Development and initial validation of the sources of self-efficacy information scales for working with lesbian, gay, and bisexual clients

Snehal Moroth Kumar

University at Albany, State University of New York, skumar@albany.edu

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DEVELOPMENT AND INITIAL VALIDATION OF THE SOURCES OF SELF-EFFICACY INFORMATION SCALES FOR WORKING WITH LESBIAN, GAY, AND BISEXUAL CLIENTS

By

Snehal Moroth Kumar

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School of Education
Department of Educational & Counseling Psychology

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Development and Initial Validation of
the Sources of Self-Efficacy Information Scales for Working with
Lesbian, Gay, and Bisexual Clients

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Acknowledgments

This dissertation represents an attempt to operationalize a long-held desire to understand how counseling psychologists and other mental health professionals can best be trained to do the crucial and humbling work we do, particularly when we work with clients whose experiences are often marginalized within society and within our training.

I have had the pleasure of learning more about becoming a psychologist through supervisors, professors, and my clients – all of whom helped me realize that book knowledge is only part of the equation. The professors and peers with whom I have had the opportunity to do research have also indulged me in this journey by modeling how research can be used to understand, re-assess, and facilitate change.

With regards to my dissertation, I would not have been able to even consider this beast of a project without the encouragement from Dr. Myrna Friedlander, my chair, whose support has been unwavering and filled with enthusiasm. Thank you to Dr. Alex Pieterse for truly allowing this project to be mine, while also providing me with much needed support and anxiety management. To Dr. Frank Dillon, I have learned a lot from your grounded approach to research and feel grateful that I got the chance to work with you. I could not have asked for a better committee - your responsiveness, investment, and commitment helped me maintain my focus and I was incredibly lucky to have the three of you in my corner.

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I’d like to dedicate this dissertation to my grandmother Meera Aroor, a woman whose lived experience and love for history first gave me a glimpse into the complexities within people and the systems in which we are raised.
Abstract

A new self-report measure, the Sources of Self-Efficacy Information Scales for Working with Lesbian, Gay, and Bisexual Clients (SSEI-LGB) was developed to identify specific graduate training experiences that contribute to mental health trainees’ confidence in working affirmatively with LGB clients. The instrument is based on Bandura’s (1986) social cognitive theory and literature on counselor self-efficacy (CSE) and LGB-affirmative CSE.

Study 1 assessed the content and face validity of 53 items that were written to reflect Bandura’s (1986) four sources of self-efficacy information (past performance, vicarious experience, social persuasion, and emotional arousal). Based on feedback from 7 experts in LGB-affirmative training and research and 6 graduate trainees, 31 items were retained, 12 were revised, 10 were deleted, and 5 new items were created.

In Study 2, the factor structure of the SSEI-LGB was assessed using a sample of 483 trainees in counseling-related programs. Exploratory factor analyses were run with a randomly selected half of the sample, and confirmatory factor analyses with the other half of the sample. The best fit of the data was a 4-factor solution with 27 items: Clinical Success (having had successful clinical and supervisory experiences directly related to work with LGB clients), Clinical Discussions (having past experience discussing LGB-related concerns with these clients), Vicarious Experiences (having observed, roleplayed, or read about LGB-affirmative practice), and LGB-Affirmative Issues (having relevant, non-clinical experiences, such as attending workshops and writing papers related to LGB practice).

In Study 3, the reliability and construct validity of the SSEI-LGB was assessed using a new sample of 259 graduate mental health trainees. Analyses supported the measure’s known-groups, convergent, discriminant and incremental validity. In the latter analysis, SSEI-LGB
scores contributed significantly to self-reported LGB-affirmative CSE, over and above the contribution of general CSE. Reliabilities ranged from $\alpha = .73$ to .96, and a new confirmatory factor analysis supported the 4-factor model.

Discussion focuses on the usefulness of the SSEI-LGB for trainees as well as academic training programs. Moreover, the measure is a template for creating new scales to assess specific training experiences to enhance novice counselors’ self-efficacy for working effectively with other diverse client populations.
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INTRODUCTION

There has been a slow but systemic shift in the U. S. towards tolerance and acceptance of lesbian, gay, or bisexual (LGB) individuals (Kort, 2008; Shelton & Delgado-Romero, 2011). This shift is evident in recent changes in the legal rights of LGB individuals, such as an increased number of states protecting against sexual orientation discrimination in the workplace and the federal legalization of same-sex marriage. This shift is also reflected in broader changes in the mental health profession; for example, the American Psychological Association (APA, 2012) published specific guidelines to facilitate appropriate professional practice with LGB clients. In these guidelines, the APA (2012) recommended that psychology graduate students receive specific training for working with LGB clients.

The need for this specific training is evident because people who identify as LGB tend to experience a number of social stressors that make their lives uniquely different from those of their heterosexual counterparts. Due to the prevalence of heterosexism, many LGB individuals experience discrimination, stereotyping, violence, and a diminished sense of physical and emotional safety (Sue & Sue, 2013). Constant exposure to heterosexism, prejudice, and discrimination may be internalized and experienced as mental health issues, including anxiety, depression, low self-esteem, substance use, and suicide (Cochran, Sullivan, & Mays, 2003; Herek, Gillis, & Cogan, 1999).

Moreover, many LGB individuals are unable to rely on traditional support systems if their friends, family members, and/or religious institutions are hostile toward them or generally ignorant about sexual orientation (Kort, 2008). For this reason, many LGB individuals seek support through mental health services. Thus, it is imperative for the mental health profession to meet the needs of this marginalized population.
In addition to the APA (2012) guidelines, a number of articles and books (e.g., Kort, 2008; Wilton, 2010) identify ways to implement what is called *affirmative counseling* to meet the specific needs of LGB clients. Nevertheless, research suggests that many counselor trainees have little confidence in working with LGB clients (Burkard, Knox, Hess, & Schultz, 2009; Grove, 2009). Because this population tends to experience discrimination and marginalization on multiple levels, counselors need to be equipped to work affirmatively and confidently with LGB clients.

Although three self-report instruments (Burkard, Pruitt, Medler, & Stark-Booth, 2009; Dillon, Alessi, Craig, Ebersole, Kumar, & Spadola, 2015; Dillon & Worthington, 2003) assess counselors’ self-efficacy or confidence in working affirmatively with LGB clients, little is known about how mental health trainees prepare to work with this specific client population. That is, the training experiences that affect trainees’ confidence to deliver LGB-affirmative counseling are largely unknown.

The present studies report on the development and initial validation of a new self-report instrument, the *Sources of Self-Efficacy Information Scales for Working with LGB Clients* (SSEI-LGB), which was developed based on the literature on LGB-affirmative counseling and Bandura’s (1986) social cognitive theory as applied to counselor self-efficacy (CSE) in general and LGB-affirmative CSE in particular. The SSEI-LGB measure was created to assess the specific kinds of training experiences that contribute to counselor trainees’ confidence in working with LGB clients.

The need for this measure was suggested by research indicating that counselor trainees tend to be inadequately prepared to work with LGB clients (Burkard, Knox, et al., 2009; Grove, 2009; Sherry, Whilde, & Patton, 2005). These research findings are particularly concerning due
to the ample documentation of LGB clients’ experience of homophobia, heterosexism, and
unintentional microaggressions from mental health professionals (e.g., Bartlej, King, & Phillips,
2001; Bieschke, McClanahan, Tozer, Grzegorek, & Park, 2000; Bowers, Plummer, &
Minichiello, 2005; Hayes & Gelso, 1993). One study (Sherry et al., 2005), for example, reported
that among 204 counseling and clinical psychology programs surveyed, fewer than half (47%)
provided students with material related to LGB concerns in their multicultural courses, and only
17.1% of programs incorporated specific LGB competencies into their evaluation of trainees. A
subsequent survey reported that fewer than 40% of students in couple and family therapy
programs received training on LGB affirmative practice (Rock, Carlson, & McGeorge, 2010).
Yet another study found that when LGB-related issues were integrated into graduate coursework,
these topics tended to be a minor focus and secondary to learning about other multicultural
issues, such as racial or ethnic identity (Burkard, Knox et al., 2009). In general, the relevant
literature suggests a deficiency in professional training related to developing counselor trainees’
confidence to work affirmatively with LGB clients.

The new measure, Sources of Self-Efficacy Information Scales for Working with LGB
Clients, is based on social cognitive theory (Bandura, 1986) as applied to counselor
development. In this theory, an individual’s self-efficacy, or confidence, in the ability to carry
out a specific behavior or task is said to influence his or her actual performance of that behavior
or task. Counselor self-efficacy (CSE) is defined as “beliefs or judgments about her or his
capabilities to effectively counsel a client in the near future” (Larson & Daniels, 1998, p. 180).

Specifically, CSE is said to influence a counselor’s affective, behavioral, and cognitive
responses to clients, including their level of anxiety, intentions, expected outcomes, and overall
performance (Larson & Daniels, 1998). A substantial body of research indicates that higher CSE
is associated with relatively more clinical experience (Lent, Hill, & Hoffman, 2003), better performance evaluation (Johnson, Baker, Kopala, Kiselica, & Thompson, 1989; Larson et al., 1992), and less in-session anxiety (Daniels, 1997; Friedlander, Keller, Peca-Baker, & Olk, 1986).

More than 10 measures of CSE have been developed in the past 40 years (e.g., Friedlander & Snyder, 1983; Johnson et al., 1989; 1992; Melchert, Hays, Wiljanen, & Kolocek, 1996), of which the two most frequently used are the Counseling Self-Estimate Inventory (COSE; Larson et al., 1992) and the Counselor Activity Self-Efficacy Scales (CASES; Lent, Hill, & Hoffman, 2003). The number of CSE measures in the published literature highlights the importance of this construct in the counselor training literature.

Although CSE is an important predictor of counselor behavior, as a construct CSE is a general one that does not capture a trainee’s self-efficacy for working therapeutically with a specific client population, such as LGB clients (Burkard, Pruitt, et al. 2009; Dillon & Worthington, 2003; Sheu & Lent, 2007). In previous studies, the association between general CSE and LGB-affirmative CSE ranged from \( r = .34 \) (Burkard, Pruitt, et al., 2009) to \( r = .50 \) (Dillon & Worthington, 2003), which suggests some similarity yet potentially important differences in the operationalization of the general and specific CSE constructs.

Three measures were created specifically to assess counselor self-efficacy for working with LGB clients. First, the Lesbian, Gay, and Bisexual Affirmative Counseling Self-Efficacy Inventory (LGB-CSI; Dillon & Worthington, 2003), which is based on LGB affirmative counseling and Bandura’s (1986) social cognitive theory, consists of 32 items in 5 subscales: Knowledge, Advocacy Skills, Awareness, Assessment, and Relationship. Recently, a 15-item version of the measure, the Lesbian, Gay, and Bisexual Affirmative Counseling Self-Efficacy Inventory – Short Form (LGB-CSI-SF; Dillon et al., 2015) was created that retained the same 5
subscales, each with 3 items. Third, the Lesbian, Gay, and Bisexual Working Alliance Self-Efficacy Scales (LGB-WASES; Burkard, Pruitt, et al. 2009) is based on Bandura’s (1986) social cognitive theory and Bordin’s (1979) conceptualization of the working alliance. The 32-item LGB-WASES total score measures counselor self-efficacy for attending to the working alliance with LGB clients.

Research on this topic indicates important relations between LGB-affirmative CSE and constructs relevant to LGB affirmative counseling and training, where more experience as a counselor (Dillon, Worthington, Soth-McNett, & Schwartz, 2008; O’Shaughnessy & Spokane, 2013), more consideration of and commitment to one’s own sexual identity (Dillon et al., 2008), greater openness to experience (O’Shaughnessy & Spokane, 2013), and one’s personal sexual orientation as lesbian, gay or bisexual (Dillon & Worthington, 2003) were associated with higher self-reported LGB-affirmative CSE. LGB-affirmative CSE was also found to mediate the relation between heterosexual psychologists’ experience, defined as number of training hours on LGB issues, and their engagement in affirmative practice (Alessi, Dillon, & Kim, 2015). Thus, it seems critically important to gain a better understanding of LGB-affirmative CSE, including the specific sources of self-efficacy in graduate training experiences that most facilitate its development.

