

2021

Sexuality and Disability in Rehabilitation Counseling Curricula: Rehabilitation Counselor Educators' Attitudes, Comfort, and Knowledge

Sharesa H. McCray
Langston University

Tyra T. Whittaker
North Carolina A & T State University

Jeff Wolfgang
North Carolina A&T State University

Tammy Webb
North Carolina A&T State University

Glacia Ethridge
North Carolina A&T State University <https://digitalcommons.unf.edu/jcssw>

 Part of the [Counselor Education Commons](#)

Recommended Citation

McCray, S. H., Whittaker, T. T., Wolfgang, J., Webb, T., & Ethridge, G. (2022). Sexuality and Disability in Rehabilitation Counseling Curricula: Rehabilitation Counselor Educators' Attitudes, Comfort, and Knowledge. *Journal of Counseling Sexology & Sexual Wellness: Research, Practice, and Education*, 3 (2), 50-57. <https://doi.org/10.34296/03021042>

This Article is brought to you for free and open access by the Brooks College of Health at UNF Digital Commons. It has been accepted for inclusion in Journal of Counseling Sexology & Sexual Wellness: Research, Practice, and Education by an authorized administrator of UNF Digital Commons. For more information, please contact [Digital Projects](#).

© 2021 All Rights Reserved

Sexuality and Disability in Rehabilitation Counseling Curricula: Rehabilitation Counselor Educators' Attitudes, Comfort, and Knowledge

Sharesa H. McCray
Langston University

Tyra T. Whittaker
North Carolina A&T State University

Jeff Wolfgang
North Carolina A&T State University

Tammy Webb
North Carolina A&T State University

Glacial Ethridge
North Carolina A&T State University

Purpose: To examine the attitudes, knowledge, and comfort levels of rehabilitation counselor educators towards sexuality and disability, and to determine if significant differences exist within variables. **Method:** Data was collected from a sample of rehabilitation counselor educators (N=27) via an internet-based survey. The Knowledge, Comfort, Approach and Attitudes towards Sexuality Scale (KCAASS) and demographic questionnaire was disseminated to collect data. A MANOVA was conducted to examine if there was a relationship among the variables of attitudes, knowledge, comfort, age, gender, and ethnicity. **Results:** Results indicate educators having high comfort levels and positive attitudes towards sexuality and disability. The mean for knowledge was low, indicating a lower level of knowledge of sexuality and disability. Results indicate that there was no variance among the means of the categorical variables. The only variation that existed within the categorical variables was the gender of the participant. **Conclusion:** Further research is warranted to examine the specific needs of educators, students, and graduate programs, as well as exploring differences based upon institutional settings. Future qualitative research in sexuality and disability may also generate testimonials and theories from the perspective of students and educators in expressing their needs. The inclusion of human sexuality within various academic levels of rehabilitation education is warranted to increase competence of both students and educators.

Keywords: sexuality, rehabilitation counseling, and counselor education

Introduction

Rehabilitation counselors should have the ability and competency to provide sexuality-related assistance, as they are experts in providing services that will enhance the quality of life of persons with disabilities (FERENCE, 1999). Sexuality is essential in the lives of persons with disabilities, as it impacts their quality of life, psychological state, self-esteem, and self-perception of their body image (BERKMAN, WEISSMAN, & FRIELICH, 1978; PEBDANI & JOHNSON, 2014). Sexuality also promotes better social adjustments within persons with disabilities' peer interactions and relationships (BERKMAN et al., 1978; PEBDANI & JOHNSON, 2014). Although sexuality is important in the lives of persons with disabilities, it is often neglected within the rehabilitation process (JUERGENS, SMEDEMA, & BERVEN, 2009; MILLIGAN & NEUFELDT, 2001; YALLOP & FITZGERALD, 2010).

Persons with disabilities typically have sexuality concerns, which include sexual expression, fertility, prevention of sexual abuse and unwanted pregnancies, dating, establishing sexual relationships, sexual orientation, as well as sexual harassment (TEPPER, 2000; MCCABE, CUMMINS, & DEEKS, 2000). Prior research indicates that persons with disabilities

Corresponding Author

Sharesa H. McCray
Langston University
6700 N. Martin Luther King Ave.
Oklahoma City, OK 73111
E: sharesa.mccray@langston.edu
P: (405)530-7526

have a need for counseling concerning their sexuality issues, which is currently ignored within health care and rehabilitation settings, as it is likely that rehabilitation counselors often do not have the appropriate preparation to address these concerns (Pebdani, 2013; Pebdani & Johnson, 2014). Rehabilitation counselors should be adequately prepared to address contemporary concerns, such as sexuality and disability.

