

# An Exploratory Factor Analysis of the Sexual Orientation Counselor Competency Scale: Examining the Variable of Experience



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The Sexual Orientation Counselor Competency Scale (SOCCS), developed by Bidell in 2005, measures counselors' levels of skills, awareness, and knowledge in assisting lesbian, gay, or bisexual (LGB) clients. In an effort to gain an increased understanding of the construct validity of the SOCCS, researchers performed an exploratory factor analysis on the SOCCS with a sample of practicing counselors who were members of the Association for Lesbian, Gay, Bisexual, and Transgender Issues in Counseling (ALGBTIC) and counselors-in-training ( $N = 155$ ) enrolled in four Council for Accreditation of Counseling & Related Educational Programs (CACREP)-accredited counseling programs. The data analyses resulted in a 4-factor model, 28-item assessment that explained 56% of the variance. In acknowledging the loading of the fourth factor, this result highlights the need to focus on involvement and engagement in clinical practice in order to maintain best practice standards. Furthermore, the fourth factor of experience adds a compelling perspective to consider when understanding, improving, and maintaining sexual orientation counselor competence.

**Keywords:** sexual orientation, counselor competence, exploratory factor analysis, best practice standards, SOCCS

In order for counselors to be ethical and effective professionals, they must be competent in providing services to sexual minority clients (Association for Lesbian, Gay, Bisexual, and Transgender Issues in Counseling [ALGBTIC], 2013). The American Counseling Association's (ACA) 2014 *ACA Code of Ethics* requires that counselors honor the uniqueness of clients in embracing their worth, potential, and dignity. Additionally, counselors should actively attempt to understand client identity, refrain from discrimination, and utilize caution when assessing diverse clients (ACA, 2014). Furthermore, the Council for Accreditation of Counseling and Related Educational Programs (CACREP) 2009 *Standards for Accreditation* assert that counselors should understand identity development, develop self-awareness, promote social justice, and strive to eliminate prejudices, oppression, and discrimination. Therefore, it is both ethical and essential to empirically explore competence assessments in order to improve overall counseling competence.

Sexual minority clients are at risk for a myriad of concerns such as shame, depression, risky behaviors, self-harm, abuse, and suicide (Cooper, 2008; Degges-White & Myers, 2005; Human Rights Campaign, 2014; McDermott, Roen, & Scourfield, 2008). In order to align with the intended population of the Sexual Orientation Counselor Competency Scale (SOCCS; Bidell, 2005), sexual minority clients are defined as individuals who identify as lesbian, gay, or bisexual (LGB). Since the 1970s, researchers have identified the importance of counseling for LGB individuals, as these clients have a higher propensity for suicide and substance abuse as compared to heterosexual populations (Cass, 1983; Cooper, 2008; Degges-White & Myers, 2005; McCarn & Fassinger, 1996; Troiden, 1979, 1989). Furthermore, at the turn of the 21st century, researchers began to note the importance of competence in providing effective counseling services to sexual minority clients (Bidell, 2005; Brooks & Inman, 2013; Graham, Carney, & Kluck, 2012; Grove, 2009; Israel & Selvidge, 2003).

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Bidell (2005) developed the SOCCS in an effort to measure counselors' awareness, skill, and knowledge competencies in assisting LGB clients. Initial research findings supported the criterion, concurrent, and divergent validity, and the internal consistency and test-retest reliability of the SOCCS with the norming population; however, the factor structure (construct validity) of the SOCCS with the norming population was questionable (i.e., 40% of the variance explained by the 29-item SOCCS). Therefore, additional research is warranted to examine the construct validity of the SOCCS with a different sample of counseling professionals, as construct validity provides a central understanding to whether or not the assessment: (a) measures the intended competencies, (b) is adequately explicated by a 3-factor structure, and (c) is best comprised of 29 items (Gall, Gall, & Borg, 2006). Consequently, the purpose of the present study was to examine the factor structure of the SOCCS with a sample of counseling practitioners and counselors-in-training to gain an increased understanding of the construct validity of the SOCCS. The findings of the present study add a new perspective, as the results display a potential 4-factor structure that warrants consideration in the literature.

## Sexual Orientation Counselor Competency Scale

The SOCCS (Bidell, 2005) is a 29-item instrument designed to measure counselors' level of competence in working with clients identifying as LGB. The SOCCS was developed based on the LGB-affirmative counseling and multicultural counseling competencies (Sue, Arredondo, & McDavis, 1992) and included an item pool of 100 items that was reduced to 42 items with 12 items pertaining to skills, 12 items to awareness, and 18 items to knowledge. Bidell (2005) examined the factor structure of the SOCCS using exploratory factor analysis (EFA) with a principal axis factoring (PAF) and an oblique rotation, identifying a 3-factor structure: (a) Factor 1: Skills (11 items, 24.91% of the variance explained), which assesses counseling skills in working with LGB clients; (b) Factor 2: Awareness (10 items; 9.66% of the variance explained), which measures counselors' awareness of biases and attitudes about LGB individuals; and (c) Factor 3: Knowledge (8 items, 5.41% of the variance explained), which assesses counselors' understanding about the LGB population.

