participants were not asked to provide identifying information (e.g., name, date of birth, training program name).
Data Analysis

Prior to data analysis, data was screened and cleaned to ensure accuracy. The percentage of missing data was analyzed. Based on the pattern of missingness, any variable that had greater than 5% missingness would undergo the process of multiple imputation. This was decided based on the widely agreed upon threshold for missingness (Schaffer, 1999). Missing data was determined to be systematic and was not missing at random. Measures in the survey were not randomized; therefore, measures towards the end of the survey had higher patterns of missingness than did those at the beginning of the survey. Demographic variables were missing at a rate of less than 1%. However, starting at question 35 (out of 46), the pattern of missingness was at greater than 20%. This can be attributed to survey structure, participant fatigue, and content of questions leading some people to not want to answer.

Prior to conducting inferential data analyses, variable distributions were checked for normality and data was checked to ensure that they approximated best linear unbiased estimates. Variable distributions were found to be normal. A series of independent linear regression equations were used to test the researcher’s hypotheses. A summary of the research questions, hypotheses, variables, and analyses are listed in Table 3.

Table 3

<table>
<thead>
<tr>
<th>Research Questions and Hypotheses</th>
<th>Variables</th>
<th>Statistical Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Question 1: What predicts school psychologists’ awareness about transgender issues?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Research Question 1:** What predicts school psychologists’ awareness of transgender issues?

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Predictor Variables</th>
<th>Criterion Variable</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1A: School psychologists’ awareness of transgender issues is predicted by their training experiences.</td>
<td>Training experiences</td>
<td>Awareness</td>
<td>Regression</td>
</tr>
<tr>
<td>H1B: School psychologists’ awareness of transgender issues is predicted by their current practices.</td>
<td>Current Practices</td>
<td>Awareness</td>
<td>Regression</td>
</tr>
<tr>
<td>H1C: School psychologists’ awareness of transgender issues is predicted by their attitudes towards transgender youth.</td>
<td>Attitudes</td>
<td>Awareness</td>
<td>Regression</td>
</tr>
</tbody>
</table>

**Research Question 2:** What predicts school psychologists’ attitudes towards transgender youth?

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Predictor Variables</th>
<th>Criterion Variable</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2A: School psychologists’ attitudes towards transgender youth is predicted by training experiences.</td>
<td>Training experiences</td>
<td>Attitudes</td>
<td>Regression</td>
</tr>
<tr>
<td>H2B: School psychologists’ attitudes towards transgender youth is predicted by awareness of transgender issues.</td>
<td>Awareness</td>
<td>Attitudes</td>
<td>Regression</td>
</tr>
<tr>
<td>H2C: School psychologists’ attitudes towards transgender youth is predicted by their current practices.</td>
<td>Current Practices</td>
<td>Attitudes</td>
<td>Regression</td>
</tr>
</tbody>
</table>

**Research Question 3:** What predicts school psychologists’ current practices with transgender youth?

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Predictor Variables</th>
<th>Criterion Variable</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>H3A: School psychologists’ current practices with transgender youth is predicted by their attitudes towards transgender youth.</td>
<td>Attitudes</td>
<td>Current Practices</td>
<td>Regression</td>
</tr>
<tr>
<td>H3B: School psychologists’ current practices with transgender youth is predicted by their awareness of transgender youth.</td>
<td>Awareness</td>
<td>Current Practices</td>
<td>Regression</td>
</tr>
<tr>
<td>H3C: School psychologists’ current practices with transgender youth is predicted by their training experiences.</td>
<td>Training experiences</td>
<td>Current Practices</td>
<td>Regression</td>
</tr>
</tbody>
</table>
CHAPTER 4

RESULTS

Preliminary Analyses

The current study investigated the relationship between school psychologists’ awareness, training, attitudes, and professional practices with transgender youth. The mean, standard deviation, skewness, and kurtosis for the scale variables are presented in Table 4. Table 4 summarizes the following information: ATTI_SSP (Attitudes towards supportive school practices) scores ranged between 1 and 5 ($M=4.21; SD=.41$); ATTI (Attitudes) scores ranged between 1 and 5 ($M=4.50; SD=.52$); SSP (Supportive school practices) scores ranged between 2 and 13 ($M=7.70; SD=2.54$); Awareness scores were measured as a proportion ($M=0.74, SD=.28$); and Training scores ranged between 1 and 4 ($M=1.75; SD=1.05$). All measures of skewness and kurtosis fall between (-3,3), an appropriate range that suggests all measures resemble a normal distribution (Brown, 2006).

Table 4

<table>
<thead>
<tr>
<th>Measure</th>
<th>$M$</th>
<th>$SD$</th>
<th>Range</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATTI_SSP</td>
<td>4.21</td>
<td>0.41</td>
<td>1-5</td>
<td>-0.92</td>
<td>1.01</td>
</tr>
<tr>
<td>ATTI</td>
<td>4.50</td>
<td>0.52</td>
<td>1-5</td>
<td>-1.54</td>
<td>2.51</td>
</tr>
<tr>
<td>SSP</td>
<td>7.70</td>
<td>2.54</td>
<td>2-13</td>
<td>-0.87</td>
<td>0.27</td>
</tr>
<tr>
<td>Awareness</td>
<td>0.74</td>
<td>0.28</td>
<td></td>
<td>-1.87</td>
<td>2.44</td>
</tr>
<tr>
<td>Training</td>
<td>1.75</td>
<td>1.05</td>
<td>1-4</td>
<td>.15</td>
<td>-0.83</td>
</tr>
</tbody>
</table>

Results showed that school psychologists’ attitudes towards transgender youth were positive, with a mean score of 4.50 on a scale of 1 to 5. Attitudes towards implementing
supportive school practices were also positive \((M=4.21)\), indicating a willingness to address the needs of transgender students. Engagement in supportive school practices \((M=7.70)\) along with awareness of transgender issues \((M = 0.74)\) were moderate. Lastly, training experiences were rated to be minimal \((M=1.75)\).