Given that rehabilitation counselors utilize a holistic approach, persons with disabilities may feel more comfortable with rehabilitation counselors (Burling, Tarvydas, & Maki, 1994; Pebdani & Johnson, 2014). Subsequently, rehabilitation counselors are typically the professionals to whom persons with disabilities disclose and discuss personal issues and concerns, which is justification for the necessary competency in sexuality and disability. Knowledge about sexuality and disability could also influence the level of comfort that rehabilitation counselors have towards addressing the sexuality concerns of persons with disabilities. For this reason, the Council for Accreditation of Counseling and Related Educational Programs (CACREP) provided accreditation standards requiring addressing the impact of disability on human sexuality in the curriculum (CACREP, 2016; CRCC, 2016). This notion is supported by a study's results (Juergens et al., 2009) that indicated rehabilitation counseling students who reported more knowledge about sexuality and disabilities were more likely to feel comfortable discussing sexuality with clients. Juergen et al. (2009) also reported in their study that students who had more exposure and preparation reported higher levels of self-reported knowledge of sexuality.

Whereas this topic lends itself to importance, presently there is a lack of textbooks, book chapters, or supplemental resources that distribute valuable information regarding sexual assistive devices and sexuality rehabilitation focused counseling in the preparation of students. To date, there is a dearth of research on the extent to which rehabilitation counseling education programs and rehabilitation counselor educators incorporate sexuality and disability into the curricula (Pebdani & Johnson, 2014). The purpose of this study was to measure rehabilitation counselor educators' attitudes, comfort, and knowledge of sexuality and disability. Participants were recruited from national organizations that serve rehabilitation counselor educators and professionals. A Multivariate Analysis of Variance was conducted on the data using an alpha of .05 to determine if rehabilitation counselor educators' gender, ethnicity, and age would influence impact levels of knowledge, attitude and comfort. Implications for institutional practices and future preparation of counselors and counselor educators are discussed.

Literature Review

Although sexuality is essential in the lives of persons with disabilities, there has been no extensive discussion within

the profession regarding its implementation in rehabilitation counseling services and education, as sexuality and disability is also often ignored within clinical rehabilitation settings (Pebdani, 2013; Pebdani & Johnson, 2014). This issue is compounded by the likelihood of persons with disabilities' sexuality concerns being ignored within the entire rehabilitation process (Pebdani & Johnson, 2014; Tepper, 2000). Given that sexuality could affect the consumer's self-perception, feelings of desirability, and self-esteem, a successful rehabilitation plan must address the consumer's sexuality needs.

The extent to which this discussion goes is currently unknown. It is also unknown if there are opportunities for experiential or interactive activities regarding this topic. There is limited knowledge of into how many courses topic extends in the rehabilitation counseling curricula. This topic is likely only to be mentioned within the medical and psychosocial aspects of a disability course, which may indicate that the topic is only being discussed in a physiological aspect instead of a holistic perspective.

Rehabilitation Counselor Education and Sexuality

To date, there is a paucity of research on rehabilitation counselor educators and their implementation of sexuality and disability into the curricula. Currently, little is known about the state of training and instruction surrounding disability and sexuality within rehabilitation counseling education (Pebdani & Johnson, 2014). It is imperative to explore the current standpoint of human sexuality within the curricula, as increasing training on the topic would increase levels of comfort and competency (Juergens et al., 2009) have been a few studies that have explored the competency and comfort of rehabilitation counselors and students in addressing sexuality needs within clinical settings. All studies have collectively indicated the importance of increasing training and education (Juergens et al., 2009; Kazukauskas & Lam, 2009; Pebdani, 2013; Pebdani & Johnson, 2014).

Pebdani and Johnson's (2014) study explored the current level of training on sexuality that rehabilitation counseling students receive. The results of the study indicated that less than half of the sample size (reported to be approximately 312 participants) received training on sexuality in their CORE rehabilitation counseling graduate programs, while nearly one-third (29.8%) received training on sexuality in their undergraduate program (Pebdani & Johnson, 2014). The results of this study also indicated that 16.7% (N=52) of rehabilitation counseling students reported receiving no training at all within both their undergraduate and graduate programs (Pebdani & Johnson, 2014). Results from this study also indicated that 14.4% (n=45) reported that they received one to six class periods in graduate school, as 10.6% (n=33) reported that they received less than one semester of training in sexuality (Pebdani & Johnson, 2014).

