

Running head: VIGNETTE STUDY OF ATTITUDES TOWARD TRANSGENDER YOUTH

AN EXPERIMENTAL VIGNETTE STUDY OF SCHOOL PSYCHOLOGY STUDENTS'

ATTITUDES TOWARD TRANSGENDER YOUTH

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ARIELLE JACLYN WALZER

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APPROVED:

Nancy Fagley, PhD

Jeffrey Shahidullah, PhD

DEAN:

Francine Conway, PhD

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Abstract

This study used an experimental vignette design to examine whether school psychology students' attitudes toward a teenager in a case vignette varied based on whether or not they believed the teen to be transgender. Transgender status was conveyed indirectly through names, e.g., by indicating that the student with the legal name "Anthony" had requested to be called "Alyssa." It also examined whether attitudes toward transgender boys and transgender girls differed, and the degree to which transgender-related training and experience affected attitudes. A 2 (Gender Status: cisgender vs. transgender) x 2 (Gender Identity: male vs. female) ANOVA indicated that participants had *more* supportive attitudes toward a transgender teen experiencing issues in school related to a name change and a behavior concern than toward a cisgender teen with the same issues, $F(1, 421) = 121.59, p < .001$. Gender Status and Gender Identity significantly interacted to affect attitudes, $F(1, 417) = 10.83, p = .001$. A test of simple effects indicated that participants were *more* supportive of transgender girls than transgender boys, $p = <.001$. However, participants' attitudes regarding cisgender boys versus girls did not differ significantly. Having had training about transgender issues, professional experiences with transgender individuals, or personal experience with transgender individuals correlated significantly with attitudes, ranging from .179-.267. Most participants had neither training nor experience; the modal score on each domain was 0. School psychology programs are advised to add required training in this area and to focus on increasing supportive attitudes toward transgender boys in particular.

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Introduction

Transgender students are a minority population in schools who face unique challenges, have distinct needs, and often experience harsh, negative school environments. In a 2015 national survey of 10,528 lesbian, gay, bisexual, transgender, and queer (LGBTQ) youth, 85.7% of the sample reported hearing perceived negative remarks about transgender people, such as “tranny” or “he/she” (Kosciw, Greytak, Giga, Villenas, & Danischewski, 2016). The survey found that, compared to their cisgender LGBQ peers, transgender youth ($N = 1384$) faced more hostile school climates (Kosciw et al., 2016). Three-quarters of trans students reported feeling unsafe in school; 51.2% reported having been verbally harassed (e.g., called names or threatened), 20.0% physically harassed (e.g., pushed or shoved), and 9.6% physically assaulted (e.g., kicked, punched, or injured with a weapon) during the past school year (Kosciw et al., 2016).

Negative school experiences can have a lasting impact on transgender youth. In a national survey that included 295 transgender students, 47% of transgender respondents reported that they had skipped class at least once in the previous month due to safety concerns, and those who face harassment over gender expression are more likely to have lower grade point averages and less likely to plan to attend college (Greytak, Kosciw, & Diaz, 2009). The National Transgender Discrimination Survey found that 78% of the more than 6,000 transgender respondents had been harassed, 35% had been physically assaulted, and 12% had experienced sexual violence – all within the school environment (Grant et al., 2011). This mistreatment often led transgender individuals to leave school; 6% reported having been expelled due to their gender expression, and 15% chose to leave due to harassment (Grant et al., 2011). Of those who left school due to mistreatment, 48% experienced homelessness, and they were twice as likely to have engaged in

sex work and had an HIV rate eight times higher than their peers who had remained in school (Grant et al., 2011).

Furthermore, in a study of LGBT young adults ($N = 245$) from the San Francisco Bay Area who reported some level of gender nonconformity in adolescence, higher levels of school discrimination based on gender expression were associated with higher levels of depression and lower levels of life satisfaction in young adulthood (Toomey, Ryan, Diaz, Card, & Russell, 2010). A study of transgender youth ($N = 55$) ages 15-21 found that 26% had made a suicide attempt, and all who had attempted reported that at least one of the attempts was related to being transgender (Grossman & D'Augelli, 2007). This suicide attempt rate is more than three times greater than the overall rate for high school youth according to the Centers for Disease Control and Prevention's 2017 national survey of youth behavior (Kann et al., 2018). Overall, the discrimination faced by transgender youth leaves them with an increased risk of emotional distress and suicidal behavior compared to their cisgender peers (Almeida, Johnson, Corliss, Molnar, & Azrael, 2009).

The Role of School Psychologists

Because so much perceived discrimination occurs in schools, school psychologists are in a unique position to support transgender students (Bowers, Lewandowski, Savage, & Woitaszewski, 2015). The National Association of School Psychologists (NASP) published guidelines directing school psychologists to advocate for transgender students and create more positive environments for them by using gender-neutral language, by responding to bullying and harassment, and by providing supportive counseling addressing social-emotional needs particular to transgender youth (National Association of School Psychologists, 2014). Furthermore, many transgender students face victimization directly from school-based professionals, and the

presence of a supportive adult in the school is a protective factor (Bowers et al., 2015; McGuire, Anderson, Toomey, & Russell, 2010).

Use of locker rooms and bathrooms that match the identified gender and use of preferred names or pronouns (e.g., “he,” “she,” or “they”) are issues that frequently impact transgender students (McGuire et al., 2010). In a national survey, 50.9% of transgender students reported that they had been prevented from using their preferred names or pronouns in school, and 60.0% reported that they had been required to use the locker room or bathroom that matched their legal sex rather than their identified gender (Kosciw et al., 2016). NASP guidelines for working with transgender youth indicate that school psychologists should advocate for students to use the facilities that are in accordance with their affirmed gender, and should use the pronouns and the name that the student prefers (Westheimer, Persinger, Cannava, & Klotz, 2016).

School Psychologists’ Attitudes

Some previous studies have examined school psychologists’ attitudes toward transgender students, with mixed results. Bowers et al. (2015) surveyed practicing school psychologists, school psychology graduate students, and school psychology faculty across the United States ($N = 204$) and found that 83.7% of respondents reported being “willing” or “more than willing” to work with transgender students. A 2015 survey of practicing school psychologists in the Northeastern U.S. ($N = 121$) found that the mean score on a measure of attitudes toward transgender youth was in the mixed to slightly positive range (Walzer, 2015).