**Scale Frequencies**

School psychologists in this study indicated high levels of willingness to engage in supportive school practices \((M=4.21)\). The following statements are reported with the highest frequency responses: “Students should be allowed to decide what pronouns (he, she, they, them, xe, xem, etc.) are used to refer to them” (Strongly agree 60%); “It is the responsibility of school staff to stop others from making negative comments based on gender identity or expression” (Strongly Agree 66%); “Every school bathroom should be either for boys only, or girls only” (Disagree 40%); “Positive representations of transgender people should be included in the curriculum whenever possible” (Strongly agree 47%); “It is unrealistic for teachers and school staff to practice using gender-neutral language in the classroom and/or at school” (Disagree 44%); “It would be unfair for transgender students to be allowed to choose men’s or women’s attire for school uniform/dress code” (Strongly disagree 51%); “It should be a low priority for school staff to become educated on issues of sexuality and gender identity” (Strongly disagree 57%); “It is acceptable for teachers and school staff to comment to a student that s/he is not “masculine” or “feminine” enough” (Strongly disagree 90%); “School staff should receive training on how to intervene against gender-and sexuality-based student harassment” (Strongly agree 72%); “Students should have the option to use private bathrooms at school” (Strongly agree 64%); “Schools should support the presence of Gay-Straight Alliances or similar groups for lesbian, gay, bisexual, and transgender students” (Strongly agree 68%); “It is inappropriate to
teach students about gender variance at school” (Strongly disagree 46%); It is unnecessary for school anti-harassment policies to specifically mention gender identity and expression” (Strongly disagree 61%); “Parents should be informed about their child’s transgender identity” (Neutral 39%); “It is the responsibility of the school psychologist to consult with teachers, parents, and other school staff to make accommodations for transgender students” (Agree 50%); “School districts should plan accommodations for transgender students who may want to participate in sports” (Agree 50%); “Male and female should be the only gender options on schools’ official forms” (Strongly disagree 42%); “Teachers and school staff should never use slurs referring to a student’s gender identity or expression (e.g. “sissy”, “tranny”, “crossdresser”)” (Strongly agree 92%); “It is the responsibility of the school psychologist to advocate for transgender students” (Strongly agree 46%). School psychologists’ in this study endorsed overall positive attitudes towards transgender individuals (M=4.5). The following statements were reported with the highest frequency responses: “Being transgender is immoral” (Strongly disagree 79%); “Transgender people are an expression of the natural continuum of gender” (Strongly agree 46%); “Transgender individuals should not be allowed to work with children” (Strongly disagree 80%); “Transgender individuals should be barred from the teaching profession” (Strongly disagree 85%); “It is necessary to have clear distinctions between girls and boys” (Strongly disagree 55%); “Having only two sexes is limiting” (Strongly agree 40%); “Transgender students are a valuable part of our schools” (Strongly agree 64%); “Transgenderism is a sin” (Strongly disagree 84%); “Anything other than boy/girl, man/woman is unnatural” (Strongly disagree 72%); “I would feel comfortable if I learned that my best friend was a transgender individual” (Strongly agree 43%); “It would be beneficial to schools to recognize transgenderism as normal” (Strongly agree 48%); “I would feel comfortable if I learned my neighbor was a transgender
individual” (Strongly agree 61%); “Transgender individuals should be accepted completely into our schools” (Strongly agree 71%); “I avoid transgender individuals whenever possible” (Strongly disagree 76%); “The presence of transgender individuals at a social function would not affect my enjoyment of the event” (Strongly agree 72%); “There should be no restrictions on gender identity” (Strongly agree 49%); “I would like to have, or I do like having, friends who are transgender individuals” (Strongly agree 41%); “I would feel comfortable teaching a transgender student” (Strongly agree 63%); “Transgender people are sick” (Strongly disagree 86%); “Transgenderism endangers the institution of the family” (Strongly disagree 80%); “Transgender individuals should not be allowed to cross-dress at school” (Strongly disagree 69%); “Transgender individuals are really just closeted gays” (Strongly disagree 81%).

Unique findings from the current study show that school psychologists on average engage in moderate levels of supportive school practices (e.g., referring to students by their preferred pronouns, using gender neutral language, consulting to create gender inclusive curriculum, advocating for transgender and gender diverse students). The average participant in this study indicated a moderate mean score on this measure ($M=3.25$). The following statements had the highest frequencies for each response: I always refer to students by their chosen name (76%); I always refer to students by their preferred pronouns (63%); I always stop others from making negative comments based on gender identity or expression (44%); I never consult with teachers to create gender intensive curriculum (36%); I sometimes consult with parents, teachers, and other school staff to meet the needs of transgender and gender diverse students (34%); I sometimes use gender-neutral language when working with a student and their family (32%); I very often educate myself on issues of sexuality and gender identity (40%); I never tell students they are not masculine or feminine enough (93%); and I sometimes advocate for transgender and
gender diverse students’ needs (32%). Only 44% of school psychologists reported that they “always” stop others; the remaining 66% of participants responded that they “never”, “sometimes”, or “very often” intervene. The majority of respondents also indicated that they “never” consult with teachers to gender intensive curriculums; consult with parents, teachers, and staff regarding the needs of transgender and gender diverse students; and use gender-neutral language when working with students and their families. Lastly, the majority of respondents indicated that they have not started a GSA or similar groups for LGBT students at their schools, but they are willing to (47%).

School psychologists reported minimal training experiences, on average reporting 1.75 opportunities of training exposure out of four possible options (graduate training, continuing education, conference workshops, and self-directed learning). When asked if any courses included content about transgender and/or GNC youth, 67.8% of participants answered “No”. Additionally, 69.5% reported that their courses did not relate to inclusive practices in working with transgender and/or GNC youth.