Pebdani and Johnson (2014) noted, “the holistic nature of rehabilitation counseling and the Council on Rehabilitation Education (CORE) requires that students receive training on sexuality during their graduate studies, it is striking that more than half the students reported that they did not receive graduate training in sexuality” (p. 174). This study also expressed concern for lack of training, being that other rehabilitation professionals often ignore the sexuality of persons with disabilities (Pebdani & Johnson, 2014). These findings are similar to the conclusions of two studies (Juergens et al., 2009; Kazukauskas & Lam, 2009), which indicates that knowledge about sexuality and disability could influence and predict certified rehabilitation counselors’ and students’ comfort level of discussing sexuality of persons with disabilities.

These studies have established that increasing formal training in sexuality and disability for students addressing sexuality with consumers is critical to proposition students’ ability to implement quality holistic services to persons with disabilities’ sexuality. Moreover, the importance of teaching sexuality within rehabilitation counseling education programs should not be understated, as Pebdani and Johnson (2014) indicate that rehabilitation counselor educators should increase the intensity of preparation in sexuality and disability. An additional study conducted by Pebdani (2013), which explored rehabilitation counseling master’s students’ knowledge, comfort, attitude, and approach towards sexuality and disability, indicated similar results as the aforementioned studies: the more knowledge a student has in sexuality and disability the more comfortable he or she is with clinical approaches.

Pebdani and Johnson (2014) also implied that there should be an increase in research on the training of sexuality and disability for rehabilitation counselors, as this would have positive results for preparation on this topic. This indicates that there is a need for research that explores how rehabilitation counselor education presently incorporates sexuality and disability into the curricula. The present study is important to the profession of rehabilitation counseling, because it addresses the barriers and needs of rehabilitation counselor educators to employ sexuality and disability more fully into the curricula. This study will also aid the body of knowledge in recognizing how developing various segments within the curricula could assist students in becoming competent in the area of sexuality and disability.

It is imperative that rehabilitation counseling students engage in comprehensive and rigorous discussions surrounding topics, such as sexuality and disability, that they will encounter in practice. This study is of importance because within the field of counselor education the rigor of educator instruction could impact the implementation of concepts in clinical practice and the retention of knowledge (Buskist & Groccia, 2011; Dewey, 1933; McAuliffe, 2011; McKeachie, 2006). In counselor education, best practices en-

courage professors to use active learning methods, which encourages and influences students’ retention after the course has ended (McAuliffe, 2011). The rigor of instruction helps students become aware of problematic patterns within the field, which would help them understand the current gap and need for quality sexuality services for persons with disabilities (Herreid, 2011; McKeachie, 2006). It also allows them to consider conflicting perspectives and challenges to ideas that they may have taken for granted within sexuality and disability (McAuliffe, 2011). Exploring rehabilitation counselor educators’ level of implementation of sexuality and disability within the curricula is vital, because it will challenge any previously held misperceptions and attitudes on sexuality and disability, which will likely impact their retention of the topic.

CACREP Standards on Training in Human Sexuality

The Council for Accreditation of Counseling and Related Educational Programs (CACREP) has committed to adopting professional standards that govern the quality of programming for counseling programs. These standards ensure that rehabilitation counseling students receive training and academic experiences that prepare them to enter the clinical profession of rehabilitation counseling (CACREP, 2016). The CACREP accreditation process promotes the effective and competent delivery of rehabilitation services to consumers with disabilities. It makes efforts to produce graduates who have skills, knowledge, and attitudes that are necessary to provide rehabilitation counseling services to clients with physical, emotional, and mental disabilities (CACREP, 2016). The accreditation process of CACREP ensures that rehabilitation counseling graduate programs meet acceptable levels of quality (CACREP, 2016).

Accreditation standards for both clinical rehabilitation and rehabilitation counseling (5.H.2.h and 5.D.2.m) require student learning outcomes of identifying the impact of disabilities on human sexuality (CACREP, 2016). According to these standards, students should demonstrate an ability, a level of comfort, and competency to address human sexuality of persons with disabilities. In the context of the impact of disabilities, rehabilitation counseling students must understand how disability and sexuality can impact intimate relationships, marriages, and family systems. Considering these standards, students should also understand how the reproductive process, sexual pleasure, and expression of sexual desires can be impacted by disabilities, and what the psychosocial implications of this could mean for a client. Disabilities impact the dynamics of sexuality and intimate relationships, and sexual activity may be decreased because of a disability (Esmail, Darry, Walter, & Knupp, 2010). Rehabilitation counseling students should not only to be introduced to sexuality and disability content in Medical Aspects of Disability, but also be challenged with developing possible

rehabilitation planning for case scenarios in theories, family counseling, and group counseling courses. Emphasizing this dynamic in a variety of courses should assist in encouraging students to consider how the micro and macro levels could be influential when discussing disability and sexuality.

