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Describing the Cognitive Complexity of Counselors-in-Training Enrolled in a Group Dynamics and Methods Course

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To the Graduate Council:

I am submitting herewith a dissertation written by John Lester Davison entitled "Describing the Cognitive Complexity of Counselors-in-Training Enrolled in a Group Dynamics and Methods Course." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Counselor Education.

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Describing the Cognitive Complexity of Counselors-in-Training Enrolled in a
Group Dynamics and Methods Course

A Dissertation Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

John Lester Davison

December 2014

Dedication

To my wife, Elizabeth, and my children,

Willa, Thomas, & Jonathan

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Abstract

Research supports the link between higher levels of cognitive complexity and counseling efficacy. Counselor educators, therefore, strive to promote higher levels of cognitive complexity in different areas of counselor preparation, such as individual counseling and multicultural training. Presently, the research literature lacks studies focused on cognitive complexity in group work training. To address this gap in the literature, this study used content analysis, a qualitative methodology to describe cognitive complexity of 10 counselors-in-training enrolled in a Group Dynamics and Methods course. Using Bloom's Cognitive Taxonomy to analyze participants' written reflection assignments, I found that participants demonstrated cognitive complexity primarily in knowledge through application levels. Several categories/themes emerged from a separate analysis, including leader styles/techniques, norms, activities, and sharing/disclosing. I discuss these findings and highlight key aspects of the findings in relation to the broader literature. I identify implications for counselor educators and suggest future studies for counselor education researchers.

Keywords: cognitive complexity, Bloom's Cognitive Taxonomy, group work, counselors-in-training.

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Chapter One: Introduction

Chapter Introduction

The primary role of counselor educators is to train and educate counselors-in-training (Rust, Raskin, & Hill, 2013). To perform this role, counselor educators must understand counselors-in-training development (Skovholt & Rønnestad, 1992) and create and implement effective teaching methods (Buser, 2008). In fact, creating and implementing effective teaching methods requires understanding of counselors-in-training development (McAuliffe & Eriksen, 2000). Stoltenberg (1981) agreed, stating that "...the trainee is viewed not just as a counselor lacking specific skills but as an individual who is embarking on a course of development that will culminate in the emergence of a counselor identity" (p. 59). The volume of research focused on different aspects of counselor development demonstrates the necessity of this understanding (Fong, Borders, Ethington, & Pitts, 1997; Skovholt & Rønnestad, 2003). Models such as Integrated Development Model (IDM) (Stoltenberg, McNeil, & Deltworth, 1998), Rønnestad and Skovholt's (1993) model, and Loganbill, Hardy, Delworth's (1982) model reflect the research related to counselors-in-training and counselor development (Haynes, Corey, & Moulton, 2003). Common areas of development across these three models include degree of autonomy, flexibility, and cognitive complexity (Bernard & Goodyear, 2004).

Researchers (Granello, 2000; Little, Packman, Smaby, & Maddux, 2005; Rust, Raskin, & Hill, 2013) and scholars in counselor education (Bernard & Goodyear, 2004; Haynes, Corey, & Moulton, 2003; McAuliffe & Eriksen, 2000) indicated two critical issues to providing effective education and training in counselor education. First, counselor educators must consider the effective methods related to the specific areas of focus such as individual counseling, career counseling, multicultural issues, group work, and other areas of counselor training curricula

(CACREP, 2009). For instance, constructivist approaches to counselor education (McAuliffe & Eriksen, 2000) provide counselor educators the methods to assess learning (Cobia, Carney, & Shannon, 2000), teach cultural diversity (Montgomery, Marbley, Contreras, & Kurtines, 2000), and enhance learning through cognitive procedures (McNamara, Scott, & Bess, 2000). Second, research related to training methods, across the specific areas of focus (e.g. individual counseling, career counseling, group counseling) include many of the same or similar knowledge and skills. These include conceptualization skills, assessment skills, theoretical knowledge, multicultural awareness, and cognitive complexity (Busacca, 2002; Duys & Hedstrom, 2000; Granello, 2002; Pedersen, 2000; Robert & Kelly, 2010), to name a few. Whether focusing on counselors-in-training development or teaching effectiveness, cognitive complexity emerges as a salient emphasis. It is this concept, within the context of counselor education, that is of interest to me.