Based on the measure of awareness towards transgender youth, school psychologists on average had a moderate awareness. The majority of school psychologists were aware of what it means to be transgender (85%), the difference between sex and gender (84%), the difference between sexual orientation and gender identity (88%), that transgender individuals could have varying sexual orientations (86%), that being transgender is not a mental health disorder (59%), that most Anti-Discrimination laws in the U.S. do not protect people from discrimination based on gender identity or gender expression (43%), and that transgender people face discrimination at work (87%), in health care settings (88%), in education (87%), in legal systems (87%), and within family systems (88%). Lastly, the majority of participants were aware that transgender
people of color experience more discrimination than white transgender people (80%), that many transgender people are the victims of subtle discrimination (89%), and that many transgender people are the target of hate crimes (85%).

**Bivariate Correlations**

Bivariate correlations were conducted to address the hypotheses about the relationships between awareness, training, attitudes, and practices among school psychologists (Table 5). A summary of the correlation matrix indicates that awareness was significantly and positively related to school psychologists’ training experiences ($r=.20, n=370, p<.01$), attitudes to supportive school practices (SSP) ($r=.31, n=357, p<.01$), attitudes towards transgender individuals ($r=.25, n=326, p<.01$), and aspirational practices ($r=.15, n=336, p<.01$). In addition, training was significantly and positively related to school psychologists’ awareness ($r=.20, n=370, p<.01$), attitudes to SSP ($r=.36, n=357, p<.01$), attitudes towards transgender individuals ($r=.31, n=326, p<.01$), current practices ($r=.51, n=332, p<.01$), and aspirational practices ($r=.37, n=336, p<.01$).

Attitudes to SSP significantly and positively correlated to school psychologists’ awareness ($r=.32, n=357, p<.01$), attitudes towards transgender individuals ($r=.32, n=357, p<.01$), training ($r=.36, n=357, p<.01$), current practices ($r=.30, n=325, p<.01$), aspirational practices ($r=.53, n=330, p<.01$). Attitudes towards transgender individuals were significantly and positively correlated to awareness ($r=.248, n=326, p<.01$), training ($r=.312, n=326, p<.01$), and current practices ($r=.443, n=309, p<.01$). Lastly, current practices were significantly and positively related to school psychologists’ awareness ($r=.140, n=332, p<.01$), training ($r=.268, n=332, p<.01$), attitudes to SSP ($r=.452, n=325, p<.01$), and attitudes towards transgender
Individuals \( (r=.443, n=309, p<.01) \). There is no evidence of multicollinearity among correlated variables.

Table 5

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Attitudes to SSP</td>
<td>.78**</td>
<td>.32**</td>
<td>.36**</td>
<td>.30**</td>
<td>.53**</td>
<td></td>
</tr>
<tr>
<td>2. Attitudes</td>
<td>.78**</td>
<td></td>
<td>.31**</td>
<td>.28**</td>
<td>.51**</td>
<td></td>
</tr>
<tr>
<td>3. Awareness</td>
<td>.32**</td>
<td>.25**</td>
<td></td>
<td>.013</td>
<td>.150**</td>
<td></td>
</tr>
<tr>
<td>4. Training</td>
<td>.36**</td>
<td>.31**</td>
<td>.20**</td>
<td></td>
<td>.37**</td>
<td></td>
</tr>
<tr>
<td>5. Current Practices</td>
<td>.30**</td>
<td>.28**</td>
<td>.013</td>
<td>.51**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Aspirational Practices</td>
<td>.53**</td>
<td>.51**</td>
<td>.15**</td>
<td>.37**</td>
<td>.35**</td>
<td></td>
</tr>
</tbody>
</table>

**\( p < .01 \) (one-tailed)

Research Question 1: What Predicts School Psychologists’ Awareness about Transgender Issues?

Multiple linear regressions were used to examine predictors of school psychologists’ awareness about transgender issues. The results, summarized below, indicated that training and attitudes to supportive school practices are significant predictors of awareness. The results are presented in Table 6.

**Training:** The regression of training on awareness was significant, \( b=.039, t(302) = 3.87, p=.000 \). Approximately 10.3% of the variance in awareness was accounted for by training.

**Current Practices:** The regression of current practices on awareness was significant, \( b=-.011, t(302) = -2.57, p=.011 \). Approximately 10.3% of the variance in awareness was accounted for by predictor variables.

**Attitudes to SSP:** The regression of attitudes towards SSP on awareness was significant, \( b=.108, t (302) =2.77, p=.006 \). Approximately 10.3% of the variance in awareness was accounted for by predictor variables.
Attitudes: The regression of attitudes towards transgender individuals on awareness was not statistically significant, \( b = -0.006, t(302) = -0.22, p = .825 \). Approximately 10.3% of the variance in awareness was accounted for by predictor variables.

<table>
<thead>
<tr>
<th></th>
<th>( b )</th>
<th>( SE )</th>
<th>( \beta )</th>
<th>( R^2 )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training</td>
<td>.039</td>
<td>.010</td>
<td>.240</td>
<td>.103</td>
<td>.000**</td>
</tr>
<tr>
<td>Current Practices</td>
<td>-.011</td>
<td>.004</td>
<td>-.162</td>
<td>.103</td>
<td>.011*</td>
</tr>
<tr>
<td>Attitudes to SSP</td>
<td>.108</td>
<td>.039</td>
<td>.247</td>
<td>.103</td>
<td>.006**</td>
</tr>
<tr>
<td>Attitudes</td>
<td>-.006</td>
<td>.029</td>
<td>-.019</td>
<td>.103</td>
<td>.825</td>
</tr>
</tbody>
</table>

\(*p < .05. **p < .01.\)

Research Question 2: What Predicts School Psychologists’ Attitudes towards Transgender Youth?