In a national survey of school psychology trainees, faculty, and practitioners ($N = 834$), Rutledge, Fedewa, Flynn, and Jackson (2012) asked respondents to rate their comfort level with various hypothetical scenarios involving LGBTQ youth on a scale of 1 to 4, with 1 indicating “least comfortable” and 4 indicating “most comfortable.” Among 13 scenarios, one involving a

student seeking help due to transgender feelings tied for the lowest mean score ($M = 2.12$, $SD = .97$), indicating the least comfort among respondents (Rutledge et al., 2012).

Teachers' Attitudes

Teachers have also been surveyed about attitudes towards trans youth. Silveira and Goff (2016) surveyed American music teachers ($N = 612$) about their attitudes toward transgender students and about their attitudes toward educational practices intended to be inclusive of trans youth, with participants rating their agreement with statements such as, "Transgender students in choir should be permitted to sing with a vocal part that aligns with their gender identity." Results indicated that the sample held generally positive attitudes toward trans youth and supportive educational practices overall (Silveira & Goff, 2016). They also found that female teachers had more positive attitudes than males, a finding consistent with the results of a study ($N = 180$) of South Australian primary school teachers and pre-service teachers (Bartholomaeus, Riggs, & Andrew, 2017; Silveira & Goff, 2016). Male teachers in the study reported lower levels of comfort working with trans students than female teachers, and those who had no experience working with trans students reported lower levels of comfort than those who had experience (Bartholomaeus et al., 2017).

The Effects of Experience and Training

In addition to experience with transgender students, some prior studies have examined whether training improves attitudes. For example, Bowers et al. (2015) found that school psychologists who have received training in transgender issues had significantly more positive attitude scores in this area. A systematic review of studies of mental health practitioners' attitudes toward transgender people noted that training and experience were found to improve attitudes in many studies (Brown, Kucharska, & Marczak, 2017). However, this was not true of

all reviewed studies, and some results suggest that improvements in attitudes might be short-lived, disappearing within 90 days or fewer (Brown et al., 2017). A study of a 10-session transgender health course for health profession students ($N = 46$) found promising results, with scores on a post-test indicating reduced transphobia among participants, yet it is unknown whether these gains were maintained in the long term (Braun, Garcia-Grossman, Quiñones-Rivera, & Deutsch, 2017).

Issues in Prior Research

Easily manipulated survey designs. Studies in this area have typically been conducted via short surveys that ask respondents about their attitudes towards transgender youth. When potentially controversial attitudes are examined this way, participants are more likely to succumb to the social desirability bias, the tendency to endorse socially desirable qualities and values and deny socially undesirable ones (Phillips & Clancy, 1972). As ethics codes and professional obligations call for school psychologists to serve all students, it is likely that items on Bowers et al.'s (2015) survey, for example, such as, "How willing are you to address transgender issues as they arise in your job?" may be answered with some degree of bias.

Failure to examine possible differences in attitudes toward transgender boys versus transgender girls. Another issue in previous research in this area is that transgender youth have typically been examined as a single, homogeneous group (Brown et al., 2017; Worthen, 2013). That is, no distinction is made between attitudes toward and treatment of transgender boys (those assigned female at birth who have a male gender identity) and transgender girls (those assigned male at birth who have a female gender identity). This has been identified as a limitation in numerous studies and as a problematic gap in the literature (Brown et al., 2017; McGuire et al., 2010; Worthen, 2013).

Although research in prior decades tended to ignore the experiences of and attitudes toward transgender males and look solely at transgender females, more recent research seems to have transgender boys and men overrepresented in their samples (McGuire et al., 2010; Worthen, 2013). Results of studies examining the experiences of transgender youth suggest that trans girls experience earlier and more frequent prejudice than trans boys; in one study, parents were more likely to have told their trans daughters to stop dressing in their preferred clothing than trans sons, as well as more likely to tell their trans daughters that they needed psychological counseling due to their gender identities (Grossman, D'Augelli, Jarrett Howell, & Hubbard, 2005).

Furthermore, the Human Rights Campaign's most recent yearly count of fatal violence in the United States against transgender individuals found that of 28 murder victims, 23 were transgender girls or women (and three were trans men and two had non-binary gender identities), indicating that violence disproportionately affects transgender females (HRC, 2017). These findings suggest that male-to-female and female-to-male transgender individuals elicit different reactions from others and face different types and degrees of harassment and discrimination, and therefore biases toward them should be analyzed separately.

Vague definitions of experience and training. Some studies have asked participants about their experience with transgender individuals and training in transgender issues, in order to determine whether these factors influence attitudes (Bartholomaeus et al., 2017; Bowers et al., 2015; Brown et al., 2017). These questions tend to be limited and vague, e.g., a single question asking if the participant has “undertaken training specific to working with trans and gender diverse students” or has “worked with at least one trans or gender diverse student” (Bartholomaeus et al., 2017).

Such questions, although decidedly important, do not account for the possibility of a high degree of variation in experiences. “Training” might refer to a single-hour lecture on the topic, a full-day workshop, or a semester-long practicum program, among other alternatives. Having conducted a short academic assessment of one trans student might be meaningfully different from conducting multiple such assessments, or conducting individual counseling with a trans student over the course of a school year. Prior studies have not fully examined these possibilities.

Current Study

This study improved upon previous research in the area of attitudes toward transgender youth in multiple meaningful ways.

Experimental vignette design. Most importantly, the current study used an experimental vignette design, in which participants read a vignette about a student who is having conflicts in school and are asked to imagine that they are the school psychologists tasked with handling the situation. The gender of the student was varied across participants (cisgender or transgender, male or female), and all other vignette details remained constant. (Although some transgender youth identify with non-binary gender identities, i.e., they have a gender identity that is neither male nor female or is a combination of male and female, non-binary identities were considered to be outside the scope of this study.)

Participants then responded to a survey designed to assess their attitudes toward the student by having them rate their opinions about the situation, and indicate the likelihood that they would take certain actions in response to it.

Experimental vignette designs have numerous advantages over traditional survey methodology: (1) they are complex representations of realistic scenarios, embedded in a concrete context, leading to responses that are similarly more realistic and concrete, (2) because multiple

factors can be embedded and manipulated within the vignettes, they allow for concurrent investigation of different variables and the testing of interaction effects, and (3) the experimental nature of the design ensures high internal validity, meaning that it will be possible to determine causality behind the attitude responses (Steiner, Atzmüller, & Su, 2016). Compared to responses to overt attitude surveys, responses to experimental vignettes are less likely to be affected by the social desirability bias, and more likely to reflect the actual thoughts and anticipated behavior of subjects. Responses are less subject to social desirability bias and thus may provide more realistic information about participants' attitudes and potential actions than overt attitude surveys (Aguinis & Bradley, 2014; Steiner et al., 2016).