Researchers in counselor education maintain that cognitive complexity is an important ability for counselors-in-training and professional counselors providing individual and group counseling (Duys & Hedstrom, 2011; Granello, 2010; Granello & Underfer-Babalis, 2004; Lovell, 1999; Welfare & Borders, 2010; Wilkinson, 2011). Cognitive complexity, simply defined as it relates to counseling, represents how counselors-in-training or professional counselors assemble multiple facets of a client's situation for use in counseling this individual (Granello, 2010). Researchers linked this ability to construct a more or less complete picture from a client's present circumstances to counseling effectiveness (Welfare & Borders, 2010). According to Bernard and Goodyear (2004) and Granello and Underfer-Babalis (2004), cognitive complexity is linked to a number of counseling competencies such as more detailed descriptions of clients, clearer conceptualizations of client problems, and higher levels of empathy. Moreover, research

studies demonstrated that higher levels of counselor cognitive complexity correlated to counseling and therapeutic outcomes (Erikson & McAuliffe, 2006; Welfare & Borders). The results of these studies underscore the importance of the development or enhancement of cognitive complexity for counselors-in-training.

In addition to this research on cognitive complexity's role in producing positive therapeutic outcomes individual and group counseling, several counselor education researchers focused on measuring cognitive complexity (Duys & Hedstrom, 2000; Fong, Borders, Ethington, & Pitts, 2000; Granello, 2010; Spurgeon, Woodside, McClam, Heidel, & Catalana, 2012; Welfare & Borders, 2010). Other counselor education researchers focused on teaching strategies that promote cognitive complexity (e.g., Duys & Hedstrom, 2000; Granello, 2000, 2001; Granello & Underfer-Bablis, 2004). Collectively, these studies expanded counselor educators' understanding of measuring cognitive complexity and promoting its development. I discuss these studies in greater detail in Chapter Two.

These studies revealed that cognitive complexity is both general and domain specific (Welfare & Borders, 2010). This means that a counselor-in-training could possess relatively high cognitive complexity in one area of counseling ability, but lower cognitive complexity in another area of counseling ability. For example, a counselor-in-training could be relatively cognitively complex in working with individuals, but lower in cognitive complexity in group work. Simply put, group counseling and individual represent different domains of ability. In distinguishing these "domains" of counseling, Hines, Stockton, & Moran (1995) stated that "Group counseling, as opposed to individual counseling, presents a more complex therapeutic environment" (p. 242). In group work, counselors encounter the daunting challenge of processing voluminous amount of

data, all while in the live action of group (Ettinger, Hillerbrand, & Claiborn, 1995; Hines, et al., 1995; Kivlighan, Markin, Stahl, & Salahuddin, 2007; Kivlighan & Quigley, 1991).

Because individual and group counseling contexts require different skill sets (Hines et al., 1995), it is important for counselor educators to account for differences in cognitive complexity in both individual and group work training (Granello & Underfer-Babalis, 2004). The ability to process and integrate critical aspects of group work such as understanding group process and group dynamics, selecting appropriate interventions, evaluating the progress of group, and other aspects (Corey, 2011; Furr & Barret, 2000; Kottler, 1994; Yalom & Leszcz, 2005) represent cognitive complexity in group work (Granello & Underfer-Babalis). Given the importance of developing increasing levels of cognitive complexity in group work, Granello and Underfer-Babalis' provided a structured supervision model to enhance the cognitive complexity of their participants. In summary, because of the inherent complexity of group dynamics and group counseling as an intervention (Hines, et al., 1995), developing increased levels of cognitive complexity becomes essential for effective group counseling (Granello & Underfer-Babalis).