The SSEI-LGB was developed to assess the impact of training experiences related to four specific sources of counselor self-efficacy on LGB-affirmative CSE. According to Bandura (1986), the four sources of self-efficacy include performance or mastery experiences, vicarious experiences, verbal persuasion, and emotional or physiological arousal. Theoretically, each source can either positively or negatively influence a person’s self-efficacy beliefs, depending on the perceived quality of the experience.
Specifically, *performance experiences* refer to past failure or success experiences (Bandura, 1986). As a source of LGB-affirmative CSE, a successful performance experience might be a trainee’s previous successful counseling with a lesbian client, whereas a negative performance experience might be counseling a lesbian client who terminated prematurely. *Vicarious experiences* refers to having observed the performance of other individuals with whom one relates (Bandura, 1986). In the context of LGB-affirmative counseling, observing a counseling session in which a peer is comfortably discussing heterosexism with a client might positively influence a trainee’s LGB-affirmative CSE; on the other hand, a detrimental influence might occur if the trainee observes a session in which a peer consistently makes heterosexist comments to a bisexual client. *Verbal persuasion*, which occurs when someone convinces a person about his or her capability to perform or to achieve a specific objective, depends on the trustworthiness, attractiveness, and credibility of the source (Bandura, 1986). In the context of LGB training, verbal persuasion is likely to be more influential when the source is an LGB-affirmative clinical supervisor who provides an opinion about a trainee’s ability to work with LGB clients, than if the source is a family member who is unfamiliar with counseling or the LGB population. Finally, emotional and physiological *arousal* is another source of SE information because people pay attention to their emotional and physiological states in order to understand and process their cognitions (Bandura, 1986). Negative arousal (e.g., excessively sweaty palms, jitters, tiredness, or pain) tends to suggest lower self-efficacy whereas a calm physiological state suggests comfort, which can raise self-efficacy. In the context of LGB affirmative counseling, arousal may positively affect a trainee’s LGB-affirmative CSE if a trainee feels calm when discussing an LGB client’s sexual history, but a detrimental influence may occur if a trainee feels very tense.
Research suggests that trainees’ CSE tends to increase over a semester-long practicum experience (Larson et al., 1992; Lent et al., 2003). Referring to three self-efficacy sources (Bandura, 1986), Larson et al. proposed that changes over time in CSE may be due to performance experiences (i.e., counseling clients successfully), vicarious learning (i.e., observing counseling sessions that were successful), and verbal persuasion (i.e., supervision). Experimental studies showed that vicarious experiences like modeling and role-playing increased CSE for novices compared to wait list controls (Munson, Zoelink, & Stadulis, 1986), and that the quality of verbal persuasion significantly influenced trainees’ level of CSE (Daniels, 1997). Interviews with trainees about perceived changes in their CSE highlight the importance of perceptions of a session’s outcome, feedback from a supervisor or a client, and emotional arousal for the development of CSE (Lent et al., 2009). Taken together, much evidence suggests that Bandura’s (1986) four sources of self-efficacy information tend to influence trainees’ general CSE.

Despite the consistent finding of a positive association between the amount of clinical experience and LGB-affirmative CSE (Dillon, et al., 2008; O’Shaughnessy & Spokane, 2013), no research was located that explicitly identified specific training experiences that contribute to the various sources of self-efficacy information for working with LGB clients. Results of a qualitative study (Asta & Vacha-Haase, 2013), however, supported the theorized importance of two self-efficacy sources, feedback (verbal persuasion) and modeling (vicarious experience) on heterosexual psychologists’ development as an LGB ally.

From this limited information, it seems likely that at least three sources of self-efficacy contribute to LGB-affirmative CSE (performance experiences, vicarious experiences, and verbal persuasion). The contribution of the fourth source, arousal, has yet to be assessed, however. According to Larson et al. (1992), it is possible that although clinical experience explicitly
reflects performance experiences, clinical experiences may implicitly include training experiences related to other sources, e.g., such as verbal persuasion or arousal.

**The Present Research**

Three studies were conducted to develop and provide an initial assessment of the psychometric qualities of the Sources of Self-Efficacy Information Scales for Working with LGB Clients (SSEI-LGB).

In Study 1, evidence for the face and content validity of a large initial item pool was obtained based on the responses of a panel of experts in LGB-affirmative counseling and a panel of counselor trainees who expressed an interest in LGB-affirmative work. Modifications to the item pool were made based on these assessments.

In Study 2, data on the measure from a large sample of graduate mental health trainees were collected to first identify and then confirm its factor structure. Since no literature was found on measures of SSEI relating to counseling, exploratory factor analysis (EFA), which is an appropriate method for scale development (Byrne, 2010), was used with a randomly selected half of the sample. Next, based on the results of the exploratory analysis, the instrument was further refined and then subjected to a confirmatory factor analysis (CFA) with the other half of the sample.

Study 3 tested four aspects of construct validity of the refined measure with a new sample of mental health trainees. First, the scales’ known groups validity (Kerlinger & Lee, 2000) was assessed by comparing the SSEI-LGB scores of participants who self-identified as lesbian, gay, or bisexual, with those who self-identified as heterosexual. Second, convergent validity was assessed by examining correlations between the SSEI-LGB scores and measures of general (Lent et al., 2003) and LGB-affirmative CSE (Dillon et al., 2015). It was hypothesized that SSEI-LGB
scores would be significantly and positively associated with general and LGB-affirmative CSE. Third, discriminant validity was assessed by examining correlations between SSEI-LGB scores and a measure of social desirability (Strahan & Gerbasi, 1972). Results showing no positive associations with scale scores would support their discriminant validity. Fourth, the incremental validity of the SSEI-LGB was assessed by examining the unique contribution of the SSEI-LGB scale scores to LGB-affirmative CSE, over and above the contribution of four covariates: general counselor self-efficacy, number of LGB friends and family members, months of supervised clinical experience, and sexual orientation (sexual minority versus heterosexual).

The SSEI-LGB was designed to fill a gap in the literature by identifying specific training experiences that contribute to LGB-affirmative CSE. It was anticipated that the measure would be a helpful tool for future research on CSE and LGB-affirmative counseling and for training, that is, to help academic programs select the most meaningful counselor training experiences for work with LGB clients. Furthermore, the measure was expected to serve as a template for identifying sources of CSE information specific to working therapeutically with other marginalized client populations.

**STUDY 1: ITEM AND SCALE DEVELOPMENT**

**Development of the Item Pool**

The initial item pool was developed from literature on Bandura’s (1986) social cognitive theory, counselor self-efficacy, LGB-affirmative counseling, and LGB-affirmative CSE. In consultation with 10 doctoral students and a PhD counseling psychologist who had published in the area of CSE, 32 items were generated reflecting trainees’ performance experiences, vicarious experiences, and verbal persuasion. Six Arousal items were generated by modifying the short form of the State-Trait Anxiety Inventory (STAI-SF; Marteau & Baker, 1992). Subsequently, 21
items were added and 6 items were revised based on feedback from a different group of 4 PhD counseling psychology students and 2 PhD counseling psychologists, one of whom had published in the area of LGB-affirmative CSE.

The resulting pool included 53 items (see Appendix A): (a) 14 Performance Experience (PE) items reflecting perceptions of the success of past experiences working with LGB clients, e.g., “I have had strong working relationships with LGB clients;” (b) 12 Vicarious Experience (VE) items reflecting the experience of learning through other sources, such as by observing other counselors’ work or by roleplaying, e.g., “I have watched many professional videos on working therapeutically with LGB clients;” (c) 12 Verbal Persuasion (VP) items reflecting the quality of feedback received specific to working with LGB clients, e.g., “Clinical supervisors have given me positive feedback about my work with LGB clients;” and (d) 15 Arousal (AR) items assessing the respondent’s emotional state when working with LGB clients, e.g., “I felt tense when I discussed the coming out process with clients who identify as L, G, or B.”

Content and Face Validity of the SSEI-LGB Items

Two panels, 7 experts in research on LGB-affirmative counseling and 6 counseling psychology PhD students interested in LGB-affirmative work, reviewed the pool of 53 items. Respondents were asked to (a) identify whether each item contributes to counselor self-efficacy (yes or no), (b) rate each item’s clarity (from 1 = very unclear to 5 = very clear), and (c) identify which source/s of self-efficacy information was best reflected in the item, if any (PE, VE, VP, AR, and/or none). It was reasoned that an item could be seen as contributing to self-efficacy but not necessarily reflect any of the sources described by Bandura (1986). Items that received mean clarity ratings ≥ 3, and were identified as contributing to LGB-affirmative CSE were either retained or revised based on the respondents’ feedback.
Based on these criteria and specific feedback from the two panels, 31 of the original 53 items were retained, 10 items were deleted, 12 items were revised to improve clarity, and 5 new items were created. The resulting 48 items (listed in Appendix B) included 10 pairs of items in which the two items had the same content but reflected either a positive or a negative training experience (e.g., “Clinical supervisors have given me positive feedback on my work with LGB client(s)” and “Clinical supervisors have given me negative feedback on my work with LGB client(s”),

**STUDY 2: REFINEMENT OF THE SSEI-LGB**

**Participants**

A convenience sample of counselor trainees from mental health counseling, counseling psychology, clinical psychology, social work, and marriage and family therapy programs was recruited for a web-based study on “trainees’ perceptions of counseling skills with LGB clients.” Inclusion criteria were (a) current enrollment in a graduate program in one of these counseling-related fields, (b) having had at least one supervised practicum experience that lasted for three months or more, and (c) having had a practicum or internship experience with clients within the past six months.

Six hundred and ten (610) participants began the survey, but 111 cases were deleted because participants had completed < 80% of the items, and 16 cases were deleted for failure to meet the inclusion criteria. The final data set consisted of 483 participants, with 0.03% of the data missing, and each case had no more than 4 missing data points. Mean substitution was used since no significant differences have been found between this and other methods of replacing low percentages of missing data (Parent, 2013). Similar to procedures used in other recent scale development studies (e.g., Wei, Alvarez, Ku, Russell, & Bonett, 2010; Wong, Kim, Nguyen,
Cheng, & Saw, 2014), the final sample ($N = 483$) was randomly split into two subsamples: one subsample with 249 cases for the exploratory factor analysis and another subsample with the remaining 234 cases for the confirmatory factor analysis. Table 1 summarizes the participant characteristics in the two subsamples and in the full sample.

**Instruments**

**SSEI-LGB.** Participants responded to the 48 randomly ordered items (retained after Study 1) that reflected training experiences related to LGB-affirmative counseling (see Appendix C). The response format was a 7-point Likert scale, ranging from $0 = \text{not applicable}$ to $6 = \text{strongly agree}$. The not applicable option, coded as 0 across all items, was included to reflect trainees who may not have had a specific training experience. Eighteen (18) items were reverse scored to minimize common method variance and socially desirable responding.

**Demographic questionnaire.** A series of demographic questions (see Appendix D) inquired about participants’ race/ethnicity, age, gender, sexual orientation, religious/spiritual affiliation, education level, and graduate degree program. Other questions asked participants to provide estimations of the number of friends and family members who identify as LGB and the number of months of supervised clinical experience obtained.

**Procedure**

Potential volunteers were contacted by emails (see Appendix E) sent to training directors of psychology pre-doctoral internship sites and of counseling-related graduate programs, who were asked to forward the recruitment email to their students. Individuals who were interested in the study were directed to a hyperlink in the recruitment email, which led them directly to the survey on psychdata.com.
The first page of the survey contained the informed consent (see Appendix F) that explained the purpose of the study, its voluntary and anonymous nature, the right to withdraw at any time, the possible benefits and risks, the incentive (a drawing with a 1 in 15 chance to obtain a $10 Amazon gift certificate), and contact information for the investigator, the dissertation chair, and the University at Albany’s Office for Research Compliance.

Potential participants indicated their informed consent by clicking “next,” which directed them to the survey. Upon completing the survey, participants read a brief description of the study and provided their contact information for the investigator if they were interested in the drawing. The contact information was stored separately from data to maintain participants’ anonymity.

**Exploratory Factor Analyses**

**Participant characteristics for subsample 1.** Gorsuch (1983)’s guidelines for exploratory factor analyses suggested a liberal minimum participant-to-item ratio of 5:1, and a conservative ratio of 10:1. Although a total of 610 participants completed the survey, when the data were inspected and the sample was divided in half, 249 participants were retained in the first subsample, with a participant: item ratio of 4.7 to 1.

As shown in Table 1, 195 of the 249 trainees identified as women (78.0%), 41 as men (16.5%), 3 as transgender (1.2%) and 10 as other (4.0%), with a mean age of 29.16 years ($SD = 6.20$). One hundred forty-two (142; 57.00%) participants identified as heterosexual, 25 (10.04%) as bisexual, 10 (4.02%) as gay, 7 (2.81%) as lesbian, 10 (4.02%) as other; another 55 (22.08%) were unable to respond to this item due to a technical error in the survey. Eighty percent (80.00%) of participants identified as White, non-Latino/a; 7.23% as Asian/Pacific Islander; 4.82% as Black/African-American; 4.82% as Hispanic/Latino/a; 2.81% as multiracial; and 4.42% as other.
In terms of training, 95 participants (38.2%) were enrolled in master’s programs, 91 (36.5%) in PhD programs, and 62 (24.9%) in PsyD programs. Participants reported an average of 26.22 months of supervised clinical experience ($SD = 19.45$) and reported $M = 4.88$ ($SD = 6.72$) friends and family members who identified as LGB.