### Factor Analysis

Bidell (2005) also examined the criterion, convergent, and divergent validity of the SOCCS with his sample. Criterion validity of the SOCCS was examined using participants' education level and self-identified sexual orientation. A positive relationship was identified between the participants' SOCCS subscale scores and their level of education and sexual orientation. Convergent validity was examined by measuring the relationship between SOCCS subscale scores and participants' Attitudes Toward Lesbians and Gay Men Scale (Herek, 1998), the knowledge subscale of the Multicultural Counseling Knowledge and Awareness Scale (Ponterotto et al., 1996), and the skills subscale of the Counselor Self-Efficacy Scale (Melchert, Hays, Wiljanen, & Kolocek, 1996). The results of the correlational analyses supported the convergent validity of the SOCCS. Discriminant validity was examined by comparing the mean social desirability scores with the SOCCS subscale scores, and results supported the divergent validity of the SOCCS within the norming sample.

### Norming Population of the SOCCS

The norming population for the SOCCS (Bidell, 2005) consisted of 312 mental health students, providers, and educators from across the United States. The majority of the sample was comprised of females ( $n = 235$ ) and the average age was 31.9 years old. Individuals were recruited from 13 public and three private universities. More than 80% of the population included students: (a) 47 were undergraduates from an undergraduate introduction to counseling course, (b) 154 were master's-level students in school or community counseling programs accredited by CACREP, (c) 32 were doctoral students from a CACREP-accredited counselor education program, and (d) 30 were from

university internship sites approved by the American Psychological Association. The non-student portion of the population was comprised of 49 doctoral-level counselor education supervisors. A majority of the population (85.5%) identified as heterosexual, 12.2% identified as LGB, and 2.5% chose to not identify. Bidell (2005) noted the limited gender variance in the development of the SOCCS, as it is possible that individuals within the 2.5% may identify on the gender continuum. More than half of the norm group ( $n = 191$ ) identified as European American or White, 41 as Latino, 32 as Asian American, 22 as African American or Black, seven as biracial or mixed, and four as Native American. Fourteen individuals identified as “other,” and this may have been because of rigid racial denominations provided in the demographics.

### Interpretation of the SOCCS

The SOCCS (Bidell, 2005) is a criterion-referenced measure consisting of rating scales. The SOCCS provides respondents with a range of seven choices to self-report on the three subscale domains (Skills, Awareness, and Knowledge): from (a) not at all true, to (b) moderately true, and to (c) totally true. Eleven of the 29 SOCCS items (2, 10, 11, 15, 17, 21, 22, 23, 27, 28, and 29) are reverse scored, and overall competence is interpreted by the sum of the items divided by the total number of items (29) to form a percentage score. Bidell (2005) does not provide information on criteria to determine low, moderate, or high competence; however, inferences can be made from interpreting the overall and subscale scores (Farmer, Welfare, & Burge, 2013).

The overall mean SOCCS (Bidell, 2005) score in the norm group was 4.64 ( $SD = 0.89$ ). Subscale mean SOCCS scores included 2.94 ( $SD = 1.53$ ) for Skills, 6.49 ( $SD = 0.79$ ) for Awareness, and 4.66 ( $SD = 1.05$ ) for Knowledge. Graham, Carney, and Kluck (2012) sampled 234 counseling students and found mean SOCCS averages for competence were 3.88 for Factor 1: Skills, 6.52 for Factor 2: Awareness, 4.67 for Factor 3: Knowledge, and 5.01 for overall SOCCS scores. Follow-up studies continue to support the original theme in which individuals believe they are more aware but less knowledgeable; furthermore, individuals believe they have less skills than knowledge pertaining to sexual minority counselor competencies (Bidell, 2012; Farmer et al., 2013; Grove, 2009; Rutter, Estrada, Ferguson, & Diggs, 2008).