Multiple linear regressions were used to examine predictors of school psychologists’ attitudes towards transgender youth. The results, summarized below, indicated that current practices and attitudes to SSP are significant predictors of attitude. The results are presented in Table 7.

Training: The regression of training on attitudes was not significant, \( b = .007, t(302) = 0.326, p = .725 \). Approximately 61.2% of the variance in attitudes was accounted for by predictor variables.

Current Practices: The regression of current practices on attitudes was not significant, \( b = .012, t(302) = 1.403, p = .162 \). Approximately 61.2% of the variance in attitudes was accounted for by predictor variables.

Awareness: The regression of awareness on attitudes was not significant, \( b = -0.25, t(302) = -0.221, p = .825 \). Approximately 61.2% of the variance in attitudes was accounted for by predictor variables.
Attitudes to SSP: The regression of attitudes towards SSP on attitudes towards transgender youth was significant, $b=1.005$, $t(302) = 19.487$, $p=.000$. Approximately 61.2% of the variance in attitudes towards transgender youth was accounted for by predictor variables.

<table>
<thead>
<tr>
<th>Table 7</th>
<th>Predicting Attitudes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$b$</td>
</tr>
<tr>
<td>Training</td>
<td>.007</td>
</tr>
<tr>
<td>Current Practices</td>
<td>.012</td>
</tr>
<tr>
<td>Awareness</td>
<td>-.025</td>
</tr>
<tr>
<td>Attitudes to SSP</td>
<td>1.005</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01.


Multiple linear regressions were used to examine predictors of school psychologists’ current practices with transgender youth. The results, summarized below, indicated that training and attitudes towards transgender youth are significant predictors of current practices with transgender youth. The results are presented in Table 8.

Attitudes to SSP: The regression of attitudes towards SSP on current practices with transgender youth was not significant, $b=.488$, $t(302) = 0.911$, $p=.363$. Approximately 25.8% of the variance in current practices was accounted for by predictor variables.

Attitudes: The regression of attitudes towards transgender individuals on current practices was not statistically significant, $b=0.559$, $t(302) =1.403$ $p=.162$. Approximately 25.8% of the variance in current practices was accounted for by predictor variables.
Training: The regression of training on current practices was significant, $b=1.114$, $t(302) = 8.587$, $p=.000$. Approximately 25.8% of the variance in current practices was accounted for by predictor variables.

Awareness: The regression of awareness on attitudes was significant, $b=-2.009$, $t(302) = -2.574$, $p=.011$. Approximately 25.8% of the variance in current practices was accounted for by predictor variables.

Table 8

**Predicting Current Practices**

<table>
<thead>
<tr>
<th></th>
<th>$b$</th>
<th>$SE$</th>
<th>$\beta$</th>
<th>$R^2$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes to SSP</td>
<td>.488</td>
<td>.536</td>
<td>.074</td>
<td>.258</td>
<td>.363</td>
</tr>
<tr>
<td>Attitudes</td>
<td>.559</td>
<td>.398</td>
<td>.112</td>
<td>.258</td>
<td>.162</td>
</tr>
<tr>
<td>Training</td>
<td>1.114</td>
<td>.130</td>
<td>.456</td>
<td>.258</td>
<td>.000**</td>
</tr>
<tr>
<td>Awareness</td>
<td>-2.009</td>
<td>.781</td>
<td>-.134</td>
<td>.258</td>
<td>.011*</td>
</tr>
</tbody>
</table>

*$p < .05$. **$p < .01$.**
CHAPTER 5

DISCUSSION

The purpose of this current study was to examine school psychologists’ knowledge about transgender youth and the issues they face, how they currently practice in relation to providing services and supports to transgender youth, and what their attitudes are towards transgender youth. This study found that school psychologists’ attitudes towards transgender youth were positive, with a mean score of 4.50 on a scale of 1 to 5. Attitudes towards implementing supportive school practices were also positive ($M=4.21$), indicating a willingness to address the needs of transgender students. These findings are consistent with the results of the Bowers et al. (2015) study that found school psychologists held overall positive attitudes towards transgender youth and the majority of their participants were willing to address the needs of transgender students in school. The results of the current study are encouraging; school psychologists have positive attitudes towards transgender youth and are willing to implement supportive school practices.

Unique findings from the current study indicate that 1) training, current practices, and attitudes towards current practices are statistically significant predictors of awareness towards transgender youth, 2) attitudes towards supportive school practices are statistically significant predictors of attitudes towards transgender youth, and 3) training and awareness are statistically significant predictors of engagement in supportive practices.

There are no published studies that have assessed school psychologists’ supportive school practices specifically for transgender youth. Results of this study show that school psychologists on average engage in moderate levels of supportive school practices (e.g., referring to students by their preferred pronouns, using gender neutral language, consulting to create gender inclusive
curriculum, advocating for transgender and gender diverse students). The average participant in this study had a moderate mean score on this measure ($M=3.25$). This mean score indicates that there is still room to increase school psychologists’ direct support for transgender youth. The regression analysis signifies that an increase in training will increase levels of supportive school practices. The current level of school psychologists’ work for transgender youth in schools are only implemented at a moderate level and can be improved in many ways. Only 44% of school psychologists reported that they “always” stop others from making negative comments. School psychologists can improve their supportive school practices by engaging in direct intervention when hearing others making negative comments based on gender and identity expression. School psychologists should aim to increase the amount of consultation they are providing with school staff and parents. The majority of respondents indicated that they “never” or “rarely” consult with teachers to gender intensive curriculums; that they “sometimes” consult with parents, teachers, and staff regarding the needs of transgender and gender diverse students; and “sometimes” use gender-neutral language when working with students and their families. Lastly, school psychologists should aim to create a GSA or similar groups for LGBT students at their schools: the majority of respondents indicated that they have not started a GSA or similar groups for LGBT students at their schools, but that they are willing to (47%). These areas can be targeted for improvement by school psychologists to increase the levels of support they directly and indirectly provide to transgender students.