The experimental vignette methodology is particularly appropriate when seeking a design with high internal validity for a situation that contains sensitive topics and vulnerable populations for which is it difficult and potentially unethical to experimentally create the situation in a manner other than in a vignette (Aguinis & Bradley, 2014).

Separate examination of transgender boys and transgender girls. This study examined school psychology graduate students' attitudes toward transgender boys and transgender girls separately, acknowledging the differences between these two groups. Rather than present just one transgender and cisgender condition each, whether the student in question is a boy or a girl was also varied, allowing for analysis of differences in attitudes based on gender.

Improved definitions of experience and training. In contrast to previous studies, this study asked detailed questions about the type of trainings attended both within students' graduate programs and outside them, and specified the length of such trainings. It also asked about experience with transgender individuals in both professional and personal settings, and it defined and quantified such experiences.

Hypotheses

Hypothesis 1. Because transgender youth face substantial perceived bias, it was predicted that attitudes toward transgender students would be more negative than toward cisgender students in the experimental vignette.

Hypothesis 2. Because transgender boys and transgender girls elicit different attitudes from others, it was predicted that there would be a difference in attitudes towards boys and girls, with transgender girls eliciting more negative attitudes than transgender boys.

Hypothesis 3. Because prior studies have found that experience working with transgender individuals is associated with more positive attitudes towards that population, and receiving training in transgender issues improves attitudes, it was predicted that experience with transgender individuals and having received training in graduate school specific to working with this population would be associated with more positive attitude scores (Bowers et al., 2015; Braun et al., 2017).

Method

Participants

Participants were eligible for inclusion in the study if they were enrolled in a school psychology graduate program at the time of the study (November-December 2018). In total, 523 people consented to the study; after those found to be ineligible because they were not enrolled in a school psychology program ($n = 10$) and those who did not answer any questions in the survey ($n = 77$) were removed from the data set, 436 responses (83.4%) were analyzed. Respondents attended a mix of program types; 69.3% ($n = 302$) were enrolled in a master's or specialist-level program and 30.5% ($n = 133$) were in a doctoral program. Nearly all respondents attended programs approved by NASP ($n = 417$), and 85% ($n = 113$) of doctoral students

attended programs accredited by the APA. Participants ranged in age from 21-57; the mean age was 26.56 years ($SD = 5.38$), and less than 10% of the sample was older than 33. Graduate programs in 34 states and the District of Columbia were represented, with New York ($n = 64$), New Jersey ($n = 44$), Massachusetts ($n = 40$), and Texas ($n = 30$) the most popular.

The gender breakdown of participants was similar to that of NASP members, with 83.7% ($n = 365$) of the sample female and 15.1% ($n = 66$) male (Walcott, McNamara, Hyson, & Charvat, 2018). Four respondents indicated that they were transgender and listed gender identities other than “male” or “female.” Three wrote “non-binary” and one wrote “genderqueer.” These terms, although nuanced in meaning, are broadly similar and refer to individuals whose gender identity does not neatly align with either male or female, blends elements of both, shifts between them, or is something altogether different (“Understanding Non-Binary People”, 2018). See Table 1 for more demographic information.

Procedure

The study was constructed and administered using Qualtrics survey software. A link to the study via Qualtrics.com was emailed to training directors or coordinators of 193 NASP-approved and/or APA-accredited school psychology graduate programs and to 13 non-approved/non-accredited programs. The initial email included a request for the directors and coordinators to forward the link to their students, as well as a request to reply indicating that they had done so (see Appendix A). A follow-up email was sent one week later asking them to forward the link again to encourage those students who have not yet completed the study to do so. Of the 206 programs contacted, administrators from 47 replied to indicate that they had sent the link to their students, for a confirmed forwarding rate of 22.8%.

After consenting to the study, participants were instructed to read a case vignette about a teenager in a school setting. The case was broken into two sections, and participants answered attitude questions after each section. They then completed a demographics survey and answered questions about their training and experiences both inside and outside of their graduate programs, and they were given the option to provide general open-ended feedback about their experience with the study.

Materials

A short vignette about a hypothetical student was developed for the study (see Appendix B). Four versions of the vignette were created by factorially crossing two factors: gender status (trans versus cis) and gender identity (boy versus girl). Participants were asked to imagine that they are school psychologists tasked with dealing with the student's issue. Participants were randomly assigned to respond to one of the four versions of the vignette representing the experimental conditions, in which the student's legal and preferred names varied and all other elements remained constant. The vignette described a student dealing with using a different name in school than his or her legal name, as well as experiencing a behavioral problem involving bullying another child. Participants were asked a variety of attitude questions in response to the vignette, including how likely it was that they would advocate for the student to use the preferred name and how severe of a behavior problem they thought the student was exhibiting.

During development of the vignette, feedback from a child and adolescent psychiatrist who directs the Gender and Sexuality Service at the Hassenfeld Children's Hospital at NYU Langone Health and from school psychology graduate students was solicited, and it was incorporated into the final versions of the vignette. Due to protections for minors and vulnerable populations, it was not possible to obtain feedback from transgender youth.

Questions about participants' training and experience with transgender individuals (see Appendix C) and personal characteristics (see Appendix D) were presented to participants after they completed the attitudes portion of the study.

Measures. Scores were calculated for three attitude measures: Name (sum of scores on attitude questions about Part 1 of the vignette, which referred to an issue with a name change), Behavior (sum of scores on attitude questions about Part 2 of the vignette, which referred to an issue with a behavioral problem), and Attitude Total (Name + Behavior). Higher scores indicate more supportive and more permissive attitudes toward the youth in the vignette. Four training and experience measures were calculated: Training (sum of scores indicating number and scope of training on working with transgender individuals), Personal Experience (sum of scores indicating number and scope of personal relationships with transgender individuals), Professional Experience (sum of scores indicating number and scope of professional contact with transgender individuals), and Training and Experience Total (Training + Personal Experience + Professional Experience).

Names. The presumed gender of the student was intended to vary across conditions, between cisgender female, cisgender male, transgender female, and transgender male. However, in order to keep the true purpose of the study hidden from participants, these terms were not used in the vignette. Instead, the gender of the student was conveyed through the use of names.