**Results.** Bartlett’s (1954) test of sphericity was significant ($p < .001$), indicating that the data matrix approximated an identity matrix and that the factor model was appropriate for analysis. The Kaiser–Meyer–Olkin measure of sampling adequacy (Kaiser, 1974) was 0.95, indicating that the sample was large enough to evaluate the factor structure.

Principal axis factoring procedures were used to examine the factor structure of the SSEI-LGB because unlike principal-components extraction, the principal axis procedure identifies factors that maximize the amount of common variance explained (Bryant & Yarnold, 1995; Tabachnick & Fidell, 2007). An oblique rotation was used because the factors were expected to be intercorrelated due to the common underlying construct and shared method variance.

Eigenvalues and parallel analysis were used to determine factor retention. The initial analysis revealed 8 factors that met the Kaiser retention criterion of eigenvalues $\geq 1.00$ (Kaiser, 1958), accounting for 73.33% of the variance. There was no clear break point in the observed scree plot. Since this method of factor retention has been critiqued for its subjectivity in estimating the break point (DeVellis, 2011; Hayton, Allen, & Scarpello, 2004; Matsunaga, 2010), it was not used to determine factor retention. Rather, parallel analysis, an approach that performs well in evaluating the accuracy of factor retention (Fabrigar et al., 1999; Hayton et al., 2004) was used. Results of the parallel analysis suggested the retention of four factors.

Next, a second EFA was run with an oblique rotation, with the specification to retain 4 factors. This 4-factor model accounted for 67.49% of the variance. Items were selected based on
the following criteria: (a) items required a factor loading ≥ 0.30, (b) in the case of cross-loadings, the item required a difference of ≥ 0.15 between factor loadings, (c) each item within a factor was logically related to the other items (Nunnally & Bernstein, 1994), and (d) each factor required ≥ 3 items (Floyd & Widman, 1995). In addition, if an item and its reverse-coded counterpart loaded on the same factor, one item of the pair was randomly deleted. Based on the above analyses and criteria, 31 of the original 48 items (64.58%) were retained.

Although Bandura’s (1986) social cognitive theory of self-efficacy was used to generate items, the factors that emerged from the second EFA did not closely reflect the four expected sources of self-efficacy information. Rather, the first two factors reflected general (Factor 1) and specific (Factor 2) experiences relating to direct clinical work with LGB clients, and the third and fourth factors reflected general and specific vicarious experiences, respectively. The original verbal persuasion and arousal items loaded on Factor 1. The 31 retained items and their respective EFA factor loadings are presented in Table 2.

Specifically, the first factor (eigenvalue = 14.44), which accounted for 46.58% of the variance, consisted of 13 items. This factor was named Clinical Success because items loading highly on this factor reflected past performance, arousal, and verbal persuasion training experiences that directly related to successful clinical experiences. The second factor (eigenvalue = 3.19), which accounted for 10.30% of the variance, consisted of 8 items and was named Clinical Discussions since items loading highly on this factor reflected performance experiences focused on discussions of LGB-related concerns with LGB clients. The third factor, accounting for 5.80% of the variance (eigenvalue = 1.80), consisted of 5 items. This factor was called Vicarious Experiences because the items reflected past training experiences focused on learning to work with LGB clients through observing, roleplaying, or reading about LGB-affirmative
counseling practice. The fourth factor (eigenvalue = 1.50), which accounted for 4.82% of the variance and consisted of 5 items, was called *LGB Affirmative Education*. Items loading highly on this factor reflected non-clinical experiences such as workshop attendance or writing papers, as well as vicarious training experiences that focused on LGB-affirmative issues that could inform LGB-affirmative counseling practice.

To obtain the four scale scores, the raw scores on items were summed, after reverse scoring 7 items. The internal consistency reliabilities ranged from very good to acceptable (DeVellis, 2011): $\alpha$ = .96 (Clinical Success), .95 (Clinical Discussions), .76 (Vicarious Experiences), and .74 (LGB Affirmative Education). Correlations among the 4 scales (in the 31-item version of the measure) showed a high association ($r = .81$) between scores on Clinical Success and Clinical Discussions (all of the other intercorrelations ranged from .24 to .37). For this reason, two competing CFA models with three and four specified factors were assessed in the second subsample to determine the best fit.

**Confirmatory Factor Analyses**

**Participant characteristics for subsample 2.** Based on Worthington and Whittaker’s (2006) recommendations, Bentler and Chou’s (1987) guideline of a minimum 5:1 ratio of participants to number of parameters and optimal ratio of 10:1 was used to estimate the minimum appropriate sample size, which was 340 participants for the 68 parameters. After the data were inspected, 234 participants were retained in this subsample, resulting in a 3.45 : 1 participant-to-parameter ratio.

As shown in Table 1, 187 of the 234 trainees identified as women (79.6%), 41 as men (17.4%), 2 as transgender (0.9%) and 5 as other (2.1%) with a mean age of 30.57 years ($SD=7.25$). One hundred forty-one (141; 60.00%) participants identified as heterosexual, 15 (6.38%)
as bisexual, 10 (4.26%) as gay, 8 (3.40%) as lesbian, 18 (7.66%) as other; 43 (18.30%) were unable to respond to this item due to a technical error in the survey. Roughly 81% of participants self-identified as White, non-Latino/a; 6.00% as Asian/Pacific Islander; 6.00% as Black/African-American; 7.20% as Hispanic/Latino/a; 2.10% as multiracial; and 1.70% as other. Eighty-four (84; 35.70%) participants were enrolled in master’s programs, 100 (42.60%) in PhD programs, and 50 (21.30%) in PsyD programs. Participants reported an average of 29.20 months of supervised clinical experience ($SD = 21.48$), and reported having $M = 5.47$ ($SD = 8.63$) friends and family members who identified as LGB.

Pearson’s chi-square tests on the categorical demographic variables (gender, sexual orientation, race, degree program, and graduate specialization) showed no significant differences between the subsamples used for the EFA and CFA, all $ps > .05$. A one-way MANOVA was conducted to assess subsample differences in the continuous variables (age, months of supervised clinical experience, and number of LGB friends and family). Since Box’s test of equality of covariance ($23.05, p < .001$) was significant, Pillai’s was examined (Tabachnick & Fidell, 2007). Results suggested no significant differences in these 3 variables across the two subsamples, Pillai’s Trace = 0.016, $F(3, 470) = 2.55, p = .06$, partial $\eta^2 = .016$.

Results. Mplus (Muthen & Muthen, 1998-2012) was used to compute a CFA on the four-factor model that emerged from the second EFA. Due to the high intercorrelation (.81) between Clinical Success and Clinical Discussions in the first subsample, a 3-factor CFA was also computed in which the items on these two factors were collapsed. The fit indices obtained for the two different models were compared to identify the best fit.

Chi-square was used to test the null hypothesis of perfect fit to the data. Since this statistic can be affected by large sample sizes and can be significant even if there is reasonable fit
to the data (Byrant & Yarnold, 1995), two alternative indexes of fit were also examined. The comparative fit index (CFI) assesses the extent to which the specified model yields a better fit to the data than a null model with no paths or latent variables, and the root mean square error of approximation (RMSEA) assesses the extent to which the covariance structure implied by the model deviates from the covariance structure observed in the data. CFI values of .95 or higher and RMSEA values of .05 or lower represent excellent fit (Tomarken & Waller, 2003), with .90 representing the lower bound for an acceptable CFI value and .08 representing the upper bound for an acceptable RMSEA value (Kline, 2006; Quintana & Maxwell, 1999).

Initially, the chi-square tests indicated poor fits to the data ($N = 31$ items) for both models, $\chi^2 = 1160.86$, $p < .001$ (4-factor model) and $\chi^2 = 1411.78$, $p < .001$ (3-factor model). Based on the RMSEA and CFI values, the 4-factor model was a better fit to the data than the 3-factor model. Both models indicated a poor fit: CFI = .87 and RMSEA = .09 (4-factor model) and CFI = .83 and RMSEA = .10 (3-factor model).

To improve model fit, item content and factor loadings analyses suggested the deletion of 3 items with factor loadings < .40 (Bowen & Guo, 2011) and 1 item with overlapping content (marked with an asterisk in Table 2). This refinement resulted in the retention of 27 items.

Next, two CFAs again were computed to compare the 4-factor and 3-factor models with 27 items. The new CFA fit indices suggested that the 4-factor model improved on the previous CFA (with better fit, CFI = .90, and RMSEA = .08). The 3-factor model fit indices remained inadequate. The fit indices for each model appear in Table 3.

Scale scores (the averaged raw scores of items in each scale) were computed with the final 27 items. Intercorrelations of the four scales appear in Table 4, along with descriptive
statistics (means and standard deviations) and internal consistency reliabilities, which ranged from .74 to .96.

**STUDY 3: FURTHER ASSESSMENT OF RELIABILITY AND CONSTRUCT VALIDITY**

**Participant Characteristics**

An a priori power analysis suggested that 245 participants would be needed to achieve power of .80, assuming an alpha level of .05 and a medium effect size of .06 (Cohen, 1988) for the hierarchical regression analyses. In this new sample, 357 participants began the survey; 76 cases were deleted in which participants had completed < 80% of the items, and 22 cases were deleted for failure to meet the inclusion criteria. The final sample included 259 participants, with 0.43% of the data missing, where each case had no more than 6 missing data points. As in Study 2, mean substitution was used for the missing data (Parent, 2013).

As shown in Table 5, 200 of the 259 trainees identified as women (77.2%), 28 as men (10.2%), 24 as transgender (9.2%) and 7 as other (2.7%) with a mean age of 28.39 years (SD = 5.95). The majority (187; 71.80%) of participants self-identified as heterosexual, 26 (10.00%) as bisexual, 17 (6.60%) as gay, 12 (4.60%) as lesbian, and 17 (6.90%) as other. Seventy-two percent (72.60%) of participants identified as White, non-Latino/a; 4.20% as Asian/Pacific Islander; 3.10% as Black/African-American; 8.10% as Hispanic/Latino/a; 4.60% as multiracial; and 4.60% as other. One hundred thirty-two (132; 51.00%) participants were enrolled in master’s programs, 83 (32.00%) in PhD programs, 42 (15.80%) in PsyD programs, and 3 (1.20%) individuals provided no response to this question. Participants reported an average of 23.30 months of supervised clinical experience (SD = 21.13) and reported having M = 5.64 (SD = 6.87) friends and family members who identified as LGB.
Pearson’s chi-square tests were used to assess differences in categorical demographic variables (race/ethnicity, sexual orientation, gender identity, degree, program, and graduate specialization) between this sample and the two subsamples in Study 2. Significant differences were found for (a) gender identity, $\chi^2(6, N = 743) = 35.42, p < .001$, with fewer men and more trans-identified participants in Study 3; (b) degree, $\chi^2(4, N = 738) = 16.92, p = .002$, with more masters’ level trainees and fewer PsyD and PhD trainees in Study 3; (c) specialization, $\chi^2(12, N = 739) = 255.83, p < .001$, with more social work and fewer counseling psychology, marriage and family therapy, and mental health counseling trainees in Study 3. Differences were nonsignificant for race/ethnicity and sexual orientation, both $ps > .05$.

A one-way MANOVA was conducted to assess differences in continuous demographic variables (age, months of supervised clinical experience, and number of LGB friends and family) between participants in Study 3 and the two subsamples of Study 2. Since Box’s test of equality of covariance ($30.94, p = .002$) was significant, Pillai’s criterion was examined (Tabachnick & Fidell, 2007). Results suggested significant differences between the three samples, Pillai’s Trace $= 0.027, F(6, 1442) = 3.34, p = .003$, partial $\eta^2 = .014$. An examination of the univariate analyses showed no significant difference across the three samples for number of LGB friends and family, $p > .05$. Since heterogeneity of error variance was found in participant age, violating one of the assumptions of ANOVA, a univariate analysis was not performed with this variable. A significant difference was found for months of supervised clinical experience, $F(2, 722) = 4.61, p = .01$, partial $\eta^2 = .013$. Scheffé’s post-hoc analysis found significant differences between the reported months of supervised clinical experience for this sample ($M = 23.30, SD = 21.13$) and the CFA subsample ($M = 29.20, SD = 21.48$).
Design and Procedure

This study assessed the internal consistency reliabilities and construct validity of the 27-item SSEI-LGB. The same demographic questionnaire used in Study 2 was administered to participants.