In addition, Graham and colleagues (2012) also assessed for potential differences in SOCCS scores between individuals who have or have not attended a conference presentation, workshop, or training pertaining to LGB issues. No difference in SOCCS scores was identified between participants reporting that they attended a conference presentation with subject matter pertaining to LGB counseling or not; however, individuals who attended a workshop had higher competency scores in Skills,  $F(1, 225) = 61.03, p < .001$ ; Awareness,  $F(1, 225) = 4.42, p < .05$ ; and Knowledge,  $F(1, 225) = 4.34, p < .05$ . Additionally, individuals who attended a training session had higher scores in the domains of Skills,  $F(1, 225) = 32.07, p < .001$ ; Awareness,  $F(1, 225) = 33.62, p < .001$ ; and Knowledge,  $F(1, 225) = 33.62, p < .001$ ; and when compared to individuals who did not attend similar trainings. Furthermore, more experience with LGB clients yielded higher competency scores. A Tukey's post hoc analysis identified that individuals who had never provided counseling services to LGB clients had lower SOCCS scores ( $M = 4.43, SD = 0.72$ ) than individuals who had provided services to one to five LGB clients ( $M = 4.99, SD = 0.66$ ), six to 10 LGB clients ( $M = 5.57, SD = 0.55$ ), 11 to 15 LGB clients ( $M = 5.59, SD = 0.57$ ), or more than 15 LGB-identified clients ( $M = 5.78, SD = 0.50$ ). Therefore, the differences in SOCCS scores suggest that more exposure and experience with LGB clients could improve sexual minority counseling competence.

### Factor Analysis of the Original Instrument

The SOCCS (Bidell, 2005) coefficient alpha for internal consistency reliability was found to be

.90. The subscale scores for internal consistency were .91 for Skills, .88 for Awareness, and .71 for Knowledge. A subsection of the sample ( $n = 101$ ) including students and supervisors was used for test-retest reliability. One-week test-retest reliability was found to be .84 for the overall instrument, .83 for the Skills subscale, .85 for the Awareness subscale, and .84 for the Knowledge subscale (Bidell, 2005). In addition, Bidell (2013) investigated the potential for SOCCS scores to change after implementation of an LGB counseling course six weeks into the program, and identified that the participants' scores were significantly higher on the overall and subscale scores. Bidell's (2013) findings identified the ability for education to promote SOCCS scores in counseling students but challenged the test-retest reliability of the SOCCS. No published data was identified related to the inter-rater reliability or alternate forms of the SOCCS.

### **Additional Factor Analysis of the SOCCS**

Carlson, McGeorge, and Toomey (2013) examined the factor structure of the SOCCS with a sample of 248 master's and doctoral students in couple and family therapy and identified a 2-factor solution: (a) Factor 1: Awareness and (b) Factor 2: Knowledge and Skills. Further, three SOCCS items (i.e., 5, 24, 25) did *not* load into the combined Knowledge and Skills subscale and were removed. The second examination resulted in an acceptable model fit  $\chi^2(df = 8) = 20.65, p < .01$ ; however, it should be noted that five SOCCS item stems (i.e., 3, 4, 7, 8, 19) were altered and the 7-point scale was adapted to a 6-point scale. Therefore, based on the modifications made to the SOCCS, it is difficult to compare the factor structure results to other investigations using the unmodified SOCCS.

### **Counseling Competency With Sexual Minority Clients**

Researchers have utilized the SOCCS in an effort to further their understanding of counseling competencies related to working with sexual minority clients (Brooks & Inman, 2013; Graham et al., 2012; Grove, 2009). Grove (2009) provided counseling students ( $n = 56$ ) with the SOCCS, and an ANOVA identified that years in training provided a significant difference in scores for Skills ( $p = .002$ ), Awareness ( $p = .05$ ), and Knowledge ( $p = .001$ ). Although analyses were not conducted to determine the differences between subscales, Grove noted high scores in the Awareness subscale. Although individuals have strong, affirmative attitudes, they may lack the knowledge and subsequent skills necessary to effectively aid LGB clients. These SOCCS scores may be interpreted to show a variety of concerns such as inflated confidence, potential lack of training, and low competency. Graham and colleagues (2012) utilized the SOCCS with counselor education and counseling psychology graduate students ( $n = 234$ ) and yielded similar results to Grove. Participants scored highest on the Awareness subscale, followed by the Knowledge and Skills subscale scores. These research findings identify that counselor trainees may not be receiving the necessary knowledge and skills to become competent counselors in working with sexual minority clients.

