The researchers examined the relationship between cognitive complexity, awareness of social barriers, and number of credits hours taken, among 68 counselor trainees. A significant inverse relationship was found between cognitive complexity and the perception of client barriers. The findings indicate there is no relationship between the number of credit hours earned in the program and awareness of social barriers. Implications for counselor preparation are discussed.

Keywords: awareness, counselor trainees, ecological perspective, social barriers, cognitive complexity

Counselors often assess their clients’ problems from an intrapsychic lens (Conyne & Cook, 2004; Greenleaf & Williams, 2009; Ivey & Ivey, 2005; Jacobs, 1994; Ratts, 2009; Wilson, 2003). That is, when presented with a client’s presenting issue, counselors typically make-meaning of these issues as if they developed primarily from disorders or dysfunctioning within the client’s intrapersonal sphere (i.e., cognitive, emotional, physiological, social, spiritual factors). The underlying assumption of this perspective is that human problems in living originate principally from inside an individual, and thus are best solved through altering clients’ thoughts, feelings, and actions.

A consequence of this intrapsychic perspective, and consistently, narrow focus on assessing and treating clients’ internal characteristics and functioning, is that many
professional counselors pay little attention to the influence of oppressive social factors in their clients’ environment (e.g., Albee & Joffe, 2004; Greenleaf & Williams, 2009; Ivey & Ivey, 2005; Ratts, 2009). Greenleaf and Bryan (2012) argued that the intrapsychic perspective locates clients’ problems internally, and consequently, a thorough assessment of the client’s context for the purposes of understanding the underlying causes behind clients’ issues is seen as being largely irrelevant and even outside the professional purview of professional counselors. In recent years, a number of scholars (e.g., Lee, 2007; Ratts & Pederson, 2014; Williams & Greenleaf, 2012) have argued that professional counselors are obligated to be social justice advocates of clients from diverse cultural groups. To embrace an advocate identity and to provide guidelines for how counselors can exercise their advocacy efforts, Lewis, Arnold, House, and Toporek (2002) developed the American Counseling Association (ACA) Advocacy Competencies. The competencies outline the numerous ways counseling professionals can address social barriers influencing their clients’ problem formation within multiple ecological levels.

Adopting an Ecological Perspective

The creation of the ACA Advocacy Competencies (Lewis et al., 2002) represents an effort to directly address oppression in clients’ lives by including environment-based interventions. These competencies are based on the belief that human beings are hindered from optimizing their well-being within oppressive social environments; hence, counseling is incomplete without equal consideration and efforts given to removing the social barriers that negatively impact their clients’ development (Lewis et al., 2002). For the past two decades, findings from various studies have demonstrated a link between social oppression (e.g., ageism, classism, ethnic/racial discrimination, heterosexism, sexism) and negative health outcomes, including brain damage (Baum, Garofalo, & Yali, 1999), low birth weight (Sable & Wilkinson, 2000), coronary heart disease (Greenwood, Muir, Packham & Madeley, 1996), depression, anxiety (Dohrenwend, 2000), post-traumatic stress disorder (Zyromski, 2007), hopelessness (Perlow, Danoff-Burg, Swenson, & Pulgiano 2004), internalized oppression (Williams & Williams-Morris, 2000), negative self-esteem (DuBois et al., 2002), substance abuse, (Dohrenwend, 2000), and suicidal ideation and suicide attempts (Ortiz-Hernandez, 2005).

Because the presence of social barriers in a client’s environment can create and perpetuate their living problems, it is imperative that counselors consider the influence of various contexts during assessment. This requires moving past an intrapsychic orientation and adopting an ecological perspective of counseling. Trickett (1997) defined an ecological perspective as “the importance of understanding behavior in sociocultural context and as influenced by multiple levels of the ecological environment” (p. 198). This definition provides counselors with a more complete perspective of the numerous environmental factors that interact dialectically with individuals’ intrapersonal characteristics to produce their problematic behavior. Lewin (1936)
schematized this dynamic relationship as, \( B = f(P \times E) \); or, behavior is the result of the interaction between personal and environmental factors. The types of problems presented in counseling are seen as problematic behavior arising from person-environment interactions.

Despite the importance of professional counselors acquiring an ecological perspective, there have been few studies exploring whether, or how counselors acquire a contextual paradigm. We believe that cognitive complexity can potentially affect the development of one’s ecological perspective. Cognitive complexity refers to “…the ability to absorb, integrate, and make use of multiple perspectives” (Granello, 2010, p. 92). Among professional counselors, cognitive complexity has been linked with greater tolerance for ambiguity, more confidence, less anxiety, more detailed case conceptualizations, more multicultural awareness (Jennings & Skovholt, 1999), more focused on the counseling process (Borders, 1989), more empathetic communication, and more flexibility in the selection of counseling methods (Benack, 1988). Based on these findings, the development of cognitive complexity can serve as a pathway to enhance an awareness of counselor trainees on clients’ social barriers and their impact on the clients’ lives.

Given that conceptualizing numerous intrapersonal and environmental variables when assessing a client’s situation is critical to counselors who utilize an ecological perspective, cognitive complexity can play an important role in differentiating and organizing the wide variety of variables influencing the problem formation. Duys and Hedstrom (2000) conducted a study examining the relationship between basic counselor skills training and cognitive complexity levels in counseling trainees. The results indicated that participants exposed to the basic skills training course showed a significantly higher cognitive complexity level than the control group. Therefore, the authors suggested that counselors’ cognitive complexity could be developed through closely supervised training experiences. To date, there is a lack of studies examining counselors’ awareness of clients’ social barriers, especially, ones examining the relationship between barrier awareness and levels of cognitive complexity. Therefore, the purpose of this study was to examine the relationship between cognitive complexity and length of time trainees spent in their counseling program on their awareness of clients’ social barriers. Therefore, our research questions were as follows: (A) Is there a relationship between counselor cognitive complexity and the perception of clients’ current and future barriers? (B) Is there a relationship between perceptions of client barriers based on the number of courses completed in the counseling training program? (C) Is there a relationship between the completion of a multicultural counseling course and perception of clients’ current and future barriers?

Method

Participants

A total of 68 counselor trainees enrolled in counseling programs at two Midwestern
Universities, accredited by the Council for Accreditation of Counseling and Related Educational Program (CACREP), participated in the study. The percentages of women and men participants in this study were 81% (n = 55) and 19% (n = 13) respectively. The ethnic composition of participants was 77.9% Caucasian/White (n = 53), 8.8% African American (n = 6), 4.4% Hispanic/Latino (n = 3), 4.4% Asian/Pacific Islander (n = 3), and 4.4% Multiracial (n = 3). Forty one percent of the participants were 25 or under (n = 28), 50% were between the ages of 26-40 (n = 34), 7% were between ages 41-56 (n = 5), and 1% of participants were 57 or older (n = 1). Of the 70 participants, 54.4% were enrolled in a school counseling program (n = 37), 39.7% mental health counseling (n = 27), and 2.9% rehabilitation counseling (n = 2). Concerning their credit hours completion, almost half of participants (42.6%) have completed between 0-9 credit hours (n = 29), 25% completed 10-21 credit hours (n = 17), 10.3% completed 22-31 credit hours (n = 7), 19.1% completed 32-41 credit hours (n = 13), and 2.9% completed 42 or more credit hours (n = 2). Of the 68 participants in the study, 39 participants had completed a multicultural counseling course.

**Instruments**

**Demographic information.** Participants self-reported their gender, race/ethnicity, program affiliation, theoretical orientation, and level of training on a brief questionnaire.

**Perception of client’s barriers.** A modified version of the Perception of Barriers Scale (POB; McWhirter, 1998) was used to measure counselor trainees’ perceptions of a fictional client’s barriers. The POB is a 64-item instrument that quantifies perceptions of education- and career-related barriers, as well as coping efficacy to overcome those barriers. Items 1 to 32 are divided into two subscales: Items 1 to 11 are summed for a Career-Related Barriers subscale score, and Items 12 to 32 for an Educational Barriers subscale score. The first subscale focuses on future barriers, while the latter on current barriers. Items are rated on a 5-point Likert scale from A (strongly agree) to E (strongly disagree). In the original POB, example items include, “In my future career, I will probably be treated differently because of my sex,” and “Money problems are currently a barrier to my educational aspirations.” In order to measure the counselor trainees’ perceptions of a client’s career-related barriers, items were adjusted to read, “In Tameika’s future career, she will probably be treated differently because of her sex,” and “Lack of role models or mentors is a barrier to Tameika’s educational aspirations.” These changes shifted the application from a self-report to a focus on the ecological barriers in another person’s life. Higher scores indicate the perception of more environmental barriers. Thus, participants with higher scores perceive more barriers in Tameika’s life. Test-retest reliability over a 2-month time period yielded a stability coefficient of .78 for the total POB scale scores and stability coefficients of .72 and .68 for the Career-Related and Educational subscales, respectively (Luzzo & McWhirter, 2001). For the purpose of this study, we removed item 33 to 60, which measure coping efficacy.
**Case illustration.** A case illustration (Morris, Shaffner, & Newsome, 2009) was used to assess the participants’ perceptions of a fictional client’s career and educational barriers. This case portrays many complex social barriers that could potentially be influencing the client’s problem formation and future development. We chose this specific case because it allowed the participants ample opportunity to identify numerous environmental barriers. That is, rather than a case with somehow less obvious barriers, we selected a story that clearly portrays many influential environmental factors potentially impacting the client’s well-being and life opportunities.

Tameika is a 29-year-old Black woman of African descent and she and her common-law husband of 9 years, D.J., have three children younger than 5 years old (pseudonyms have been used for these individuals). D.J. had a couple of jobs, making just enough for the family to survive, and Tameika stayed home. D.J. had become increasingly violent since the younger children were born, especially after bouts of binge drinking. Distressed by the escalating violence and fearful for herself and her children, Tameika took her children to a local domestic violence shelter and made contact with a counselor.

Early in the counseling process, the counselor allowed Tameika to talk freely about her story while validating her feelings and legitimate concerns. The counselor gently probed to assess the nature of the domestic violence (e.g., physical, psychological, sexual, economic, or a combination). Tameika reported feeling safe at the shelter, although she was visibly shaken when talking about the most recent altercation with D.J. Tameika wanted to find work. She had a high school education, and she had taken some courses in the Allied Health program at a community college because she had wanted to become a nurse. When asked about nursing as a possible career, Tameika mentioned many concerns, including educational requirements, cost, and lack of access to day care, and a positive outcome expectation in that nurses “make good money.”

**Cognitive complexity.** We utilized the Role Category Questionnaire (RCQ; Crockett, Press, Delia, & Kenney, 1974) to measure cognitive complexity of counselor trainees. The RCQ consists of two open-ended questions that ask the participant to describe two people who they know well. The first person is identified as someone the participant likes, and the second is identified as someone the participant does not like. Cognitive complexity has been defined as the degree of social differentiation or the number of interpersonal constructs a person can use to define social reality (Crockett, 1965; Kelly, 1955). The RCQ produces a score that is an estimate of social differentiation. This is obtained by counting the number of distinct constructs a person can write down about another person at one time. Since participants are given five minutes per question, responses are considered to be a sample of the participant’s level of differenti-
ation or cognitive complexity.

Test-retest reliability values for the RCQ over a 1-month period were .84 and .86 (O'Keefe, Shepherd, & Streeter, 1982). An additional study reported a test-retest reliability value of .95 over a 4-month period (Crockett et al., 1974). Regarding validity, higher RCQ scores were shown to be positively associated with higher levels of trait differentiation. Individuals who scored higher on the RCQ were able to generate more conceptual knowledge about another person (Meyer, 1996). In addition, higher RCQ scores have been linked with higher social cognition skills, such as social perspective-taking and social construct abstractness (O'Keefe & Sypher, 1981). Positive correlations were also found between higher chronological age and elevated scores on the RCQ (Scarlett, Press, & Crockett, 1971), yet RCQ scores have been shown to be unrelated to intelligence (Allen, Mabry, & Preiss, 1997).

Procedure

Sixty-eight Master’s level counseling students were invited and agreed under a voluntary basis to participate in the IRB approved study. Participants responded to a three-part survey. In Part 1 of the survey, participants answered multiple choice demographic questions about their sex, age, race/ethnicity, number of course credit hours completed in the counseling program, number of credit hours currently taken in counseling program, program affiliation and preferred theoretical orientation. In Part 2 of the survey, participants read the case illustration (5 minutes) and then completed the modified version of the POB (10 minutes). Lastly, in Part 3 of the survey, participants were given 10 minutes to complete the RCQ (5 minutes for each question). The data collection took place at two Midwestern universities (during class) and lasted approximately 25-30 minutes.

Data Analysis

Through the use of Statistical Package for the Social Sciences, a Pearson product-moment correlation was conducted to analyze the strength and direction of the relationship between cognitive complexity scores on the RCQ and perceived barriers on the POB scale and its subscales. The relationship between perceived barriers and completed courses (credit hours) was calculated using the same method. Additionally, basic descriptive statistics were calculated about the sample to examine the participants’ responses to the RCQ and POB.

Results

This study examined the relationship between cognitive complexity and perception of client barriers. Cognitive complexity was measured by adding together the total liked and disliked peer scores on the RCQ. Accordingly, this combined score provides an estimate of each participant’s social differentiation. Total means on the RCQ were
within expected ranges reported by other studies ($M = 27.59, SD = 10.12, \text{range} = 7-64$). Other recent studies examining counselor cognitive complexity have reported RCQ ranges of 11 to 35 (Welfare & Borders, 2010). Perceived barriers were measured by the modified POB. The POB total scores ranged from 75 to 144 ($M = 110.09, SD = 12.13$). The POB perceived future barriers subscore ranged from 20 to 56 ($M = 36.89, SD = 7.27$), and the current perceived barriers scores ranged from 53 to 99 ($M = 73.51, SD = 8.42$).

Men had an average RCQ score of 22.69. Women in the sample had an average RCQ score of 28.74. While these comparisons were found to be significant different ($p = .05$), this should be interpreted with caution due to the small sample size and over all alpha level for the study. Men in this study tended to have similar impressions ($M = 108.85, SD = 9.15$) in their perception of social barriers compared to women in the sample ($M = 110.38, SD = 12.78$). They also had similar scores on anticipated future barriers ($M = 36.92, SD = 8.09$) compared to the women in the sample ($M = 36.89, SD = 7.15$), and similar perceptions of current barriers ($M = 71.92, SD = 8.03$) compared to women in the study ($M = 73.89, SD = 8.54$).

To answer the primary research question, RCQ total scores were compared to the total POB combined score and additionally to each POB subscale using a Pearson product-moment correlation coefficient. Cognitive complexity was not significantly related to the total score on the POB, but was significantly related to future career barriers on the first subscale ($r(66) = -.368, p = .029$) for all participants in the study. The number of completed course hours were not found to be significantly related to counseling students’ perceptions of the client’s barriers. Gender differences, race/ethnicity, program affiliation, and whether students had completed a multicultural counseling course were also not found to be significantly related to students’ perceptions of the client’s barriers.

**Discussion**

The purpose of this study was to examine the relationship between cognitive complexity and awareness of counselor trainees on client’s social barriers. We expected more cognitively complex students to perceive more barriers standing in the way of a client’s career development based on the vignette used. In addition, we hypothesized that the number of barriers perceived would also vary by the counselors’ gender, ethnicity, program affiliation, and number of completed counseling program credit hours.

First, we did not find the total number of barriers that counselor trainees perceived to be significantly related to their cognitive complexity. This is somewhat surprising as cognitive complexity has been associated with a multicultural awareness (Jennings & Skovholt, 1999), and an ability to engage, integrate, and utilize multiple perspectives (Granelllo, 2010). Considering the propensity for cognitively complex individuals to organize and differentiate a wide variety of variables, we hypothesized that, in conjunction with their multicultural sensitivity, they would be more ecologically conscious of the multiple barriers facing their client’s career development. Compounding the result is
that when broken into subsections, an inverse relationship was found between cognitive complexity and future career-related barriers; in other words, more cognitively complex counseling students perceived fewer future barriers standing in Tameika’s way than less cognitively complex students. This is perhaps explained by the possibility that more cognitively complex students were reflecting greater multicultural awareness through their anticipation of slightly fewer barriers. Since multicultural competence includes not profiling individuals based on their social group membership (e.g., race/ethnicity, sex, sexual orientation, age, religion), possibly more cognitively complex counselor trainees did not want to stereotype Tameika by predicting barriers based on her gender or race, thereby avoiding an artificially inflated assessment of client concerns. However, this explanation of our findings raises an important consideration. If students with higher cognitive complexity perceived fewer barriers in Tameika’s life because of their heightened multicultural awareness, then evidently multicultural awareness did not translate to an awareness of social barriers. That is, our finding suggests that multicultural awareness is not tantamount to barrier awareness.

Implications for Counselor Preparation

The findings of this study have a number of important implications for counselor educators and counselor preparation programs. First, the results of this research support the idea that counselor education programs need to provide enhanced theoretical and conceptual training to address complex case conceptualization to include the client’s contextual factors. For example, traditional counseling theories taught in counselor preparation programs are intrapsychically oriented and provide narrow explanations for human problems in living (Conyne & Cook, 2004). As Greenleaf and Williams (2009) argued, counselors were unable to appropriately assess or treat clients without accounting for the interrelated contextual factors that affect their functioning. Therefore, training programs need to expose counseling students to both traditional and non-traditional theoretical orientations including, but not limited to systemic/ecological perspectives as Shallcross (2013) reminded us, “… an ecological perspective in counseling involves identifying how a client’s environment affects his or her well-being and development, and using interventions that move beyond exclusive focus on the individual” (p. 30).

Another implication of this study is that counselor educators should strive to familiarize themselves with contextual teaching strategies and practices (e.g., critical genograms, concept mapping, eco-webbing, ethnographic fiction assignment, photovoice, perspective taking, critical self-reflection, service learning projects) that can be applied across counseling courses and that provide an opportunity for students to identify factors within and across levels/systems that impact clients’ well-being (Carlson, Engebretson, & Chamberlain, 2006; Chung & Bemak, 2013; Kosutic et al., 2009). For example, Williams, McMahon, and Goodman (2015), describe a teaching strategy (eco-webbing) that counselor educators can use to help pre-service counselors: (a) draw connections between the presenting concerns of clients and the larger context in which
they live; (b) view clients experiences through a different lens; and (c) develop critical thinking skills, particularly in regards to the contextual conditions that contribute to clients’ problems. Preliminary findings, based on student perspectives support the use of eco-webs as a useful strategy to promote greater insight into the ways the ecological context (e.g., social, economic, cultural, political) affects individuals embedded within those larger systems.

Third, the results of this study indicate that students enter counselor-training programs with varying levels of critical consciousness (i.e., awareness of the historical, social, political, cultural, and psychological factors that impact well-being and development). That is, some students regardless of gender, race/ethnicity, program affiliation, and level of training are more aware of social barriers than others, and for reasons that go beyond the influence of cognitive complexity and counselor training. This finding suggests that critical consciousness development must also be considered as counselor educators search for pedagogical practices that help develop more cognitively complex students. In contrast to cognitive complexity, critical consciousness relates specifically to the recognition of how various factors inhibit the well-being of clients and a commitment to social action. According to Brown and Perry (2011) counseling students with high levels of critical consciousness are better able to identify how a client’s environment affects his or her well-being and to identify specific strategies for action (e.g., advocacy) in comparison to their peers with lower levels of critical awareness. Counselor educators might find Watts, Griffin, and Abdul-Adil (1999), five-stage model of critical consciousness, useful in understanding and assessing students’ level of critical consciousness.

Counselors are increasingly expected, from both a professional and ethical standpoint, to operate from a multicultural/social justice orientation to promote wellness for their clients. To do this, counselor education programs must provide opportunities for students to develop a critical awareness of the social barriers that impede the well-being and development of individuals. With that opportunity, counselor trainees would be able to select appropriate culturally relevant counseling strategies to provide the clientele with the most appropriate services based on their cultural reference (Bemak, Chung, Talleyrand, Jones, & Daquin, 2011).

**Limitations and Future Research**

The primary limitation of this study was the relatively small and less diverse sample size of the counselor trainees. Participants from a bigger and more diverse ethnic/racial backgrounds, geographical regions, and genders may have responded significantly differently from ones who participated in the current study. In addition, because the overall RCQ scores for the sample population were higher than average, the results may have been influenced by a ceiling effect. As a result of the small sample size and homogenous demographic variables, the conclusions of this study are made tentatively. Nonetheless, we believe these findings may be meaningful and relevant to the practice of counselor educators and clinical supervisors as they reflect on their current methods.
of instilling social justice awareness.

The findings from this study raise critical questions for future research. Most notably, we found no significant difference in scores on the POB among those who had taken a multicultural counseling course and those who had not. That is, taking a multicultural counseling course did not increase the participants’ perceptions of barriers score. This raises questions about the relationship between multicultural competence and awareness of social barriers. Some might assume that multicultural competencies translate seamlessly into an awareness of social justice issues. However, as Vera and Speight (2003) highlighted in their seminal article delineating the differences between multicultural and social justice perspectives, multicultural competence is often operationalized more narrowly on how mental health professionals can work effectively with diverse clientele within the context of counseling. Multicultural competencies include an awareness of the counselor’s own worldview, an understanding of the client’s worldview, and the skills to provide culturally relevant interventions (Arredondo et al., 1996). In contrast, Toporek and Liu (2001) described advocacy within counseling as “action taken by a counseling professional to facilitate the removal of external and institutional barriers to clients’ well-being” (p. 387). Presumably, counselor trainees could develop multicultural competencies, and yet lack awareness of social barriers and their influence in the problem formation. Our research finding entreats further investigation into the overlap and distinctions between multicultural and social justice competence, and specifically, whether multicultural counselor training in most programs infuses their students with an awareness of social barriers.

Conclusion

This study raises a number of important implications and questions about current practices of counselor training, and specifically whether counseling students are being adequately trained to adopt a keen awareness of, or respect for, the negative impact of clients’ social barriers. The findings suggest implications for counselor educators and counselor education programs in terms of how to prepare counselor trainees to recognize social barriers when approaching the client’s presenting issues. The findings also guide future research to determine the relationship between valued constructs related to the development of barrier awareness.

References


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