First, known-groups validity (Kerlinger & Lee, 2000) of the SSEI-LGB was assessed by comparing the scores of participants who identified as straight or heterosexual versus those who identified as lesbian, gay, or bisexual on the demographic questionnaire. Second, evidence of the convergent and concurrent validity of the instrument was assessed by examining relationships between SSEI-LGB scores and scores on the Lesbian, Gay, and Bisexual Affirmative Counseling Self-Efficacy Inventory-Short Form (LGB-CSI-SF; Dillon et al. 2015) and the Counselor Activity Self-Efficacy Scales (CASES; Lent et al., 2003). Third, evidence of discriminant validity was assessed by examining correlations between scores on the SSEI-LGB and scores on the Marlowe-Crowne 1 Social Desirability Scale (Strahan & Gerbasi, 1972). Fourth, the incremental validity of the SSEI-LGB was assessed by examining the unique contribution of the SSEI-LGB scores to LGB-affirmative CSE, as measured by the LGB-CSI-SF, over and above the contribution of four covariates: CASES (general counselor self-efficacy) and three demographic characteristics: number of LGB friends and family, months of supervised clinical experience, and participant sexual orientation (sexual minority versus heterosexual). These covariates were included due to their significant positive correlations with LGB-affirmative CSE in previous studies (Dillon et al., 2008; O’Shaughnessy & Spokane, 2013).

The same recruitment procedure was followed as in Study 2, with emails sent to a different pool of training directors (See Appendix G). Participants who completed the survey were given the opportunity to enroll in a drawing with a 1 in 10 chance to obtain a $10 Amazon
gift certificate (See Appendix H for the informed consent). The measures were counterbalanced in 4 orders, with the demographic questionnaire first.

Instruments

SSEI-LGB. The final, 27-item SSEI-LGB had four scales: Clinical Success (10 items), Clinical Discussion (8 items), Vicarious Experiences (4 items) and LGB Affirmative Education (5 items). Internal consistency reliabilities in this sample were $\alpha = .96$ (Clinical Success.), .94 (Clinical Discussion), .81 (Vicarious Experiences), and .73 (LGB Affirmative Education), which were similar to those found in subsample 2 of Study 2 (see Table 4).

Lesbian, Gay, and Bisexual Affirmative Counseling Self-Efficacy Inventory-Short Form. The LGB-CSI-SF (Dillon et al. 2015) measures counselor self-efficacy for working affirmatively with LGB clients. This instrument was chosen to assess the concurrent validity of the SSEI-LGB due to its theoretical underpinnings of LGB-affirmative counseling and Bandura’s (1986) social cognitive theory.

The instrument has five scales: Application of Knowledge, Advocacy Skills, Self-Awareness, Relationship, and Assessment Skills, each of which contains three items. Application of Knowledge reflects a counselor’s confidence in the ability to perform counseling behaviors that are dependent on the counselor’s a priori knowledge of LGB issues in psychology (e.g., “Identify specific mental health issues associated with the coming out process”). Advocacy Skills represents a counselor’s confidence in the ability to apply community resources that are supportive of LGB clients’ concerns within the counseling process (e.g., “Help a same-sex couple access local LGB-affirmative resources and support”). Awareness refers to a counselor’s confidence in the ability to maintain awareness of attitudes toward his or her own and others’ sexual identity development (e.g., “Examine my own sexual orientation/identity development..."
process”). Assessment reflects a counselor’s confidence in the ability to perform a counseling behavior that is reliant on assessing underlying issues and problems of an LGB client (e.g., “Assess for post-traumatic stress felt by LGB victims of hate crimes based on their sexual orientations/identities”). Relationship reflects the counselor’s confidence in attending to the working alliance with LGB clients (“Establish a safe space for LGB couples to explore parenting”).

The response format of the LGB-CSI-SF is a 6-point Likert-type scale, ranging from 0 = not at all confident, 3 = moderately confident, and 6 = highly confident. Raw scores are averaged, and higher scores (range 0 to 6) reflect a greater self-reported confidence in the respondent’s ability to perform LGB-affirmative counseling. The total score was used because there was no theoretical basis for specifying different predictions for the 5 LGB-CSI-SF scales.

In a sample of mental health professionals and graduate students in counseling-related fields (Dillon et al. 2015), total LGB-CSI-SF scores were positively associated with instruction in LGB issues \( (r = .42) \), number of LGB clients \( (r = .30) \), and number of LGB friends and family \( (r = .30) \), and low significant correlations were observed between the Self-Deception subscale of the Balanced Inventory of Desirable Responding (BIDR; Paulhus, 1991) and the LGB-CSI-SF Application of Knowledge \( (r = .18) \), Self-Awareness \( (r = .21) \), and total \( (r = .19) \) scores. No significant association was observed between the LGB-CSI-SF total score and the Impression Management subscale of the BIDR.

With respect to reliability, Dillon et al. (2015) reported a total score internal consistency estimate as \( \alpha = .87 \) and a test-retest coefficient over a 1-week period as .80. In the current sample, total score \( \alpha = .91 \).
**Counselor Activity Self-Efficacy Scales.** The CASES (Lent et al., 2003) is a 41-item measure that assesses the general counselor self-efficacy of novice trainees (Lent et al., 2003). Items are rated on a 10-point scale that ranges from 0 = no confidence to 9 = complete confidence; Scores are averaged and higher scores (range 0 to 9) reflect greater self-efficacy.

The CASES has a total scale score, which was used in the present study, and scores on 6 subscales: (a) Insight Skills (6 items), e.g., “Immediacy = disclose immediate feelings you have about the client, the therapeutic relationship, or yourself in relation to the client”; (b) Exploration Skills (5 items), e.g., “Restatements = repeat or rephrase what a client has said, in a way that is succinct, concrete and clear”; (c) Action Skills (4 items), e.g., “Role-play and behavior rehearsal = assist the client to role-play or rehearse behaviors in session”; (d) Session Management Skills (10 items), e.g., “Help your client to understand his or her thoughts, feelings, and actions”; (e) Relationship Conflict (10 items), e.g., “… you have negative reactions toward e.g., boredom, annoyance”); and (f) Client Distress (6 items). e.g., “[client] has experienced a recent traumatic life event e.g., physical or psychological injury or abuse”.

Convergent validity of the CASES was demonstrated through positive associations with the Counseling Self-Estimate Inventory (Larson et al., 1992) total score ($r = .76$) and a nonsignificant correlation with a measure of social desirability (Lent et al., 2003). The internal reliability estimate for the total score was $\alpha = .97$, and the 2-week test-retest correlation was $r = .75$ (Lent et al., 2003). In the current sample, total $\alpha = .97$.

**Marlowe-Crowne 1 Social Desirability Scale.** The Marlowe-Crowne Social Desirability Scale (M-C 1 SDS; Strahan & Gerbasi, 1972) is a true-false inventory that describes culturally approved behaviors that have a low probability occurrence, e.g., “I'm always willing to
admit it when I make a mistake.” The 10-item M-C 1 SDS is a short form of the original 33-item scale (Crowne & Marlowe, 1960).

Total scores range from 0 to 10, with higher scores suggesting more socially desirable responding. The M-C 1 SDS was chosen because it has shown high internal consistency ($\alpha = .96$; Strahan & Gerbasi, 1972) and better fit than seven other short forms of the M-C SDS (Fischer, 1993). Due to the dichotomous response format (true/false) of the M-C 1 SDS, the Kuder-Richardson coefficient of reliability (KR-20) was used. The KR-20 in the current sample was .61.

**Results**

**Preliminary analyses.** A one-way MANOVA was conducted to assess differences in SSEI-LGB scale scores based on order of survey administration (with 4 different orders). The Box’s test of equality of covariance (26.48) was nonsignificant, indicating no significant differences between the covariance matrices. Results were not significant, $F(12, 667) = .92, p = .53$; Wilks's $\Lambda = 0.96$, partial $\eta^2 = .014$.

Visual examination of the scatter plots for the SSEI-LGB, LGB-CSI-SF, CASES, months of supervised clinical experience, and number of LGB friends and family indicated that the assumption of linearity and normality were met. See Table 4 for the descriptive statistics on the four SSEI-LGB scales alongside those found in Study 2.

**Known-groups validity.** A one-way MANOVA was conducted to test the known-groups validity of the SSEI-LGB by participants’ self-reported sexual orientation (L, G, or B vs. heterosexual). The Box’s test of equality of covariance (10.81) was nonsignificant ($p = 0.40$), indicating no significant differences between the covariance matrices. Results indicated a
statistically significant multivariate difference, $F(4, 237) = 2.91, p = .022$; Wilks's $\Lambda = .953$, partial $\eta^2 = .05$.

The univariate analyses indicated significant differences only on Clinical Discussions, $F(1, 240) = 5.39, p = .02$, partial $\eta^2 = .027$, with LGB participants scoring significantly higher than heterosexual individuals. Since heterogeneity of error variance was found in the LGB Affirmative Education scores between the two groups, violating one of the assumptions of ANOVA, a univariate analysis was not performed with this scale.

The nonparametric Spearman’s rho was used to examine the association between participant sexual orientation and the LGB Affirmative Education scale. A small significant positive correlation was observed ($r = .22, p < .001$) where participants who identified as L, G, or B had significantly higher scores compared to those of the heterosexual participants.

**Convergent and concurrent validity.** Pearson’s correlation coefficients were examined to assess relationships between SSEI-LGB scores and (a) LGB-affirmative CSE as well as (b) general counselor self-efficacy. First, results indicated significant medium to large positive correlations between LGB-CSI-SF scores and three SSEI-LGB scales: Clinical Success ($r = .37, p < .001$), Clinical Discussions ($r = .45, p < .001$), and LGB Affirmative Education ($r = .42, p < .001$). A significant small positive correlation was also observed between the LGB-CSI-SF and the Vicarious Experiences scale score ($r = .21, p = .001$). Second, results indicated significant medium positive correlations between scores on the CASES and two of the SSEI-LGB scales: Clinical Success ($r = .33, p < .001$) and Clinical Discussion ($r = .38, p < .001$). Small significant positive correlations were observed between scores on the CASES and two SSEI-LGB scales: Vicarious Experiences ($r = .12, p = .03$), and LGB Affirmative Education ($r = .13, p = .02$).
Taken together, these analyses supported the convergent and concurrent validity of the SSEI-LGB.

**Discriminant validity.** Based on Pearson’s correlation coefficients, no significant associations were found between 3 of the SSEI-LGB scales and the measure of social desirability: Clinical Discussion ($r = -0.08, p = .11$), Vicarious Experiences ($r = 0.09, p = .09$), and LGB Affirmative Education ($r = 0.05, p = .21$). A small significant negative correlation was observed with Clinical Success, ($r = -0.17, p = .003$), indicating less social desirability with more self-reported Clinical Success. Taken together, these analyses support the discriminant validity of three SSEI-LGB scales, and suggest that responses for Clinical Success were likely not affected by socially desirable responding.

**Incremental validity.** A hierarchical multiple regression was computed with four covariates entered on Step 1: CASES scores (general counselor self-efficacy), number of LGB friends and family, months of supervised clinical experience, and participant sexual orientation (sexual minority = 1, heterosexual/straight = 0). The criterion variable was scores on the LGB-CSI-SF (self-efficacy for LGB-affirmative counseling).

The four SSEI-LGB scores were entered into the model in Step 2. (See Table 6 for the descriptive statistics of the variables entered into the regression model.) The normal p-p plot and histogram of the standardized residuals were examined. Results suggested a normal distribution of error terms. Evidence of multicollinearity was observed for Clinical Success (VIF = 3.80; Tolerance = 0.26) and Clinical Discussion (VIF = 3.98; Tolerance = 0.25), which was likely due to the high correlation between the two scales ($r = .85$), both of which reflect the underlying construct of clinical work with LGB clients.
Due to this collinearity problem, a new variable called *Clinical Work* \((M = 3.28, \ SD = 1.95)\) was created by averaging the scores on the Clinical Discussion and Clinical Success scales. Thus in Step 2, the three SSEI-LGB variables (Clinical Work, Vicarious Experience and LGB Affirmative Education) were entered into the model. Tests of linearity, normality of residuals, and homoscedasticity indicated that the data met the underlying assumptions required for multiple regression. Additionally, the VIF (ranging from 1.09-1.47) and tolerance scores (ranging from 0.68 to .91) showed no evidence of multicollinearity.