Advances have been made in the counseling field regarding the understanding of competency in aiding sexual minority clients (Bidell, 2005; Graham et al., 2012; Grove, 2009); however, additional research is warranted. The commonly utilized SOCCS is a self-report measure; therefore, there is potential for participants to provide socially desirable answers. Further, because the SOCCS was created to measure counselors' level of confidence (self-efficacy) in providing counseling services to LGB clients, the literature has followed this narrow lead (Bidell, 2013; Carlson et al., 2013; Grove, 2009). The SOCCS was created prior to ALGBTIC's (2013) guidelines; therefore, the items may not align with the essential aspects of the guidelines. Considering this potential gap, it is essential to explore the psychometric properties of the SOCCS (Bidell, 2005). Nevertheless, the SOCCS is the most used assessment instrument for examining LGB counselor competence in training and research; hence, it is important to explore the reliability and validity of the instrument in order to support

continued exploration of LGB counselor competence. Therefore, we aimed to examine the factor structure of the SOCCS with a sample of counselor trainees and practitioners in order to gain an increased understanding of the psychometric properties of this assessment. The following research questions guided our investigation:

**Research Question 1.** What is the factor structure of the SOCCS with a sample of practicing counselors and counselors-in-training?

**Research Question 2.** What is the internal consistency reliability of the SOCCS with a sample of practicing counselors and counselors-in-training?

## Method

### Participants

We aimed to examine the factor structure of the SOCCS with a sample of practicing counselors and counselors-in-training. The data used for this investigation were part of a larger study regarding counselors' preparedness to assist clients in the coming-out process. Because online surveys tend to have a lower response rate (Shih & Fan, 2009), we decided to use additional intentional data collection methods in our sampling to achieve a sample of counselors-in-training and practicing professionals. The data collection assessments were distributed through ALGBTIC in order to acquire a national sample of counseling professionals and to include individuals who may perceive themselves as competent to work with sexual minority individuals. In addition, the data collection assessments were distributed to counselors-in-training enrolled in four CACREP-accredited counseling programs in four different southeastern states with the assumption that the student population would help to cover the domain of individuals who do not believe they are competent to assist sexual minority clients in counseling. We received a total of 200 responses, which gave us a response rate of 28.41%. However, because of missing data, 45 participants were eliminated, leaving 155 (22.02%) usable cases. Although the response rate was less than the weighted average Van Horn, Green, and Martinussen (2009) noted in their meta-analysis of counseling and clinical psychology journals (49.6%), we decided our response rate was adequate to continue because of the necessity of research on the factor structure of the SOCCS and the potential value of the implications on improving counseling services for sexual minority clients. Additionally, the demographics of the sample mirrored the overall population (i.e., a majority of the participants identified as white and female), which is presented in Table 1 (U.S. Census Bureau, 2016).

### Procedure

Our university's institutional review board approved this study prior to any data collection and recruitment. We implemented the Tailor Design Method (Dillman, Smyth, & Christian, 2009) in our recruitment and data collection (e.g., invitation, survey). We utilized Qualtrics, an electronic survey research tool, to assemble our informed consent, data collection instruments, and demographic questionnaire online. Qualtrics permitted us to collect anonymous data. After data collection, Statistical Package for the Social Sciences (Windows Version 20) was used for data cleaning and analysis.

### Data Screening

Before we analyzed our data, we screened our dataset. First, we needed to remove responses with at least one incomplete item from the overall data set to promote consistency (Warner, 2013). Listwise deletion resulted in the removal of 45 cases, resulting in 155 completed data collection packets for the investigation. SOCCS item scores were converted to standardized z-scores to determine if outliers

**Table 1**  
*Participants' Demographic Characteristics*

Characteristic	<i>n</i>	Total Percent
<b>Gender</b>		
Female	121	82.9
Male	24	16.4
<b>Ethnic Background</b>		
African American/African/Black	14	9.7
Asian/Asian American	6	3.9
Biracial/Multiracial	9	5.8
Caucasian (Non-Hispanic)	105	67.7
Hispanic/Latina/Latino	7	4.5
Other	2	1.3
Chose not to specify	2	1.3
<b>Sexual Orientation</b>		
Bisexual	8	5.2
Gay	5	3.2
Heterosexual	71	45.8
Lesbian	7	4.5
Other	3	1.9
<b>Professional Status</b>		
Student	102	61.5
Clinician	43	33.3
<b>CACREP Status</b>		
Accredited	73	46.8
Not Accredited	20	12.8
<b>Age</b>		
21–25	70	45.2
26–30	27	17.4
31–35	16	10.3
36–40	13	8.4
41–45	4	2.6
46–50	7	4.5
51–55	1	.6
56–60	6	3.9
61–65	1	.6
66–70	1	.6