This study found that training predicts both higher levels of awareness and higher implementation of supportive school practices. School psychologists reported minimal training experiences. The majority of research has assessed school psychologists training experiences surrounding LGBT issues, and has found that school mental health professionals (counselors,
social workers, and psychologists) report that they did not receive adequate education or training to prepare them to meet the needs of LGBT youth (Kull et al., 2017). Another study found that only 58% of school psychologists report having received education in working with LGBT students (Arora et al., 2016). These findings indicate that there is minimal pre-service training exposure to LGBT related coursework, and even less exposure to content related to transgender and GNC youth. In order for school psychologists to make changes to their approach and increase their engagement in supportive school practices, it will be imperative for graduate training programs to provide learning opportunities to graduate students, and for current school psychologists to participate in professional training opportunities offered at conferences and through continuing education events. In the current study, 40.5% of school psychologists indicated they received professional training working with transgender youth through continuing education, 45% indicated they have received professional training through conference workshops, and 64% indicated that they have engaged in self-directed learning.

There are no published studies that assess school psychologists’ awareness of transgender youth or individuals. School psychologists in this study had a moderate level of awareness. Training, engagement in supportive practices, and attitudes towards supportive practices predict awareness. However, while higher levels of training predicted higher levels of awareness, and higher levels of attitudes towards supportive practices predicted higher levels of awareness, the regression analysis that answers research question 1 (Table 6) shows that school psychologists with high levels of awareness are not actually engaging in supportive practices. The majority of school psychologists were aware of what it means to be transgender, the difference between sex and gender, the difference between sexual orientation and gender identity, that transgender individuals could have varying sexual orientations, that being transgender is not a mental health
disorder, that most Anti-Discrimination laws in the U.S. do not protect people from discrimination based on gender identity or gender expression, and that transgender people face discrimination at work, in health care settings, in education, in legal systems, and within family systems. Lastly, the majority of participants were aware that transgender people of color experience more discrimination than white transgender people, that many transgender people are the victims of subtle discrimination, and that many transgender people are the target of hate crimes. With higher exposure to training, school psychologist’s awareness will increase, attitudes towards transgender students will become more positive, and will engage in higher rates of supportive school practices.

These results have important implications for school psychologists because awareness allows for quality care when working with transgender students. The majority of school psychologists understand that being transgender is not a mental health disorder so school psychologists will not try to treat an individual for identifying as transgender, and rather they will work to provide services related to their experiences of dysphoria, discrimination and harassment across multiple settings, hate crimes, and other events that may affect the mental health, psychosocial and educational well-being of transgender youth. Additionally, school psychologists understand that transgender people of color face more discrimination than white transgender people do, indicating an awareness of racial implications in discrimination and hate crimes. This awareness is critical in providing culturally responsive mental health services.

**Practical Implications**

The results of this study highlight the importance and significance of the observed predictor variables in accounting for change in school psychologists’ awareness, attitudes, and current practices. These findings are important for the field of school psychology across many
realms including graduate training programs, school-based practitioners, and conference and professional development organizers. The study found that training and awareness predicts current professional practices. Greater exposure to learning about and working with transgender students in graduate curriculum, professional development, and in practice, will increase school psychologist’s awareness towards transgender issues, positive attitudes towards transgender youth, and on-campus support for transgender students.

It is likely that the quality of education and training in school psychology training programs vary across the country. NASP and APA require a diversity course that includes learning about cultural and linguistical diversity, racial and ethnic diversity, and gender and sexual diversity. All of these areas of diversity have deep histories that are deserving of more than what can be learned within one course. Students with minimal exposure (e.g., one course) and applied training experiences will not be prepared to provide a plethora of services to diverse children, youth, or their families. In this study, almost 68% of participants reported that their graduate coursework did not cover transgender or GNC youth. The mean age of participant is 47 years, and mean number of years of experience as a school psychologist is 10 years. These participant demographics may contribute to the majority of participants not having been exposed to topics of gender identity and diversity during graduate study.

Training opportunities in the form of professional development are limited and can be costly. Registration for a professional conference ranges between $200 and $600 depending on the size of the event and the organization hosting the event. Diverse training seminars at conferences are as few as diverse research is present in published journals. Additionally, practitioners must seek out these experiences on their own, which reduces the probability that the majority of these topics are sought out. While this financial requirement may act as a barrier to
access to professional development, there are also training opportunities for practitioners that come at little to no cost. In summer 2011, GLSEN provided a training addressed working with gender-nonconforming youth and their families was provided for professionals working with youth. These trainings occur several times throughout the year at individual schools, counselor professional development days, and GLSEN continuing education events. The goal of this training was to prepare professionals to fulfill their roles in supporting GNC children, families, and schools in managing their adjustment with regard to school systems, working with medical professionals, navigating the courts for legal needs such as name changes, religious and spiritual committees, and familial support. This training was offered at no cost to participants, with the exception of a continuing education fee for those who seeking this credit. After the workshops, 93% of participants reported they acquired new knowledge or skills as a result of their attendance (Case & Meier, 2014). GLSEN also provides online workshops to educators, covering topics such as “LGBT Issues in Our Nation’s K-12 Schools”, “School Mental health Professionals Supporting LGBT Youth”, “State Data for Advocacy”, and “Trans and GNC Student Experiences”. Additional free resources can be found through organizations that support gender diverse students such as The Safe Zone Project, The TREVOR Project, and Human Rights Campaign. The APA offers recommendations for school administrators in Supporting Transgender and Gender Diverse Students in School and a free course (The Respect Online Course) that aims to teach school professionals how to provide direct services and utilize school-based practices for LGBT youth. The presence of free online material is in abundance.