As shown in Table 7, results of the Step 1 equation were significant, \(F(4, 254) = 41.23, p < .001, R^2 = .39, \ adj. R^2 = .38\). CASES uniquely accounted for 32.38% of the variance in LGB-CSI-SF scores, \(\beta = .60, t = 11.65, p < .001\), and number of LGB friends and family members uniquely accounted for 2.25% of the variance in the LGB-CSI-SF scores, \(\beta = 0.16, t = 3.06, p = .002\). Months of supervised clinical experience uniquely accounted for 2.53% of the variance in LGB-CSI-SF scores, \(\beta = -.17, t = -3.26, p = .001\), and participant sexual orientation uniquely accounted for an additional 3.84%, \(\beta = .21, t = 4.01, p < .001\).

As shown in Table 7, the full Step 2 model was significant, \(F(3, 251) = 33.08, p < .001, R^2 = .48, \ adj. R^2 = .47\). Moreover, 8.6% of incremental variance associated with the 3 SSEI-LGB variables entered at Step 2 was also significant, \(\Delta F (3, 245) = 13.86, p < .001, \Delta R^2 = .09\). These results supported the incremental validity of the SSEI-LGB. See Table 7 for the results of the hierarchical regression analysis.

Examination of the beta coefficients showed that the CASES uniquely accounted for 19.71% of the variance in LGB-CSI-SF scores, \(\beta = .50, t = 9.76, p < .001\), and number of LGB friends and family members uniquely accounted for 0.77% of the variance in the LGB-CSI-SF scores, \(\beta = 0.10, t = 1.94, p = .04\). Months of supervised clinical experience uniquely accounted
for 2.89% of the variance in LGB-CSI-SF scores, $\beta = -0.19$, $t = -3.73$, $p < .001$, and participant sexual orientation accounted for 1.74%, $\beta = 0.15$, $t = 2.89$, $p = .004$. Clinical Work was incrementally associated with LGB-CSI-SF, accounting for a unique 2.31% of the variance, $\beta = 0.18$, $t = 3.33$, $p = .001$, as was LGB Affirmative Education, which accounted for a unique 2.99% of the variance, $\beta = 0.21$, $t = 3.80$, $p < .001$. On the other hand, Vicarious Experiences was not uniquely associated with LGB-CSI-SF, $\beta = 0.09$, $t = 0.18$, $p = .86$.

**Factor Analysis.** Due to the high multicollinearity between Clinical Success and Clinical Discussion in this sample, a CFA was computed using Mplus (Muthen & Muthen, 1998-2012) to re-assess the 4-factor model in this sample. Chi square results were significant, $\chi^2 = 853.30$, $p < .001$. Since $\chi^2$ can be significant even when there is a reasonable fit to the data due to a large sample size (Bryant & Yarnold, 1995), alternate indices of fit were examined. These indices, CFI = 0.90 and RMSEA = 0.08, indicated that the 4-factor model was an acceptable fit in this sample, as it was in Study 2.

**GENERAL DISCUSSION**

The SSEI-LGB was created to fill a gap in the literature by identifying specific training experiences that contribute to LGB-affirmative CSE. Taken together, results of the three present studies provide preliminary psychometric support for the SSEI-LGB. Although the factor analyses did not reflect the distinctiveness of the four sources of self-efficacy information as theorized by Bandura (1986), results of these studies indicated that training experiences relating to these four sources significantly contributed to self-efficacy beliefs associated with a target behavior, in this case, providing LGB-affirmative counseling.
Strengths

The present research had many strengths. First, the item generation was informed by the literature and research on social cognitive theory (Bandura, 1986), LGB-affirmative counseling, counselor self-efficacy, and LGB-affirmative CSE. The original pool of items was critiqued and accordingly revised based on feedback from panels of experts in LGB-affirmative research and the target population, graduate students from a counseling-related field, thus providing evidence for content and face validity. Second, with regard to procedures, the data collection was anonymous to minimize socially desirable responding, and email addresses for the drawings were collected and stored separately to ensure participants’ anonymity. Different pools of training directors were contacted for Study 2 and 3 to minimize the possibility of the same individuals participating in both studies. Furthermore, the measures in Study 3 were counterbalanced, and an assessment of order effects showed no differences in scores based on the ordering of the measures. Third, since no measures of SSEI relating to counseling were found, a data driven approach was used to assess the factor structure of the initial SSEI-LGB, and subsequently a confirmatory approach was replicated in two different samples to assess model fit. Finally, in addition to factor analysis, aspects of the measure’s construct validity were assessed using well-established measures.

Major Results

Results of the factor analyses on three samples of graduate trainees revealed four dimensions of training experiences in (a) general clinical work with LGB clients, including previous effective performance, low emotional arousal, and positive verbal persuasion experiences; (b) past experiences with a specific type of performance experience, discussions with LGB clients on LGB-specific issues; (c) past vicarious learning experiences such as role
playing and observations of others’ clinical work with LGB clients; and (d) past LGB affirmative education experiences, such as workshop attendance or writing papers that facilitate vicarious learning about counseling LGB clients. Although the factor analyses did not result in a categorization that reflected the four distinct sources of self-efficacy information as theorized by Bandura (1986), the factor structure obtained in Study 2 and replicated in Study 3 contained items from all four sources of self-efficacy information.

One explanation for the finding that the four SSEI categories did not emerge as distinct in the exploratory and confirmatory factor analyses may be related to the initial uses of social cognitive theory as proposed by Bandura (1986). That is, the theory and four self-efficacy information sources were developed to explain specific behaviors and fears such as snake phobia and agoraphobia (Bandura, 1977). However, LGB-affirmative counseling for trainees, while well-defined, involves a multilayered process. As the ethical standards in the various mental health professions become increasingly LGB-affirmative (Bieschke & Dendy, 2010), guidelines for working with these underserved groups require some trainees to reject the biased and discriminatory beliefs about these groups that they may have adopted from their cultural background and/or from the dominant culture. To do so, these sexual minority and heterosexual trainees need to become aware of their fears and biases, whether they are learning to navigate an invisible sexual minority identity as a professional counselor, or learning to recognize their own heterosexist bias. In other words, the fluidity and complexity of becoming a counselor who is learning LGB-affirmative work is substantially more indistinct than the behaviors that informed Bandura’s development of the self-efficacy model.

There are other reasons that the factor structure of the SSEI-LGB did not clearly reflect the self-efficacy sources in social cognitive theory. With regard to the first factor, Clinical
Success, it is likely that the use of past tense in all the items may have anchored responses relating to arousal and verbal persuasion within the context of counseling LGB clients to specific past clinical experiences with LGB clients, resulting in a factor that reflected past overall clinical success. It is also possible that items relating to performance, arousal, and verbal persuasion about clinical work loaded highly on this factor because trainees, particularly those in the earlier stages of their training, are just beginning to articulate the nuances of their new role as a counselor, and thus may rely heavily on arousal and verbal persuasion to determine the degree of success in their work with LGB clients.

A high correlation was observed between Clinical Success and Clinical Discussion scores, likely due to the underlying construct of clinical work with LGB clients. However, both the EFA and CFA results indicated that these two factors are distinct, possibly due to a difference in their focus. Clinical Success reflects trainees’ perceptions of past success in clinical work with LGB clients that may or may not be related to a client’s sexual identity, while Clinical Discussion reflects trainees’ perceptions of past success integrating and discussing sexual minority aspects of a client’s identity into the therapy.

Indeed, the conceptual and factorial distinction between Clinical Discussion and Clinical Success is supported by the observed differences in scores on these two scales between LGB trainees and their heterosexual counterparts. That is, participants who identified as LGB reported significantly higher scores on the Clinical Discussion scale, but no difference was observed between the two groups on Clinical Success. It is likely that trainees who identified as LGB feel more confident in initiating and sustaining these kinds of discussions with their LGB clients due to their personal experience with these issues. The training implications of these results seems important, that is, trainees who identify as heterosexual, may benefit from learning how to
engage LGB clients in specific discussions about their sexual minority identity. This learning process would likely include gaining knowledge, recognizing personal biases, and gaining supervised experience around these discussions with their LGB clients.

The hypothesized difference in scores based on participant sexual orientation was not supported for three SSEI-LGB scales: Clinical Success, Vicarious Experiences, and LGB Affirmative Education. Although in previous research trainees and mental health professionals who self-identified as LGB reported higher LGB-affirmative CSE than did their heterosexual counterparts (Dillon & Worthington, 2003), there may not be a significant difference in their specific training experiences. It is possible that due to the greater emphasis on LGB-affirmative counseling in the past two decades, affirmative training may now be more integrated and accessible in mental health graduate programs. It is also possible that when exposed to LGB-affirmative training experiences, heterosexual trainees may find these experiences more helpful than trainees who identify as LGB, who are likely to be quite familiar with the material. For this reason, LGB-affirmative training experiences may contribute more to heterosexual trainees’ counseling self-efficacy with sexual minority clients than trainees who identify as L, G, or B.

With respect to construct validity, significant moderate to large positive associations (Cohen, 1988) were observed between the four scales of the SSEI-LGB and the LGB-CSI-SF. These findings reflect the theorized positive relationship between LGB-affirmative training experiences in the measure and LGB-affirmative CSE, and thus provide evidence of the new measure’s convergent and concurrent validity. Similarly, significant small to moderate positive associations were observed between the SSEI-LGB scales and the CASES, supporting the theorized positive relationship between LGB-affirmative training experiences and general CSE. These findings, compared to the larger associations observed between the SSEI-LGB and the
LGB-CSI-SF, indicate that LGB-affirmative training experiences contribute more to LGB-affirmative CSE than trainees’ general CSE, supporting the reasoning that LGB-affirmative CSE and general CSE are related but distinct constructs. Moreover, the non-significant and significant small negative associations observed between the four scales of the SSEI-LGB and the M-C I SDS provided evidence of discriminant validity, in that participants’ scores on the SSEI-LGB were not likely to have been influenced by social desirability.

Vicarious Experiences and LGB Issues scales of the SSEI-LGB along with the composite variable, Clinical Work, explained a significant 8% increase in variance in LGB-affirmative CSE, over and above the CASES and the three demographic factors, providing evidence of the measure’s incremental validity. In the full model, CASES scores and three demographic factors explained 40% of the variance in LGB-CSI-SF scores, supporting the relation between general CSE and LGB-affirmative CSE and highlighting the importance of exposure to LGB-related issues, either through personal experience as a sexual minority group member or due to having LGB friends or family members. Interestingly, however, a significant small negative relationship was observed between LGB-CSI-SF and participants’ months of supervised clinical experience. Previous studies that have observed a positive association between years in training and LGB-affirmative CSE included experienced professionals as well as trainees (Dillon et al., 2008), sampled more advanced trainees (O’Shaughnessy & Spokane, 2013), or measured LGB-affirmative training experiences rather than years in training (Alessi et al., 2015; Dillon & Worthington, 2003). It is plausible that as trainees gain supervised clinical experience, their awareness of the complexity of LGB-affirmative counseling may increase, which may result in a decrease in reported confidence. In other words, the present result may be due to a lack of specification in type of training, a difference in this sample’s level of clinical experience, or a
change in trainees’ awareness and thus their confidence. These results suggest that when heterosexual trainees who have few LGB friends and family members seek out LGB-affirmative training experiences, these experiences are likely to help them develop their confidence in working affirmatively with LGB clients.

In sum, results supported the scales’ known-groups, concurrent/convergent, discriminant, and incremental validity. In other words, the data from two large samples of graduate trainees in mental-health related professions indicate that the specific training experiences, measured by the SSEI-LGB scales contributed specifically to participants’ self-efficacy in the delivery of affirmative counseling to their LGB clients.

Limitations

Despite the strengths of the present research, several limitations should be noted. First, results from Study 2 suggested that the four-factor model of the SSEI-LGB provided the best fit to the data as compared with the three-factor model, and this result was replicated in Study 3. However, the Clinical Success and Clinical Discussion scales were highly correlated in both studies, suggesting a need for replication. If the four-factor model continues to provide the best fit to the data, future studies could use different procedures, such as path analysis and structural equation modeling, that may better accommodate the strong association between the two scales. Second, although results of Study 3 suggest that the training experiences as measured by the SSEI-LGB contribute to LGB affirmative CSE, the ex post facto design precludes causal inferences.

Third, the validity estimates observed in Study 3 may have been artificially inflated by the use of a singular method of data collection, i.e., electronic surveys that involve self-report. Future studies that assess the construct validity of the SSEI-LGB could diversify the response
format, by interviewing trainees’ or their supervisors about LGB-related experiences, or introduce a temporal or psychological separation between the self-report measures (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) to minimize mono-method bias.