Because the student is described as 16-years-old, popular baby names from 16 years prior to the study – 2002 – were researched. The names, “Anthony,” and “Alyssa,” which were the twelfth most popular names given to baby boys and girls, respectively, in the United States in 2002, were chosen (Social Security Administration, 2018). In addition to their similarity in level of popularity, the names share the same number of syllables, have some letters in common, and

are of similar length. Ten young professionals and school psychology students and recent graduates were contacted and asked to serve as advisors. They confirmed that the names were strongly associated with one gender only.

For the transgender conditions, the student had a legal name of either Anthony or Alyssa, and preferred to be called the other name. For example, for the transgender boy, the vignette stated, “The student’s legal name is “Alyssa.” Friends refer to the student as “Anthony,” and the student uses this name on all social media and on a video blog posted online with 1,000 weekly viewers. The student has repeatedly asked teachers to use “Anthony,” as well, and has just gotten into a heated argument over the name with the geometry teacher, who continues to use “Alyssa.” When you call the student’s parents, they ask that their child be referred to as “Alyssa.”

For the cisgender conditions, names that were uncommon and that school faculty and staff might refuse to use were necessary. These names also needed to evoke a certain gender identity that was in keeping with the student’s presumed gender based on the legal name. The names “Axel” and “Apple” were selected for their similarity in length, syllables, sounds, parts of speech, and low frequency as given names. The advisory group confirmed that these names evoked an image of either a male or female student, respectively. This was also supported by multiple comments in the open-ended, optional comment box on the survey, in which multiple participants in the cisgender condition reported that they did not think the student in question was transgender due to the preferred names. (This further indicated that they thought the study was about transgender youth only once they read the experience and training questions at the end of the survey.)

Pilot testing. The full study was piloted with recent school psychology graduates, and changes were made based on feedback. Pilot participants reported being unsure of the study's aims, which was considered ideal to protect from social desirability bias.

Concealment

Due to the study's design, it was advantageous to conceal the true nature of its purpose. To do so, details about cyber-bullying and the use of social media were included in the vignette, and items on the survey asked about these topics (e.g., items asked respondents about their attitudes toward social media policies in schools and their experience with cyber-bullying interventions). Although these items were not included in the analysis, they were essential as they were intended to make it less obvious to respondents that the study was examining attitudes toward transgender individuals. Participants were debriefed about the study's purpose after completion of the survey and were given the option to withdraw their consent to include their data in analysis. None chose to withdraw.

Analyses

The study design is a two-way analysis of variance (ANOVA), with two factors: Gender Identity (i.e., whether the student in the vignette identified as either a girl or a boy) and Gender Status (i.e., whether the student is cisgender or transgender). Four versions of the vignette form the materials comprising the four conditions. As indicated earlier, participants were randomly assigned to one of the four versions of the vignette, and thus to one of the cells of the design. Figure 1 displays a diagram of the experimental design.

		Gender Status	
		Transgender	Cisgender
Gender Identity	Girl	<i>A</i>	<i>C</i>
	Boy	<i>B</i>	<i>D</i>

Figure 1. Diagram of the experimental design, demonstrating the two factors and each factor's two levels. Boxes are lettered A-D to provide clarity with what is being compared in each analysis.

Hypothesis 1. To test Hypothesis 1, a two-way ANOVA was conducted, comparing the mean scores of respondents who read vignettes about transgender students (boxes A and B) to those that read vignettes about cisgender students (boxes C and D), to determine if there was a main effect of gender status on attitude scores.

Hypothesis 2. A two-way ANOVA was conducted to test Hypothesis 2, and the interaction between gender identity and gender status was examined.

Hypothesis 3. To test Hypothesis 3, a Pearson correlation was computed based on only those participants who responded to the transgender vignettes (boxes A and B). The correlation was between the attitude scores of and degree of experience to determine whether experience with and training about working with transgender individuals is related to attitude scores on the survey. Experience was calculated by totaling participants' responses to questions about their work and training. Specific values assigned to each response are reported in Appendix C.

Results

Descriptive Statistics

Attitudes. The mean Attitude Total across conditions was 573.67 ($SD = 117.81$). The mean Name score was 284.69 ($SD = 100.87$), and the mean Behavior score was 288.98 ($SD = 51.43$). Scores by condition and marginal means are displayed in Table 2.

Training and Experience. The modal Training, Personal Experience, Professional Experience, and Training and Experience Total scores were 0. Aside from Training and Experience Total, the mean of each measure was less than 1. Training and experience descriptive statistics are displayed in Table 3.

Analyses

A 2 (Gender Identity) x 2 (Gender Status) ANOVA was conducted for the main analyses.

Hypothesis 1. There was a significant main effect of gender status on Attitude Total, $F(1, 418) = 92.01, p < .001$, such that attitudes toward the transgender students in the vignette were more supportive ($M = 621.27$) than toward the cisgender students ($M = 522.63$). The ANOVA summary table is provided in Table 4. Looking separately at the two components of the Attitude Total, there was a significant main effect of gender status on Name, $F(1, 421) = 121.59, p < .001$, such that attitudes were more supportive of the transgender students' use of their preferred name than of the cisgender students' use of their preferred name. The main effect of gender status on Behavior was not significant.

Hypothesis 2. There was a significant interaction effect between gender status and gender identity on Attitude Total, $F(1, 417) = 10.83, p = .001$. When examined separately for each gender identity, attitudes toward the transgender girl ($M = 647.26$) were significantly more supportive than toward the transgender boy ($M = 595.29$), $p = <.001$. In contrast, attitudes toward

the cisgender boy ($M = 530.49$) were slightly (but not significantly) higher than attitudes toward the cisgender girl ($M = 514.77$).

Although the interaction between gender status and gender identity was not significant for Behavior, it was significant for Name, $F(1, 423) = 17.11, p < .001$. Participants were significantly more supportive of name changes for the transgender girl ($M = 357.62$) than the transgender boy ($M = 298.71$). Conversely, participants' attitudes toward the cisgender girl ($M = 231.39$) were slightly lower than those toward the cisgender boy ($M = 245.32$), but not significantly so.

Overall, for cisgender students, there is little difference in attitudes based on gender identity (boy vs. girl). Yet for transgender students, school psychology graduate students reported significantly more supportive attitudes toward the transgender girl than the transgender boy. Figure 2 shows the interaction for Attitude Total.