Systematically, it is difficult for graduate students and practitioners to receive adequate training to work with transgender youth. NASP (2014) published a position statement to support transgender youth and included the following recommendations to school psychologists: school
psychologists have an important role in advocating for safe and inclusive learning environments for transgender youth, should ensure that transgender and gender diverse students are included under the protections of school antiharassment policies, should intervene when homophobic or transphobic statements are made, and may providing gender affirming counseling. Similarly, the APA (2020) supports that children and adolescents who have diverse gender and sexual identities, expressions, and/or presentations have the inherent human right to equal opportunity and a physically and psychologically safe environment within all institutions. As recommended by NASP, advocacy plays an integral role in providing safe spaces for transgender and gender diverse youth. It is recommended that graduate programs follow this model and expose students to these topics in their coursework to increase the probability that practitioners will be prepared to work with and advocate for transgender and GNC youth.

Best practices for multicultural training suggest that integrating topics into courses coupled with separate multicultural course(s) is the best approach to multicultural training in school psychology (Newell et al., 2010; Rogers, 2006). Content related to gender identity and gender diversity can be integrated into multiple courses, including child and adolescent development, cultural diversity in school psychology, psychological consultation and supervision, contemporary and emerging issues in school psychology, mental health practicum, and advanced social psychology. Additionally, Rogers (2006) found that exemplary graduate training programs include faculty who value and implement multicultural research. Multicultural research includes research studies for which cultural variables (e.g., gender, race/ethnicity, SES, religion, sexual orientation) are integral to the conceptualization, design, and analysis of the study (Newell et al., 2010).
The presentation of transgender and GNC identities in training programs are often addressed using the medical model rather than the multicultural model (APA 2014). Singh and dickey (2016) summarize the implications of using the medical model, and find that this model is less likely to approach a client’s strengths, is more likely to take a pathological view of the needs of TGNC people, is more likely to pathologize people with transgender or gender diverse identities, and is more likely to unnecessarily enforce the gender binary. The medical model assumes that a TGNC person’s behavior is abnormal and must be assessed or treated. Lastly, trainees often learn about TGNC people in a psychopathology course, framing these individuals as problematic from the outset. It is recommended that programs shift from the medical model to the multicultural model to teach trainees to understand TGNC individuals, to focus on their strengths, and to advocate for their rights and needs.

**Study Limitations**

It is important to address the limitations of the current study and acknowledge how these limitations could have impacted the results. First, this study gathered data in a non-randomized manner. This could potentially lead to a biased sample, as the survey was distributed utilizing a convenience sample and was distributed mainly via social media platforms. Colleagues of the researcher, committee members, and faculty also disseminated the survey. The results of the study indicated that the participants generally held positive attitudes towards transgender youth and that they had a willingness to provide support to transgender youth in their jobs. It is possible that those who do not hold positive attitudes or who do not wish to provide supportive school practices did not participate in the survey or complete the survey.

All of the measures used in this study relied on self-report, which could possibly bias the results. Social desirability is often common on self-report measures due to a variety of factors...
including selective memory, exaggeration, and a possible misunderstanding/misinterpretation of questions (Rosenman, Tennekoon, & Hill, 2011). Demographically, the majority of respondents represent a normative sample of school psychologists (predominately White females). Although this observation accurately reflects the current state of practitioners in the field, it is difficult to determine the degree to which the findings can be applied to other populations of practitioners with so few respondents.

The survey questions were not randomized, and questions appeared in the same order for each participant. Because of this, there was a significant amount of missing data in the last two survey measures. The pattern of missingness for these measures was at greater than 20%. This can be attributed to survey structure, participant fatigue, and content of questions leading some people to not want to answer.

This study identified variables that hold statistical significance in their prediction towards awareness, attitudes, and current practices. These results are promising but effect sizes also indicate that practical significance is not necessarily as prevalent when predicting awareness or current practices ($R^2 < 30\%$). There may be other variables besides the predictor variables in this study that better explain the variance in the dependent variables. It is recommended that future studies account for other observed variables and follow up with moderation analyses. For example, demographic variables that may have a moderating effect include participant age, years of experience practicing, settings in which participants practice, highest academic degree, and NASP membership. Lastly, the internal consistency of the attitudes towards transgender student’s scale had an unacceptable Cronbach alpha value ($a = 0.24$). This measure was omitted from data analysis.
Future Directions

As noted throughout the paper, there is very little research within the field of school psychology related to transgender youth. School psychology researchers should work to increase the amount of peer-reviewed studies that look specifically at transgender youth within the U.S. public-school system and in relation to the practice of school psychology. The dissemination of research will allow training programs and creators of professional development opportunities to synthesize and present this research to graduate students and practitioners.

The accessibility of school psychologists to participate in research was (and remains) very limited. In order to gather data from a national sample of school psychologists’, researchers only option at this point is to reach out to each state association. In order to increase research production within field, it is recommended that NASP and all state associations collaborate to determine ways in which members can contribute to research. Research participation should always be voluntary, but researchers should be able to have greater accessibility to potential participants.

It will be important for future research to explore training as a mediator to determine the impact training has between independent and dependent variables. Including this step of analysis may allow for stronger practical significance and will guide researchers to provide stronger recommendations. Future researchers may also find it valuable to work directly with transgender youth to determine what supports and needs they have within our public-school systems. They can then investigate the relationship between supportive school practices, as deemed important by transgender youth, and school experiences of transgender youth. Lastly, future researchers should consider assessing school psychologists’ comfortability and confidence in providing
mental health services to transgender youth, a variable that was not assessed in this study and has not yet been assessed in existing research.