Fourth, the SSEI-LGB items are structured in such a way that respondents were asked about lesbian, gay, and/or bisexual clients within the same item. By considering LGB clients as a single minority group, the measure conceals potential differences in trainees’ experiences with different sexual minority clients. It is possible that some trainees may have training experiences that increase their self-efficacy with only one subgroup of sexual minority clients. Future studies may require alternate versions of the SSEI-LGB to assess differences in training experiences and the resulting impact on affirmative CSE with lesbian, gay, or bisexual clients considered separately. Similarly, in the present analyses sexual minority participants were grouped together to compare their self-efficacy experiences with those of the heterosexual respondents. Future studies could specifically assess differences on the SSEI-LGB based on participants’ self-identified sexual orientations as lesbian, gay or bisexual.

Fifth, the SSEI-LGB focuses on trainees’ confidence in working with only one aspect of a client’s identity, i.e., sexual orientation, and does not address other aspects of these clients’ identities. That is, the SSEI-LGB does not capture trainees’ sources of self-efficacy information in relation to the diversity within the LGB community across multiple dimensions of identities, such as, race/ethnicity, gender, income level, ability status, religion, or family structure.

Sixth, convenience samples were used for all studies, and self-selection bias may have occurred. Thus, it is possible that trainees who are not interested in LGB-affirmative counseling may have chosen not to volunteer for these studies. In addition, since trainees in various graduate programs were sampled, the results cannot be generalized to experienced, licensed mental health
professionals. The samples in both Studies 2 and 3 were predominantly comprised of White heterosexual women. Although this majority accurately reflects the mental health profession, the present findings should be cautiously generalized.

**Implications for Training and Future Research**

The SSEI-LGB fills a gap in the literature by identifying specific training experiences that contribute to LGB-affirmative CSE and is thus an important and appropriate tool for use in counselor training. Supervisors and supervisees could use the instrument to assess strengths and areas for growth of a trainee’s exposure to LGB-affirmative training opportunities. Academic faculty may also use the tool to identify and structure training opportunities for their students to contribute to their CSE. In addition, trainees can use the SSEI-LGB to advocate for specific training experiences within their practica or academic programs. Finally, specific scales in the SSEI-LGB may be used to assess the impact of particular training activities, such as role-playing, since the SSEI-LGB goes beyond noting the presence of a training experience and assesses trainees’ perception of the success of each experience.

The SSEI-LGB is also expected to be useful in research on LGB-affirmative counseling, LGB-affirmative CSE, and counselor training. Future research is needed regarding the reliability and stability of SSEI-LGB scores over time. Observed test-retest reliability estimates for LGB-affirmative CSE measures tend to be low, possibly due to learning experiences that occur between administrations of the measure (Dillon & Worthington, 2003; Dillon et al., 2014). Similarly, retest scores on the SSEI-LGB will also likely be lower than the original scores.

Future research could also examine the viability of the factor structure of the SSEI-LGB in samples that vary from the demographics of the present samples. It is likely that the SSEI-
LGB may not have the same utility in other countries, because LGB-specific issues and experiences of LGB individuals might be different due to societal and/or legal differences.

It seems important to examine relations among the SSEI-LGB scales and the subscales of the existing measures of LGB-affirmative CSE to investigate how different training experiences contribute to the different facets of LGB-affirmative CSE. Researchers could also examine relations among the SSEI-LGB, LGB-affirmative CSE, and trainees’ developmental level, since it is possible that specific sources of self-efficacy information contribute differently to LGB-affirmative CSE based on trainees’ developmental level.

The SSEI-LGB may also serve as an important bridge between research on LGB-affirmative CSE and sexual orientation counselor competency (SOCC), two important constructs related to counselor development. Although both constructs are important, LGB-affirmative CSE reflects counselor confidence in being able to work effectively with LGB clients, while SOCC refers to the attitudes, knowledge and skills needed to provide ethical, affirmative, and competent services to these clients (Fassinger & Richie, 1997; Israel & Selvridge, 2003). Since theoretically training experiences influence both LGB-affirmative CSE and SOCC (Bidell, 2005; Dillon & Worthington, 2003; O’Shaughnessy & Spokane, 2013), the SSEI-LGB may be an important tool to identify similarities and differences between LGB-affirmative CSE and SOCC.

Finally, the SSEI-LGB items may also be used as a template for studying training experiences that contribute to trainees’ confidence in working with other marginalized populations, such as transgender clients or racial/ethnic minority clients. In other words, researchers interested in specific aspects of counselor self-efficacy may consider modifying the SSEI-LGB to study training experiences related to working with specific marginalized groups.
Conclusion

The mental health professions have taken important steps in being more inclusive and informed when working with various marginalized populations, including clients who identify as L, G, or B. While there is much literature on the importance of training experiences in helping trainees develop an LGB-affirmative approach, the impact of specific kinds of training experiences on trainees’ confidence in delivering LGB-affirmative counseling was largely unknown.

The present research project fills an important gap by identifying specific training experiences that contribute to the development of LGB-affirmative CSE. The SSEI-LGB, a measure grounded in theory, goes beyond noting the presence of a training experience and assesses trainees’ perception of the usefulness of each kind of experience in contributing to self-confident work with LGB clients. Thus, the SSEI-LGB is expected to be a useful tool in the practice and research of LGB-affirmative CSE and trainee development.
References


Grove, J. (2009). How competent are trainee and newly qualified counselors to work with Lesbian, Gay, and Bisexual clients and what do they perceive as their most effective learning experience? Counselling and Psychotherapy Research, 9, 78-85. doi: 10.1080/14733140802490622


Table 1

Demographic Characteristics: Study 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>Subsample 1</th>
<th>Subsample 2</th>
<th>Total Sample</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
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<td>78.00</td>
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<tr>
<td>Male</td>
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<td>16.50</td>
<td>41</td>
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<tr>
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<td>1.20</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
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<td>4.00</td>
<td>5</td>
</tr>
<tr>
<td>Sexual orientation</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Bisexual</td>
<td>25</td>
<td>10.04</td>
<td>15</td>
</tr>
<tr>
<td>Gay</td>
<td>10</td>
<td>4.02</td>
<td>10</td>
</tr>
<tr>
<td>Heterosexual</td>
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<td>57.00</td>
<td>141</td>
</tr>
<tr>
<td>Lesbian</td>
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<td>2.81</td>
<td>8</td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
<td>4.02</td>
<td>18</td>
</tr>
<tr>
<td>Race/ethnicity</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
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<td>7.23</td>
<td>14</td>
</tr>
<tr>
<td>Black/African-American</td>
<td>12</td>
<td>4.82</td>
<td>14</td>
</tr>
<tr>
<td>Hispanic/Latino(a)</td>
<td>12</td>
<td>4.82</td>
<td>17</td>
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<tr>
<td>White/Non-Hispanic</td>
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<td>190</td>
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<tr>
<td>Multiracial</td>
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<td>Other</td>
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<td>4.42</td>
<td>4</td>
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<td>Degree Program</td>
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<td>36.50</td>
<td>100</td>
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<td>PsyD</td>
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<td>24.90</td>
<td>50</td>
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<td>Master’s</td>
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<td>38.20</td>
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<td>Graduate Specialization</td>
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<tr>
<td>Clinical psychology</td>
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<td>40.20</td>
<td>90</td>
</tr>
<tr>
<td>Counseling psychology</td>
<td>65</td>
<td>26.10</td>
<td>70</td>
</tr>
<tr>
<td>Marriage and family therapy</td>
<td>31</td>
<td>12.40</td>
<td>23</td>
</tr>
<tr>
<td>Mental health counseling</td>
<td>26</td>
<td>10.04</td>
<td>30</td>
</tr>
<tr>
<td>School counseling</td>
<td>7</td>
<td>2.80</td>
<td>6</td>
</tr>
<tr>
<td>Social work</td>
<td>11</td>
<td>4.40</td>
<td>11</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>3.20</td>
<td>3</td>
</tr>
<tr>
<td>Age</td>
<td>29.16&lt;sup&gt;a&lt;/sup&gt;</td>
<td>6.20&lt;sup&gt;b&lt;/sup&gt;</td>
<td>30.57&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Months of clinical supervision</td>
<td>26.22&lt;sup&gt;a&lt;/sup&gt;</td>
<td>19.45&lt;sup&gt;b&lt;/sup&gt;</td>
<td>29.20&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Number of LGB friends and family</td>
<td>4.88&lt;sup&gt;a&lt;/sup&gt;</td>
<td>6.72&lt;sup&gt;b&lt;/sup&gt;</td>
<td>5.47&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

*Note.* Study 2 (subsample 1) *N* = 249. Study 2 (subsample 2) *N* = 234. Study 2 *N* = 483. Some subcategories do not sum to the total due to missing data. Due to a technical error, 98 (22.08%) cases had missing values for sexual orientation.

*<sup>a</sup>Means.  <sup>b</sup>Standard deviations.*
### Table 2
Items and EFA Factor Loadings: Study 2

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>I felt comfortable when I worked with client(s) who identify as L, G, or B. (AR, 17)</td>
<td><strong>.930</strong></td>
</tr>
<tr>
<td>I felt worried when I was assigned to client(s) who identify as L, G, or B. * (AR, 32)</td>
<td><strong>.873</strong></td>
</tr>
<tr>
<td>I felt tense when I worked with client(s) who identify as L, G, or B. (AR, 33)</td>
<td><strong>.870</strong></td>
</tr>
<tr>
<td>I felt excited when I was assigned to client(s) who identify as L, G, or B. (AR, 31)</td>
<td><strong>.851</strong></td>
</tr>
<tr>
<td>I have had strong working relationships with LGB client(s). (PE, 18)</td>
<td><strong>.800</strong></td>
</tr>
<tr>
<td>I felt calm when I was assigned to client(s) who identify as L, G, or B. (AR, 3)</td>
<td><strong>.775</strong></td>
</tr>
<tr>
<td>LGB client(s) have made improvements in working with me. (PE, 36)</td>
<td><strong>.759</strong></td>
</tr>
<tr>
<td>Clinical supervisors have discouraged me from working with LGB clients. * (VP, 44)</td>
<td><strong>.682</strong></td>
</tr>
<tr>
<td>LGB client(s) have not had positive outcomes in their work with me. (PE, 13)</td>
<td><strong>.649</strong></td>
</tr>
<tr>
<td>Peers or co-workers have discouraged me from working with LGB clients. * (VP, 22)</td>
<td><strong>.646</strong></td>
</tr>
<tr>
<td>LGB client(s) have made positive comments about their work with me. (VP, 40)</td>
<td><strong>.598</strong></td>
</tr>
<tr>
<td>Clinical supervisors have given me negative feedback about my work with LGB client(s). (VP, 7)</td>
<td><strong>.564</strong></td>
</tr>
<tr>
<td>Peers or co-workers have given me positive feedback on my work with LGB client(s). (VP, 46)</td>
<td><strong>.508</strong></td>
</tr>
<tr>
<td>In counseling sessions with LGB client(s), I have effectively discussed clients' experiences with same-sex activity. (PE, 34)</td>
<td>-.027</td>
</tr>
<tr>
<td>In counseling sessions with LGB client(s), I have effectively discussed client's experiences with sexual attraction. (PE, 27)</td>
<td>.031</td>
</tr>
<tr>
<td>In counseling sessions with LGB client(s), I have effectively discussed their experiences of homophobia. (PE, 39)</td>
<td>.007</td>
</tr>
<tr>
<td>In counseling sessions with LGB client(s), I have effectively discussed client's experiences with sexual attraction. (PE, 42)</td>
<td>.098</td>
</tr>
<tr>
<td>In counseling sessions with LGB client(s), I have effectively discussed clients' experiences with sexual activity. (PE, 10)</td>
<td>.093</td>
</tr>
</tbody>
</table>