*Note.* *N* = 155

existed in the data, and the results identified that no scores were greater than +4 or less than -4; therefore, no outliers were identified (Hair, Black, Babin, Anderson, & Tatham, 2010). Next, we examined the appropriateness of the sample size to conducting an EFA. Smaller sample sizes are suitable for EFA if several solutions have high loading variables (above .80; Tabachnick & Fidell, 2013). In addition, rather than sample size, the ratio of assessment items to participant may be used to determine appropriateness of data for EFA (Dimitrov, 2012; Nunnally, 1978; Tabachnick & Fidell, 2013), with a five participant cases-to-item ratio deemed acceptable. Because there were more than five cases per SOCCS item (5.34:1), we determined this sample size was appropriate for EFA. Our

next step was to examine the normality of the data and determine the most appropriate method of extraction. To assess for normality of our data, we checked the univariate normality of each SOCCS item, and if item univariate normality was satisfied, we checked multivariate normality using the Mardia test (Mvududu & Sink, 2013). We identified several SOCCS items that were not normally distributed; therefore, multivariate normality was not examined because univariate normality is a necessary condition of multivariate normality (Mvududu & Sink, 2013). In addition, our histograms, boxplots, and Q-Q Plots results identified that multiple SOCCS items were non-normally distributed; hence, we assumed the data was non-normally distributed, which can occur in social science research (Mvududu & Sink, 2013).

### Data Analysis

After screening the dataset for missing data and assessing for normality, we conducted an EFA to examine the factor structure of the SOCCS with our sample of counseling practitioners and counselors-in-training. Because of the non-normality of the data (Costello & Osborne, 2005), PAF was used for extraction with an oblimin rotation with Kaiser Normalization. A significant value ( $p < .001$ ) was identified for Bartlett's test of sphericity (Bartlett, 1954), and a value of .83 was obtained for Kaiser-Meyer-Olkin sampling adequacy for the SOCCS. Next, we examined internal consistency reliability of SOCCS using Cronbach's  $\alpha$ , thus assessing the degree of correlation between SOCCS items.

### Results

To examine the factor structure of SOCCS, we used EFA, employing PAF analysis. All SOCCS items displayed a factor loading of at least .3 and were initially retained (Floyd & Widaman, 1995; Hair et al., 2010). However, SOCCS items were reduced following classical test theory in order to reduce items with poor measurement properties and to increase internal consistency reliability (Crocker & Algina, 2006; DeVellis, 2003). As noted in Table 2, The PAF results identified the presence of six SOCCS factors with eigenvalues exceeding one, explaining 62% of the variance. However, the first three factors produced eigenvalues of greater than 2.8, whereas the remaining three were all less than 1.5. The three factors accounted for 49% of the variance. As noted in Figure 1, the scree plot, a preferred method for identifying factor solutions in EFA (Hair et al., 2010), identified a steep decline including three factors, a break near the fourth factor, and a significant plateau at the fifth factor, supporting a 3- or 4-factor model solution for the SOCCS with these data. The factor matrix showed loadings of more than .4 for the first three factors, and less than .4 for the fourth through sixth factors. The first three SOCCS factors paralleled Bidell's conceptually based factors of Skills, Awareness, and Knowledge. In the essence of EFA, we examined the potential construct being measured by the fourth factor and determined that all items (i.e., 4, 7, 8, 12 and 18) pertained to experience. Originally, these SOCCS items were included in the Skills subscale; however, we determined that the presence of these items together shows promise for a fourth SOCCS subscale of Experience. The model with four subscales accounted for 54% of the variance.

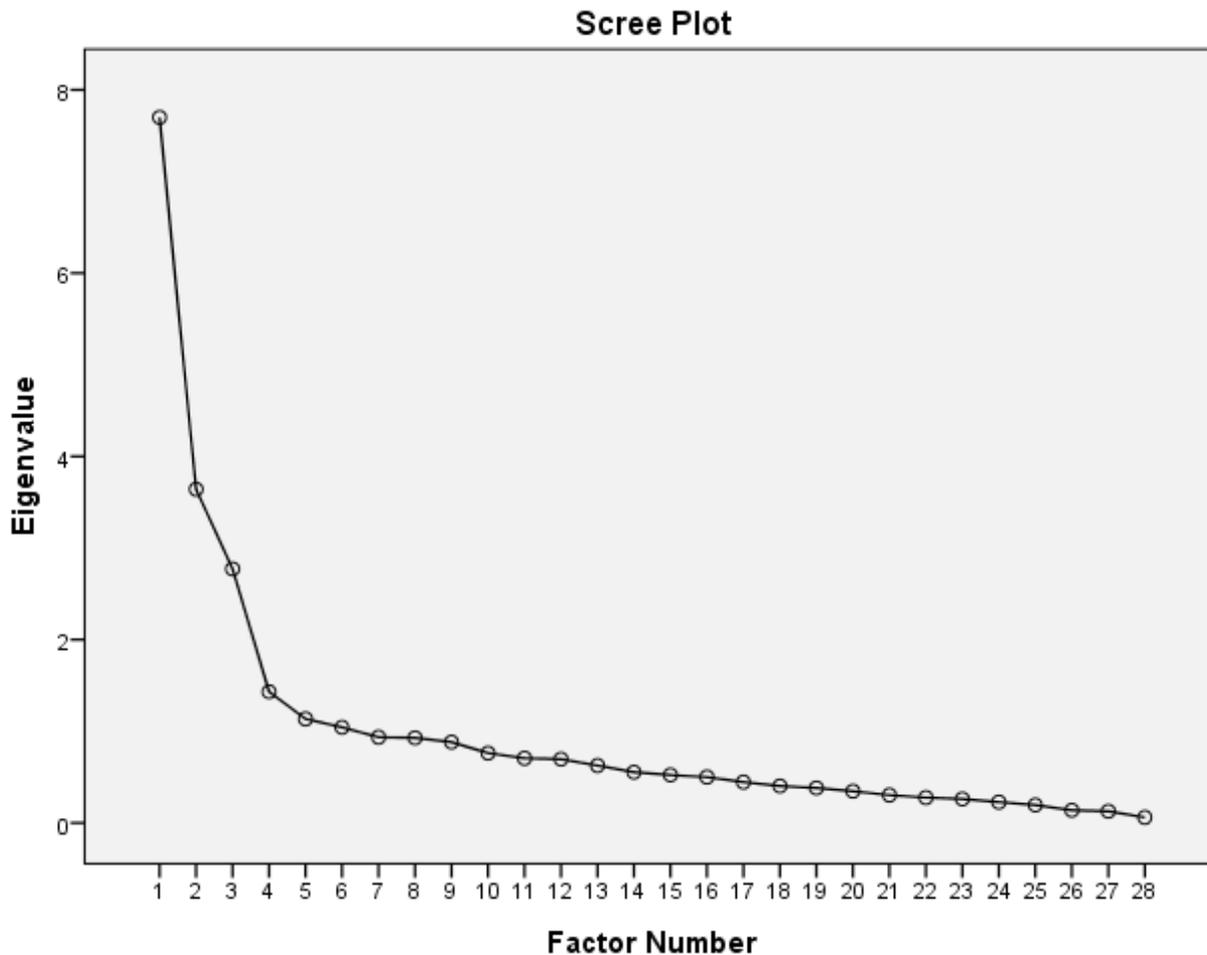
The Knowledge subscale was the only subscale that loaded as intended with eight items, accounting for 9.90% of variance as compared to 5.41% of variance in the original analysis (Bidell, 2005). Six SOCCS items loaded onto the Skills subscale, accounting for 27.5% of the variance as compared to 24.91% of variance in the original analysis. The remaining five SOCCS items that did not load onto the Skills subscale loaded together onto the fourth subscale, which is the Experience subscale. The Experience subscale accounted for 5.11% of the variance. Five SOCCS items loaded onto the Awareness subscale. Of the remaining items, three loaded onto both fifth and sixth factors (i.e., 11, 15, and 17). Unlike the Awareness subscale, which was theoretically justified, a fifth factor was not theoretically justified; therefore, we decided to keep these three items with the Awareness subscale.

**Table 2***Total Variance Explained*

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		Rotation Sums of Squared Loadings <sup>a</sup>	
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	7.705	26.568	26.568	7.344	25.311	25.311	5.422
2	3.722	12.834	39.402	3.263	11.250	36.561	3.520
3	2.828	9.750	49.152	2.365	8.155	44.717	3.982
4	1.442	4.972	54.124	1.005	3.464	48.181	5.050
5	1.195	4.121	58.245	.710	2.447	50.628	2.362
6	1.088	3.752	61.996	.601	2.072	52.699	1.440
7	.992	3.419	65.416				
8	.929	3.204	68.619				
9	.898	3.097	71.716				
10	.827	2.850	74.566				
11	.745	2.568	77.134				
12	.705	2.431	79.565				
13	.666	2.298	81.863				
14	.583	2.012	83.874				
15	.540	1.861	85.735				
16	.523	1.804	87.539				
17	.474	1.634	89.173				
18	.445	1.535	90.709				
19	.399	1.377	92.085				
20	.381	1.313	93.399				
21	.341	1.174	94.573				
22	.299	1.031	95.604				
23	.276	.953	96.557				
24	.257	.887	97.444				
25	.226	.781	98.224				
26	.194	.670	98.895				
27	.137	.472	99.366				
28	.126	.434	99.800				
29	.058	.200	100.000				

Note: Extraction Method: Principal Axis Factoring.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.

**Figure 1.***Eigenvalues from 28-item SOCCS Factor Analysis*

Because SOCCS items 10 and 23 only loaded onto factors five and six and no other factor, we decided to remove these items for parsimony. Therefore, the Awareness subscale now has eight items, accounting for 13% of the variance. Further information on factor loadings can be seen in Table 3.

### Internal Consistency Reliability of the SOCCS

The second research question examined the internal consistency reliability of the SOCCS with a sample of counselors-in-training and practicing counselors. The original 29-item SOCCS displayed a strong reliability score with a Cronbach's  $\alpha$  of .90 (Leech, Onwuegbuzie, & O'Connor, 2011). As a 27-item assessment, the Cronbach's  $\alpha$  for the overall SOCCS was .894; although slightly lower than the original assessment, the reliability of the revised SOCCS displays strong internal consistency (Leech et al., 2011). Original SOCCS subscale reliability scores were .91 for Skills, .88 for Awareness, and .76 for Knowledge. Our item analysis of the SOCCS data identified strong internal consistency reliability with a Cronbach's  $\alpha$  of (a) Total SOCCS scores .893, (b) SOCCS Knowledge subscale scores .807, (c) SOCCS Skills subscale scores .877, (d) SOCCS Awareness subscale scores .814, and (e) SOCCS Experience subscale scores .872 (Ponterotto & Ruckdeschel, 2007).

**Table 3***Factor Loadings for a 4-Factor Solution*

SOCCS Item	1	2	3	4
I have received adequate clinical training and supervision to counsel lesbian, gay, and bisexual (LGB) clients.	.742	.255	.216	.356
I check up on my LGB counseling skills by monitoring my functioning/competency—via consultation, supervision, and continuing education.	.618	.214	.365	.418
I feel competent to assess the mental health needs of a person who is LGB in a therapeutic setting.	.925	.224	.369	.588
I have done a counseling role-play as either the client or counselor involving an LGB issue.	.513	.138	.317	.470
Currently, I do not have the skills or training to do a case presentation or consultation if my client were LGB.	.673	.326	.185	.533
The lifestyle of an LGB client is unnatural or immoral.	.173	.896	-.120	.133
I believe that being highly discreet about their sexual orientation is a trait that LGB clients should work toward.	.132	.207	.083	-.088
I believe that LGB couples don't need special rights (domestic partner benefits, or the right to marry) because that would undermine normal and traditional family values.	.171	.426	.089	.127
It would be best if my clients viewed a heterosexual lifestyle as ideal.	.090	.393	-.020	.109
I think that my clients should accept some degree of conformity to traditional sexual values.	.102	.343	.004	.040
I believe that LGB clients will benefit most from counseling with a heterosexual counselor who endorses conventional values and norms.	.050	.200	.080	.163
Personally, I think homosexuality is a mental disorder or a sin and can be treated through counseling or spiritual help.	.328	.618	.046	.096
I believe that all LGB clients must be discreet about their sexual orientation around children.	.115	.506	-.040	.010
When it comes to homosexuality, I agree with the statement: "You should love the sinner but hate or condemn the sin."	.289	.894	-.091	.180
LGB clients receive less preferred forms of counseling treatment than heterosexual clients.	.090	-.118	.584	.038
I am aware some research indicates that LGB clients are more likely to be diagnosed with mental illnesses than are heterosexual clients.	.468	.064	.581	.334
Heterosexist and prejudicial concepts have permeated the mental health professions.	.300	.129	.787	.202

There are different psychological/social issues impacting gay men versus lesbian women.	.098	-.093	.482	.202
I am aware of institutional barriers that may inhibit LGB people from using mental health services.	.524	.171	.684	.334
I am aware that counselors frequently impose their values concerning sexuality upon LGB clients.	.394	-.023	.758	.195
Being born a heterosexual person in this society carries with it certain advantages.	.216	.040	.636	.112
I feel that sexual orientation differences between counselor and client may serve as an initial barrier to effective counseling of LGB individuals.	.038	-.220	.482	-.055
At this point in my professional development, I feel competent, skilled, and qualified to counsel LGB clients.	.904	.310	.301	.659
I have experience counseling lesbian or gay couples.	.440	.169	.147	.720
I have experience counseling lesbian clients.	.494	.178	.199	.847
I have been to in-services, conference sessions, or workshops which focused on LGB issues (in Counseling, Psychology, Mental Health).	.397	.261	.192	.540
I have experience counseling bisexual (male or female) clients.	.479	.181	.179	.891

## Discussion

The purpose of this research was to explore the factor structure and reliability of the SOCCS with a sample of counselor trainees and practitioners in the United States. Our results identified a 4-factor SOCCS model, including the subscales of Skills, Awareness, Knowledge, and Experience. The 4-factor SOCCS structure identified with these substantiate the three previous factors of Skills, Awareness, and Knowledge; however, an additional factor is noted. The fourth factor, Experience, echoes Graham and colleagues' (2012) findings, which note improved competence with practice. Hence, the results of this study should encourage researchers to explore beyond the 3-factor model and promote measurement versatility with counselor trainees and clinicians. Overall, our results identified a 4-factor SOCCS model with strong internal consistency, offering counselor educators and practitioners a sound method for assessing sexual orientation counselor competence.

### Implications for Counselors and Counselor Educators

Counselor competency with sexual minority clients is essential in counselor education (ACA, 2014; ALGBTIC, 2013; CACREP, 2009). Our findings support the use of the SOCCS as a valid and reliable measure of sexual orientation counselor competency. Therefore, we suggest that the SOCCS may be implemented in counselor training programs to assess trainees' levels of competency in providing services to sexual minority clients. Our results identified that in addition to the previously suggested areas of importance in sexual orientation counselor competence (i.e., Skills, Awareness, Knowledge), experience may be an important factor to consider. Counselor educators may consider methods of facilitating experiences within training in order to foster increases in competence. Further, the SOCCS may be used as a pedagogical intervention strategy in counselor education programs. For example, the SOCCS may be given to students to prompt reflection on overall and subscale competence levels regarding counseling sexual minority clients. The SOCCS may also be used beyond counselor education programs to assure that practicing counselors not only have, but also maintain necessary

components of competence in order to aid sexual minority clients. Additionally, the results of our study help to further sexual minority counselor competence literature. The SOCCS (Bidell, 2005) is an effective measure for researchers to employ to examine counselors' self-perceived levels of competence in working with LGB clients; however, the SOCCS also offers educators and practitioners a tool to support best practices in counseling and counselor education. Our SOCCS data yielded a potential fourth factor (i.e., Experience) that was not delineated as an essential component of counselors' competence in working with LGB clients in prior research. Therefore, this study prompts researchers, counselor educators, and counselors to consider the factor of counselors' experience in providing services to LGB clients as a necessary domain of counselor competence.

### **Recommendations for Future Research**

The SOCCS is an effective instrument in assessing sexual orientation counselor competence. At this time, there is no indication of cutoff scores that determine appropriate levels of counselor competence (e.g., counselor is competent or not competent to provide services to sexual minority clients). Hence, we recommend that future researchers investigate levels of competence that should be assessed as benchmarks for counselors-in-training prior to graduating from their graduate programs. To our knowledge, other than the SOCCS creator (Bidell, 2005), Carlson and colleagues (2013) are the only researchers to explore the factor structure of the SOCCS. However, Carlson and colleagues altered SOCCS item stems (i.e., 3, 4, 7, 8, and 19) in their investigation and transformed the 7-point scale to a 6-point scale. Their results displayed a 2-factor model that differs from the 3-factor model recommended by Bidell (2005); however, the amendments to the instrument make the SOCCS results difficult to compare to other studies. Further, to our knowledge, we are the only researchers to explore the factor structure of the SOCCS without altering the instrument prior to exploration. Moreover, our 4-factor SOCCS model results accounted for a larger percent of variance (56%) than the original 3-factor SOCCS model (40%; Bidell, 2005). We recommend that future researchers conduct confirmatory factor analyses with their data to determine if the four factors found in our results are consistent with other samples and populations.

### **Limitations**

We recognize that our study has limitations. The SOCCS is a self-report instrument, making the data vulnerable to social desirability bias (Gall et al., 2006). Our response rate may have contributed to our sampling and data collection methods (e.g., online survey), influencing the external validity of our findings. Because of recruitment from ALGBTIC, it is possible that there may have been bias, as members of this group may not have competence levels that are equivalent to the general counseling population. Additionally, because of an error in the original Qualtrics survey, complete SOCCS answers were not required, thus causing issues in missing data. Furthermore, our sample size was limited, affecting the interpretation of our findings. Nevertheless, our study examined an area warranting further investigation (counselors-in-training's and counselors' competency in providing service to sexual minority clients) and offered meaningful findings (e.g., a 4-factor SOCCS model).

### **Conclusion**

The social climate for sexual minorities is changing, and it is imperative for counselors to be competent to serve this population. Because of constant societal change, it is important for measures to be relevant in order to measure sexual minority counselor competence. The SOCCS (Bidell, 2005) is the most current and related instrument to measure sexual minority counselor competence. It fulfills an area of need in counselor training and development. This study provides helpful data to expand on the reliability and validity data of this useful assessment.

Moreover, the findings from the study present the case for a potential fourth subscale of Experience to be considered in addition to Skills, Awareness, and Knowledge. The existence of an additional factor pertaining to involvement and engagement in practice holds considerable implications for counselor training and effective practice with LGB clients.

### ***Conflict of Interest and Funding Disclosure***

The authors reported no conflict of interest or funding contributions for the development of this manuscript.

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