**Conclusion**

The results of this study illustrate the relationships between school psychologists’ awareness, training experiences, attitudes towards transgender and GNC youth, and supportive school practices. Overall, school psychologists hold moderate levels of awareness towards transgender issues. School psychologists have minimal exposure to training related to working with transgender youth. While school psychologists report that they are overall willing to implement supportive school practices, they only currently implement moderate levels of support for transgender and GNC youth. These findings stress the importance of attention to increasing school psychologists’ exposure and training experiences in order to increase the implementation of supportive school practices and awareness of transgender experiences. Because transgender and GNC youth are at high risk of experiencing peer victimization, academic underachievement, lower motivation to pursue secondary education, experience of mental health problems, substance abuse, and suicidality, school psychologists are in the perfect position to provide support, build positive school climates, and advocate for them to have safe learning environments. Therefore, it is imperative for graduate training programs and professional organizations to provide training to trainees and practitioners to increase their competency, skills, and confidence in working with and supporting transgender and GNC youth in the schools.
REFERENCES


doi:10.1210/jc.2014-1919


voxel based morphometry study. *Public Library of Science One, 8*(12).
doi:10.1371/journal.pone.0083947


doi:10.1111/jsm.12083


APPENDIX A: MEASURES

Section 1: Demographic Questionnaire

1. Age: ______

2. If you had to categorize your gender identity, out of the following options, which best describes you (check all that apply)?
   - Male
   - Female
   - Trans Male
   - Trans Female
   - Non-binary
   - Genderqueer
   - Gender non-conforming
   - Other (write in) ________________________

3. Sex designated on your birth certificate when you were born:
   - Female
   - Male

4. If you had to categorize your sexual orientation, out of the following options, which best describes you (check all that apply)?
   - Straight
   - Gay
   - Lesbian
   - Bisexual
   - Queer
   - Pansexual
   - Unsure or still questioning my orientation
   - Other (write in): ________________________

5. Race: Check all that apply
   - Native American/ Alaska Native
   - Asian/ Asian American
   - African American/ Black
   - Native Hawaiian or Other Pacific Islander
   - White
   - Biracial
   - Multiracial
   - Other (write in) ________________________

6. Ethnicity: Check all that apply
□ Hispanic or Latina/o/x
□ Non-Hispanic or Latina/o/x
□ Other (write in)______________________

7. Geographic region of where you currently practice:
□ Northeast (ME, NH, VT, MA, RI, CT, PA, NJ, NY)
□ Midwest (WI, MI, IL, IN, OH, MO, ND, SD, NE, KS, MN, IA)
□ South (DE, MD, DC, VA, WV, NC, SC, GA, FL, AL, KY, MS, TN, AR, LA, OK, TX)
□ West (ID, MT, WY, NV, UT, CO, AZ, NM, AK, WA, OR, CA, HI)
□ Other (write in): ____________________

8. What is the highest academic degree in school psychology you have attained? Check all that apply
□ Masters
□ Specialist
□ Doctorate
□ Other: __________

9. Was your school psychology graduate program NASP approved or APA accredited? Check all that apply
□ Yes, NASP approved
□ Yes, APA accredited
□ Yes, both APA and NASP approved/accredited
□ No

10. Are you a member of NASP?
□ Yes
□ No

11. How many years of experience do you have practicing as a school psychologist (post-internship)? ________________

12. In what settings do you practice? Check all that apply
□ Early childhood/Preschool
□ Elementary
□ Middle School
□ High School
□ Adult transition services
□ Not currently practicing
□ Retired
□ Other: ____________________
a) Please indicate your level of comfort in working with transgender and gender nonconforming youth (GNC) on a scale from 1 to 4 (1=Not at all comfortable, 2=Somewhat comfortable, 3= Comfortable, 4= Very comfortable) Knowledge about issues transgender and GNC individuals experience
b) Advocacy for transgender and GNC students
c) Consultation and collaboration with staff in supporting transgender and GNC students
d) Providing mental health services to transgender and GNC youth

13. How many transgender and GNC youth have you worked with throughout your career as a school psychologist?
   □ 0
   □ 1-2
   □ 3-5
   □ 5-7
   □ 7+

14. Does your school include transgender and gender non-conforming youth in their anti-harassment and protective policies?
   □ Yes
   □ No
   □ Unsure

15. In your school psychology training program, did any of your courses include content about transgender and/or GNC youth?
   □ Yes
   □ No

16. Did any of your courses cover content related to inclusive practices in working with transgender and/or GNC youth?
   □ Yes
   □ No
   □ Not familiar with inclusive practices

17. Beyond course work, what additional professional training related to working with transgender and/or GNC youth have you had? Check all that apply
   □ Continuing education
   □ Conference workshop
   □ Self-directed learning
   □ N/A
Section 2: Attitudes Toward Transgender Individuals--Supportive School Practices (ATTISSP)

Adapted from Music Teachers’ Attitudes Toward Transgender Individuals Scale—Supportive School Practices (Silveira & Goff, 2016). Five-point Likert scale (Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree).

1. Legal names no longer preferred by transgender students should be information known to teachers, students, and staff.
2. Students should be allowed to decide what pronouns (he, she, they, them, xe, xem etc.) are used to refer to them.
3. It is the responsibility of school staff to stop others from making negative comments based on gender identity or expression.
4. Every school bathroom should be either for boys only, or girls only.
5. Positive representations of transgender people should be included in the curriculum whenever possible.
6. It is unrealistic for teachers and school staff to practice using gender-neutral language in the classroom and/or at school.
7. It would be unfair for transgender students to be allowed to choose men’s or women’s attire for school uniform/dress code.
8. It should be a low priority for school staff to become educated on issues of sexuality and gender identity.
9. It is acceptable for teachers and school staff to comment to a student that s/he is not “masculine” or “feminine” enough.
10. School staff should receive training on how to intervene against gender-and sexuality-based student harassment.
11. Students should have the option to use private bathrooms at school.
12. Schools should support the presence of Gay-Straight Alliances or similar groups for lesbian, gay, bisexual, and transgender students.
13. It is inappropriate to teach students about gender variance at school.
14. It is unnecessary for school anti-harassment policies to specifically mention gender identity and expression.
15. Parents should be informed about their child’s transgender identity.
16. It is the responsibility of the school psychologist to consult with teachers, parents, and other school staff to make accommodations for transgender students.
17. School districts should plan accommodations for transgender students who may want to participate in sports.
18. “Male” and “female” should be the only gender options on schools’ official forms.
19. Teachers and school staff should never use slurs referring to a student’s gender identity or expression (e.g. “sissy”, “tranny”, “crossdresser”).
20. It is the responsibility of the school psychologist to advocate for transgender students.
Section 3: School Psychologists’ in Practice: Working with Transgender Students (SSP)