* table 2 continues
Table 2, continued

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td>In counseling sessions with LGB client(s), I have effectively</td>
<td>.138</td>
</tr>
<tr>
<td>discussed their experiences with oppression. (PE, 45)</td>
<td></td>
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<tr>
<td>I felt uncomfortable when I discussed homophobia with</td>
<td>.066</td>
</tr>
<tr>
<td>client(s) who I identify as L, G, or B. (AR, 28)</td>
<td></td>
</tr>
<tr>
<td>I felt afraid when I discussed internalized heterosexism with</td>
<td>.124</td>
</tr>
<tr>
<td>client(s) who identify as L, G, or B. (AR, 35)</td>
<td></td>
</tr>
<tr>
<td>I have learned about counseling LGB clients by role-playing a</td>
<td>-.029</td>
</tr>
<tr>
<td>counselor. (VE, 9)</td>
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</tr>
<tr>
<td>I have learned about counseling LGB clients from observing</td>
<td>-.036</td>
</tr>
<tr>
<td>roleplay(s) on the topic. (VE, 20)</td>
<td></td>
</tr>
<tr>
<td>I learned about counseling LGB clients by role-playing an L, G,</td>
<td>-.032</td>
</tr>
<tr>
<td>or B client. (VE, 4)</td>
<td></td>
</tr>
<tr>
<td>I have learned about counseling LGB clients from watching</td>
<td>.021</td>
</tr>
<tr>
<td>professional video(s) on the topic. (VE, 6)</td>
<td></td>
</tr>
<tr>
<td>I have learned about counseling LGB clients from reading book(s)</td>
<td>.276</td>
</tr>
<tr>
<td>on clinical practice. * (VE, 15)</td>
<td></td>
</tr>
<tr>
<td>I have had positive experiences conducting workshops or programs</td>
<td>.024</td>
</tr>
<tr>
<td>for LGB individuals. (VE, 30)</td>
<td></td>
</tr>
<tr>
<td>I have had positive experiences conducting workshops or programs</td>
<td>-.066</td>
</tr>
<tr>
<td>about being an ally to the LGB community. (VE, 38)</td>
<td></td>
</tr>
<tr>
<td>I have learned about counseling LGB clients from conducting</td>
<td>-.011</td>
</tr>
<tr>
<td>research on the topic. (VE, 41)</td>
<td></td>
</tr>
<tr>
<td>I have learned about counseling LGB clients from writing paper(s)</td>
<td>-.076</td>
</tr>
<tr>
<td>on the topic. (VE, 25)</td>
<td></td>
</tr>
<tr>
<td>I have learned about counseling LGB clients by attending</td>
<td>.068</td>
</tr>
<tr>
<td>workshop(s) on the topic. (VE, 16)</td>
<td></td>
</tr>
</tbody>
</table>

Note. The original scales are indicated in parentheses after each item with the number indicating the order in which item appeared in the survey: PE = Performance Experiences; VE = Vicarious Experiences; VP = Verbal Persuasion; AR = Arousal. Factor loadings in boldface type indicate the 31 items that were retained based on the EFA results. Asterisked items were deleted based on the CFA results. Factor 1 = Clinical Success; Factor 2 = Clinical Discussions; Factor 3 = Vicarious Experiences; Factor 4 = LGB Affirmative Education.
Table 3

*CFA Fit Indices: Study 2*

<table>
<thead>
<tr>
<th></th>
<th>31-Item Model</th>
<th>27-Item Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4-Factor Solution</td>
<td>3-Factor Solution</td>
</tr>
<tr>
<td>$\chi^2$</td>
<td>1160.86*</td>
<td>1411.78*</td>
</tr>
<tr>
<td>RMSEA</td>
<td>.09</td>
<td>.10</td>
</tr>
<tr>
<td>CFI</td>
<td>.87</td>
<td>.83</td>
</tr>
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*Note. * $p < .001.$*
Table 4

*Descriptive Statistics on the SSEI-LGB: Studies 2 (Subsample 2) and 3*

<table>
<thead>
<tr>
<th>Variable</th>
<th>CS</th>
<th>CD</th>
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*Note.* Study 2 (subsample 2) N = 234. Study 3 N = 261. CS = Clinical Success; CD = Clinical Discussion; VE = Vicarious Experiences; LGB-I = LGB Affirmative Education

*p < .01. ** p < .001.
Table 5

Demographic Characteristics: Study 3

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*Descriptive Statistics: Study 3*

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*Note.* $^a$Clinical Work was the average of Clinical Success and Clinical Discussion.
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Note. $N = 261$. Step 1 $F(4, 248) = 43.09, p < .001, R^2 = .41, \text{adj. } R^2 = .40$. Step 2 $F(3, 245) = 33.64, p < .001, R^2 = .49, \text{adj. } R^2 = .48$. $\Delta F (3, 245) = 12.98, p < .001, \Delta R^2 = .08$. $\rho^2$ squared semi-partial correlation. CASES = Counselor Activity Self-Efficacy Scales (Lent et al. 2003). * $p < .05$. ** $p < .01$. 
Appendix A

Sources of Self-Efficacy Information Scales for Working with LGB Clients – Initial Items

Performance Experiences:

1. I have had strong working relationships with LGB clients.
2. LGB clients have had positive outcomes in their work with me.
3. LGB clients have made improvements in working with me.
4. I discussed sexuality with LGB clients.
5. I discussed social justice issues (e.g., oppression, discrimination) with LGB clients.
6. I discussed social concerns (e.g., friends, family, dating) related to sexual orientation with LGB clients.
7. I have had positive experiences conducting workshops or programs for LGB individuals.
8. I have had positive experiences conducting workshops or programs about being an ally to the LGB community.
9. I avoided discussing sexuality with LGB clients.*
10. I avoided discussing social justice issues (e.g., oppression, discrimination) with LGB clients
11. I avoided discussing social concerns (e.g., friends, family, dating) related to sexual orientation with LGB clients. *
12. I have had poor working relationships with LGB clients.*
13. LGB clients have not made improvements in their work with me.*
14. LGB clients have not had positive outcomes in their work with me.*
Vicarious Experiences:

1. I have watched many useful professional videos on working therapeutically with LGB clients.
2. I have participated in many useful group supervision sessions in which an LGB client was discussed.
3. I have observed many helpful role-plays with an LGB client.
4. I have taken part in many helpful role-plays with an LGB client.
5. I have observed many role-plays with an LGB client that were not helpful.*
6. I have taken part in many role-plays with an LGB client that were not helpful. *
7. I have read much useful professional material on working with LGB clients.
8. I have written many papers on working with LGB clients.
9. I have completed many useful projects on working with LGB clients.
10. I have attended many helpful workshops on working therapeutically with LGB clients.
11. I have attended many workshops on working therapeutically with LGB clients that were not helpful.*
12. I have read much professional material on working with LGB clients that was not helpful.*

Verbal Persuasion:

1. LGB clients have given me positive feedback about their work with me.
2. Peers or co-workers have given me positive feedback on my work with LGB clients.
3. Peers or co-workers have encouraged me to work with LGB clients.
4. Clinical supervisors have given me positive feedback on my work with LGB clients.
5. Clinical supervisors have encouraged me to work with LGB clients.
6. People who personally identify as LGB have encouraged me to work with LGB clients.

7. LGB clients have given me negative feedback about their work with me. *

8. Peers or co-workers have given me negative feedback about my work with LGB clients. *

9. Peers or co-workers have discouraged me from working with LGB clients.

10. Clinical supervisors have given me negative feedback about my work with LGB clients. *

11. Clinical supervisors have discouraged me from working with LGB clients.

12. People who personally identify as LGB discouraged me from working with LGB clients. *

Emotional Arousal

1. I felt calm when I was assigned to clients who identify as L, G, or B.

2. I felt tense when I worked with clients who identify as L, G, or B. *

3. I felt upset when I was assigned to clients who identify as L, G, or B. *

4. I felt worried when I was assigned to clients who identify as L, G, or B. *

5. I felt comfortable when I worked with clients who identify as L, G, or B.

6. I felt excited when I was assigned to clients who identify as L, G, or B.

7. I felt tense when I discussed the coming out process with clients who identify as L, G, or B. *

8. I felt repulsed when I worked with same-sex couples. *

9. I felt afraid when I discussed internalized heterosexism with clients who identify as L, G, or B. *

10. I felt uncomfortable when I discussed sexuality with clients who identify as L, G, or B. *

11. I felt disgusted when I worked with same-sex couples. *

12. I felt calm when I worked with same-sex families.
13. I felt uncomfortable when I discussed heterosexism with clients who identify as L, G, or B. *

14. I felt uncomfortable when I discussed homophobia with clients who identify as L, G, or B. *

15. I felt confident when I discussed heterosexism with clients who identify as L, G, or B.

* Items marked with an asterisk were expected to be reverse coded.
Appendix B

SSEI-LGB Items Retained after Peer and Expert Feedback

1. People who personally identify as LGB discouraged me from working with LGB clients.
2. I felt uncomfortable when I discussed heterosexism with client(s) who identify as L, G, or B.
3. I felt calm when I was assigned to client(s) who identify as L, G, or B.
4. I learned about counseling LGB clients by role-playing an L, G, or B client.
5. I felt repulsed when I worked with same-sex couple(s).
6. I have learned about counseling LGB clients from watching professional video(s) on the topic.
7. Clinical supervisors have given me negative feedback about my work with LGB client(s).
8. I felt calm when I worked with same-sex familie(s).
9. I have learned about counseling LGB clients by role-playing a counselor.
10. In counseling sessions with LGB client(s), I have effectively discussed clients' experiences with sexual activity.
11. I felt tense when I discussed the coming out process with client(s) who identify as L, G, or B.
12. LGB client(s) have not made improvements in their work with me.
13. LGB client(s) have not had positive outcomes in their work with me.
14. I have learned about counseling LGB clients from listening to peer(s) discuss clinical work in group supervision.
15. I have learned about counseling LGB clients from reading book(s) on clinical practice.
16. I have learned about counseling LGB clients by attending workshop(s) on the topic.
17. I felt comfortable when I worked with client(s) who identify as L, G, or B.
18. I have had strong working relationships with LGB client(s).
19. Peers or co-workers have given me negative feedback about my work with LGB client(s).
20. I have learned about counseling LGB clients from observing roleplay(s) on the topic.
21. Clinical supervisors have encouraged me to work with LGB clients.
22. Peers or co-workers have discouraged me from working with LGB clients.
23. Clinical supervisors have given me positive feedback on my work with LGB client(s).
24. I felt upset when I was assigned to client(s) who identify as L, G, or B.
25. I have learned about counseling LGB clients from writing paper(s) on the topic.
26. Peers or co-workers have encouraged me to work with LGB clients.
27. In counseling sessions with LGB client(s), I have effectively discussed client's experiences with same-sex sexual attraction.
28. I felt uncomfortable when I discussed homophobia with client(s) who I identify as L, G, or B.
29. LGB client(s) have had positive outcomes in their work with me.
30. I have had positive experiences conducting workshops or programs for LGB individuals.
31. I felt excited when I was assigned to client(s) who identify as L, G, or B.
32. I felt worried when I was assigned to client(s) who identify as L, G, or B.
33. I felt tense when I worked with client(s) who identify as L, G, or B.
34. In counseling sessions with LGB client(s), I have effectively discussed clients' experiences with same-sex activity.
35. I felt afraid when I discussed internalized heterosexism with client(s) who identify as L, G, or B.
36. LGB client(s) have made improvements in working with me.
37. LGB client(s) have made negative comments about their work with me.
38. I have had positive experiences conducting workshops or programs about being an ally to the LGB community.

39. In counseling sessions with LGB client(s), I have effectively discussed their experiences of homophobia.

40. LGB client(s) have made positive comments about their work with me.

41. I have learned about counseling LGB clients from conducting research on the topic.

42. In counseling sessions with LGB client(s), I have effectively discussed client's experiences with sexual attraction.

43. I have had poor working relationships with LGB client(s).

44. Clinical supervisors have discouraged me from working with LGB clients.

45. In counseling sessions with LGB client(s), I have effectively discussed their experiences with oppression.

46. Peers or co-workers have given me positive feedback on my work with LGB client(s).

47. People who personally identify as LGB encouraged me to work with LGB clients.

48. I felt disgusted when I worked with same-sex couple(s).
Appendix C

The 48 SSEI-LGB Items used in Study 2 with Instructions

Instructions:

The items below ask about your overall counseling/psychotherapy and training experiences related to working with Lesbian, Gay, and/or Bisexual (LGB) client(s). Please respond to each item by marking your answer from 1 = “strongly disagree” to 6 = “strongly agree,” keeping in mind your overall training and counseling experiences with LGB clients.

If you have had no experience with the content in a given item, please put “Not Applicable.” For example, if you have never had group supervision, you should put “Not Applicable” for items relating to group supervision, and if you have never worked therapeutically with a client who identifies as lesbian, gay, or bisexual, you should indicate “Not Applicable” for relevant items.

Response format:

Not Applicable Strongly disagree Disagree Slightly disagree Slightly agree Agree Strongly Agree

1. People who personally identify as LGB discouraged me from working with LGB clients.
2. I felt uncomfortable when I discussed heterosexism with client(s) who identify as L, G, or B.
3. I felt calm when I was assigned to client(s) who identify as L, G, or B.
4. I learned about counseling LGB clients by role-playing an L, G, or B client.
5. I felt repulsed when I worked with same-sex couple(s).
6. I have learned about counseling LGB clients from watching professional video(s) on the topic.
7. Clinical supervisors have given me negative feedback about my work with LGB client(s).
8. I felt calm when I worked with same-sex familie(s).