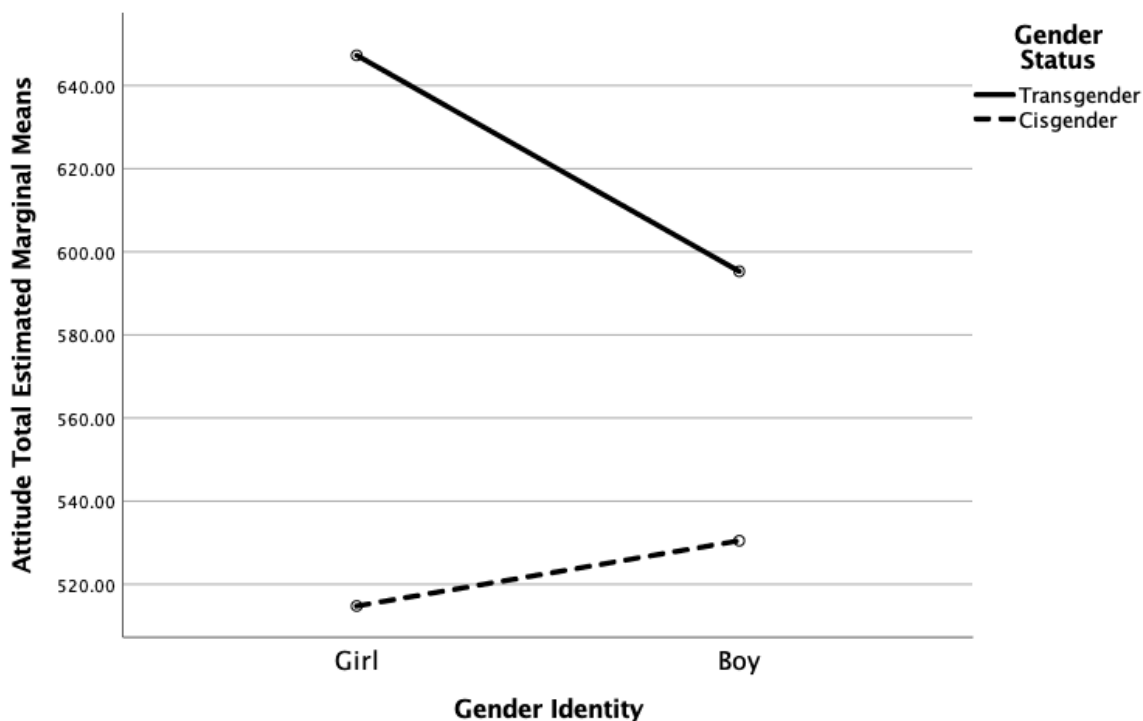


Figure 2. Graph of the interaction between Gender Identity and Gender Status on Attitude Total.

Hypothesis 3. Among participants reading a vignette involving a transgender student, Training and Experience Total was significantly correlated with Attitude Total, $r(215) = .267, p < .001$, and with Name, $r(215) = .255, p < .001$. Training, Personal Experience, and Professional Experience were also all significantly correlated with Attitude Total and Name, ranging from .179-.227. For a full list of correlations, see Table 5.

Other analyses. There was a significant main effect of gender identity on Name $F(1, 423) = 7.21, p = .008$, such that attitudes toward girls were more supportive than toward boys. However, as the interaction was significant, this main effect needs to be viewed with caution.

Controlling for experience. When Training and Experience Total was included as a covariate in the analyses for Hypothesis 1, the significant effects on Attitude Total of gender status, $F(1, 417) = 98.95, p < .001$, and of the interaction between gender status and gender identity, $F(1, 417) = 9.87, p = .002$, were maintained (see Table 6). The significant effects on Name were also maintained. Training and Experience Total had a significant effect on Attitude Total, $F(1, 417) = 28.23, p < .001$, and on Name, $F(1, 423) = 28.56, p < .001$ (see Table 7).

Participant gender. Attitude Total was found to be significantly higher for female respondents ($M = 579.16, SD = 117.01$) than male respondents ($M = 534.70, SD = 113.18$), based on a one-way ANOVA, $F(1) = 7.90, p = .005$ (see Table 8). Consequently, it was included as an independent variable in the analysis of the two experimental independent variables, yielding a 2 (Gender Identity) x 2 (Gender Status) x 2 (Participant Gender) ANOVA. However, no significant interactions with participant gender were found. Only its main effect was significant; female participants reported more supportive attitude scores ($M = 579.16, SD = 117.01$) than male participants ($M = 534.70, SD = 113.18$) regardless of condition.

Whether participant gender influenced the number of training and practical experiences with transgender individuals was considered. There were no significant differences between male and female respondents on any of the training and experience measures. (The four respondents indicating a different gender were excluded from these analyses because the sample size was too small to examine as an additional group.)

Discussion

The results of the study indicate that there were significant differences on all three of the variables targeted by the three hypotheses, i.e., there is evidence that: (1) school psychology students' attitudes toward youth differ based on whether they believe the child to be transgender, (2) attitudes differ toward transgender girls and transgender boys, and (3) amount of training about, and experience with, transgender individuals is correlated with attitudes. However, the results regarding hypotheses 1 and 2 were in the *opposite direction* from that hypothesized. The results suggest that the proposed reasoning behind the first two hypotheses was unsupported. Respondents were *more* supportive of a transgender teen using a preferred name than of a cisgender teen doing the same. Those in the transgender conditions might have recognized the importance of the name change issue for transgender youth and therefore been inclined to support them. Respondents in the cisgender conditions might have failed to see a legitimate reason to support a name change for these students.

One possible explanation for this finding is that exposure to transgender individuals and issues has been increasing in the mass media in recent years, and real and fictional depictions of transgender people may positively affect attitudes (Capuzza & Spencer, 2017; Gillig, Rosenthal, Murphy, & Folb, 2018; GLAAD, 2019). Having viewed an episode of a medical drama featuring a transgender character was found to be associated with more supportive attitudes toward

transgender people, for example, even reducing the effects of political ideology on attitudes (Gillig et al., 2018). Portrayals of transgender people need not be in-depth to alter attitudes; an experiment in which participants read short descriptions and viewed facial images found that mere exposure to transgender people reduced participants' experiences of discomfort and transphobia (Flores, Lewis, Miller, Tadlock, & Taylor, 2018).

This provides a compelling explanation for the difference in attitudes toward transgender girls and transgender boys. According to GLAAD Media Institute (2019), there were more transgender women on television in the 2018-2019 season across all platforms (broadcast, cable, and streaming media) than transgender men. Transgender men remain largely unseen on television, and even shows that depict transgender women supportively may fail to do the same for transgender men (Capuzza & Spencer, 2017; Keegan, 2014). Media depiction of real-life transgender people also favors females; Caitlyn Jenner (an Olympic medal-winning athlete and television personality) and Jazz Jennings (a teenage girl who starred in a documentary series and co-wrote a children's book about her gender transition) are two of the most highly visible transgender individuals in Western popular culture (Lovelock, 2017). Participants may have less supportive attitudes toward transgender boys because they have been exposed to fewer examples of transgender men and boys in the media.