The remaining chapter covers the following topics. The first section broadly discusses research related to teaching and preparing counselors-in-training. The second section introduces research specific to teaching counselors-in-training learning group work. Third, this chapter reviews Bloom's Cognitive Taxonomy in relation to cognitive complexity as well as research related to cognitive complexity. The fourth section introduces content analysis as a qualitative method to describe cognitive complexity of counselors-in-training learning group work. Finally, this chapter discusses my interest in studying cognitive complexity in counselors-in-training learning group work.

Teaching Counselors-in-Training

Teaching counselors-in-training individual counseling skills such as active listening, reflection, paraphrasing, and other fundamental skills represents a primary goal in counselor training programs (Crews et al., 2005; Little, Packman, Smaby, and Maddux, 2005; O'Connell & Smith, 2005; Urbani et al., 2002) and in psychotherapy training programs (Bennett-Levy, 2006). Early efforts to teach counselors-in-training basic skills included methods such as microcounseling (MC; Ivey, 1971) and interpersonal process recall (IPR; Kagan, Krathwohl, & Miller (1963). In recent years, training methods such as the Skilled Counselor Training Model (SCTM; Little et al., 2005; Urbani et al., 2002) emerged to promote skill building in counselors-in-training (Buser, 2008). In addition to these training programs, counselor educators developed strategies to promote specific knowledge and skills in various aspects of training, including legal and ethical issues (Lambie, Hagedorn, & Ieva, 2010), multicultural competence (Kim & Lyons, 2003), case conceptualization (Robert & Kelly, 2010), career counseling (Busacca, 2002), cognitive complexity (Granello, 2010), and other aspects within counselor education. Overall, the purpose of various training programs and specific teaching/training strategies is to develop expertise (Kivlighan & Tibbits, 2012) and to ensure competently trained counselors-in-training (Rust, Raskin, & Hill, 2013).

Teaching Counselors-in-training Group Work

In addition to the aspects of counselor training discussed above, group work represents a fundamental aspect of counselor-in-training preparation (Furr & Barret, 2000). Compared to individual counseling, group work requires different skills and knowledge (Hines, Stockton, & Moran, 1995; Zimmick, Smaby, & Maddux, 2000). To assist counselor educators teaching group work knowledge and skills, CACREP (2009) and ASGW (2000) provided learning objectives

and standards of professional practice. Of the many skills, knowledge aspects, and abilities associated with learning group work, cognitive complexity represents a vital need for counselors-in-training learning group work (Granello & Underfer-Babalis, 2004). Although counselors-in-training and professional counselors at all levels of expertise struggle with the multifaceted nature of client issues, counselors-in-training especially struggle with the complexity of client issues. (Skovholt & Ronnestad, 1992, 2003). Despite empirical support for cognitive complexity and client outcome related to individual counseling and the importance of fostering cognitive complexity in counselors-in-training, only Granello and Underfer-Babalis examined cognitive complexity with counselors-in-training learning group work.

Cognitive Processes and Cognitive Complexity

Although I found only one research study on cognitive complexity in counselors-in-training learning group work (Granello & Underfer-Babalis, 2004), I discovered several studies focused on group work related to specific cognitive processes. Whereas cognitive complexity refers to a counselor's ability to synthesize various pieces of information (Welfare & Borders, 2010), cognitive processes refer to specific cognitive behaviors (Hines, Stockton, & Moran, 1995) such as self-talk, leader intentions, and knowledge structures. For example, Kivlighan (2008) compared the "intentions" (i.e., the reason behind the selection of therapeutic intervention) of counselors-in-training to experienced counselors. Studies on self-talk explored cognitions (i.e., internal thoughts) leaders say to themselves (during the course of group counseling. Hines, Stockton, and Morran (1995) contrasted and compared the "cognitions" of participants, which included counselors-in-training and experienced group leaders. Another set of studies examined how group counselors organize their knowledge (i.e., "knowledge structures") about group members. In this area of research, Kivlighan and Quigley (1991)

compared counseling psychology students with experienced group therapists in terms of how novices and experts organized information about group members. In a recent study on knowledge structures, Kilvighan and Tibits (2012) compared and contrasted the knowledge structures of counselors-in-training learning group work with the knowledge structures of four expert group therapists. Collectively, these studies added to research on the cognitive processes of counselors-in-training learning group work.