9. I have learned about counseling LGB clients by role-playing a counselor.

10. In counseling sessions with LGB client(s), I have effectively discussed clients' experiences with sexual activity.

11. I felt tense when I discussed the coming out process with client(s) who identify as L, G, or B.

12. LGB client(s) have not made improvements in their work with me.

13. LGB client(s) have not had positive outcomes in their work with me.

14. I have learned about counseling LGB clients from listening to peer(s) discuss clinical work in group supervision.

15. I have learned about counseling LGB clients from reading book(s) on clinical practice.

16. I have learned about counseling LGB clients by attending workshop(s) on the topic.

17. I felt comfortable when I worked with client(s) who identify as L, G, or B.

18. I have had strong working relationships with LGB client(s).

19. Peers or co-workers have given me negative feedback about my work with LGB client(s).

20. I have learned about counseling LGB clients from observing roleplay(s) on the topic.

21. Clinical supervisors have encouraged me to work with LGB clients.

22. Peers or co-workers have discouraged me from working with LGB clients.

23. Clinical supervisors have given me positive feedback on my work with LGB client(s).

24. I felt upset when I was assigned to client(s) who identify as L, G, or B.

25. I have learned about counseling LGB clients from writing paper(s) on the topic.

26. Peers or co-workers have encouraged me to work with LGB clients.

27. In counseling sessions with LGB client(s), I have effectively discussed client's experiences with same-sex sexual attraction.
28. I felt uncomfortable when I discussed homophobia with client(s) who I identify as L, G, or B.
29. LGB client(s) have had positive outcomes in their work with me.
30. I have had positive experiences conducting workshops or programs for LGB individuals.
31. I felt excited when I was assigned to client(s) who identify as L, G, or B.
32. I felt worried when I was assigned to client(s) who identify as L, G, or B.
33. I felt tense when I worked with client(s) who identify as L, G, or B.
34. In counseling sessions with LGB client(s), I have effectively discussed clients' experiences with same-sex activity.
35. I felt afraid when I discussed internalized heterosexism with client(s) who identify as L, G, or B.
36. LGB client(s) have made improvements in working with me.
37. LGB client(s) have made negative comments about their work with me.
38. I have had positive experiences conducting workshops or programs about being an ally to the LGB community.
39. In counseling sessions with LGB client(s), I have effectively discussed their experiences of homophobia.
40. LGB client(s) have made positive comments about their work with me.
41. I have learned about counseling LGB clients from conducting research on the topic.
42. In counseling sessions with LGB client(s), I have effectively discussed client's experiences with sexual attraction.
43. I have had poor working relationships with LGB client(s).
44. Clinical supervisors have discouraged me from working with LGB clients.
45. In counseling sessions with LGB client(s), I have effectively discussed their experiences with oppression.

46. Peers or co-workers have given me positive feedback on my work with LGB client(s).

47. People who personally identify as LGB encouraged me to work with LGB clients.

48. I felt disgusted when I worked with same-sex couple(s).
Appendix D

Demographic Questionnaire

1. Please identify your age: ________________

2. Please identify your gender identity:
   a. Female
   b. Male
   c. Transgender
   d. Other (please specify): ________________

3. Please identify your sexual identity:
   a. Bisexual
   b. Gay
   c. Heterosexual
   d. Lesbian
   e. Other (please specify): ________________

4. Please identify your racial/ethnic background:
   a. American-Indian / Alaskan Native
   b. Black / African-American
   c. East Asian / Pacific Islander
   d. Hispanic or Latino/a
   e. Middle Eastern / West Asian
   f. Multiracial
   g. South Asian
   h. White, non-Latino/a
   i. Other (please specify): ________________

5. Please identify your nationality: ________

6. Please identify your religious or spiritual affiliation, if any: _________

7. Please enter your relationship status: ________________________

8. Which degree are you currently pursuing?
   a. Master’s
   b. Ph.D.
   c. Psy.D.

9. In which graduate program are you currently enrolled?
   a. Mental Health Counseling
   b. School Counseling
   c. Social Work
d. Marriage & Family Therapy  
e. Counseling Psychology  
f. Clinical Psychology  
g. Other (please specify): _______________

10. In what country is your current graduate program located?  
   a. Australia  
   b. Canada  
   c. United Kingdom  
   d. United States of America  
   e. Other (please specify): _______________

11. Please estimate the number of months of supervised clinical experience you have had at 
   the graduate level (Example: Please indicate 2 years with the response: 24): 
   ____________

12. Please estimate the approximate number of your family members or close friends who 
   identify as lesbian, gay, or bisexual. ________________
Dear fellow graduate student,

My name is Snehal Kumar and I’m a doctoral candidate at University at Albany’s Counseling Psychology program. I’d like to invite you to participate in a study that helps in understanding trainees’ perceptions of counseling skills with LGB clients. I know you are extremely busy, but I would really appreciate you taking the time to help out a fellow student.

The study is expected to take no more than 15 minutes of your time. To participate in this study, you need to

- Be currently enrolled in a professional graduate program in a counseling related field (Mental Health Counseling, School Counseling, Social Work, Marriage & Family Therapy, Counseling Psychology, Clinical Psychology)
- Have at least one supervised practicum experience that lasted for at least 3 months
- Have worked with one or more clients in the past 6 months
- Be at least 18 years of age

To thank you for participating, you can choose to enroll in a drawing where you are guaranteed a 1 in 15 chance to receive a $10 Amazon.com gift card. Your responses will be anonymous and confidential, and you may withdraw at any time with no penalties. Here is the link to the study:

https://www.psychdata.com/s.asp?SID=162607
If you have any questions at all, please contact me at skumar@albany.edu, or my dissertation chair, Dr. Myrna Friedlander, at mfriedlander@albany.edu. Thank you again and good luck with your semester!

This study is approved by University at Albany’s Institutional Review Board. Everything that you divulge will be anonymous. If you have questions about your rights as a participant, the Office of Regulatory Research Compliance at the University at Albany will be happy to take your call, at 1-866-857-5459 or hsconcerns@albany.edu.

Snehal Kumar
Doctoral Candidate
University at Albany
Albany, NY
Appendix F

Informed Consent Form for Study 2

This is a research study conducted by Snehal Kumar (Counseling Psychology doctoral student at UAlbany). This project has been approved by the University at Albany Institutional Review Board. Approval of this project only signifies that the procedures adequately protect the rights and welfare of the participants. Please note that absolute confidentiality and anonymity cannot be guaranteed due to the limited protections of Internet access.

Thank you for considering participating in this study that hopes to gain a better understanding of trainees’ perceptions of counseling skills with LGB clients. Here is an overview of some information about the study to help you decide if you would like to continue.

To participate in this study you must,

- Be 18 years or older,
- Be currently enrolled in a graduate program in a counseling related field,
- Have at least one supervised practicum experience that lasted for at least 3 months,
- Worked with clients in the past 6 months.

Your participation involves completing an online survey that should take no more than 15 minutes to complete. Your participation in this project is voluntary. Even after you agree to participate in the research or sign the informed consent document, you may decide to leave the study at any time without penalty or loss of benefits to which you may otherwise have been entitled. I will retain and analyze the information you have provided up until the point you have left the study.

I anticipate that you will experience minimal risk by participating in the study. Although
you will not receive any personal benefit from filling out this survey, I hope that others may ultimately benefit from the knowledge obtained from this research.

To thank you for participating, you can choose to enroll in a drawing where you are guaranteed a 1 in 15 chance to receive a $10 Amazon.com gift card. You will have the opportunity to provide your email address at the end of the survey in order to enter the drawing. Email addresses will be stored in a separate database from survey responses. Survey responses will be confidential and anonymous and will not be linked to the provided email addresses.

Given the online nature of this study, the requirement for signing the consent form has been waived by the University at Albany’s Institutional Review Board. By proceeding to click on “Continue,” you are giving your consent to participate in this research. You may print this page for your own records.

Please contact the principal investigator Snehal Kumar (Counseling Psychology Doctoral student: XXX-XXX-XXXX, skumar@albany.edu) or dissertation chair Dr. Myrna Friedlander (mfriedlander@albany.edu) if you have any questions regarding the study or consent.

Your Rights as a Research Participant: Research at the University Albany involving human participants is carried out under the oversight of the Institutional Review Board (IRB). This research has been reviewed and approved by the IRB. If you have any questions concerning your rights as a research subject or if you wish to report any concerns about the study, you may contact University at Albany Office of Regulatory & Research Compliance at 1-866-857-5459 or hsconcerns@albany.edu.
Dear fellow graduate student,

My name is Snehal Kumar and I’d like to invite you to participate in a study that helps in understanding trainees’ perceptions of counseling skills with LGB clients. I know you are extremely busy, but I would really appreciate you taking the time to help out a fellow student!

The study is expected to take about 20-25 minutes. To participate in this study, you need to

• Be currently enrolled in a professional graduate program in a counseling related field (Mental Health Counseling, School Counseling, Social Work, Marriage & Family Therapy, Counseling Psychology, Clinical Psychology)
• Have at least one supervised practicum experience that lasted for at least 3 months
• Have worked with one or more clients in the past 6 months
• Be at least 18 years of age

To thank you for participating, you can choose to enroll in a drawing where you are guaranteed a 1 in 10 chance to receive a $10 Amazon.com gift card. Your responses will be anonymous and confidential, and you may withdraw at any time with no penalties. Here is the link to the study:
https://www.psychdata.com/s.asp?SID=167153
If you have any questions at all, please contact me at skumar@albany.edu, or my dissertation chair, Dr. Myrna Friedlander, at mfriedlander@albany.edu. Thank you again and good luck with your semester!

This study is approved by University at Albany’s Institutional Review Board. Everything that you divulge will be anonymous. If you have questions about your rights as a participant, the Office of Regulatory Research Compliance at the University at Albany will be happy to take your call, at 1-866-857-5459 or hsconcerns@albany.edu.

Snehal Kumar
Doctoral Student
University at Albany
Albany, NY
Appendix H

Informed Consent for Study 3

Informed Consent Form: Trainees’ Self-Perceptions of Counseling Skills with LGB Clients.

This is a research study conducted by Snehal Kumar (Counseling Psychology doctoral student at UAlbany). This project has been approved by the University at Albany Institutional Review Board. Approval of this project only signifies that the procedures adequately protect the rights and welfare of the participants. Please note that absolute confidentiality and anonymity cannot be guaranteed due to the limited protections of Internet access.

Thank you for considering participating in this study that hopes to gain a better understanding of trainees’ perceptions of counseling skills with LGB clients. Here is an overview of some information about the study to help you decide if you would like to continue.

To participate in this study,

• You must be 18 years or older,
• Enrolled in a graduate program in a counseling related field,
• Have at least one supervised practicum experience that lasted for at least 3 months,
• Worked with clients in the past 6 months.

Your participation involves completing an online survey that should take 20-25 minutes to complete and your participation is voluntary. Your participation in this project is voluntary. Even after you agree to participate in the research or sign the informed consent document, you may decide to leave the study at any time without penalty or loss of benefits to which you may otherwise have been entitled. I will retain and analyze the information you have provided up
until the point you have left the study.

I anticipate that you will experience minimal risk by participating in the study. Although you will not receive any personal benefit from filling out this survey, I hope that others may ultimately benefit from the knowledge obtained from this research.

To thank you for participating, you can choose to enroll in a drawing where you are guaranteed a 1 in 10 chance to receive a $10 Amazon.com gift card. You will have the opportunity to provide your email address at the end of the survey in order to enter the drawing. Email addresses will be stored in a separate database from survey responses. Survey responses will be confidential and anonymous and will not be linked to the provided email addresses.

Given the online nature of this study, the requirement for signing the consent form has been waived by the University at Albany’s Institutional Review Board. By proceeding to click on “Continue,” you are giving your consent to participate in this research. You may print this page for your own records.

Please contact the principal investigator Snehal Kumar (Counseling Psychology Doctoral student: XXX-XXX-XXXX, skumar@albany.edu) or dissertation chair Dr. Myrna Friedlander (mfriedlander@albany.edu) if you have any questions regarding the study or consent.

Your Rights as a Research Participant: Research at the University Albany involving human participants is carried out under the oversight of the Institutional Review Board (IRB). This research has been reviewed and approved by the IRB. If you have any questions concerning your rights as a research subject or if you wish to report any concerns about the study, you may contact University at Albany Office of Regulatory & Research Compliance at 1-866-857-5459 or hsconcerns@albany.edu