Methods

The study examined rehabilitation counselor educators' attitudes, comfort, and knowledge of sexuality and disabilities. The data was synthesized and analyzed using computer-based software and statistical analysis software (SPSS). Data from the surveys were imported into SPSS to facilitate advanced analysis of the data, such as calculating the central tendencies. SPSS also facilitated the advanced multivariate of variance analysis of all of the factors and variables. The purpose of this study was to measure rehabilitation counselor educator's attitudes, comfort level, and knowledge of sexuality and disability, and to determine if there are differences based upon age, gender, and ethnicity. The research questions that guided this study were:

Research Question 1: What are rehabilitation counselor educator's perceived level of comfort, knowledge, and attitude towards sexuality and disability?

- **H₀:** Rehabilitation counselor educators have a perceived low level of comfort, knowledge, and attitude towards sexuality and disability.
- **H_a:** Rehabilitation counselor educators have a perceived high level of comfort, knowledge, and attitude towards sexuality and disability.

Research Question 2: Do Rehabilitation Counselor Educators' level of knowledge, comfort, and attitude towards sexuality and disability differ by their age, ethnicity, gender?

- **H₀:** Rehabilitation counselor educators' level of knowledge, comfort, and attitudes towards sexuality and disability does not differ by their age, ethnicity, gender, counselor identity, and years of experience as a counselor educator.
- **H_a:** Rehabilitation counselor educators' level of knowledge, comfort, and attitudes towards sexuality and disability differs by their age, ethnicity, gender, counselor identity, and years of experience as a counselor educator.

Sampling

Convenience sampling was employed via the non-random sampling technique to generate the sample size for this study. A total of 27 rehabilitation counselor educators were included in the study. Rehabilitation counselors

within CACREP accredited rehabilitation counseling programs were surveyed. The surveys for this study were disseminated to Listservs of National Council on Rehabilitation Counselor Education (NCRE), National Association of Multicultural Rehabilitation Concerns (NAMRC), and North Carolina Agricultural and Technical State University (NCAT).

Participants were required to teach within a CACREP-accredited program and teach rehabilitation counseling students. It is important to note that the merger of CORE and CACREP may have impacted the participant response to the study. This merger took place in July 2017 and may have influenced rehabilitation counselor educators as they were likely adapting to new policies and accreditation standards.

Participants were required to complete an informed consent and two surveys that will collect the data to measure the variables. Selection criteria for inclusion in this study are as follows: (a) taught courses in rehabilitation counseling and (b) rehabilitation counselor educators who currently instruct rehabilitation counseling courses within CACREP-accredited graduate programs. To be included within the data analysis, the participant had to indicate within the survey that they delivered content on sexuality and disability prior to participating in the study. Participants not meeting the criteria for inclusion were excluded from the study.

Analysis

A multivariate analysis of variance (MANOVA) was used to analyze if mean differences existed among rehabilitation counselor educators' age, gender, ethnicity, year of experience as a counselor educator, and counselor identity compared to their level of knowledge, comfort, and attitude towards sexuality and disability. MANOVA allows for a test to compare multivariate means (Howell, 2013). This data analysis will also allow a test of the relationship among the independent variables (Howell, 2013). A MANOVA will analyze if the rehabilitation counselor educators' age, gender, counselor identity, ethnicity, and years of experience as a counselor educator an effect on their level of comfort, attitude, and knowledge towards the topic of sexuality and disability (Howell, 2013).

The current research was subjected to the approval of the Institutional Board Review at NCAT. All procedures for this study were approved by the Institutional Board Review at NCAT. This study was conducted in accordance to ethical standards established by the American Counseling Association (ACA), CRCC, and NCAT Institutional Review Board.

Instrumentation

There was a demographic questionnaire that was disseminated to all participants to obtain the categorical variables, such as gender, age, and ethnicity. The instrument that measured the three dependent variables was the Knowledge,

Comfort, Approach and Attitudes towards Sexuality Scale (KCAASS) (Kendall, 2003). The KCAASS is an instrument that was developed for utility within rehabilitation facilities interested in identifying and targeting training initiatives and needs related to addressing the sexuality need of clients following spinal cord injury (Kendall, 2003). The KCCASS requires participants to indicate their current level of knowledge, attitude, comfort, and approach related to sexuality and spinal cord injury. With permission from the authors of the scale, the researcher modified the questions to reflect participant's knowledge, attitude, and comfort on the topic of sexuality and disability. For the purposes of this study, only three of the original four factors of the scale were measured: knowledge, comfort, and attitudes. The approach factor was excluded from the instrument because it reflects clinical practice, which is not addressed in the current research.