The review described above uncovered numerous studies focused on specific cognitive processes (e.g., knowledge structures) of counselors-in-training learning group work, but found Granello and Underfer-Babalis (2004) as the lone study focused on cognitive complexity with this population. Given the demonstrated importance of cognitive complexity with counselors working with individuals, I wish to better understand cognitive complexity in the context of group work. In contrast to Granello and Underfer-Babalis' study, which detailed a specific supervision model to increase cognitive complexity, this study described the cognitive complexity of counselors-in-training learning group work by analyzing the content of their written reflections during the semester of a Group Dynamics and Methods course.

Theoretical Framework: Bloom's Cognitive Taxonomy and Cognitive Complexity

Bloom's (1956) Cognitive Taxonomy offers researchers a framework to understand and classify varying levels of cognitive complexity. Bloom's Cognitive Taxonomy posits that levels of cognitive ability range from simple to complex, outlined in following six progressive levels: knowledge, comprehension, application, analysis, synthesis, and evaluation. In the first and simplest level, Knowledge, individuals can cite and recall facts, figures, and data. Comprehension, the second level of Bloom's Cognitive Taxonomy, focuses on the tasks of understanding facts, main ideas and how learners organize them as well. According to Bloom's

third level, Application, students apply facts and understanding of these facts to new situations. The fourth level of Bloom's Cognitive Taxonomy, Analysis, individuals begin to problem solve through organization (of information ideas) and deduction. Synthesis, the fifth level, individuals problem solve by piecing together disparate information. In the final and highest form of cognitive ability according to Bloom, Evaluation, individuals can appraise the best choice and explain and support their decision. Educators and researchers across disciplines accepted Bloom's Cognitive Taxonomy as a way to describe cognitive development and plan educational experiences (Granello, 2001). In a later version of Bloom's Cognitive Taxonomy, Anderson and Krathwohl (2001) revised the terminology and key features of Bloom's Cognitive Taxonomy. Because of the widespread acceptance and utility of Bloom's Cognitive Taxonomy in categorizing levels of cognitive ability, in this study I used Bloom's original taxonomy to describe the experiences of counselors-in-training learning group work.

Cognitive Complexity Research Methods

Researchers investigated cognitive complexity using both qualitative and quantitative methods. For example, Fong (1997) conducted a longitudinal, quantitative study to measure the cognitive complexity of counselors-in-training during the course of a master's in counseling program. In another quantitative study, Duys and Hedstrom (2000) compared differences in cognitive complexity in counselors-in-training enrolled in a basic skills course and those enrolled in a traditional, lecture-oriented course. Welfare and Borders (2010) explored the cognitive complexity of counselors-in-training and professional counselors using quantitative methods. Granello (2000, 2001, 2002, 2010), who conducted extensive research on cognitive complexity, used both quantitative and qualitative methods. In a recent study, Spurgeon, Woodside, McClam, Heidel, & Catalana (2012) utilized a qualitative methodology to explore the cognitive

complexity of pre-practicum students enrolled in a professional orientation and ethics course. Altogether, qualitative and quantitative approaches provided counselor educators with a greater understanding of cognitive complexity. A thorough discussion of these studies and research related to cognitive complexity in counseling follows in Chapter Two.

The purpose and goals of a given research study dictates the choice of research methodology (Thomas & Pollio, 2002). Researchers use qualitative research methods when the goal is to better understand and fully describe a complex phenomenon (Creswell, 2013). Merriam (2009) stated “qualitative researchers are interested in understanding the meaning people have constructed, that is, how people make sense of their world and the experiences they have in this world” (p.13). Thus, this study’s goal aligns with the goals of qualitative methodology.