It is also important to note that prior research included practicing school psychologists and school psychology faculty, meaning that the mean age was likely higher than the mean of this sample. Respondents that were both younger at the time of participation in the study and born later (since this study occurred more recently) might be more likely to be supportive of transgender students because younger people are more likely to have more socially liberal attitudes, and because public attitude has changed in the interim between studies.

Although the effects were significant for the vignettes overall, the behavior-related part of the vignette was not significant on its own, indicating that respondents' views of a teenager bullying another is not affected by whether or not they believe the bully to be transgender. This suggests that, in contrast to expectations, respondents did not view transgender teens as inherently more pathological or worthy of punitive consequences than cisgender teens. On the other hand, they also did not view transgender status as making teens less culpable for their actions and in need of more leniencies with regard to behavioral issues. Gender status did not significantly affect attitudes toward social behavior in either direction.

The name-related portion of the vignette was highly significant on its own, with respondents strongly more supportive of a transgender teen using a preferred name than a cisgender teen. This finding suggests that school psychology graduate students recognize that name changes are important issues in the lives of transgender youth.

Female participants in this experiment had more supportive attitude scores than male participants across all conditions. Because gender status of the student depicted in the vignette did not interact with this difference, there is no reason to believe that men are necessarily less supportive of transgender youth due to the fact that they are transgender. Rather, men appear to endorse less supportive attitudes overall toward youth who use names other than their legal names and who exhibit some bullying behaviors. Therefore, this finding implies that prior research suggesting that women have more accepting attitudes toward transgender individuals might be due to women exhibiting more accepting or supportive attitudes toward youth in general (Grossman, Anthony, & Frank, 2011; Norton & Herek, 2013).

Limitations

Although the experimental vignette design is well suited to this type of research, there were nonetheless limitations. Though the design was intended to reduce the influence of the social desirability bias, the possibility remains that participants reported their attitudes in a way that they perceived to be more socially desirable. Distractor details about social media and cyberbullying were included in the vignette (and multiple survey questions referenced these elements) in order to keep participants unsure of the study's true purpose, but it is nevertheless possible that some participants may have deduced it and altered their answers to be in accordance with what they believed the experimenter desired.

Additionally, the vignettes were intended to be realistic to school settings and relevant to school psychology graduate students, enhancing generalizability to true-life settings outside of the survey. However, vignettes are unable to exactly replicate reality, and therefore, there are limits to how generalizable the results are. Self-reports of potential behavior may differ from actual behavior, and self-reports of attitudes may differ from attitudes that would arise in a real-world situation.

Future Directions

This study provides support for the existence of significant effects of youth gender status (transgender vs. cisgender), as well as its interaction with youth gender identity (girl vs. boy), and school psychology student training and experience on attitudes toward teens experiencing problems in school common among transgender adolescents. It does not, however, provide explanations or the reasons behind these differences. Although there is strong support in the literature for why gender status is significant, there is much less known about its interaction with gender identity, because past studies have failed to analyze attitudes toward transgender males

and transgender females separately. Although past research has provided evidence to suggest that less exposure to transgender women leads to less supportive attitudes, it is not clear why the current respondents were *more* supportive of a transgender girl using a preferred name than of a transgender boy using preferred name.

The rapid rate of change in attitudes toward transgender individuals and rise in exposure to them may be responsible for the discrepancy in findings. The general culture might be shifting to be more supportive overall toward transgender youth. This change in attitudes might be the result of the aforementioned increase in the depiction of transgender characters on television, as exposure is thought to be the most effective way to alter attitudes in this area. Future studies might productively assess exposure to these various shows, blog, or online content, and they might benefit from using qualitative methods to address underlying attitude differences.

Furthermore, a more in-depth look at the types of training experiences that are most effective at engendering supportive attitudes is recommended. Differences in methods, such as lectures, discussions, and brief practicum experiences, should be explored.

Impact

This study assessed school psychology students' attitudes toward transgender youth experimentally, reducing the impact of social desirability bias and more accurately reporting attitudes. It provides evidence that school psychology students are supportive of transgender students using names that are congruent with their gender identities and that they do not view these students as more pathological than cisgender ones. This helps clarify the existing conflicting literature and implies that there may have been growth in supportive attitudes in recent years.

Because there were differences found in attitudes toward transgender girls and boys, this study also sheds light on an often-overlooked discrepancy. Further attention should be paid to the unique needs of each group, and special focus should be placed on supporting and promoting positive attitudes toward transgender boys. In doing so, quality-of-life issues for transgender boys may be eased.

The study strengthens the literature's implication that both participating in trainings about transgender people and having personal and professional experiences with them increases positive attitudes. Because having participated in training was associated with more supportive attitudes toward transgender youth, this study suggests that school psychology programs should add these elements to their course offerings. Organizations that advocate for transgender youth can bolster their claims when campaigning for the inclusion of mandatory trainings for school psychologists and other school-based professionals. As having supportive school psychologists and faculty is a protective factor, this may impact the lives of many transgender youth (Bowers et al., 2015; McGuire et al., 2010).

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Table 1

Demographics

Variable	<i>n</i>	%
Gender		
Female	365	83.7
Male	66	15.1
Other ¹	4	.9
Age (<i>M</i> = 26.56, <i>SD</i> = 5.38)		
21-25	240	58.6
26-30	112	27.3
31-35	24	5.9
36-40	16	3.9
41-45	11	2.7
46-50	3	.7
51-55	1	.2
56-60	1	.2
Program Location		
Northeast ²	186	43.4
Midwest ³	69	16.1
South ⁴	100	23.3
West ⁵	74	17.2
Program Type		
Master's/Specialist/Certificate	302	69.3
PhD/PsyD/EdD	133	30.5
APA-accredited ⁶	113	87.6 (25.9 of total sample)
NASP-approved	417	95.9
Year in Graduate Program		
First	148	33.9
Second	124	28.4
Third	101	23.2
Fourth	39	8.9
Fifth	12	2.8
Sixth or greater	5	1.1

Notes. Percentages may not add to 100 due to rounding and missing answers.

¹Respondents were allowed to write in their own responses. Three wrote, "non-binary," and one wrote, "genderqueer."

²ME, MA, RI, CT, NY, NJ, PA

³OH, IN, IL, MI, WI, MN, IA, NE, MO

⁴MD, DC, SC, GA, FL, TN, MS, AR, TX, WV

⁵MT, CO, NM, AZ, UT, WA, OR, CA

⁶Applies to PhD/PsyD/EdD programs only, as the APA accredits only doctoral programs.

Table 2

Attitude Total Means, Standard Deviations, and Marginal Means by Condition

Gender Status			
Gender Identity	Transgender	Cisgender	Marginal Mean
Girl	647.26 (112.25)	514.77 (103.18)	581.01 (7.31)
Boy	595.29 (114.15)	530.49 (90.44)	562.89 (7.23)
Marginal Mean	621.27 (7.17)	522.63 (7.38)	

Notes. $N = 422$. Some participants were omitted due to missing data on one or more key variables.

Table 3
Descriptive Statistics for Training and Experience

Measure	<i>M</i>	<i>SD</i>
Training and Experience Total	2.35	3.02
Training	.92	1.50
Personal Experience	.61	1.04
Professional Experience	.81	1.57

Notes. $N = 436$. Higher training and experience scores indicate having participated in more training or having had more experiences with transgender individuals.

Table 4

ANOVA Summary Table for Attitude Total

Source	<i>df</i>	MS	<i>F</i>	<i>p</i>	Partial η^2
Gender Identity	1	34612.15	3.11	.079	.007
Gender Status	1	1024995.81	92.01	<.001	.180
Identity x Status	1	120659.58	10.83	.001	.025
Within groups	418	11140.527			
Total	422				

Notes. Some participants were omitted due to missing data on one or more key variables.

Table 5

Training, Experience, and Attitude Correlations for Respondents in Transgender Conditions

Variables	Attitude Total	Name	Behavior	TE Total	Training	Pers. Exp.	Prof. Exp.
Attitude Total	1						
Name	.884***	1					
Behavior	.510***	.049	1				
TE Total	.267***	.255***	.101	1			
Training	.227**	.184**	.147*	.739***	1		
Pers. Exp.	.211**	.233**	.021	.663***	.263***	1	
Prof. Exp.	.179**	.179**	.052	.843**	.384***	.408***	1

Notes. $N = 217$. TE Total = Training and Experience Total, Pers. Exp. = Personal Experience, and Prof. Exp. = Professional Experience.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Table 6

ANOVA Summary Table for Attitude Total, Controlling for Training and Experience Total

Source	<i>df</i>	MS	<i>F</i>	<i>p</i>	Partial η^2
TE Total	1	295256.81	28.23	<.001	.063
Gender Identity	1	33681.61	3.22	.073	.008
Gender Status	1	1034940.89	98.95	<.001	.192
Identity x Status	1	103183.16	9.87	.002	.023
Within groups	417	10459.19			
Total	422				

Notes. TE Total = Training and Experience Total. Some participants were omitted due to missing data on one or more key variables.

Table 7

ANOVA Summary Table for Name, Controlling for Training and Experience Total

Source	<i>df</i>	MS	<i>F</i>	<i>p</i>	Partial η^2
TE Total	1	209006.63	28.56	<.001	.063
Gender Identity	1	52731.58	7.21	.008	.017
Gender Status	1	874718.57	119.52	<.001	.220
Identity x Status	1	125195.06	17.11	<.001	.039
Within groups	423	7318.92			
Total	428				

Notes. TE Total = Training and Experience Total. Some participants were omitted due to missing data on one or more key variables.

Table 8

ANOVA Summary Table for Attitude Total Based on Participant Gender

Source	<i>df</i>	MS	<i>F</i>	<i>p</i>
Between Groups	1	107075.609	7.90	.005
Within groups	415	13558.14		
Total	416			

Notes. Some participants were omitted due to missing data on one or more key variables.

Appendix A

Initial Contact Letter

Dear School Psychology Program Director,

My name is Arielle Walzer, and I am a fourth-year school psychology graduate student at the Graduate School of Applied and Professional Psychology at Rutgers, the State University of New Jersey.

I am currently conducting a study for my dissertation that examines how school psychology graduate students think about – and would respond to – complex professional practice scenarios.

I need your help. I am requesting that you please copy and paste the email below that contains the link to my survey, and email it to all of your currently enrolled school psychology students.

Would you please (1) forward this email to your students, (2) reply to let me know that you have done so, and (3) if you know it, please share with me the approximate number of students on your electronic mailing list who will receive the email?

If you or your students have any questions, please feel free to contact me at XXXX@gsapp.rutgers.edu.

Thank you!

Dear fellow graduate student,

I am a fourth-year school psychology graduate student at the Graduate School of Applied and Professional Psychology at Rutgers, the State University of New Jersey.

I am currently conducting a study for my dissertation that examines how school psychology graduate students think about – and would respond to – complex professional practice scenarios.

The survey presents you with a short vignette about a hypothetical student, and asks you to imagine that you are the school psychologist responsible for working with that student.

Questions are multiple-choice, and participation takes 10 minutes or fewer.

Would you kindly help me out by completing this online survey?

Follow this link to the Survey:

[Take the Survey](#)

Or copy and paste the URL below into your internet browser:

[\[link\]](#)

If you have any questions, please feel free to contact me at XXXX@gsapp.rutgers.edu.

Thank you in advance for your consideration!

Follow-up Contact Letter

Dear School Psychology Program Director:

Thank you for sending the link to my dissertation survey to your school psychology students. This is a follow-up email regarding my survey on how school psychology students view complex professional practice scenarios.

To help remind those who have not yet completed the survey, would you please re-send the message below to your enrolled students?

Thank you for your help!

Dear fellow graduate student,

This is a reminder notice about my dissertation survey. If you have already completed it, I want to let you know that I *really appreciate* it. If you haven't completed it yet, it isn't too late to help.

I am a fourth-year school psychology graduate student at the Graduate School of Applied and Professional Psychology at Rutgers, the State University of New Jersey. I am currently conducting a study for my dissertation that examines how school psychology graduate students think about – and would respond to – complex professional practice scenarios.

The survey presents you with a short vignette about a hypothetical student, and asks you to imagine that you are the school psychologist responsible for working with that student.

Questions are multiple-choice, and participation takes 10 minutes or fewer.

Would you kindly help me out by taking this online survey?

Follow this link to the Survey:

[Take the Survey](#)

Or copy and paste the URL below into your internet browser:

[\[link\]](#)

If you have any questions, please feel free to contact me at XXXX@gsapp.rutgers.edu.