The original validity and reliability of the instrument are as follows: the Cronbach's alphas for the four factors to verify the reliability of the KCAASS was reported to be comfort (.97), knowledge (.93), approach (.80), and attitude (.73) (Kazukauskas & Lam, 2009). The respondents were asked to complete the KCAASS (Kendall, 2003). However, after the modifications of the instrument, we did not use factorial analysis to establish the validity and the reliability of the instrument. Because the modifications that we made were not significant, we feel that it will not affect the validity and reliability in a significant way. Nevertheless, given this limitation, precaution must be taken when interpreting the results.

The sub-scales that were used for this study were the attitude, comfort, and knowledge scales. Each subscale consisted of a Likert scale that measured each variable. The lowest response would be 1 for discomfort, no knowledge, or strongly disagree, while the highest, 4, indicates high discomfort, excellent knowledge, and strongly agree. The highest score for the subscale of knowledge was 52; for the subscale of comfort, indicating high discomfort would be 80; and for the subscale of attitude would be 0.

One of the limitations is once we modified the instrument we did not recalculate the reliability and validity; however, this study is an important step in exploring the topic, and future research is needed whereby researchers can use a factorial analysis to recalculate the validity and reliability.

Results

A substantial number of participants were within the 35-45-years-old age range (40.7%). Participants 24-34-years-old represented the second highest percentage of age range (37%). Approximately 22.2% of participants were 46 years and older. The survey provided an option for participants to respond as other and enter their respective racial/ethnic background. Twenty-seven participants responded to the racial/ethnic background question. Black/African American represented most of the respondents at 77%, followed by re-

spondents who identified as White at (11%). Hispanic/Latino and Asian/Pacific Islander represented 3.7% of the respondents. One respondent identified as "other" (3.7%). Table 1 depicts the demographics of the participants' age, gender, and race/ethnicity respectively.

Table 1
Sample Demographics

| Measure | n | % |
|---------------------------|----|------|
| Age in Years | | |
| 24-34 | 10 | 37.0 |
| 35-45 | 11 | 40.7 |
| 46+ | 6 | 22.2 |
| Gender | | |
| Male | 6 | 2.2 |
| Female | 21 | 77.8 |
| Ethnicity | | |
| Black/African American | 21 | 77.8 |
| White | 3 | 11.1 |
| Hispanic or Latino/Latina | 1 | 3.7 |
| Asian/Pacific Islander | 1 | 3.7 |
| Other | 1 | 3.7 |
| Total | 27 | 100 |

The respondents were asked to identify their ranking as professors, as well as years they have taught in the field of rehabilitation counseling education. Over half (66.7%) of respondents reported that they were within 0 to 1 year of teaching rehabilitation counseling. The next prominent group were respondents who taught for 8 or more years (14.8%). The next two groups represented in the respondents were the 5 to 7 years at approximately 11.1%, and 2 to 4 years at approximately 7.4%. Regarding professor rank, doctoral-level respondents represented approximately 48.1% of the respondents. Respondents who were ranked as assistant professors were represented at approximately 22.2%. Adjunct professors represented approximately 18.5%, with associate professors representing approximately 3.7%. Respondents were asked to identify their clinical identity. Most of the respondents (74.1%) identified as rehabilitation counselors. Approximately 7% of the respondents identified clinically as school counselor. Clinical mental health counselors represented approximately 3.7% of the respondents. Approximately 11.1% of respondents identified addiction counseling as their counselor identity, as 3.7% identified their ethnicity as being "other".

Respondents were asked to indicate their level of knowledge, comfort, and attitude towards the topic of sexuality and disability. The results of the scores for knowledge, comfort, and attitude are presented in Table 2 below. The H_0 for research question one was rejected, due to rehabilitation counselor educators having high comfort levels and positive attitudes towards sexuality and disability. The mean for knowledge was low indicating that participants had a lower level of

knowledge of sexuality and disability.

Table 2
Knowledge, Comfort, and Attitude of Sexuality & Disability

| Variable | Mean | Median | Mode |
|-----------|------|--------|------|
| Knowledge | 2.33 | 2.38 | 0.0 |
| Comfort | 1.62 | 1.45 | 1.10 |
| Attitude | 1.36 | 1.20 | 1.00 |

The multivariate analysis of variance (MANOVA) was used to analyze research question two. MANOVA was used to examine if there was a relationship among the variables of rehabilitation counselor educators' attitudes, level of knowledge, level of comfort, age, gender, and ethnicity. It was determined that there was no variance among the means of the categorical variables. There was not a statistically significant difference among the age, ethnicity, the level of comfort, attitude, and knowledge as $\rho > .05$ for these categorical variables. Gender was the only categorical variable that had a significant difference with a statistical significance of $\rho = .001$. Therefore, the null hypothesis for research question two was rejected due to a non-significant coefficient. Post Hoc tests were not conducted due to a non-significant MANOVA ρ values. Wilks Λ , Wilks V, Pillai's Trace, and Hotelling's Trace statistics were utilized to determine if there were variation among the means of the dependent variables and these yielded non-significant statistics, indicating no significant variances among the means of the dependent variables. Refer to Table 3 below for results of the significant analysis.

Discussion

Within rehabilitation counselor education, it is unquestionable that sexuality and disability is an area of concern, as it has a direct impact on consumers' quality of life and social adjustment. The data from this study revealed that participants' demographic characteristics did not significantly impact the level of knowledge, comfort, or attitudes towards sexuality and disability. No variation existed among the participants' responses and perspectives based upon their specific backgrounds. The only variation that existed within the categorical variables was the gender of the participant.

Results also indicated that rehabilitation counselor educators within this study reported high levels of comfort and positive attitudes towards sexuality and disability. However, the data yielded that participants had low levels of knowledge when it pertained to the topic. This indicates that personal cultural beliefs, associated groups (i.e. family and communities), and ethnicity did not influence their personal attitudes and willingness to discuss the topic. This may be attributed to the fact that many of the attitudes towards sexuality in society have shifted and become more permissive. The overall social construct of sexuality has progressed to consider

sexuality beyond just a physical expression (Esmail, Esmail, & Munro, 2001; Franco, Cardoso, & Neto, 2012; Gilmore & Chambers, 2010). It is likely that persons with disabilities have not benefited from this evolution of this social construction (Esmail et al., 2001; Franco et al., 2012; Gilmore & Chambers, 2010). This is evident due to their sexual rights and recognitions often being ignored on various platforms, such as media, clinical services, and education (Nucci, 2010; Franco et al., 2012; Shakespeare, 2000; Tepper, 2000).

Rehabilitation counselor educators should focus on increasing the intensity of training on sexuality and disability in rehabilitation counselor education (Juergens et al., 2009; Pebdani, 2013; Pebdani & Johnson, 2014; Kazukauskas & Lam, 2009). Increasing intensity should not be understated, as it has been documented in literature (Pebdani & Johnson, 2014) that students who received training in this topic reported more comfort and positive attitudes towards discussing sexuality with clients. The findings of this study support previous research suggesting personal attitudes about sexuality and disability have not impacted providing education and counsel related to sexuality (Kazukauskas & Lam, 2009).

Although results from this study suggests otherwise, previous studies have shown that as attitudes towards sexuality and disability increases, so does the comfort level in approach (Kazukauskas & Lam, 2009). Results suggest that participants reported lower levels of knowledge towards sexuality and disability. This is cause for concern regarding rehabilitation counselor education, as previous studies have reported that increased training and knowledge are predictive of comfort levels of rehabilitation professionals.

Higher comfort levels have been reported in the literature to increase the probability of sexuality and disability being addressed within the profession (Juergens et al., 2009; Kazukauskas & Lam, 2009; Pebdani, 2013; Pebdani & Johnson, 2014). Increasing the comfort levels of rehabilitation counselor educators could increase the instruction on this topic for students. It is likely that educators are apprehensive about instructing on sexuality, due to the nature of this topic. Future research should explore the specific needs of educators to increase the comfort level towards this topic.

Former research has endorsed a positive relationship among the variables of increased training and increased comfort (Fronck et al., 2005 as cited by Kazukauskas & Lam, 2009). Research has shown that sexuality education has a direct impact on willingness to discuss sexuality with clients (Juergens et al., 2009), which indicates that increased levels of knowledge have an impact with this specific topic. Further exploration, particular to the rehabilitation counseling curricula, should investigate if educators' instruction and implementation is impacted by their level of knowledge on sexuality and disability. This is of importance, as rehabilitation counseling graduate students have reported higher levels of

Table 3
Results of Gender Analysis

| | Effect | Value | F | df | Sig. |
|-----------|-------------------|--------|---------|----|-------|
| Intercept | Pillai's Trace | 0.938 | 115.834 | 3 | 0 |
| | Wilks' Lambda | 0.062 | 115.834 | 3 | 0 |
| | Hotelling's Trace | 15.109 | 115.834 | 3 | 0 |
| Gender | Pillai's Trace | 0.489 | 7.337 | 3 | 0.001 |
| | Wilks' Lambda | 0.511 | 7.337 | 3 | 0.001 |
| | Hotelling's Trace | 0.957 | 7.337 | 3 | 0.001 |

confidence and comfort in addressing sexuality in practice with clients (Juergens et al., 2009), which lends itself to importance within clinical practice as sexuality has an impact on the physical and emotional wellbeing of persons with disabilities (Boyle, 1993; Juergens et al., 2009).

Limitations

There are several implications for future research in rehabilitation counseling education and sexuality. The primary implication for future research is to increase qualitative and quantitative research on infusing sexuality and disability into the rehabilitation counseling education curricula. Results from the study indicates that more literature regarding sexuality and disability is needed. Future qualitative research in sexuality and disability may also generate testimonials and theories from the perspective of consumers in expressing their needs.

The data suggest there is a low level of knowledge among rehabilitation counselor educators. Moreover, the knowledge variable has been previously related to the willingness of rehabilitation professionals to discuss or address sexuality and disability with persons with disabilities (Juergens et al., 2009). Consideration should be given towards creating a special topic dedicated to the topic of sexuality and disabilities. It is practical that providing a stand-alone course would give adequate time and attention to such a complex and multicultural topic. Incorporating this topic within courses such as medical aspects, practicum, clinical internship, couples counseling, family counseling, and multicultural counseling would also emphasize the importance of developing competency. This would particularly give doctoral students an opportunity to address any professional and ethical concerns they may have in respect to instructing human sexuality.

There is a clear indication in previous research that increasing training on this subject will directly increase the level of knowledge (Juergens et al., 2009; Pabdani, 2013). Neglecting to increase training on sexuality and disability in rehabilitation counseling curricula, would have a direct impact on professionals being able to holistically address persons with disabilities' sexuality concerns. This is a direct violation of CACREP standards and expectations of clinical rehabilitation (5.D.2.m) and rehabilitation counseling

(5.H.2.h) that specifies students should be able to demonstrate professional knowledge and skills on the "effects of the onset, progression, and expected duration of disability on clients' holistic functioning (i.e., physical, spiritual, sexual, vocational, social, relational, and recreational)" (CACREP, 2016). Providing instruction on sexuality and disability in practicum and internship course may provide the opportunity for in-service learning. Intentional instruction and incorporation of this topic in doctoral programs would emphasize the importance of increasing competency and comfort levels.

There was a large percentage of doctoral-level teaching assistants, therefore increasing training on sexuality and disability within doctoral CACREP programs could influence educators to incorporate topics within the curricula as future assistant and associate professors. It is imperative for future research to focus on specific needs of educators, as they may vary across institutions. Discovering the different needs based upon variables related to the cultures and attitudes of departments and institutions is critical to understanding training needs. For example, institutions' attitudes towards instruction of human sexuality may differ based upon community needs and culture. Such investigations would likely encourage the development of materials and textbooks that provide adequate information and training opportunities to educators and students. Research and scholarly development should focus on the creation of supplemental materials that could assist with building competency for not only students, but educators, in providing standard key aspects and points to consider while instructing the topic.

References

- Berkman, A. H., Weissman, R., & Frielich, M. H. (1978). Sexual adjustment of spinal cord injured veterans living in the community. *Archives of Physical Medicine and Rehabilitation*, 59(1), 29–33.
- Boyle, P. S. (1993). Training in sexuality and disability: *Journal of Social Work & Human Sexuality*, 8(2), 45–62. doi:10.1300/j291v08n02_03
- Burling, K., Tarvydas, V. M., & Maki, D. R. (1994). Human sexuality and disability: A holistic interpretation for rehabilitation counseling. *Journal of Applied Rehabil-*

- itation Counseling, 25(1), 10-16. doi:[10.1891/0047-2220.25.1.10](https://doi.org/10.1891/0047-2220.25.1.10)
- Buskist, W., & Groccia, J. E. (2011). Evidence-based teaching: Now and in the future. *New Directions for Teaching and Learning*, 2011(128), 105–111. doi:[10.1002/tl.473](https://doi.org/10.1002/tl.473)
- Commission on Rehabilitation Counselor Certification. (2016). *Code of professional ethics for rehabilitation counselors*. Author.
- Council for Accreditation of Counseling and Related Educational Programs. (2016). *2016 standards for accreditation*. Author.
- Dewey, J. (1933). *How we think : a restatement of the relation of reflective thinking to the educative process*. Lexington, MA: D.C. Heath.
- Esmail, S., Darry, K., Walter, A., & Knupp, H. (2010). Attitudes and perceptions towards disability and sexuality. *Disability and Rehabilitation*, 32(14), 1148–1155. doi:[10.3109/09638280903419277](https://doi.org/10.3109/09638280903419277)
- Esmail, S., Esmail, Y., & Munro, B. (2001). Sexuality and disability: The role of health care professionals in providing options and alternatives for couples. *Sexuality and Disability*, 19(4), 267–282. doi:[10.1023/a:1017905425599](https://doi.org/10.1023/a:1017905425599)
- Ference, T. (1999). Rehabilitation issues: Women with disabilities. *Sexuality and Disability*, 17(3), 187–197. doi:[10.1023/a:1022168619990](https://doi.org/10.1023/a:1022168619990)
- Franco, D. G., Cardoso, J., & Neto, I. (2012). Attitudes towards affectivity and sexuality of people with intellectual disability. *Sexuality and Disability*, 30(3), 261–287. doi:[10.1007/s11195-012-9260-x](https://doi.org/10.1007/s11195-012-9260-x)
- Gilmore, L., & Chambers, B. (2010). Intellectual disability and sexuality: Attitudes of disability support staff and leisure industry employees. *Journal of Intellectual & Developmental Disability*, 35(1), 22–28. doi:[10.3109/13668250903496344](https://doi.org/10.3109/13668250903496344)
- Herreid, C. F. (2011). Case study teaching. *New Directions for Teaching and Learning*, 2011(128), 31–40. doi:[10.1002/tl.466](https://doi.org/10.1002/tl.466)
- Howell, D. (2013). *Statistical methods for psychology*. Belmont, CA: Wadsworth Cengage Learning.
- Juergens, M. H., Smedema, S. M., & Berven, N. L. (2009). Willingness of graduate students in rehabilitation counseling to discuss sexuality with clients. *Rehabilitation Counseling Bulletin*, 53(1), 34–43. doi:[10.1177/0034355209340587](https://doi.org/10.1177/0034355209340587)
- Kazukauskas, K. A., & Lam, C. S. (2009). Disability and sexuality: Knowledge, attitudes, and level of comfort among certified rehabilitation counselors. *Rehabilitation Counseling Bulletin*, 54(1), 15–25. doi:[10.1177/0034355209348239](https://doi.org/10.1177/0034355209348239)
- Kendall, M. (2003). The development of a scale to assess the training needs of professionals in providing sexuality rehabilitation following spinal cord injury. *Sexuality and Disability*, 21(1), 49–64. doi:[10.1023/a:1023510925729](https://doi.org/10.1023/a:1023510925729)
- McAuliffe, G. (2011). *Handbook of counselor preparation : constructivist, developmental, and experiential approaches*. Thousand Oaks: Sage Publications.
- McCabe, M. P., Cummins, R. A., & Deeks, A. A. (2000). Sexuality and quality of life among people with physical disability. *Sexuality and Disability*, 18(2), 115–123. doi:[10.1023/a:1005562813603](https://doi.org/10.1023/a:1005562813603)
- McKeachie, W. (2006). *McKeachie's teaching tips : strategies, research, and theory for college and university teachers*. Boston: Houghton Mifflin.
- Milligan, M. S., & Neufeldt, A. H. (2001). The myth of asexuality: A survey of social and empirical evidence. *Sexuality and Disability*, 19(2), 91–109. doi:[10.1023/a:1010621705591](https://doi.org/10.1023/a:1010621705591)
- Nucci, E. D. (2010). Sexual rights and disability. *Journal of Medical Ethics*, 37(3), 158–161. doi:[10.1136/jme.2010.036723](https://doi.org/10.1136/jme.2010.036723)
- Pebdani, R. N. (2013). Rehabilitation counselor knowledge, comfort, approach, and attitude toward sex and disability. *Rehabilitation Research, Policy, and Education*, 27(1), 32–42. doi:[10.1891/2168-6653.27.1.32](https://doi.org/10.1891/2168-6653.27.1.32)
- Pebdani, R. N., & Johnson, K. L. (2014). Rehabilitation counseling students report on training and sexuality. *Rehabilitation Counseling Bulletin*, 58(3), 173–175. doi:[10.1177/0034355214553308](https://doi.org/10.1177/0034355214553308)
- Shakespeare, T. (2000). Disabled sexuality: Toward rights and recognition. *Sexuality and Disability*, 18(3), 159–166. doi:[10.1023/a:1026409613684](https://doi.org/10.1023/a:1026409613684)
- Tepper, M. S. (2000). Sexuality and disability: The missing discourse of pleasure. *Sexuality and Disability*, 18(4), 283–290. doi:[10.1023/a:1005698311392](https://doi.org/10.1023/a:1005698311392)
- Yallop, S., & Fitzgerald, M. H. (2010, August). Exploration of occupational therapists' comfort with client sexuality issues. *Australian Occupational Therapy Journal*, 44(2), 53–60. doi:[10.1111/j.1440-1630.1997.tb00755.x](https://doi.org/10.1111/j.1440-1630.1997.tb00755.x)