Adapted from Music Teachers’ Attitudes Toward Transgender Individuals Scale (Silveira & Goff, 2016). Five-point Likert scale (Always, Very Often, Sometimes, Rarely, Never)

1. I refer to students by their chosen name
2. I refer to students by their preferred pronouns
3. I stop others from making negative comments based on gender identity or expression
4. I consult with teachers to create gender inclusive curriculum
5. I consult with parents, teachers, and other school staff to meet the needs of transgender and gender diverse students
6. I use gender-neutral language when working with a student and their family
7. I educate myself on issues of sexuality and gender identity
8. I tell students that they are not “masculine” or “feminine” enough
9. I have received training on how to intervene against gender and sexuality-based student harassment
10. I have started a Gay-Straight Alliance or similar groups for LGBT students at my school
11. I advocate for transgender and gender diverse students’ needs
12. I am aware of my school’s protective policies for transgender and gender diverse youth.
13. I know my school’s anti-harassment policies regarding gender identity and expression

Section 4: School Psychologists’ Attitudes Toward Transgender Individuals Scale (ATTI)

Adapted from Music Teachers’ Attitudes Toward Transgender Individuals Scale (Silveira & Goff, 2016). 5-point Likert scale (Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree).

1. Being transgender is immoral
2. Transgender people are an expression of the natural continuum of gender
3. Transgender individuals should not be allowed to work with children
4. Transgender individuals should be barred from the teaching profession
5. It is necessary to have clear distinctions between girls and boys
6. Having only two sexes is limiting
7. Transgender students are a valuable part of our schools
8. Transgenderism is a sin
9. Anything other than boy/girl, man/woman is unnatural
10. I would feel comfortable if I learned that my best friend was a transgender individual
11. It would be beneficial to schools to recognize transgenderism as normal
12. I would feel comfortable if I learned my neighbor was a transgender individual
13. Transgender individuals should be accepted completely into our schools
14. I avoid transgender individuals whenever possible
15. The presence of transgender individuals at a social function would not affect my enjoyment of the event
16. There should be no restrictions on gender identity
17. I would like to have, or I do like having, friends who are transgender individuals
18. I would feel comfortable teaching a transgender student
19. Transgender people are sick
20. Transgenderism endangers the institution of the family
21. Transgender individuals should not be allowed to cross-dress at school
22. Transgender individuals are really just closeted gays


6-point Likert Scale: (strongly disagree) to 6 (strongly agree)

1. In my role in the schools, it would not bother me to work directly with a transgender student
2. Transgender students would benefit from keeping issues of gender identity to themselves
3. I am confident in my ability to address the unique educational, emotional, and social needs of transgender students
4. Transgender students should be entitled to an education equal to that of their non-transgender peers
5. I would feel comfortable stepping in if a transgender student came out to me regarding their gender identity
6. I would be comfortable stepping in to stop physical harassment related to gender identity in the school environment
7. I would be comfortable to stop physical harassment related to gender identity in the school environment
8. School policy should explicitly prohibit harassment related to gender identity and gender expression
9. Issues of gender identity should not be addressed in schools by school personnel
10. My education adequately prepared me to work with transgender youth

Section 6: School Psychologists’ Awareness of Transgender Issues

What does transgender mean? Transgender is:

- A mental disorder that is included in the DSM-5 characterized by cross dressing behaviors.
- Confusion about one’s sexual orientation
- An umbrella term for persons whose gender identity, gender expression, or behavior does not conform to that typically associated with the sex which they were assigned at birth.
- All of the above
- None of the above

What is the difference between sex and gender?

- Sex and gender are the same.
Sex is assigned at birth; gender refers to socially constructed roles, behaviors, and activities that represent what is male and female. Gender is assigned at birth; sex refers to socially constructed roles, behaviors, and activities that represent what is male and female.

What is the difference between sexual orientation and gender identity?
- Gender identity and sexual orientation are the same.
- Sexual orientation refers to an individual’s physical, romantic, and/or emotional attraction to another person; gender identity refers to one’s internal sense of being male, female, or something else.
- Sexual orientation refers to one’s internal sense of being male, female, or something else; gender identity refers to an individual’s physical, romantic, and/or emotional attraction to another person.

Transgender individuals can have the following sexual orientations (check all that apply):
- Heterosexual
- Gay/Lesbian
- Bisexual
- Asexual
- All of the above
- None of the above

Is being transgender a mental health disorder?
- Being transgender is a mental disorder according to the DSM-5
- A psychological state is considered a mental disorder only if it causes significant distress or disability
- Being transgender is not a mental health disorder
- Unsure

Do most Anti-Discrimination laws in the U.S. protect transgender people from discrimination based on gender identity or gender expression?
- Yes
- No
- Unsure

Transgender people face discrimination in the following settings (check all that apply):
- Employment/Work
- Housing
- Health Care
- Education
- Legal Systems
- Family
- None of the above
Transgender people of color may experience more discrimination than White transgender people

☐ True
☐ False
☐ Unsure

Many transgender people are the victims of subtle discrimination (glances, glares of disapproval, discomfort, invasive questions about their body parts, microaggression).

☐ True
☐ False
☐ Unsure

Many transgender people are the targets of hate crimes: