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A Video Intervention for Professionals Working with Transgender and Gender Nonconforming Older Adults

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Acknowledgements

Abstract

There is consensus that providers who work with transgender and gender nonconforming (TGNC) older adults should use the language preferred by the older adult; however, self-efficacy in this particular context is unexplored. The current study compared the efficacy of three online interventions for aging-focused professionals designed to increase knowledge of TGNC-related terminology, decrease self-reported negative attitudes towards TGNC individuals, and increase self-efficacy for affirmative interactions. Employees and volunteers of area agencies on aging across the United States (N = 155) were randomly assigned to one of three interventions: written educational information, a video demonstration, or both the written educational information and the video demonstration. It was hypothesized that individuals in the video intervention group would show greater improvements in the three domains compared to those in the written educational group. Results for this set of hypotheses showed a decrease in anti-TGNC attitudes and increase in self-efficacy for affirmative interactions in both intervention groups with neither group showing greater impact on these variables. It was also hypothesized that individuals in the combined written and video intervention group would show greater improvements in the three domains compared to those in the written educational group. Again, results showed no difference between interventions; participants in both conditions demonstrated a decrease in anti-TGNC attitudes and an increase in self-efficacy. Future directions include introducing a waitlist control group, replication of these findings, and consideration of a development model for continuing education.

A Video Intervention for Professionals Working with Transgender and Gender

Nonconforming Older Adults

The number of older adults is rapidly increasing in the United States, with

approximately 20% of citizens projected to be 65 or older by the year 2030

(Administration on Aging, 2012). Transgender and gender nonconforming (TGNC) older

adults tend to be an unconsidered minority among the aging population; however, the

number of TGNC older adults is also increasing (Witten, 2003, 2009). Any estimation is

unlikely to reflect the actual number of TGNC older adults due to the fear of persecution

and abuse that maintains these individuals' perceived need for anonymity.

This risk of discrimination, faced by all TGNC individuals, extends to older

TGNC adults seeking aging-focused services. Social services, which include those

services offered by area agencies on aging, have thus far focused little on TGNC aging

issues (Witten, 2014). This lack of attention is likely due to a number of interrelated

concerns, beginning with the conflation of "gay" and TGNC (Lev, 2007). The confusion

of these terms has led to a superficial concentration on TGNC and homosexuality as one

and the same. The literature reflects a genuine focus on aging lesbians and gay men,

while there remains a dearth of information on issues facing TGNC older adults and those

who aim to serve them (Fredriksen-Goldsen, Hoy-Ellis, Goldsen, Emlet, & Hooyman,

2014; Porter et al., 2016).

Perceptions of "LBGT" (lesbian, gay, bisexual, and transgender) individuals in

the United States are rapidly shifting and the gerontology literature reflects these

changes. However, the literature uses a narrow definition of LGBT that more often than

not is less than inclusive. Regardless of the good intentions and the merit behind this

social and psychological shift, TGNC individuals of all ages are often viewed as a last priority or even excluded from larger LGBT social movements and research. The current study assumes that aging-focused providers desire to more confidently provide care to TGNC older adults and are willing to expand their knowledge of this oft-neglected population.

Social cognitive theory emphasizes the role of self-efficacy in acquiring a new behavior (Bandura, 1977; Bandura, 1982; Bandura, 1997). Self-efficacy, as defined by Bandura, is the level of confidence one possesses that one can perform a given behavior in a specific domain. This confidence varies across domains, which means that individuals may experience a high level of self-efficacy in one area and low self-efficacy in a different area. For example, providers working with older adults may demonstrate high levels of self-efficacy when speaking with cisgender older adults, but may experience low levels of self-efficacy when interacting with TGNC older adults; however, there is no literature to support this supposition.

Bandura's Theory of Self-Efficacy

Social cognitive theory provides an explanation for the ways in which individuals learn and engage in new behaviors (Bandura, 2001). Internal and external factors interact to determine the acquisition of a new behavior. Internal factors include cognitions, emotional states, previous experiences, expectancies, and goals. External factors include the social and physical contexts of the individual while learning. The interaction between the person, the context, and the behaviors determines the manner in which a person learns the new behavior.

As previously mentioned, self-efficacy, or the level of confidence one has that one can perform a specific behavior, is domain-specific (Bandura, 1977; Bandura, 1982; Bandura, 1997). Self-efficacy directly impacts one's ability to persist at said behavior, despite obstacles. These beliefs about one's ability to perform a specific behavior originate from various experiences.

Self-efficacy beliefs may derive from vicarious learning experiences, during which an individual observes another individual successfully perform the given behavior (Bandura, 1977; Bandura, 1982; Bandura, 1997). This experience is most powerful when the individual performing the behavior is similar to the observer. Other experiences that may generate self-efficacy beliefs include performance accomplishments, verbal persuasion, and physiological state changes (Bandura, 1977; Bandura, 1982; Bandura, 1997). The most effective experience for increasing self-efficacy is performance accomplishments, while vicarious experiences follow in power. Information provided by an expert and other forms of persuasive learning are less powerful in shaping self-efficacy (Bandura, 1997). Self-efficacy theory has provided a fruitful framework in the development of diversity-based interventions for professionals.

Video-Based Interventions

A professional education program aimed at increasing knowledge, improving attitudes, and enhancing self-efficacy in interactions with sexual minorities may prove relevant for the development of a similar program for providers working with TGNC older adults. A video-based diversity training for physical and occupational therapists was designed and implemented with the goal of utilizing a motivational interviewing framework to conceptualize participants' perceptions of their own knowledge, attitudes,

and self-efficacy when working with LGBT individuals with spinal cord injuries (Burch,

2008). The study also measured the effect of the training program on participants'

perceptions of their ability to change. The transtheoretical model was used to identify

health care providers' readiness to serve LGBT individuals with spinal cord injuries

(SCI) using three variables: knowledge, attitudes, and self-efficacy.

Approximately four hundred health care professionals who provided services to

those with SCI were surveyed. The sample included nurses, physical therapists,

occupational therapists, and physicians (Burch, 2008). Following a viewing of the video

entitled *Issues that Health Care Providers Confront When Providing Services to the*

GLBT Population, the participants participated in a discussion period during which peers

were able to further educate each other on topics related to sexual orientation. The video

created for this study used the concept of vicarious experience in an effort to increase

self-efficacy in the participants (Burch, 2008). The script for the videoed lecture, which

was written by the principal investigator and filmed in front of a live audience, was

written based on the research questions in the study and shaped by concepts within

motivational interviewing. The pre- and post-intervention questionnaire created for this

study included items intended to measure participants' knowledge, attitudes, and self-

efficacy when providing services to individuals with SCI who may be LGBT

This study demonstrated how most providers had not considered issues of

diversity in sexual orientation among those with spinal cord injuries and again confirms

that negative attitudes towards LGBT people exist among health care providers (Burch,

2008). In addition, the term "heterosexism" was used to describe health care providers'

assumptions that all clients are or should be heterosexual. These assumptions might

contribute to less than supportive provider/client interactions, such as when health education material is provided that does not include language or visuals inclusive of LGBT individuals. Heterosexism may also include using language that ignores LGBT relationships (Burch, 2008).

Potential areas of growth in this study include measurement and specificity in language. The post-intervention questionnaire consisted of 6 items, the first three of which asked participants to rank their responses on whether the video intervention changed their knowledge, attitudes, and self-efficacy toward providing services to LGBT patients (1 question to address each; Burch, 2008). The final three questions asked the participants to evaluate how the video changed the way they think about the written, verbal, and audiovisual language they use and whether this language is inclusive. Based on Bandura's recommendations for the measurement of self-efficacy, it is unlikely this scale may not be an adequate measure of self-efficacy (Bandura, 2006). Moreover, the study defined sexual orientation as "an individual's identity as either heterosexual or GLBT," conflating the terms sexual orientation and gender identity (Burch, 2008, p. 192). The study did not include any gender identity specific interventions or measures.

Previous research has found film clips to be an effective means of reducing anti-gay and anti-lesbian prejudice (Bassett, van Nikkelen-Kuyper, Johnson, Miller, Carter, & Grimm, 2005; Walters, 1994). For example, students at a Christian liberal arts college were recruited to participate in an intervention that included watching video clips and reading Biblical scripture that addressed homosexuality. The 38 participants fell into two categories: those that "universally rejected" homosexuality and those that "universally accepted" homosexuality (Bassett et al., 2008). Participants watched four video clips

from the film *As Good As It Gets* that totaled 10 minutes. The scenes depicted a gay

character being assaulted by burglars, the same character discussing the extent of his

injuries while hospitalized, the character discussing what led to his estrangement from his

father, and the character encouraging his roommate to pursue a relationship with a female

friend. The authors noted that these scenes were chosen because of how they depicted the

humanness of the character. Following the video clips, the participants read passages of

Biblical scripture and wrote about their reactions to those passages. They were asked to

reflect on how the passages might be applied to their actions and attitudes towards sexual

minorities. Notably, participants who were initially universally rejecting endorsed a

positive change in their attitudes immediately following the intervention. This change had

moved minimally towards baseline approximately one month following the intervention

(Bassett et al., 2008).

Another set of interventions aimed to decrease reported negative attitudes towards

"transsexuals," correct beliefs in myths about transsexuality, and reduce associated

discriminatory behaviors (Case & Stewart, 2013). Although the participants were college

students, the study confirmed several previous findings: women endorsed more

acceptance and positive attitudes than men; and participants with more contact with

transsexuals endorsed more positive attitudes.

Participants were exposed to one of three interventions: a letter from a transsexual

adolescent to his parents, a list of facts regarding transsexuality, or a clip from a

documentary about transsexual college students (Case & Stewart, 2013). The clip was

from the documentary TransGeneration (Bailey, Barbato, Smothers, Bittner, & Simmons,

2005) and focused on the experiences of one of four transsexual college students. The

first clip depicted the reactions of parents upon hearing of their son's wish to start

hormone therapy. The second clip depicted a meeting between father and son during

which the father expresses his thoughts and emotions in response to his son's continued

transition. The authors noted that exposure to this individual's experiences "may help

foster prejudice reduction" (Case & Stewart, 2013, p. 149). Although the previous

research discussed has found film clips to be an effective means of reducing negative

attitudes towards sexual minorities, no intervention proved better than the others in this

comparison. Nonetheless, ratings of negative attitudes and beliefs in myths about

transsexuality significantly decreased when participants were exposed to any of the three

interventions (Case & Stewart, 2013).

Additional research on reducing anti-trans prejudice utilized a vicarious-contact

intervention with a perspective-taking component in a sample of 100 liberal arts college

students (Tompkins, Shields, Hillman, & White, 2015). Participants were randomly

assigned to one of two conditions: an educational condition or a humanizing condition.

Participants in the humanizing condition watched an excerpt from a 20/20

documentary about the experience of a transgender child (Tompkins et al., 2015). The

documentary conceptualizes the child's experience as that of a psychiatric disorder while

also providing a humanizing portrayal of transgender children and their parents. The

excerpt also includes a review of TGNC-relevant terminology (e.g., gender identity,

biological sex). Following a viewing of this video, participants were asked to imagine

they were transgender and to write a "coming out" letter to their parents conveying this

information. The education condition viewed a brief interview with an expert in gender

identity disorder (GID) and then reviewed the diagnostic criteria. Participants in this

condition were then asked to write all they could recall about GID. Results indicated that individuals in the humanizing condition demonstrated more favorable attitudes of transgender individuals following the intervention while participants in the education group reported greater trans-prejudice post-intervention (Tompkins et al., 2015).

These interventions demonstrate varying results; however, there is some evidence that video interventions may be an effective method of changing self-reported negative attitudes and increasing knowledge. A brief diversity training that utilizes this method in order to increase self-efficacy in a particular domain (e.g., affirmative interactions) with a particular clientele (e.g., TGNC older adults) may be worthy of exploration.

TGNC in the Gerontology Literature

TGNC issues largely go unmentioned in the gerontology literature. Little is known and written about transgender, cross-dressers, intersex, and other individuals with nontraditional gender identities and expressions (Persson, 2009). TGNC aging continues to most often be lumped with the discussion of LGB aging (Cartwright, Hughes, & Lienert, 2012; Fenge, 2012; Haas et al., 2011). Although the term "LGBT" is bordering on ubiquitous, it is most often used to discuss the needs and experiences of older lesbians and gay men while ignoring TGNC older adults (de Vries, 2014).

Service provision to LGB and TGNC older adults. Although "LGBT" continues to be conflated with the term TGNC, some information may be carefully gleaned from this research, particularly considering the correlation between attitudes towards sexual minorities and attitudes towards TGNC individuals (Costa & Davis, 2012; Norton & Herek, 2013). Aging-focused professionals surveyed in the Midwestern United States endorsed largely positive attitudes towards providing gay affirmative care to older

lesbians and gay men (Warren, Steffen, & Wayland, 2015). Environmental factors within organizations should also not be overlooked, particularly in combination with employees' individual attitudes. For older sexual minorities, the explicit use of affirmative materials and employee nondiscrimination policies that include sexual minorities are indicators of openness and a willingness to serve (Jihanian, 2013). However, providers who endorsed positive attitudes towards gay affirmative practice and a willingness to provide this care expressed an unwillingness to inquire about sexual orientation (Warren et al., 2015). This first step involving inquiry of clients may not only be crucial to affirmative care for older sexual minorities, but it may also represent an essential component of meeting the needs of TGNC older adults and communicating an openness to serve.

Currently, it is unlikely that area agencies on aging and state units on aging are fully prepared to meet the needs of LGB and TGNC older adults (Knochel, Croghan, Moone, & Quam, 2012). However, agencies that recognize they are serving LGB and TGNC clients may be more likely to offer professional development trainings on working with these older adult populations (Moone, Cagle, Croghan, & Smith, 2014). Additionally, those agencies that believe they do not serve older LGB and TGNC adults may be less likely to experience professional development trainings aimed at working effectively with LGB and TGNC older adults. Providers, nonetheless, remain interested in learning how to best work with these client populations. They most often prefer brief (≤ 2 hours) online trainings. This online format may be especially important when working with rural agencies; however, brevity is important in all agencies due to concerns regarding loss of productivity during training sessions.

In general, urban-based area agencies on aging may be more open to training staff on LGB- and TGNC-related aging issues (Knochel et al., 2012). Nonetheless, some agency employees do not believe that LG clients would be welcome at local aging-focused organizations (Knochel, Quam, & Croghan, 2011). Of 316 area agencies on aging surveyed across the United States, approximately 1/3 offered or funded staff training about TGNC aging, while only 23 provided targeted services to TGNC older adults (Knochel et al., 2012). Approximately 60% of directors surveyed believed there was a need to address issues specific to TGNC older adults. This admission of need provides a rationale for creating targeted training opportunities for professionals working with older adults.

Confounding LGB and TGNC. The use of LGBT to describe and define the experiences of individuals who are largely (or solely) lesbians or gay men perpetuates the illusion of homogeneity among LGBT individuals. Moreover, labeling the experiences of sexual minorities as representative of all individuals who might fall under the LGBT umbrella perpetuates the invisibility of TGNC older adults (Orel, 2014). The terminology used to describe TGNC older adults in the research literature is inconsistent and contributes to confusion when attempting to understand what remains unknown about this heterogeneous group. Most often in the literature, the experiences and gender expressions encompassed by the term "transgender" are not explicit; this makes it impossible to know who self-identifies as transgender and which presentations are not captured by the sample (Croghan, Moone, & Olson, 2014; Sullivan, 2014). Notably, the literature, at times, does not seem to use the language preferred by the participants, and

instead identifies participants simply as those whose "sex" does not align with that

assigned at birth (Van Wagenen, Driskell, & Bradford, 2013).

Small sample sizes might also mean that experiences of TGNC older adults are

subsumed under those of sexual minorities (Brennan-Ing, Seidel, Larson, & Karpiak,

2014; Fredriksen-Goldsen, Kim, Shiu, Goldsen, & Emlet, 2015). The experiences of

TGNC older adults are being confounded with sexual minorities even when those adults

identify as heterosexual (Lee & Quam, 2013; Van Wagenen et al., 2013). An unfortunate

consequence of this tendency to confound sexual orientation and gender identity is a

confusion of information. For example, information about LGBT old-old cohorts in

comparison to LGBT young-old cohorts does not necessarily provide information about

older TGNC adults (Fredriksen-Goldsen et al., 2015).

Relevant terminology. Historical context provides terminology, however limited

and limiting, which attempts to capture experiences and expressions of gender. This

context also influences the reception of one's gender expression. As used in the literature,

transgender is not always a reference to identity but rather an umbrella term for gender

nonconforming individuals. This flexible term may refer to an individual who is post-

operative and no longer views themselves as "trans" to women who identify as "butch"

and men who present as "feminine" but do not identify as trans (Cook-Daniels &

munson, 2010). The term transgender may be used to capture the experiences of cross-

dressers, transsexuals, transgenderists, androgynes, drag queens, heterosexuals, gender-

bent queers, two-spirit individuals, and intersex people (Kidd & Witten, 2008; Lev, 2007;

Witten & Eyler, 2012). Some other common terms TGNC individuals have been given or

have given themselves include transwoman, transman, gender bender, stone butch,

genderqueer, and female-bodied man (Lev, 2004). Importantly, applying the label TGNC

to shared experiences of gender nonconforming expression does not mean that all of

these individuals label themselves as such (Lev, 2007).

       This study will use the term transgender and gender nonconforming (TGNC), not

as representative of identities, but rather to broadly examine and recognize shared

experiences of discrimination and stigma based on nonconforming gender expression.

Gender role expression is understood as the socialized aspect of gender identity, a social

performance within a particular historical context (Butler, 1988; Lev, 2004). The term

"transition" will be used generally to refer to any change that results in a more gender

confirming presentation.

       Cisgender refers to individuals whose gender identities and/or gender expression

corresponds to their assigned biological sex (Richmond, Burnes, & Carroll, 2012).

Transgender, in contrast, refers to individuals whose gender identities and/or gender

expressions differ from their assigned birth sex (Davidson, 2007; Lev, 2004). The current

paper will not focus on identity, but rather, presentation and the impact of gender

presentation on the individual's experience as well as the experiences of others.

       Many conflate sexual orientation and identity with gender expression; however,

these are two individual variables with a complex relationship (Lev, 2004). Sexual

identity is a biopsychosocial integration of biological sex, gender identity, gender role

expression, and sexual orientation (Lev, 2004). Sexual orientation, a component of sexual

identity, is a combination of attraction, self-identification, fantasy, and behavior

(Fassinger & Arseneau, 2007; Grossman, Frank, & McCutcheon, 2013; Hill, Dawood, &

Puts, 2013; Lev, 2004). Gender identity is the internal experience of gender, how one

experiences one's own sense of self as a gendered being (Lev, 2004). Gender expression, as previously mentioned, is the socialized aspect of gender identity (Butler, 1988; Lev, 2004). Gender identity and biological sex are attributed to others based on perceived traits, which are enacted through gender role expression (Lev, 2004).

The conflation of these terms is likely the result of the assumptions of duality, immutability, and biological determinism that plague the sex/gender system (Lev, 2004). This bipolar system is used to categorize the components of sexual identity and subsequently render others invisible (Lev, 2004). Biological sex is a complex relationship of genetic, hormonal, morphological, chromosomal, gonadal, biochemical, and anatomical determinants, while sex assignment at birth is based on the presence or absence of certain primary sex characteristics. In reality, TGNC individuals can have any sexual orientation. These constructs and the options therein are reflections of the choices available during a particular historical context, and the reception of those expressions is shaped by the social policies of the time.

The World Professional Association for Transgender Health (WPATH) promotes evidence-based care, education, and advocacy for TGNC individuals (Coleman et al., 2011). These standards of care have been developed for physical and mental health contexts; however, the vision of WPATH includes access to social services. Providers who serve TGNC older adults would benefit from understanding these standards and how they may promote general wellbeing among their TGNC older adult clientele. Knowledge and implementation of these standards of care could facilitate the use of services beginning with explicit acceptance of TGNC older adults. This is particularly important considering that TGNC older adults have concerns about quality of care when there are

perceived disconnections by providers between perceived gender identity and physical

body state (Lev & Sennott, 2012). They also report fear of increased limitations to care as

they age, including being denied care (Espinoza, 2014).

Contained within the key competencies and strategies for providing culturally

competent service with LGBT older adults is the assertion that language is used

appropriately and is inclusive (Burch, 2008; Fredriksen-Goldsen, Hoy-Ellis, Goldsen,

Emlet, & Hooyman, 2014). Using inaccurate language (i.e., preferred pronouns and

name) may communicate negative attitudes or beliefs towards those with whom one is

working (Shelton & Delgado-Romero, 2011). TGNC individuals report feeling

"considerably stigmatized" when misgendered (McLemore, 2015). This knowledge may

also include information about gender identity and sexual identity and understanding

these as distinct concepts that are intertwined. Additionally, it is important for providers

to know the differences between sex and gender as well as the meaning of the terms

transgender and gender nonconforming (Fredriksen-Goldsen et al., 2014). Understanding

these terms and using them appropriately communicates understanding and respect for

older TGNC adults.

The Current Study: Specific Aims and Hypotheses

Although there is consensus that providers who work with TGNC older adults

should use the language preferred by the older adult, there is no information on whether

aging-focused professionals have a working knowledge of TGNC-related terminology

and feel comfortable using this knowledge. Self-efficacy in this particular context is

unexplored, and there are currently no interventions aimed at increasing self-efficacy for

affirmative interactions with TGNC older adults. The current study aimed to utilize a

vicarious learning experience for aging-focused professionals to increase knowledge of

TGNC-related terminology, decrease self-reported negative attitudes towards TGNC

individuals, and increase self-efficacy using affirmative language. Participants were

exposed to one of three interventions: written educational information, a video

demonstration, or both the written educational information and the video demonstration.

Ideal professional development opportunities within agency settings should minimally

disrupt employees' typical workdays. Therefore, this study aimed to test the impact of a

brief video intervention on professionals' self-efficacy when interacting with older

TGNC adults.

Hypotheses:

Compared to participants in the written education condition only, participants

assigned to the online video only condition were hypothesized to:

1a) Show a greater pre- to post-intervention increase in objective knowledge of

language and terminology pertinent to working with TGNC older adults

1b) Show a greater pre- to post-intervention decrease in self-reported negative

attitudes towards TGNC individuals

1c) Show greater pre- to post-intervention increases in self-efficacy for interacting

with TGNC older adults using affirming language

Compared to participants in the online written education condition only, the

participants assigned to the video and written education condition were hypothesized to:

2a) Show a greater pre- to post-intervention increase in objective knowledge of

language and terminology pertinent to working with TGNC older adults

2b) Show a greater pre- to post-intervention decrease in self-reported negative

attitudes towards TGNC individuals

2c) Show greater pre- to post-intervention increase in reported self-efficacy for

interacting with TGNC older adults using affirming language

Methods

Participants

Eligible participants were employees or volunteers in area agencies on aging

(AAAs) across the United States. Participants were not excluded based on education

level, time of employment, or position within the agency (e.g., full-time versus

volunteer). These agencies employ professionals from a variety of fields, including those

from social work, psychology, gerontology, and nursing (Morgan, Markwood, Eltzeroth,

& Reed, 2010).

Recruitment. All assessment and intervention tasks were conducted online, which

allowed for nationwide recruitment. The project was advertised through direct emails to

administrators and directors of area agencies on aging. Emails to AAA directors and

administrators included the invitation to participate in a "free professional education

opportunity" and a brief description of the study as an attempt to evaluate "different

educational strategies for how to provide more affirmative services to older transgender

and gender nonconforming adults." Instructions included the following: "Below is the

link to the 20-30 minute educational opportunity designed to capture experiences to date

as well as address how to better serve these older adults." A flyer and a formal copy of

the email were also attached. Email recipients were asked to share the flyer and/or study

hyperlink "with your employees and volunteers if you agree that this free educational

opportunity will benefit their work with older adults." Each agency in the United States
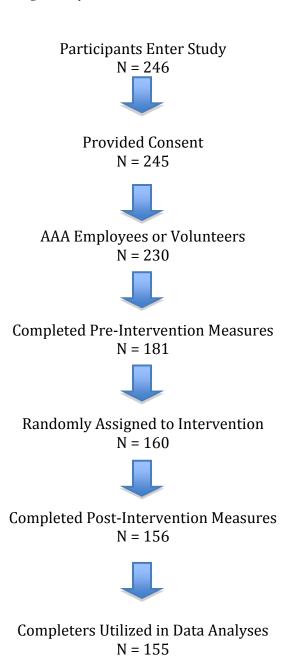
was contacted twice for participation and 32 states are represented in this study. Agency

employees and volunteers at all levels of involvement were eligible for participation.

Flow of Participants through the study. A total of 246 individuals entered the this

study, and of those, one person (0.41%) did not provide informed consent and seven

individuals (2.8%) provided consent but opted not to move forward in the study.

Additionally, eight individuals (3.3%) were not AAA employees or volunteers. Forty-

nine participants (19.92%) began the pre-intervention measures but did not complete

them. Thus, 181 individuals (73.58%) completed the pre-intervention assessment. Of

those individuals, 160 individuals (65.04%) did not drop out of the study and were

randomized to an intervention condition after reading a brief introduction to the

intervention portion of the study ("Next you will proceed through the professional

education component.") and pressing the continue icon at the bottom of the page. After

random assignment, 156 individuals (63.41%) completed the post-intervention measures.

All four of the individuals who were randomized and did not complete the post-

intervention measures were assigned to the written educational group. One participant

who completed the study in the lowest amount of time (9 minutes) was removed from

analyses. Based on others' time to completion, including project research assistants

(which was approximately 25-40 minutes), no other participants were removed (Figure

1).

Study participants. A total of 155 individuals completed the study, randomized to

one of three levels of the intervention, and retained for data analyses, representing 63% of

individuals who entered the study site. Of 155 participants, 55 (35.48%) were

randomized to the video only education condition, 68 (43.87%) were assigned to the

written only education condition, and 32 (20.65%) were assigned to the combined video

and written education condition. This difference in cell sizes was due to the programmed

randomization procedures used within Qualtrics.

Figure 1

Flow of Participants Through Study

Participants Enter Study
N = 246

Provided Consent
N = 245

AAA Employees or Volunteers
N = 230

Completed Pre-Intervention Measures
N = 181

Randomly Assigned to Intervention
N = 160

Completed Post-Intervention Measures
N = 156

Completers Utilized in Data Analyses
N = 155

Participants ranged in age from 21-84 (M = 45.19, SD = 13.89) and primarily identified as women (85.2%). Notably, 1.3% identified as transgender and 1.3% identified as queer/non-binary. The majority of participants identified as heterosexual (77.4%); however, 8.4% identified as bisexual, 4.5% as gay, 3.2% as lesbian, 1.9% as asexual, and 1.3% as queer. Notably, 3.2% of participants did not feel their sexual orientation was represented in the response options provided. Participants identified primarily as White/Caucasian (82.6%), followed by Biracial/Multiracial (7.1%), Hispanic/Latino (5.2%), Black/African American (4.5%), and Asian/Pacific Islander (0.6%). The majority of participants (62.6%) identified as Christian.

Most participants reported their highest level of education as college (45.2%) or graduate school (44.5%). Additionally, 56.5% of the participants reported annual incomes of $70,000 or greater. One participant did not respond to the income question. The majority of participants were full-time AAA employees (87.1%) with an average of 7.05 years at their current agency. Many participants reported they worked in agencies with 40+ employees (40.0%). Participants represented a range of disciplinary backgrounds: social work (29.0%), psychology (12.3%), business administration (10.3%), education (5.8%), medicine (3.2%), law (1.3%), and other disciplines (38.1%). Participants described how their professional time in AAAs is divided among a number of professional activities: administrative activities (M = 39.28, SD = 34.33), direct service (M = 29.37, SD = 31.96), support services (M = 8.71, SD = 14.41), marketing/outreach activities (M = 8.55, SD = 9.76), other/not listed activities (M = 4.99, SD = 19.67), teaching (M = 4.63, SD = 10.68), and professional consultation (M = 4.47, SD = 9.40).

For this study, participants were instructed that they were completing a professional development survey aimed at identifying the needs of aging professionals. The study description posited that there are many new graduates entering the field of gerontology and the information gathered would be used to aid these new professionals. Participants were then asked to share their knowledge by participation in the brief online survey. They then completed a 20-30 minute online survey (see Appendix A) that assessed the following constructs: knowledge of TGNC-related language and issues, attitudes related to gender roles and TGNC individuals, pronoun and language self-efficacy when interacting with TGNC older adults, and open-ended questions regarding interactions with TGNC individuals professionally and personally. There were eight validity items interspersed throughout the questionnaires to determine if participants were actively attending to each item. No participants were removed due to suspect responses (> 4 incorrect responses) on these validity items.

Randomization. In order to confirm group similarities between participants randomly assigned to the written educational group and those assigned to the video group, demographic variables were recoded (Table 1). Gender, sexual orientation, and race/ethnicity were all recoded to minority and non-minorities statuses. Religious affiliation was recoded to Christian-Protestant, Christian-Catholic, Atheist/Agnostic, and Other. Income was recoded to six categories from the original nine. The highest level of education variable was recoded to high school/associates degree/some college, college graduate, and graduate degree. Employment status was recoded to full-time and part-time/volunteer. Additionally, disciplinary background was recoded to psychology, social

work, business administration, and other. No demographic differences emerged between

the written educational group and the video group.

Table 1

Pre-intervention Participant Demographic Characteristics: Total and Comparison of Video Only and Written Only Conditions

Variable	Total (n = 123)	Video Only (n = 55)	Written Only (n = 68)	F or chi square	*p* value
Age (M, SD)	44.30 (13.95)	45.77 (14.32)	43.12 (13.64)	1.10	0.30
Gender (n, %)				0.50	0.82
Minority	111 (90.2%)	50 (90.9%)	61 (89.7%)		
Non-Minority	12 (9.8%)	5 (9.1%)	7 (10.3%)		
Sexual Orientation (n, %)				0.96	0.33
Minority Status	25 (20.3%)	9 (16.4%)	16 (23.5%)		
Non-Minority Status	98 (79.7%)	46 (83.6%)	52 (76.5%)		
Racial/Ethnic Identity (n, %)				0.27	0.60
Minority Status	20 (16.3%)	10 (18.2%)	10 (14.7%)		
Non-Minority Status	103 (83.7%)	45 (81.8%)	58 (85.3%)		
Religious Affiliation (n, %)				1.23	0.75
Christian (Protestant)	46 (37.4%)	19 (34.5%)	27 (39.7%)		
Christian (Catholic)	30 (24.4%)	16 (29.1%)	14 (20.6%)		
Atheist/Agnostic	17 (13.8%)	7 (12.7%)	10 (14.7%)		
Other	30 (24.4%)	13 (23.6%)	17 (25.0%)		
Annual Income (n, %)				1.24	0.94
Less than $15,000-$39,999	18 (14.6%)	7 (12.7%)	11 (16.2%)		
$40,000-$54,999	21 (17.1%)	8 (14.5%)	13 (19.1%)		
$55,000-$69,999	13 (10.6%)	7 (12.7%)	6 (8.8%)		
$70,000-$84,999	22 (17.9%)	10 (18.2%)	12 (17.6%)		
$85,000-$99,999	14 (11.4%)	7 (12.7%)	7 (10.3%)		
$100,000 or more	35 (28.5%)	16 (29.1%)	19 (27.9%)		

Table 1 (Cont.)

Pre-intervention Participant Demographic Characteristics: Total and Comparison of Video Only and Written Only Conditions

Highest level of education (n, %)				1.93	0.38
HighSchool/Associates /Some College	12 (9.8%)	6 (10.9%)	6 (8.8%)		
College Graduate	60 (48.8%)	23 (41.8%)	37 (54.4%)		
Graduate School	51 (41.5%)	26 (47.3%)	25 (36.8%)		
Employment Status (n, %)				0.54	0.46
Full-time	106 (86.2%)	46 (83.6%)	60 (88.2%)		
Part-time or Volunteer	17 (13.8%)	9 (16.4%)	8 (11.8%)		
Disciplinary Background (n, %)				0.20	0.98
Psychology	15 (12.2%)	7 (12.7%)	8 (11.8%)		
Social Work	37 (30.1%)	16 (29.1%)	21 (30.9%)		
Business Administration	12 (9.8%)	6 (10.9%)	6 (8.8%)		
Other	59 (48.0%)	26 (47.3%)	33 (48.5%)		
Number of Employees (n, %)				5.24	0.26
1-10	15 (12.2%)	10 (18.2%)	5 (7.4%)		
11-20	23 (18.7%)	10 (18.2%)	13 (19.1%)		
21-30	22 (17.9%)	10 (18.2%)	12 (17.6%)		
31-40	17 (13.8%)	9 (16.4%)	8 (11.8%)		
40+	46 (37.4%)	16 (29.1%)	30 (44.1%)		
Years at Current AAA (M, SD)	6.41 (7.33)	7.53 (7.56)	5.51 (7.06)	2.32	0.13
Professional Time (M, SD)				0.91	0.49
Administration	36.66 (33.06)	37.51 (32.91)	35.97 (33.41)		
Direct Service	32.41 (32.89)	29.60 (29.95)	34.69 (35.14)		
Marketing/Outreach	9.09 (10.47)	10.58 (32.91)	35.97 (33.41)		
Support Services	8.45 (14.52)	8.60 (14.89)	8.32 (14.33)		
Professional Consultation	3.97 (7.93)	4.75 (7.90)	3.34 (7.95)		
Teaching	4.84 (11.55)	6.58 (14.45)	3.43 (8.38)		
Other Activities					
	4.59 (18.28)	2.38 (13.57)	6.37 (21.38)		

Independent t-tests were also run in order to further assess the equivalency of these two

groups on primary outcome variables (Table 2). The written educational group and video

group were compared on pre-test values of knowledge, self-efficacy, and genderism and

transphobia. No significant differences emerged in the data.

Table 2

Pre-intervention Comparison between Video Only and Written Only Conditions on Primary Outcome Variables

Variable	Video Only (n = 55)	Written Only (n = 68)	t	p
Genderism and Transphobia Scale-Revised (M, SD)	2.26 (1.08)	2.04 (1.06)	1.12	0.26
TGNC Self-Efficacy Scale: Interactions	79.55 (18.81)	83.00 (16.97)	-1.07	0.29
Knowledge of TGNC Terminology	6.45 (2.77)	7.10 (2.65)	-1.54	0.13

For the comparison of participants randomly assigned to the written educational

group and the combined written education and video intervention group, demographic

variables were recoded (Table 3). As in the previous comparison, gender, sexual

orientation, and race/ethnicity were recoded to reflect minority and non-minority statuses.

Religious affiliation was similarly recoded to reflect Christian-Protestant, Christian-

Catholic, Atheist/Agnostic, and Other. Income was recoded to three categories from the

original nine. Highest level of education was recoded to reflect two categories: high

school/associates degree/some college/college graduate and graduate degree.

Employment status was recoded into full-time and part-time/volunteer. Disciplinary

background was recoded and reduced to social work and other. Additionally, number of

employees in the agency was recoded to 1-40 employees and 40+ employees. One

significant difference between the groups emerged in years at agency ($p = 0.01$; Written

$M = 5.51$, $SD = 7.06$; Written/Video Combination $M = 9.47$, $SD = 7.64$).

Table 3

Pre-intervention Participant Demographic Characteristics: Total and Comparison of Written Only and Combined Written and Video Conditions

Variable	Total (n = 100)	Written Only (n = 68)	Combination Written and Video (n = 32)	F or chi-square	p
Age (M, SD)	44.87 (13.71)	43.12 (13.64)	48.59 (13.31)	3.56	0.06
Gender (n, %)				1.38	0.24
Minority Status	87 (87.0%)	61 (89.7%)	26 (81.3%)		
Non-Minority Status	13 (13.0%)	7 (10.3%)	6 (18.8%)		
Sexual Orientation (n, %)				0.67	0.41
Minority Status	26 (26.0%)	16 (23.5%)	10 (31.3%)		
Non-Minority Status	74 (74.0%)	52 (76.5%)	22 (68.8%)		
Racial/Ethnic Identity (n, %)				0.79	0.37
Minority Status	17 (17.0%)	10 (14.7%)	7 (21.9%)		
Non-Minority Status	83 (83.0%)	58 (85.3%)	25 (78.1%)		
Religious Affiliation (n, %)				0.49	0.92
Christian (Protestant)	41 (41.0%)	27 (39.7%)	14 (43.8%)		
Christian (Catholic)	21 (21.0%)	14 (20.6%)	7 (21.9%)		
Atheist/Agnostic	15 (15.0%)	10 (14.7%)	5 (15.6%)		
Other	23 (23.0%)	17 (25.0%)	6 (18.8%)		
Annual Income (n, %)				0.63	0.73
Less than $15,000-$54,999	37 (37.4%)	24 (35.3%)	13 (41.9%)		
$55,000-$99,999	34 (34.3%)	25 (36.8%)	9 (29.0%)		
$100,000 or more	28 (28.3%)	19 (27.9%)	9 (29.0%)		
Highest level of education (n, %)				3.37	0.07
HS/Associates/Some college/College	57 (57.0%)	43 (63.2%)	14 (43.8%)		

Table 3 (Cont.)

Pre-intervention Participant Demographic Characteristics: Total and Comparison of Written Only and Combined Written and Video Conditions

	Total	Written Only	Combined		
Graduate	43	25	18		
	(43.0%)	(36.8%)	(56.3%)		
Employment Status (n, %)				0.13	0.72
Full-time	89	60	29		
	(89.0%)	(88.2%)	(90.6%)		
Part-time or volunteer	11	8	3		
	(11.0%)	(11.8%)	(9.4%)		
Disciplinary Background (n, %)				0.37	0.55
Social Work	29	21	8		
	(29.0%)	(30.9%)	(25.0%)		
Other	71	47	24		
	(71.0%)	(69.1%)	(75.0%)		
Number of Employees in AAA (n, %)				0.30	0.58
1-40	54	38	16		
	(54.0%)	(55.9%)	(50.0%)		
40+	46	30	16		
	(46.0%)	(44.1%)	(50.0%)		
Years at Current AAA (M, SD)	6.78	5.51	9.47	6.47	0.01*
	(7.45)	(7.06)	(7.64)		
Percentage of Professional Time (M, SD)				1.55	0.17
Administration	40.25	35.97	49.34		
	(35.21)	(33.41)	(37.70)		
Direct Service	29.24	34.69	17.66		
	(33.16)	(35.14)	(25.27)		
Marketing/Outreach	7.44	7.88	6.50		
	(9.09)	(10.24)	(6.03)		
Support Services	8.77	8.32	9.72		
	(14.22)	(14.33)	(14.14)		
Professional Consultation	4.32	3.34	6.41		
	(10.16)	(7.95)	(13.67)		
Teaching	3.55	3.43	3.81		
	(7.77)	(8.38)	(6.37)		
Other Activities	6.43	6.37	6.56		
	(22.26)	(21.28)	(24.58)		

*$p < .05$
**1 participant did not report income

No other demographic differences between the groups reached significance; however,

one non-significant trend emerged. Overall, the written educational group, M = 43.12, SD

= 13.64, was younger than the written/video combination group, M = 48.59, SD = 13.31,

p = 0.06).

      In order to further assess equivalency between these two groups on the three

outcome variables, independent t-tests were run to compare the written condition and the

written/video combination condition (Table 4). The two groups were compared on the

pre-intervention values of knowledge, self-efficacy, and genderism and transphobia; no

significant differences emerged.

Table 4

Pre-intervention Comparison between Written Only and Combined Written and Video
Conditions on Primary Outcome Variables

Variable	Written Only (n = 68)	Video and Written (n = 32)	t	p value
Genderism and Transphobia Scale-Revised (M, SD)	2.04 (1.06)	1.91 (1.09)	0.57	0.57
TGNC Self-Efficacy Scale: Interactions	83.00 (16.97)	77.86 (20.04)	1.33	0.19
Knowledge of TGNC Terminology	7.10 (2.65)	6.59 (2.77)	0.88	0.38

      Analysis of participant dropout. Individuals who provided consent, identified

themselves as an employee or volunteer in an AAA, completed the pre-intervention

measures and did not complete the post-intervention measures were considered non-

completers (n = 25). This includes the individuals (n = 4) randomly assigned to the

written educational group who did not complete the post-intervention measures. This

means that of all the participants randomized to one of the three intervention groups (n =

160), 97.5% were considered intervention completers.

Independent sample t-tests were used to compare intervention completers and

non-completers on age, years at agency, and primary outcome variables (Table 5).

Table 5

Pre-Intervention Comparison of Intervention Completers and Intervention Non-Completers

Variable	Intervention Completers	Intervention Non-Completers	t	p
Age (M, SD)	45.87 (12.98)	54.04 (11.09)	2.97	.003*
Years at Agency (M, SD)	7.13 (7.52)	10.76 (11.93)	1.48	.15
Knowledge of TGNC Terminology (M, SD)	6.69 (2.77)	5.20 (2.36)	-2.53	.01*
TGNC Language Self-Efficacy Scale: Interactions (M, SD)	79.34 (20.75)	77.86 (15.50)	-.34	.73
Genderism and Transphobia Scale-Revised	2.14 (1.17)	2.60 (1.16)	1.80	.07

Note. *$p < .05$

Two significant differences arose. Participants who dropped out prior to completing the

post-intervention measures were older than those who completed the post-intervention

measures ($p < .01$; Completers $M = 45.87$ $SD = 12.98$; Non-completers $M = 54.04$, $SD =$

11.09). Completers and non-completers did not differ significantly on years at their

current agency ($p = .15$; Completers $M = 7.13$, $SD = 7.52$; Non-completers $M = 10.76$, SD

$= 11.93$). Due to the nature of chi-square analyses, other potential differences among

demographic variables were not assessed because cell Ns were too small for further

analyses. Non-completers demonstrated a lower level of knowledge of TGNC

terminology than completers ($p = .01$; Completers $M = 6.69$, $SD = 2.77$; Non-completers

$M = 5.20$, $SD = 2.36$). There were no other significant differences between completers

and non-completers on the primary outcome measures.

Procedure

Participants were asked to provide informed consent for the study, prior to completing the pre-intervention assessment portion of the "Online Professional Development Survey." The consent form emphasized participation as voluntary and explained that participation could be withdrawn at any time without prejudice to the person or the agency. Participants were informed they would have the opportunity to enter a raffle for a new iPad following completion of the survey. This project was reviewed by the University of Missouri-St. Louis IRB and approval was given before initiation of data collection.

Individuals who met study criteria (i.e., an employee or volunteer within the agency) and provided informed consent for the study, and who agreed to be enrolled in the intervention, proceeded. All participants then completed the pre-test measures. Following completion of these measures, participants were randomly assigned to one of three intervention groups: the online written educational condition, the online video educational condition, or the online written and video educational condition. Subsequently, all participants completed the post-test measures.

In order to ensure the quality of online data collected, steps were taken to guarantee that participants were providing thoughtful responses. The length of time to complete the pre-test measures, participate in the intervention, and complete the post-test measures was measured and compared to median response time of other participants. Those who completed the surveys in significantly less time than other participants were not included in data analyses in order to protect quality of data. The average time it took participants to complete the entirety of the study was approximately 75 minutes. The

modal time to completion was 36 minutes. One participant was removed whom

completed the study in the lowest amount of time (9 minutes). Based on others' time to

completion, including project research assistants (which was approximately 25-40

minutes), no other participants were removed.

Experimental Conditions

Content of all conditions provided information and explained how to engage an

older adult regarding issues of preferred pronouns and names despite perceived gender

identity.

Written educational group. Participants were provided with a brief series of

paragraphs to review (Appendix B). For individuals randomized to this condition, the

written information appeared automatically once they entered the intervention. The

information provided relevant definitions, as identified primarily by FORGE (Fassinger

& Arseneau, 2007; FORGE Transgender Aging Network, 2012, 2012, 2015; Lev, 2004;

Richmond, Burnes, & Carroll, 2012). These included gender expression, gender identity,

transgender, and gender nonconforming, among others. In addition, this handout provided

a brief explanation about the importance of using clients' preferred names and pronouns

as well as how to move through the conversation if an incorrect pronoun or name is

accidentally used.

Video group. Participants who entered this condition watched a brief video

(approximately 2 minutes) that appeared and played automatically once participants

entered the intervention. The video portrayed a role-played interaction between a

provider and TGNC older adult for whom there existed a discrepancy in current

name/gender and name/gender on previous records. The interaction provided comparable

information to the written educational condition regarding definitions, pronoun and name

usage, and instructions on how to conversationally apologize when incorrect pronouns

and names are used.

Written educational material and video group. These participants were first

shown the video, which played automatically upon entering the intervention. On the same

webpage and under the video, participants were able to review the written educational

component.

Measures

Primary Outcome Measures. Participants completed the following primary

outcome measures pre- and post-intervention in this order.

Knowledge of TGNC Terminology. This 10-item measure assessed objective

knowledge of gender-related terminology, rather than perceptions of knowledge (Israel,

Harkness, Delucio, Ledbetter, & Avellar, 2014). In a sample of police officers, the

original 18-item measure (α = .83) demonstrated adequate reliability; validity was not

reported. However, the additional eight items were not relevant to this study and were not

used. In the current study, participants were asked to match each term (e.g., gender

identity) to its respective definition. One point was provided for each correct answer and

the total number of points earned reflected the participants' total score with a maximum

possible score of 10. This 10-item scale demonstrated excellent internal consistency in

the current study (α = .81). Results of the Knowledge of TGNC Terminology were

platyturtic and slightly negative skewed (Table 6). There was no evidence of outliers.

Because normality was not improved through the use of transformations, no

transformation was performed prior to main analyses.

The TGNC Language Self-Efficacy Scale. This 10-item measure was developed for the current study and used to assess participants' confidence in using affirmative language while conversing with TGNC older adults in a professional setting. The instructions and scaling are based on Bandura's recommendations for the measurement of self-efficacy (0-100 scale where higher scores indicated greater belief in their ability to perform the behavior; Bandura, 2006). Because this measure was created for this study, an exploratory factor analysis using a principal component extraction method and varimax rotation was performed on the 10 self-report items. The Kaiser-Meyer-Olkin measure of sampling adequacy was 0.83, indicating that the present data were suitable for principal components analysis. Similarly, Bartlett's test of sphericity was significant ($p < .001$), indicating sufficient correlation between the variables to proceed to analysis. Using the Kaiser-Guttman retention criterion of eigenvalues greater than 1.0, a two-factor solution provided the clearest extraction. These two factors accounted for 70.91% of the total variance. Table 7 presents the 10 items, their factor correlations, and communality estimates. Communalities were fairly high for each of the 10 items, with a range of 0.55 to 0.79.

Factor 1: Self-Efficacy for Interactions (eigenvalue = 5.57) accounted for 55.74% of the variance and had six items; Factor 2: Self-Efficacy for Information (eigenvalue = 1.52) accounted for 15.17% of the variance and had four items. The rationale used in naming these two factors was guided in part by the recommendations of Comrey and Lee (1992) and Rummel (1970) in which sorted factor weights in excess of .65 were used to "drive" the process of labeling and interpreting each factor. The present two-factor model was deemed the best solution because of its conceptual clarity and ease of interpretability.

Table 6
Psychometric Properties of Study Variables (N = *155*)

Variable	Mean	SD	Range (Possible Range)	SE of Skew	Skew	SE of Kurtosis	Kurtosis	alpha
Genderism and Transphobia Scale-Revised: Genderism and Transphobia Subscale	2.09	1.08	4.35 (1-7)	0.20	0.98	0.39	0.10	0.95
Genderism and Transphobia Scale-Revised: Gender Bashing Subscale	1.23	0.69	6.00 (1-7)	0.20	5.21	0.39	34.61	0.95
TGNC Language Self-Efficacy Scale-Behaviors Subscale	80.71	18.29	86.00 (0-100)	0.20	-1.27	0.39	1.46	0.83
TGNC Language Self-Efficacy Scale-Information Subscale	56.53	25.90	99.25 (0-100)	.20	-0.10	0.39	-0.82	0.78
Knowledge of TGNC Terminology	6.73	2.72	10.00 (1-10)	.20	-0.46	0.39	-0.91	0.81
Gender Role Beliefs Scale	5.41	0.81	3.60 (1-7)	0.20	-0.24	0.39	-0.49	0.89
Traditional Beliefs about Gender Subscale	2.00	0.87	3.88 (1-7)	0.20	0.70	0.39	-0.15	0.84
Traditional Beliefs about Gender Identity Subscale	2.68	1.17	4.57 (1-7)	0.20	0.44	0.39	-0.68	0.83
Attitudes Towards Lesbians-Short Form	2.31	1.45	7.00 (1-9)	0.20	1.39	0.39	1.58	0.71
Attitudes Towards Gay Men-Short Form	2.30	1.84	8.00 (1-9)	0.20	1.73	0.39	2.36	0.89

Table 7

Summary of Items and Factor Loadings for Varimax Orthogonal Two-Factor Solution for the TGNC Language Self-Efficacy Scale (N = *155*)

Item	Factor Loading		Communality	M (SD)
	1	2		
I feel I am confident I can explain the difference between biological sex and gender.	0.41	**0.71**	0.67	69.21 (29.57)
I feel I am confident I can explain the difference between sexual orientation and gender identity.	0.33	**0.77**	0.71	74.49 (27.88)
I feel I am confident I can explain the difference between cisgender and transgender.	0.15	**0.87**	0.78	45.31 (40.87)
I feel I am confident I can explain the meanings of transgender and gender nonconforming.	0.13	**0.88**	0.79	37.11 (33.54)
I feel I am confident I can ask an older adult their preferred name.	**0.87**	0.13	0.76	88.99 (21.66)
I feel I am confident I can ask an older adult their preferred pronouns.	**0.84**	0.06	0.71	77.86 (29.53)
I feel I am confident I can identify when I misuse pronouns with a TGNC older adult.	**0.64**	0.38	0.56	59.90 (35.83)
I feel I am confident I can apologize for misusing pronouns when working with a TGNC older adult and subsequently continue the conversation.	**0.84**	0.28	0.79	83.31 (27.29)
I feel I am confident I can recognize when I need professional development training to positively interact with an older TGNC adult client.	**0.67**	0.38	0.60	85.30 (23.04)
I feel I am confident I can actively seek out a professional consultation when needed.	**0.76**	0.41	0.74	83.25 (25.22)

The Self-efficacy for Interactions subscale consisted of 6 items and demonstrated excellent internal consistency as a pre-test measure (α = .83) and post-test measure (α = .89). Results of the Self-Efficacy for Interactions subscale were approximately leptokurtic and negatively skewed. There were two univariate outliers (z > 3.29). These individuals were not removed from analyses due to small sample size. Instead, mean value substitution was utilized to replace the individuals' scores. Because normality was not improved through the use of transformations, no transformation was performed prior to the main analyses.

The Self-Efficacy for Information subscale consisted of 4 items and demonstrated good internal consistency as a pre-test measure (α = .78) and post-test measure (α = .87). Results of this subscale were approximately leptokurtic and evenly skewed. No outliers were identified. Because normality was not improved through the use of transformations, no transformation was performed. Because this study included a scale designed to specifically measure knowledge of TGNC-relevant terminology, this new subscale was not used in the main analyses.

Genderism and Transphobia Scale-Revised. This 22-item scale assessed negative attitudes towards TGNC individuals (GTS-R; Tebbe, Moradi, and Ege, 2014). This measure included two subscales: genderism/transphobia and gender-bashing. Items were rated on a 7-point Likert scale with response choices ranging from 1 (strongly disagree) to 7 (strongly agree). Item ratings were averaged to produce GTS-R subscale and overall scale scores with higher scores indicating greater anti-TGNC prejudice. In a sample of undergraduate students, the genderism/transphobia subscale items (α = .94) and the gender-bashing subscale items (α = .86) demonstrated adequate reliability, as did the full

22-item scale (α =. 94). In a separate sample of undergraduate students, the GTS-R

demonstrated adequate convergent and discriminant validity.

The Genderism/Transphobia subscale consisted of 17-items and demonstrated

excellent internal consistency in the current study (α = .95). Results of the Genderism and

Transphobia subscale were approximately platyturtic and positively skewed. Two

univariate outliers ($z > 3.29$) were identified. These individuals were not removed from

analyses due to small sample size. Instead, mean value substitution was utilized to

replace the individuals' scores. Because normality was not improved through the use of

transformations, no transformation was performed prior to the main analyses.

The Gender Bashing subscale was not used in the main analyses. This subscale

consisted of 5 items and demonstrated excellent internal consistency in the current study

(α = .95). However, the gender-bashing subscale items were not used in the analyses

because of the nature of the questions (e.g. "I have behaved violently towards a man

because he was too feminine.") and because of the lack of variability in responses (Table

6). Results of this scale were approximately platyturtic and positively skewed.

Descriptive measures. All measures except for the open-ended questionnaire

were presented pre and post intervention.

Gender Role Beliefs Scale. This scale contained 20 items (e.g., "The initiative in

courtship should usually come from the man") measuring gender role ideologies (1 =

strongly agree, 7 = strongly disagree; GRBS; Kerr & Holden, 1996). Higher scores

indicated more feminist gender role beliefs. In a sample of university of undergraduates,

the overall reliability of this instrument was .87 (Kerr & Holden, 1996). Test-retest

reliability was .86, and concurrent and discriminant validity were strong. In addition, in a

sample of Chilean undergraduate students (α = .88) and American undergraduate students

(α = .89), the scale demonstrated acceptable reliability (Nierman, Thompson, Bryan, &

Mahaffey, 2007). In the current study, this 20-item scale demonstrated excellent internal

consistency (α = .89). Results of the Gender Role Beliefs scale were normally distributed

and no outliers were identified (Table 6).

Traditional Beliefs about Gender and Gender Identity Scale. This 15-item scale

comprised two subscales: Traditional Beliefs about Gender (TBG; 8-items) and

Traditional Beliefs about Gender Identity (TBI; 7-items; Dasgupta & Rivera, 2006). The

former included eight items that focused on the degree to which individuals endorsed

traditional prescriptive gender norms in various life domains (e.g., professional life and

physical appearance). The latter included items that measured the degree to which people

were invested in emphasizing their heterosexual identity to others and to themselves.

These items were rated on a seven point Likert scale (1= strongly disagree, 7 = strongly

agree). Higher scores indicated more traditional beliefs about gender roles and gender

identity. In six student and community samples, the scale demonstrated strong reliability

(αs ranged from .84 to .90). In community samples, the measure showed strong criterion-

related validity. This 15-item measure demonstrated excellent internal consistency (α =

.88) in the current study. The Gender subscale (α = .84) and Gender Identity subscale (α

= .83) also demonstrated good internal consistency. The Gender subscale was

approximately positively skewed and leptokurtic. The Gender Identity subscale was

slightly positively skewed and approximately leptokurtic (Table 6). No outliers were

identified for this scale. Transformations were not performed as this scale was used only

for descriptive purposes.

Attitudes Towards Lesbians and Gay Men-Short Form. This 10-item measure

consisted of five items used to assess attitudes towards lesbians (ATL-S; e.g. *Lesbians*

just can't fit into our society) and five items used to assess attitudes towards gay men

(ATG-S; e.g., *Male homosexuality is a perversion*; Herek, 1988). The items were rated on

a 9-point Likert scale (1-strongly disagree to 9-strongly agree) and four items were

reversed scored. Scoring was accomplished through averaging scores across items for

each subscale and these scores could be combined in a single ATLG-S score. In a

community sample, the ATL-S (α = .85), ATG-S (α = .87), and ATLG-S (α = .92)

demonstrated adequate reliability and validity. This 10-item measure demonstrated

excellent internal consistency (α = .90) in this study. The subscales were also examined

independently and also demonstrated good internal consistency: ATL-S subscale (α =

.71) and ATG-S (α = .89). The ATL-S subscale was approximately leptokurtic and

positively skewed. The ATG-S subscale was also positively skewed and approximately

platyturtic (Table 6). One outlier was identified but not removed from the data due to

small sample size. Mean substitution was not utilized as this measure was administered

only for descriptive purposes.

Open-ended Assessment. This 7-item measure, created for this study, provided an

open-ended format to assess participants' experiences interacting with sexual minorities

and TGNC individuals in professional and personal contexts. Questions also assessed

fears and concerns related to working with TGNC older adults. This measure included

drop-down menus and an open-ended format in order to maximize responses.

Data Analytic Strategy

A repeated measures ANOVA assessed Condition * Time effects and the main effect of time for the following dependent variables: knowledge of TGNC terminology, TGNC self-efficacy scale for interactions, and genderism and transphobia.

In order to achieve power of 0.80 for the primary analyses, at an alpha of 0.05, with a medium effect size ($d = 0.80$), a minimum of 52 participants were required at pre and post-intervention, in each treatment group (Cohen, 1992). Of the initially planned data analyses, the sample size necessary was N = 156. This study is considered adequately powered for testing mean difference scores (N = 155).

No missing values were present in this data set. All responses to primary measures in the pre and post-intervention measures were marked in the survey software as "required" items due to the anticipated difficulty in recruitment and potential dropout. As described above, all data were screened for high quality of responses. One participant was removed due to the length of time spent completing the study in comparison with others. All data was screened for normality; normality was not improved with transformations so no transformations were performed prior to main analyses. In instances where outliers were identified in the primary measures, mean value substitution was used to replace outlying values. This was infrequent and occurred in less than 4% of cases. ANOVA and chi-square analyses were completed to assess for pre-intervention equivalence. The three intervention groups were approximately equivalent on all initially gathered demographic variables; however, the sample sizes of the intervention groups are not equal. ANOVA is robust to violations of normality as well to as to small differences in sample sizes that do not violate the homogeneity of variance assumption. In these

analyses, there were two tests for hypotheses that violated the homogeneity of variance

assumption with unequal sample sizes and significant Box's M (p < .001). Table 8

presents pre and post-intervention means and standard deviations on primary outcome

variables across intervention groups.

Table 8

Pre and Post-Intervention Scores on Primary Outcome Measures Across Intervention Conditions

Variable	Written Educational Group (n = 68)		Video Group (n = 55)		Combination Written and Video Group (n = 32)	
	Pre-Intervention	Post-Intervention	Pre-Intervention	Post-Intervention	Pre-Intervention	Post-Intervention
Knowledge of TGNC Terminology (M, SD)	7.10 (2.65)	7.69 (2.49)	6.35 (2.77)	6.69 (2.59)	6.59 (2.77)	7.16 (2.45)
TGNC Language Self-Efficacy Scale: Interactions (M, SD)	83.00 (16.97)	89.57 (14.21)	79.55 (18.81)	86.95 (15.96)	77.86 (20.04)	87.53 (15.78)
Genderism and Transphobia Scale-Revised (M, SD)	2.04 (1.06)	1.88 (1.07)	2.26 (1.08)	2.07 (1.12)	1.91 (1.09)	1.83 (0.89)

Results

Primary Outcomes

Hypothesis 1a. A repeated measures two-group Time * Condition ANOVA was

used to test the hypothesis that, compared to participants in the written education

condition, participants assigned to the online video condition would show a greater pre to

post-intervention increase in objective knowledge of language and terminology pertinent

to working with TGNC older adults. This analysis revealed a non-significant main effect

of time on knowledge of TGNC-relevant terminology F(1, 120) = 2.04, p = .16, η^2_p = .02.

The Time*Condition results indicated that scores for knowledge of TGNC-relevant

terminology, from pre-intervention to post-intervention, were not significantly affected

by intervention condition F (1, 120) = 1.17, p = .28, η^2_p = .01 (Table 9). Age was

examined and included as a covariate in this model, and there was a significant main

effect of age F(1, 120) = 6.19, p < .05, η^2_p = .05 with a demonstrated increase in

knowledge of TGNC terminology. There was a significant interaction effect between

time * age, F(1, 120) = 6.34, p < .05, η^2_p = .05.

Table 9

Hypothesis 1A: Repeated Measures Analysis of Covariance of the Effects of Time and
Intervention Condition on Knowledge of TGNC Terminology, With Age as Covariate

Variable	MS	$F(1, 120)$	p	η^2_p	Observed Power
Age	73.81	6.19	.02*	.05	.69
Time	2.54	2.04	.16	.02	.29
Intervention	36.09	3.03	.09	.03	.41
Time*Condition	1.46	1.17	.28	.01	.19
Time*Age	7.90	6.34	.01*	.05	.70
Error	1.25				

*p < .05

Participants 46 years of age and older demonstrated a more significant increase in

knowledge from pre-intervention, *M* = 5.98, *SD* = 2.87, to post-intervention, *M* = 6.83,

SD = 2.64, compared to participants 45 years of age and younger from pre-intervention,

M = 7.34, *SD* = 2.47, to post-intervention, *M* = 7.54, *SD* = 2.50. Based on these results,

hypothesis one was not supported.

Hypothesis 1b. A repeated measures two-group Time * Condition ANOVA was

used to test the hypothesis that compared to participants in the written education

condition, participants assigned to the online video condition would show a greater pre to

post-intervention decrease in self-reported negative attitudes towards TGNC individuals.

This analysis revealed a significant main effect of time on self-reported negative attitudes

towards TGNC individuals $F (1, 121) = 32.60$, $p < .01$, $\eta^2_p = .21$. Participants in both

groups reported a reduction in anti-TGNC attitudes post-intervention. The

Time*Condition results indicated self-reported negative attitudes towards TGNC

individuals, from pre-intervention to post-intervention, were not significantly affected by

intervention condition $F (1, 121) = .23$ $p = .64$, $\eta^2_p = .002$ (Table 10). Age was examined

as covariate in this model but was not retained. Based on these results, hypothesis two

was not supported.

Table 10

Hypothesis 1B: Summary Table for Repeated Measures Analysis of Variance of the
Effects of Time and Intervention Condition on Genderism and Transphobia

Variable	MS	$F(1,121)$	p	η^2_p	Observed Power
Time	1.80	32.60	.00**	.21	1.00
Intervention	2.53	1.11	.30	.01	.18
Time*Condition	.01	.23	.64	.002	.08

**p < .001

Hypothesis 1c. A repeated measures two-group Time * Condition ANOVA was

used to test the hypothesis that compared to participants in the written education

condition, participants assigned to the online video condition would show a greater pre to

post-intervention increase in self-efficacy for using affirming language when interacting

with TGNC older adults. This analysis revealed a significant main effect of time on self-

efficacy for interactions F (1, 121) = 57.55, p < .001, η^2_p = .32. Participants in both

intervention groups reported an increase in self-efficacy for interactions with TGNC

older adults post-intervention.   The Time*Condition results indicated self-efficacy for

interactions, from pre-intervention to post-intervention, were not significantly affected by

intervention condition F (1, 121) = .20, p = .66, η^2_p = .002 (Table 11). Age was examined

as a covariate in this model but was not retained. Based on these results, hypothesis three

was not supported.

Table 11

*Hypothesis 1C: Summary Table for Repeated Measures Analysis of Covariance of the
Effects of Time and Intervention Condition on Self-Efficacy for Affirmative Interactions
with TGNC Older Adults*

Variable	MS	$F(1,121)$	p	η^2_p	Observed Power
Time	2966.87	57.55	.00*	.32	1.00
Intervention	560.48	1.41	.29	.01	.19
Time*Condition	10.33	.20	.66	.002	.07

*p < .05

Hypothesis 2a. A repeated measures two-group Time * Condition ANOVA was

used to test the hypothesis that compared to participants in the written education

condition, participants in the combined video and written education condition would

demonstrated a greater pre to post-intervention increase in objective knowledge of

language and terminology pertinent to working with TGNC older adults. There was a

non-significant main effect of time F(1, 97) = .01, p = .93, η^2_p = .00. The

Time*Condition results indicated that knowledge of TGNC-relevant terminology, from

pre-intervention to post-intervention, was not significantly affected by intervention

condition F(1, 97) = .06, p = .81, η^2_p = .001 (Table 12). Age was examined and included

as a covariate in this model. There was significant main effect of age F(1, 97) = 10.14, p

$< .05$, $\eta^2_p = .10$ with a demonstrated increase in knowledge of TGNC terminology. The

variable years at agency was examined as a covariate in this model but was not retained.

Hypothesis four was not supported.

Table 12

*Hypothesis 2A: Repeated Measures Analysis of Covariance of the Effects of Time and
Intervention Condition on Knowledge of TGNC Terminology, With Age as Covariate*

Variable	MS	$F(1, 97)$	p	η^2_p	Observed Power
Age	111.37	10.14	.00*	.10	.88
Time	.01	.01	.93	.00	.05
Intervention	1.98	.18	.67	.002	.07
Time*Condition	.08	.06	.81	.001	.06
Time*Age	1.17	.85	.36	.01	.15
Error	1.37				

*$p < .05$

Hypothesis 2b. A repeated measures two-group Time * Condition ANOVA was

used to test the hypothesis that compared to participants in the written education

condition, participants in the combined video and written education condition would

demonstrated a greater pre to post-intervention decrease in self-reported negative

attitudes towards TGNC individuals. There was a significant main effect of time $F(1, 98)$

$= 5.85$, $p < .05$, $\eta^2_p = .06$ such that participants in both groups reported a reduction in

anti-TGNC attitudes post-intervention. The Time*Condition results indicated that

decreases in negative attitudes were not significantly affected by intervention condition F

$(1, 98) = .59$, $p = .45$, $\eta^2_p = .01$ (Table 13). Age and years at agency were examined as

covariates in this model but not retained. Hypothesis five was not supported.

Table 13

Hypothesis 2B: Summary Table for Repeated Measures Analysis of Variance of the Effects of Time and Intervention Condition on Genderism and Transphobia

Variable	MS	$F(1, 98)$	p	η^2_p	Observed Power
Time	.62	5.85	.02*	.06	.67
Intervention	.37	.18	.67	.002	.07
Time*Condition	.06	.58	.45	.01	.12

*$p < .05$

Hypothesis 2c. A repeated measures two-group Time * Condition ANOVA was used to test the hypothesis that compared to participants in the written education condition, participants in the combined video and written education condition would demonstrated a greater pre to post-intervention increase in self-efficacy for interactions with TGNC older adults. There was a significant main effect of time F $(1, 98) = 36.10$, p $< .001$, $\eta^2_p = .27$, such that participants in both intervention groups reported an increase in self-efficacy for interactions with TGNC older adults post-intervention. The Time*Condition results of these analyses indicated that increases in self-efficacy were not significantly affected by intervention condition F $(1, 98) = 1.31$, p $= .26$, $\eta^2_p = .01$ (Table 14). Age and years at agency were examined as covariates in this model but were not retained. Hypothesis six was not supported.

Table 14

Hypothesis 2C: Summary Table for Repeated Measures Analysis of Variance of the Effects of Time and Intervention Condition on Self-Efficacy for Affirmative Interactions with TGNC Older Adults

Variable	MS	$F(1, 98)$	p	η^2_p	Observed Power
Time	2870.10	36.10	.00*	.27	1.00
Intervention	561.18	1.22	.27	.01	.19
Time*Condition	104.34	1.31	.26	.01	.21

*p < .001

Descriptive Outcomes

The Pearson product-moment correlations for the variables used in this study are presented in Table 15. As can be seen from this table, all variables were significantly correlated. Knowledge of TGNC Terminology was moderately positively correlated with Gender Role Beliefs Scale ($r = .44$), meaning those with higher levels of knowledge reported more feminist beliefs . Knowledge of TGNC Terminology also demonstrated a moderate negative correlation with the Attitudes Towards Lesbians and Gay Men-Short Form (ATLG-S; $r = -.29$) and a moderate negative correlation with Traditional Beliefs about Gender and Gender Identity Scale ($r = -.44$). Individuals reporting a lower level of knowledge of TGNC terminology reported more negative attitudes towards lesbians and gay men as well as more traditional beliefs about gender and gender identity. The TGNC Language Self-Efficacy Scale: Interactions demonstrated moderate negative correlations with the Genderism and Transphobia Scale-Revised (GTS-R; $r = -.34$) and the Traditional Beliefs about Gender and Gender Identity Scale ($r = -.43$). Individuals reporting a lower level of self-efficacy for affirmative interactions reported more anti-TGNC attitudes and more traditional beliefs about gender and gender identity. The Self-Efficacy: Interactions scale demonstrated a moderate positive correlation with the Gender Role Beliefs Scale ($r = .28$), indicating that individuals who reported greater self-efficacy also reported more feminist beliefs. The Self-Efficacy: Interactions scale demonstrated a small negative correlation with the ATLG-S ($r = -.20$), suggesting that individuals who reported lower self-efficacy tended to report more negative attitudes towards lesbians and gay men. The GTS-R demonstrated a large negative correlation with the Gender Beliefs Scale ($r = -.80$), which demonstrates that individuals who reported less anti-TGNC

attitudes tended to report greater feminist beliefs. However, the GTS-R demonstrated

large positive correlations with the ATLG-S (r = .82) and Traditional Beliefs about

Gender and Gender Identity Scale (r = .83). This demonstrates that individuals who

reported greater anti-TGNC attitudes also reported more negative attitudes towards

lesbians and gay men as well as more traditional beliefs about gender. The ATLG-S

demonstrated a large negative correlation with the Gender Role Beliefs Scale (r = -.69)

and a large positive correlation with the Traditional Beliefs about Gender and Gender

Identity Scale (r = .63). Individuals who reported more negative attitudes towards

lesbians and gay men demonstrated fewer feminist beliefs and more traditional beliefs

about gender and gender identity.

Table 15

Means, Standard Deviations, and Intercorrelations for Scores on Outcome and Secondary Measures

Measure	M	SD	1	2	3	4	5	6
1. Knowledge of TGNC Terminology	6.73	2.72	__					
2. TGNC Language Self-Efficacy Scale: Interactions	80.71	18.29	.38**	__				
3. Genderism and Transphobia Scale-Revised	2.09	1.08	-.45**	-.34**	__			
4. Gender Role Beliefs Scale	5.41	0.81	.44**	.28*	-.80**	__		
5. Attitudes Towards Lesbians and Gay Men Scale-Short Form	2.31	1.58	-.29**	-.20*	.82**	-.69**	__	
6. Traditional Beliefs about Gender and Gender Identity Scale	2.31	0.90	-.44**	-.43**	.83**	-.82**	.63**	__

Note. Correlations significant at p < .01**. Correlations significant at p < .05*.

Open-ended Outcomes

At the end of this study, participants were asked a series of optional open-ended questions: how many gay/lesbian/bisexual/queer individuals and transgender or gender nonconforming individuals the participant has contact with in professional and personal contexts; what concerns/worries/frightens the participant about interacting with TGNC older adults in a professional context; what does the participant believe would be most helpful should they desire to learn more about working with TGNC older adults; and how it felt to complete the training.

Questions one and two. Responses varied greatly among participants for these questions because the format allowed participants to write in their responses. The majority of participants (98.06%) responded to questions about how many TGNC individuals they interact with in personal and professional contexts. However, 50 (32.26%) participants reported they are not aware of interacting with any TGNC individuals in a personal context, while 56 (36.13%) participants noted they are not aware of interacting with any TGNC individuals in a professional context. Nearly all participants (99.35%) responded to the question about how many LGBQ individuals they have contact with in a personal context, and 98.71% of participants responded to the question about how many LGBQ individuals they have contact with in a professional context. Approximately 3 (1.94%)participants reported no contact with LGBQ individuals in a personal context while 11 (7.10%) participants reported not knowingly interacting with LGBQ individuals in a professional context.

Independent samples t-tests were used to examine the potential relationship between contact with TGNC individuals and the primary outcome measures. The

variables contact with TGNC individuals in professional and personal contexts were each recoded to reflect no contact or any contact. For the variable that assessed contact with TGNC individuals in a professional context, there was a significant difference, $t(150) = 2.59$, $p < .05$, in post-intervention anti-TGNC attitudes between those who endorsed contact, $M = 1.76$, $SD = .96$, and participants who reported no contact with TGNC individuals, $M = 2.20$, $SD = 1.14$. There was also a significant difference in post-intervention reports of self-efficacy for affirmative interactions with TGNC older adults, $t(150) = -2.25$, $p < .05$, for individuals who reported contact with TGNC individuals in professional context, $M = 90.63$, $SD = 13.80$, and those reported no contact, $M = 85.08$, $SD = 16.60$.

Individuals who reported contact with TGNC individuals in their personal lives, $M = 7.70$, $SD = 2.42$, demonstrated a significant difference in post-intervention knowledge of TGNC terminology $t(149) = -2.74$, $p < .05$ compared to individuals who reported no contact with TGNC individuals in their personal lives, $M = 6.55$, $SD = 2.52$. Additionally, participants who reported contact in their personal lives, $M = 1.68$, $SD = 0.94$, reported lower levels of post-intervention anti-TGNC prejudice, $t(149) = 4.13$, $p < .001$, compared to participants who reported no contact with TGNC individuals in their personal lives, $M = 2.38$, $SD = 1.11$. Participants who reported contact in their personal lives, $M = 91.69$, $SD = 12.97$, demonstrated greater post-intervention levels of self-efficacy for affirmative interactions $t(90.68) = -3.29$, $p < .05$ compared to participants who reported no contact with TGNC individuals in their personal lives, $M = 83.02$, $SD = 16.91$.

Question three. Participants noted a number of concerns and worries related to

interacting with TGNC older adults in their AAA. Many participants worried about

providing an inclusive environment for TGNC older adults, including being able to

connect these older adults with affirming and supportive services in their area. Many

expressed concern about a lack of resources or a lack of knowledge about potential

resources in their area. Others expressed concern about consistency of data entry within

their agency. Some participants articulated concern for these older adults both in the

larger context of elder care services and also in regards to how TGNC older adults may

be treated by cisgender older adults. Some participants expressed nervousness about

asking clients about gender identity and pronoun use. Several participants noted they fear

"saying the wrong thing" because TGNC older adults represent a worldview they do not

understand or morally oppose. Most participants (96.13%) responded to this question.

Question four. When asked what would be most helpful to the participants to

help them learn more about working with TGNC older adults many articulated a desire

for additional trainings, opportunities to engage in role plays, and trainings that involve

watching other professionals model interactions with TGNC older adults. Others

requested "tip sheets" or other methods to communicate to agencies how they might

create more inclusive environments for these older adults. Specifically, many wondered

about how to change paperwork and other documents to reflect fewer binary choices. One

person wondered how to handle a professional environment that often includes

discriminatory language while others expressed interested in how to interactively

affirmatively when their personal beliefs conflict with the TGNC older adult's identity.

The majority of participants (94.19%) responded to this question.

Question five. This question asked broadly how it felt to participate in this professional development training. Many expressed satisfaction or dissatisfaction with the training and information. Some participants noted the information presented led them to reflect on their own identities more closely. Other participants noted they felt uncomfortable, bored, confused, or disgusted while completing the study. Most participants (94.84%) responded to this question.

Question six. Participants were asked to using a sliding scale of 0-100 to rate their worries related to working with TGNC older adults and 99.35% of participants responded to this question (Table 16). Specifically, participants were asked how much they worry about: offending the older adult ($M = 52.47$, $SD = 34.69$); making the older adult uncomfortable ($M = 50.45$, $SD = 35.33$); using the wrong pronoun ($M = 45.19$, $SD = 32.88$); not being able to perceive someone's gender identity ($M = 39.10$, $SD = 33.51$); using the wrong name ($M = 30.37$, $SD = 32.98$); coping with their own discomfort when the terms transgender and gender nonconforming ($M = 10.91$, $SD = 21.88$); feeling uncomfortable ($M = 10.09$, $SD = 18.89$); working with an individual who does meet their idea of a "man" or "woman" ($M = 5.01$, $SD = 14.70$); feeling offended ($M = 4.40$, $SD = 13.80$); and feeling angry about working with the older adult, ($M = 2.19$, $SD = 6.00$).

Table 16

Participants' Worries Related to Working with TGNC Older Adults (*N* = 155)

Variable	*M*	*SD*
Offending the older adult	52.47	34.69
Making the older adult uncomfortable	50.45	35.33
Using the wrong pronoun	45.19	32.88
Not being able to perceive someone's gender identity	39.10	33.51
Using the wrong name	30.37	32.98
Coping with own discomfort when using the terms transgender and gender nonconforming	10.91	21.88
Feeling uncomfortable	10.09	18.89
Working an individual who does not meet own idea of a "man" or "woman"	5.01	14.70
Feeling offended	4.40	13.80
Feeling angry about working with the older adult	2.19	6.00

Question seven. Participants were asked to using a sliding scale of 0-100 to rate their experiences of relief, disgust, confusion, anger, and eagerness while completing the study, and 98.06% of participants responded to this question (Table 17). Specifically, participants were asked how much they felt: eager to learn more about how to best work with TGNC older adults (*M* = 72.62, *SD* = 33.56); relieved to have the information (*M* = 50.66, *SD* = 39.85); confused (*M* = 13.11, *SD* = 24.68); disgusted by the information (*M* = 3.46, *SD* = 13.14); and angry (*M* = 3.01, *SD* = 12.56).

Table 17

Participants' Responses to the Interventions (*N* = 155)

Variable	*M*	*SD*
Eager to learn more	72.62	33.56
Relieved to have the information	50.66	39.85
Confused	13.11	24.68
Disgusted by the information	3.46	13.14
Angry	3.01	12.56

Discussion

Summary of Results

This study assessed the efficacy of three online professional education interventions. All three conditions were designed to increase knowledge of TGNC-related terminology, decrease self-reported negative attitudes towards TGNC individuals, and increase self-efficacy for aging-focused professionals using affirmative language in interactions with TGNC older adults. The written educational component was provided in the written education condition and the combined video/written education condition. In both conditions, the written information appeared automatically and included relevant terminology (e.g., gender identity) and definitions as well as well a brief explanation regarding the importance of accurate name and pronoun usage with clients. Information on how to move through a conversation when an error is made (e.g., incorrect pronoun is used) was also provided. The video only condition provided comparable information in the form of a role-played interaction between a provider and TGNC older adult.

Primary analyses revealed there were no significant differences between intervention conditions on their reported levels of knowledge of TGNC-related terminology, anti-TGNC attitudes, and self-efficacy for affirmative interactions. When

comparing the written educational group and video group, analyses revealed a significant

main effect of time on anti-TGNC attitudes and self-efficacy. Also, when comparing the

written educational group and combined group, analyses revealed a similar main effect of

time on anti-TGNC attitudes and self-efficacy.

Discussion of hypothesis 1a. Hypothesis 1a proposed that participants assigned

to the video only condition would demonstrate a greater increase in knowledge of TGNC

terminology post-intervention compared to those in the written education group. No

significant differences were found between intervention levels. However, age was

included as a covariate in this model, and a significant age*time interaction was found.

Specifically, older participants (46 years of age and older) gained more knowledge of

TGNC terminology from pre to post-intervention than those 45 years of age and younger.

This is worth consideration particularly in light of the finding that older participant, in

general, were less likely to complete the post-intervention measures prior to dropping out.

It may be that the terminology was unfamiliar to these participants, and yet, if they

completed the study they potentially benefitted from exposure to the terminology more

than younger participants. Perhaps the measure of knowledge of TGNC terminology

adapted and used for this study (Israel et al., 2014) was appropriate for a particular subset

of participants with pre-existing familiarity with TGNC-related terminology. Individuals

with less knowledge of these terms may have found the other measures more

cumbersome and difficult to complete. Future studies and educational interventions

should consider the impact of varying levels of familiarity and comfort with language as

potential barrier to participation, particularly for older individuals seeking such

interventions. One method to overcome this barrier may be the use of a screening tool to

measure existing levels of knowledge among participants. Additionally, recruitment strategies may include directly advertising the study as way for individuals unfamiliar with the terminology (e.g., transgender) to increase familiarity and knowledge.

Discussion of hypothesis 1b. Hypothesis 1b postulated that participants assigned to the video only condition would demonstrate a greater decrease in self-reported negative attitudes towards TGNC individuals compared to those in the written education group. No significant differences were found between intervention levels. However, both the written education group and video group self-reported a decrease in anti-TGNC prejudice. This may suggest that attitudes can change over time with exposure to TGNC terminology and affirmative styles of interacting regardless of format. The potential flexibility in formatting may be important information for educational interventions in the future, as employers may prefer shorter, more cost-effective professional development opportunities for employees.

For aging-focused providers working with older lesbians and gay men, attitudes may predict intentions to provide affirmative care (Warren et al., 2015). Although the current study aims to not confound sexual orientation and gender identity, the correlations in attitudes towards sexual minorities and TGNC individuals might suggest a similar possibility for providers who work with older TGNC adults. Future studies may want to further consider how anti-TGNC attitudes and self-efficacy for affirmative interactions interact over time, particularly for individuals who receive training in affirmative interaction styles.

Discussion of Hypothesis 1c. Hypothesis 1c posited that participants assigned to the video only condition would show greater increase in self-efficacy for interactions

with TGNC older adults compared to those in the written education condition. No

significant differences were found between intervention levels. However, similarly to

hypothesis 1b, self-efficacy for affirmative interactions with TGNC older adults

improved for participants in both conditions. Based on proposed sample size for adequate

power (Cohen, 1992), it is unlikely this conclusion is based on Type II error. It is possible

that in this context intervention modality has little impact on improvements in self-

efficacy.

Although participants assigned to both conditions reported an increase in self-

efficacy for affirmative interactions, this impact of this change on actual behavior

remains unknown. Additionally, because pre and post-intervention measures of self-

efficacy were separated by short periods of time, it is not clear how long participants

experienced this reported change following the intervention. Measuring behavior change

among professionals in area agencies on aging would be extremely onerous task for

researchers and agencies. However, future studies may want to consider the possibility of

not only measuring self-efficacy for affirmative interactions over time but also

implementing quality assurance programs within agencies. For example, agency

employees and volunteers may gather data on preferred names and pronouns of all

service recipients in order to demonstrated a concerted effort to include these questions in

conversations with all older adults.

Discussion of Hypothesis 2a. Hypothesis 2a postulated that participants in the

combined written education and video group would show a greater increase in knowledge

of TGNC terminology post-intervention than participants in the written education group.

No significant differences were found between intervention levels. However, there was a

main effect of age such that there was a demonstrated improvement in knowledge of

TGNC terminology. The participants in the combined group were exposed to overlapping

content in the video and written components of the intervention. These results suggest

that exposure to the same material (i.e., TGNC-related terminology) did not necessarily

contribute to increases in knowledge of that terminology over simply reading the

information. Also, as outlined in discussion of hypothesis 1a, the knowledge measure

used in this study may not have been appropriate for many participants in this sample.

Notably, the measure required participants to match terms with definitions, which may

have been especially difficult for those new to the terminology. Some participants

commented on the challenge of this component in the open-ended feedback section of

this study.

       Discussion of Hypothesis 2b. Hypothesis 2b proposed that participants in

combined written education and video group would show a greater decrease in self-

reported negative attitudes towards TGNC individuals post-intervention compared to

those in the written education group. There was no significant Time * Condition effect on

genderism and transphobia; however, there was a main effect of time on this variable.

Participants in both groups self-reported a decrease in anti-TGNC attitudes post-

intervention. It is worth noting, however, that neither intervention endorsed high levels of

anti-TGNC prejudice pre-intervention. Nonetheless, exposure to the affirmative

information presented in the interventions may have had some impact on attitudes.

Notably, the groups compared in this analysis were not equal (written = 68 and combined

= 32). Box's M was determined to be significant ($p < .001$), and this combined with

unequal sample sizes, suggests the test is not robust. However, because the intervention

group with the larger sample size demonstrated greater variance, this may be a conservative estimation of group differences.

Nevertheless, participants in these two comparison groups did not report high levels of anti-TGNC prejudice prior to exposure to either intervention. This study did not include a measure of social desirability, which may be a potential limitation, especially considering the professional sample. Although individuals were not asked to identify their agency more specifically than by state, it is possible that participants who learned of this study at work may have felt more pressure to respond in socially desirable ways to these particular items. This study sample also reflects a self-selected group of individuals who may have been more willing to participate in the study due to lower pre-existing levels of prejudice. Without mandatory professional development trainings on these topics, it may be difficult to attract a large number of individuals less receptive to this information and with greater degrees of anti-TGNC prejudice.

Discussion of Hypothesis 2c. Hypothesis 2c posited that participants in the combined written education and video group would show a greater increase in self-efficacy for interactions with TGNC older adults compared to those in the written education group. There was no significant Time * Condition effect on this variable; however, there was a main effect of time. Participants in both conditions reported increases in self-efficacy for affirmative interactions with TGNC older adults. Although this hypothesis was not supported, exposure to both written information and the combined written/video condition contributed to significant changes in self-efficacy for participants. However, as in hypothesis 2b, Box's M was significant (p < .001), and this combined with unequal sample sizes, suggests the test is not robust. Although Box's M is

highly sensitive, the p-value in combination with the unequal sample sizes suggests the

significance of this test and associated violation of assumption of homogeneity of

variance should be considered. Because the intervention group with the smaller sample

size (combined group) has greater variance, the likelihood for Type I error is significantly

increased. Unfortunately, study participants were not randomly assigned equally to the

three intervention groups, which impacted the interpretation these analyses. The self-

efficacy measures designed for and used in the current study, however, demonstrated

excellent internal consistency within this study. Future studies could continue to explore

the psychometrics of this measure both within area agencies on aging and other social

service networks that serve older adults.

Discussion of open-ended responses. This study demonstrated strength in

gathering responses to the open-ended questions at the end of the post-intervention

measures. The majority of participants responded to these questions, which included an

assessment of how many TGNC and LGBQ individuals who participants knowingly have

contact with in their professional and personal lives. Additional questions included

concerns about working with TGNC older adults, what would be helpful in the future for

participants to feel prepared to offer affirmative services, and responses to the

intervention. Participants also ranked potential worries they may have when working with

TGNC older adults (e.g., offending older adult, feeling uncomfortable) and potential

feelings about the study (e.g., confused, angry).

Interestingly, individuals who endorsed contact with TGNC individuals in their

professional lives demonstrated differences on primary outcome measures as compared to

those who reported no contact with TGNC individuals. Specifically, individuals with

professional contact with TGNC individuals reported more positive attitudes towards

TGNC individuals and greater self-efficacy for affirmative interactions. Participants who

reported known contact with TGNC individuals in their personal lives demonstrated not

only more positive attitudes and greater self-efficacy for interactions but also more

knowledge of terminology. Because the majority of the participants in this study did not

self-identify as transgender, it is possible to assume that most participants were cisgender.

This results are consistent with what might be expected given that more positive attitudes

towards TGNC individuals has been demonstrated by individuals with more personal

contact with individuals from this heterogenous group (Case & Stewart, 2013).

These results might also be considered in light of Allport's (1954, 1979) contact

hypothesis, later extended by Pettigrew (1998), which posits that changes in attitudes and

beliefs about those in the outgroup occur through learning about the outgroup and

creating new relationships through intergroup contact. Among college students, those

with at least one trans*-identified friend reported fewer negative attitudes and more

positive views than those with no trans*-identified friends (Barbir, Vandevender, &

Cohn, 2016). Possibly, this same contact hypothesis contributed to differences among

participants with and without TGNC-identified friends and acquaintances.

Sample Description

This sample comprised employees from AAAs fro 32 states who were

predominantly heterosexual, White/Caucasian, women, most of whom identified as

Christian. The study sample was highly educated, and the most common disciplinary

background was in social work. Most participants reported working full-time in an area

agency on aging for an average of approximately 7 years. Study participants described a

range of professional responsibilities within their AAAs. Individuals reported spending the most time engaged in administrative activities and direct service.

The current study sample exhibits a number of strengths and areas for growth. Although the sample includes employees and volunteers from 32 states, it is likely that agencies and employees who self-selected into the study already demonstrated and endorsed less anti-TGNC attitudes and behaviors than agencies and employees who did not participate. However, based on the open-ended data, some participants described moral or religious systems that prohibited them from agreeing with or validating the experiences of TGNC adults. Nevertheless, these participants completed the study and some expressed a desire to interact affirmatively with these adults and not allow their moral or religious belief systems to compromise the care they provide.

Pre-intervention group equivalence. Demographic variables among participants in the written education group and video only group were approximately equivalent. Additionally, no significant differences emerged between these two groups on the primary outcome variables. Participants in the written education group and combined written/video group were compared on demographic variables, and one significant difference emerged. Individuals in the written/video combined group reported working at their current agency significantly longer than those in the written education group. Additionally, a non-significant trend emerged demonstrating individuals in the written/video combined group were older than individuals in the written education group. No significant differences emerged between these groups on the primary outcome variables.

Analysis of dropout. Participant dropout in the current study was approximately 37%. Of the 160 individuals randomized to an intervention group, 97.5% completed the post-intervention measures. The four individuals randomized to an intervention group who did not complete the post-intervention measures were all assigned to the written education group. The intervention demonstrated a potential strength in this domain; individuals randomized and exposed to the interventions typically completed the study. No significant differences in years at current agency appeared between those who completed the post-intervention measures and those who did not. No differences emerged between these two groups on self-efficacy for affirmative interactions or genderism and transphobia.

However, two notable differences emerged between completers and non-completers. Participants who dropped out prior to completing the post-intervention measures tended to be older than those who completed the study. Additionally, those who dropped out also demonstrated a lower pre-intervention level of knowledge of TGNC terminology. This is a particularly interesting combination of differences between completers and non-completers. One hypothesis might be that older potential participants with less knowledge of TGNC terminology found the pre-test measures inaccessible and lost interest in the information. Unfortunately, one possibility is that terminology in the measures or even the nature of the intervention was not tolerated well by older participants.

Evaluation of Research Methodology

Strengths. The study included a novel approach to professional education for AAA employees and volunteers. These educational interventions are currently the only

such interventions for AAAs that have been empirically studied. The study boasts

random assignment to intervention conditions that potentially limited threats to internal

validity and group differences. Moreover, the study included a strong theoretical

foundation in Bandura's (2001) Social Cognitive Theory. Relatedly, the video condition

was produced and developed with the intent of providing agency employees and

volunteers a vicarious learning experience consistent with the potential origins of self-

efficacy (Bandura, 1977; Bandura, 1982; Bandura, 1997). The role of the agency

employee was intentionally portrayed by a women based on a previous sample of aging-

focused employees who identified primarily as social workers (Warren et al., 2015).

This study aimed to provide professional development opportunities for

individuals both with and without exposure to TGNC individuals and issues. An older

TGNC-identified woman from the St. Louis area was consulted during the development

phase of this project. Additionally, she participated in the video component of the

intervention and provided guidance and feedback on the role-play. Although not viewed

as representative of the heterogeneous TGNC population, her participation was critical

and informative for the development of a sensitive and truthful intervention.

Limitations & Future Directions. The present study had several limitations. One

of the primary limitations was the lack of a control group. The decision to include three

intervention groups without a control group was made in order to maximize the number

of participants exposed to information about TGNC older adults within the time frame

allotted for this study. However, there is no way to discern if within group changes would

have occurred without any form of intervention. In addition, based on the brief period of

time between pre- and post-intervention measures, it is unclear if the changes noted in

this study would be maintained at later follow-up times. Future studies may aim to

replicate and explore change in professionals through longitudinal measurement may

utilize a waitlist control group, which would allow for comparisons and the provision of

content to all professionals.

    Recruitment is an additional area for growth and consideration. Participants were

recruited directly through leaders in area agencies on aging. Administrators and others

individuals in leadership positions chose whether or not to inform employees and

volunteers about the opportunity to participate in this study. This may have limited the

sample in myriad ways. For example, agencies may have chosen not to participate

because of the potential biases of those in leadership positions; however, that decision

does not necessarily reflect the views of other employees and volunteers within the

agency. Individuals contacted directly about the study served as gatekeepers for the entire

agency. Future studies in this area may want to consider an array of recruitment

techniques, including recruiting through professional organizations or other contexts

outside of the employee's agency.

    The strong correlation between attitudes towards sexual minorities and attitudes

towards TGNC individuals (Costa & Davis, 2012; Norton & Herek, 2013) may lend itself

to an additional area of growth. For example, the explicit use of affirmative materials and

employee nondiscrimination policies communicate an openness and willingness to serve

to older sexual minorities (Croghan, Moone, & Olson, 2015; Jihanian, 2013). Perhaps

future studies might consider the use of gender affirming materials for TGNC older

adults as well as the impact of TGNC-affirming workplaces on not only the employees

but also the clients being served in that context.

The results of this study cannot conclude one intervention modality is more effective than another at increasing knowledge of TGNC terminology, decreasing anti-TGNC attitudes, and increasing self-efficacy for affirmative interactions. However, attitudes and self-efficacy for interactions were shown to improve across intervention groups. This is similar to a previously discussed study that utilized video clips to improve attitudes and beliefs about TGNC individuals (Case & Stewart, 2013) during which exposure to any intervention group improved attitudes. In the current study, the examination of open-ended data suggests intergroup contact, including friendships and professional relationships, may be important in the formation of more positive attitudes and behavioral intentions towards transgender and gender nonconforming individuals (Barbir et al., 2016; Case & Stewart, 2013). The contact hypothesis (Allport, 1954, 1979) and the potential power of vicarious-contact interventions (Tompkins et al., 2015) that utilize media and perspective taking to reduce stigma and anti-trans* attitudes suggest an array of potentially impactful interventions.

Practice Implications. The age difference between those who completed the study and non-completers suggests continuing education and other professional education interventions should potentially target various age groups of providers. Beyond age, this difference may reflect differences in how long participants had been practicing in their disciplinary field; however, this study did not assess this information. Non-completers also demonstrated a lower level of pre-intervention knowledge of TGNC-related terminology. This may be indicative of the need to have more targeted educational programming for individuals with less familiarity with TGNC terminology and language. Perhaps continuing education programs in this growing area could have a more

developmental approach and become increasingly complex based on the knowledge base of the participants.

For TGNC employees, nondiscrimination policies and supportive coworkers are related to lower levels of perceived discrimination in the workplace (Ruggs, Martinez, Hebl, & Law, 2015). Because external factors (e.g., agency environment) may contribute to learning a new behavior (Bandura, 2001), the agency environment seems especially salient. For AAAs and other aging-focused contexts that seek to provide affirmative care to TGNC older adults, it may be important to consider the experiences of employees within the agency's culture. A firm commitment to culturally competent care may include a commitment to an open and affirming work environment.

Conclusion

This study investigated the effectiveness of an online intervention for AAA employees and volunteers with the goal of increasing self-efficacy for affirmative interactions with TGNC older adults. Participants were recruited from AAAs across the United States and randomly assigned to one of three intervention groups: written education, video intervention, or the combined written education and video intervention group. Prior to random assignment, participants completed pre-intervention measures assessing knowledge of TGNC terminology, anti-TGNC prejudice, and self-efficacy for affirmative interactions with TGNC older adults. After participating in the assigned intervention, participants completed post-intervention measures, which included a open-ended assessment of contact with TGNC individuals and responses to the intervention.

The findings of this study are mixed and replication studies would be helpful in the design and implementation of continuing education programs for aging-focused

professions. Although the video group and written education group did not differ from each other in the three domains described, there was a main effect of time on anti-TGNC attitudes and self-efficacy for affirmative interactions. The written education group and combined group also did not differ on the three domains; however, there was a main effect of time for attitudes and self-efficacy for interactions.

Overall, this study provides a first step in the development of an evidence-based intervention for area agencies on aging that aim to acquire greater competency in working with TGNC older adults. Future studies should seek to replicate these findings while including a waitlist control group for comparison to the intervention conditions developed for the current study. Future areas of growth may also include diversifying recruitment strategies, the consideration of agency-level factors (e.g., nondiscrimination policies), and a developmental approach to professional education.

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Appendix A

The TGNC Language Self-Efficacy Scale
Responses will be on a scale 0-100

I am confident I can…

1. Explain the difference between biological sex and gender.
2. Explain the difference between sexual orientation and gender identity.
3. Explain the difference between cisgender and transgender.
4. Explain the meanings transgender and gender nonconforming
5. Ask an older adult their preferred name
6. Ask an older adult their preferred pronouns
7. Identify when I misuse pronouns with a TGNC older adult
8. Apologize for misusing pronouns when working with a TGNC older adult and subsequently continue the conversation
9. Recognize when I need professional development training to positively interact with older TGNC adult client
10. Actively seek out a professional consultation when needed

Open-ended Assessment:

Section A (open-ended):

1. Approximately how many gay/lesbian/bisexual/queer persons have you had contact with in:
    a. A personal context?
    b. A professional context?
2. Approximately how many transgender or gender nonconforming persons have you had contact with in:
    a. A personal context?
    b. A professional context?
3. What concerns/worries/frightens you about interacting with TGNC older adults in a professional context?
4. What do you believe would be most helpful to you in your professional context should you need to learn more about working with TGNC older adults?
5. How did it feel to have this training?

Section B (sliding scale for each item: 0-100):

1. When working with TGNC older adults, I worry about:

Feeling offended
Offending the older adult
Using the wrong pronoun
Using the wrong name

Feeling uncomfortable
Making the older adult uncomfortable
Not being able to automatically perceive someone's gender identity
Feeling angry that I have to work with this older adult
Coping with my discomfort using the terms transgender and gender nonconforming
Working with an individual who does meet my idea of what a "man" or "woman" should
be

2. While completing this professional development training, I felt:

Relieved to have the information
Disgusted by the information
Confused
Angry
Eager to learn more about how to best work with TGNC older adults

Appendix B

What Does Gender Mean?

A person's gender identity is how they think of their own gender. This may mean how people think of themselves as men, women, something in between, a combination of genders, another gender, or no gender. For example, a person may think of herself as a woman while presenting to others in a way that others think is more masculine.

Gender expression is how a person shows their gender to others. This may be through clothing and hairstyles. It may also be through ways of talking, body language, ways of being with others, and other behaviors. For example, having short hair, wearing pants, a tie, and a jacket may communicate information about a person's gender.

What About Sex?

Biological sex is a complicated relationship that includes different physical and chemical parts. This does not just mean whether or not a person has certain genitalia. However, when people are born, a doctor or nurse typically gives them a sex (most often, boy or girl) based on the child's genitalia.

Sexual orientation is a mix of whom a person finds attractive and about whom they have sexual thoughts. It also includes how a person thinks of themselves and their behaviors. For example, a person may think men and women are attractive and may have sexual thoughts about men and women. That same person may think of themselves as lesbian and only date and have sex with women.

It's important to know that gender identity and biological sex are both labels we give others. These are things we think or assume about others based on how we see them. This means that we make up ideas about other people based on how they show their gender to the world.

It's important to know that the ideas we make up about other people's genders may not be the same as how they think about their own gender. It may also not be the same as how they wish to show their gender to the world. As talked about in the gender identity example, a person who thinks of herself as a woman may dress in a way that leads others to feel confused about her gender identity or think that she is a man.

Which terms do I need to know?

Although some people feel more comfortable when they have a list of words and the meanings of those words, this information by itself will not really allow you to work easily with transgender and gender nonconforming (TGNC) older adults. One reason having a list of words and definitions is not enough is because not everyone agrees on what these words and definitions mean. This might lead to situations in which a provider's definition is different from the older adult's definition. This might then lead to

older adults being told they are not really what they say they are. It is more helpful to have a list of more general definitions that might give you an idea of how to talk to clients.

Transgender is often used as a general term. It includes a lot of people whose gender identity or expression may not be the same as the biological sex they were given at birth. For example, a person who was given a female sex at birth might think of herself as a man or a person without a gender.

Gender nonconforming is a term that might include anyone who does not fit traditional ideas about how men and women should dress or act. Some people who see themselves as gender nonconforming may also feel okay using the word transgender to talk about themselves. Other people may not feel as okay with this word and may not use it to talk about themselves.

The word "questioning" can mean how a person sees themselves. It can also mean the process a person goes through to find out about their gender identity. People can try to find out about their gender identity at any age. Some people might even do this many times during their lifetimes. This means that some people may question or explore their gender identity in childhood while others explore it when they are middle aged or an older adult.

The word "cisgender" means people whose way of thinking about themselves (gender identity) or way of showing their gender (gender expression) is the same as the biological sex they were given at birth.

Transgender and gender nonconforming individuals are in all communities and come from all income levels. They are in all races, ethnicities, educational backgrounds, ability levels, ages, political groups, religions, and family structures.

Names and Pronouns

The words we use are really important when trying to show respect for clients and work well with them. Providers must find out what words a person uses and use those words when talking and working with the client. For example, if a client you thought was a man told you they wanted people to use she/her/hers when talking to or about them, you would want to use those pronouns to show respect for the client. Also, use the name a client gives you. This is true even if you think it doesn't seem to match their appearance or is not their legal name.

If you're unsure what name or pronouns (like she or he) to use, ask what name and pronouns the client wants you to use. Pronouns are really important, so if you are not sure what pronoun is best to use, ask, "What pronoun would you prefer I use for you?"

These kinds of questions tell the client that you know transgender and gender nonconforming people exist and that you want to work with them in a respectful way.

What if I make a mistake?

Of course, we all make mistakes, like using the wrong pronoun or calling a client by the wrong name. What should you do when you make a mistake? Apologize as soon as you know you've made a mistake. Then tell the client you will try not to repeat it and move on.

Apologizing over and over and for a long time makes everyone uncomfortable. You're better off giving your attention to providing the needed services. However, if the client needs to talk more about your mistake, it is best to agree to that discussion and listen carefully to their concerns and comments.