Thank you in advance for your consideration!

Appendix B

Vignettes

One of four versions of the following vignettes and associated questions were randomly presented to respondents. Questions were presented with a sliding button that participants were instructed to move to indicate their response on a scale from “Not at all” (0) to “Extremely” (100). Items marked with an asterisk were reverse-coded and items marked with two asterisks were ignored in the analysis. The terms “LEGAL NAME” and “PREFERRED NAME” were replaced according to condition, as shown in the following table.

Table 8

Names for Student in Vignettes

Condition	Legal Name	Preferred Name
Transgender girl	Anthony	Alyssa
Transgender boy	Alyssa	Anthony
Cisgender girl	Alyssa	Apple
Cisgender boy	Anthony	Axel

The survey text appears below:

Please read the following and answer the questions while imagining that you are working as a school psychologist at a public high school.

You are the case manager for a 16-year-old, tenth-grade student. The student's legal name is "LEGAL NAME." Friends refer to the student as "PREFERRED NAME," and the student uses this name on all social media and on a video blog posted online with 1,000 weekly viewers. The student has repeatedly asked teachers to use "PREFERRED NAME," as well, and has just gotten into a heated argument over the name with the geometry teacher, who continues to use "LEGAL NAME." When you call the student's parents, they ask that their child be referred to as "LEGAL NAME."

- How important is it that the student be called "LEGAL NAME" by faculty and staff?
- How important is it that the student be called "LEGAL NAME" in official school documents?
- How important is it for the school to have a policy that clearly restricts use of social media to outside of school hours?
- How likely is it that you would recommend that the student discontinue recording a video blog?
- How likely is it that you would use "PREFERRED NAME" when speaking directly to the student?
- How likely is it that you would use "PREFERRED NAME" when speaking to faculty and staff about the student?
- How likely is it that you would advocate for the student to be referred to as "PREFERRED NAME" on school documents?

The **same** student's physical education teacher comes to you to report that the student has been displaying conduct problems in class recently. The student has allegedly been mocking the athletic ability of other kids in the class. The teacher stated that another teen, Emma, left the gym crying yesterday after the student mimicked her dropping the ball. The teacher then heard from other pupils that the student had been targeting Emma online, posting negative comments about her on multiple social media channels.

- How severe is the student's conduct problem?
- How likely is it that you would recommend that the student receive detention as a consequence?
- How important is it for the school to have an explicit policy addressing consequences for cyberbullying?
- How likely is it that you would recommend that a behavior plan is created to address this issue?
- How likely is it that you would recommend that the student receive individual counseling with you?
- How likely is it that the student meets special education criteria for Emotional Disturbance?
- How likely is it that you would recommend that the administration implement a school-wide anti-cyberbullying program?

Appendix C

Experience and Training

Have you attended any **required or optional** training on systems-level anti-bullying interventions as part of your graduate program?***

- Yes
- No

Have you attended any **required or optional** training on cyberbullying as part of your graduate program?***

- Yes
- No

Which of the following significant experiences have you had with transgender individuals in your **professional** life? (Professional life can refer to your school psychology practicum or internship experiences, or to related roles you may have had, such as teacher, teaching assistant, camp counselor, or case manager.) Select all that apply.

- Provided counseling, therapy, or another direct intervention on a regular basis to a transgender individual focused on gender identity and transgender status (2)
- Provided counseling, therapy, or another direct intervention on a regular basis to a transgender individual focused on anything other than gender identity and transgender status (1)
- Worked with a transgender coworker (1)
- Handled issues in a school or another system for an individual related to him/her being transgender (e.g., helping a child obtain permission to use facilities in accordance with his/her affirmed gender) (2)
- Spoke to parents about issues related to their child being transgender (1)
- Was the case manager for a transgender individual (1)
- Conducted an evaluation or intake with a transgender individual (1)
- None of these

Which of the following experiences have you had with transgender individuals in your **personal** life? Select all that apply.

- Have one or more casual friends (more than an acquaintance) who are transgender (1)
- Have one or more close friends who are transgender (2)
- Have one or more distant family members who are transgender (1)
- Have one or more immediate family members who are transgender (2)
- I am transgender (3)
- None of these

Have you participated in any **optional** training outside of your graduate program on working with transgender individuals?

- Yes (1)
- No

If yes →

Which of the following best describes your experience attending **optional** training on working with transgender individuals outside of your graduate program?

- Part of one optional lecture/training devoted to the topic
- One-time optional lecture/training devoted to the topic (1)
- Ongoing/series of optional lectures/trainings devoted to the topic (2)

Has your graduate program provided you the **opportunity** for either voluntary or required training/lectures/practicum experiences related to working with transgender individuals?

- Yes
- No

If yes →

Did you **participate** in any trainings/lectures/practicum experiences in your graduate program related to working with transgender individuals?

- Yes
- No

If yes →

Did you attend any **required** lectures/training in your graduate program on working with transgender individuals?

- Yes (1)
- No

If yes →

Which of the following best describes your experience attending **required** training on working with transgender individuals?

- Part of one required lecture devoted to the topic
- Required lecture devoted to the topic of working with transgender individuals (1)
- Required series of lectures devoted to the topic (2)

Did you attend any **optional** lectures/training on working with transgender individuals offered by your graduate program?

- Yes (1)
- No

If yes→

Which of the following best describes your experience attending **optional** training on working with transgender individuals in your graduate program?

- Part of one optional lecture/training devoted to the topic

- One-time optional lecture/training devoted to the topic (1)
- Ongoing/series of optional lectures/trainings devoted to the topic (2)

Did you participate in a practicum/hands-on experience working with transgender individuals?

- Yes (1)
- No

If yes →

Which of the following best describes your experience participating in a practicum/hands-on experience working with transgender individuals?

- One-time practicum experience working with transgender individuals
- Extended practicum experience working with transgender individuals (1)

Appendix D

Demographics

What is your gender?

- Male
- Female
- Other – please specify:

Are you transgender?

- Yes
- No

What type of graduate program are you enrolled in?

- Master's/Specialist/Certificate
- PhD/PsyD/EdD

Is your graduate program approved by the National Association of School Psychologists (NASP)?

- Yes
- No

Is your graduate program accredited by the American Psychological Association?

- Yes
- No

How old are you?

- Response options included ages 18-100 and “Under 18”

What year are you in your graduate program?

- First
- Second
- Third
- Fourth
- Fifth
- Sixth or greater
- Other:

Where is your graduate program located?

- Response options included 50 states, Washington, D.C., and “It is not in the United States”