Within qualitative inquiry, researchers use several approaches to describe phenomena such as narrative studies, phenomenological studies, case studies, ethnographies, and grounded theory (Creswell, 2013). In addition to these approaches, content analysis represents another approach to qualitative inquiry (Merriam, 2009). A widely utilized approach in health care research, content analysis seeks to find meaning in the text of data (Elo & Kynga, 2008; Hsieh & Shannon, 2005). Merriam stated that content analysis is a “...process that involves the simultaneous coding of raw data and the construction of categories that capture relevant characteristics of the document’s content” (p.205). In this study, I used content analysis methodology to analyze counselors-in-training written reflections in an effort to describe their cognitive complexity levels while enrolled in a Group Dynamics and Methods course

Different forms of text data such as verbal or print data (Hsieh & Shannon, 2005) offer researchers a readily available and nonintrusive method of collecting and analyzing data

(Marshall & Rossman, 2011; Merriam, 2009). Given that counselor educators often require many forms of writing assignments to help counselors-in-training reflect on their training experiences and to assess their learning, these documents provide researchers with insights into counselors-in-trainings, clients, and training practices. For example, researchers in counselor education analyzed written documents to investigate topics such as race and spirituality (Baker, Bowen, Butler, & Shavers, 2013), counselor advocacy (Eriksen, 1999), school counselor reform (Wilkerson, 2010), LGBTQ qualitative research (Singh, & Shelton, 2010), and supervision practices (Neswald-McCalip, Sather, Strati, & Dineen, 2003).

As shown above, the analysis of documents holds promise for researchers in different areas of counselor education. Marshall and Rossman (2011) agreed with this assertion, stating “the analysis of documents is potentially quite rich in portraying the values and beliefs of participants in the setting” (p.160). Similarly, Elo & Kyngas (2007) asserted that the content analysis approach is especially useful “...if the aim is to test an earlier theory in a different situation or to compare categories at different time periods” (p.113). Thus, using content analysis approach with Bloom’s Cognitive Taxonomy as the theoretical framework matches the purpose of the present study.

In conclusion, researchers in counselor education described and examined cognitive complexity in professional counselors and in counselors-in-training, using both qualitative and quantitative methods. Previous research provided counselor educators insights into techniques, skills, and curricula to intentionally enhance cognitively complexity in counselors-in-training, especially in the context of individual counseling; however, further research related to cognitive complexity and counselors-in-training in the context of group work remains relatively unexplored. Cognitive complexity as it relates to counselors-in-training learning group work

represents an area in need of further study. To this end, this study describes cognitive complexity in counselors-in-training learning group work by using Bloom's Cognitive Taxonomy and qualitatively analyzing the written reflections of counselors-in-training enrolled in a Group Dynamics and Methods course.

Statement of the Problem

The importance of counselor cognitive complexity remains well established. Researchers demonstrated the relationship of advanced levels of cognitive complexity with better treatment outcomes, especially as it relates to individual counseling. Because of the importance of developing greater levels of cognitive complexity, researchers studied training methods to enhance cognitive complexity in counselors-in-training. However, only Granello and Underfer-Babalis' (2004) focused on cognitive complexity and the teaching of counselors-in-training in the context of group work. Therefore, this study addresses this gap by describing the cognitive complexity of counselors-in-training learning group work.

Purpose of the Study

This study's purpose is to use qualitative content analysis procedures to describe the cognitive complexity of counselors-in-training enrolled in a 15-week Group Dynamics and Methods course. Using Bloom's Cognitive Taxonomy (Bloom et al., 1956), this study analyzed content of counselors-in-trainings' written reflections of their experiences in a Group Dynamics and Methods course over a 15-week semester. In analyzing these written reflections related to their didactic and experiential components of their Group Dynamics and Methods course class for cognitive complexity, this study hopes to contribute to the counselor education literature on counselors-in-training learning group work by describing cognitive complexity levels.

Research Question

This study seeks to answer the following question: What levels of cognitive complexity do counselors-in-training enrolled in a Group Dynamics and Methods course demonstrate in written reflection assignments as measured by Bloom's Cognitive Taxonomy?

Definition of Terms

Cognitive Complexity

According to Granello (2010) cognitive complexity is "...the ability to absorb, integrate, and make use of multiple perspectives (p. 88; Granello, et al., 1956).

Counselors-in-training

Counselors-in-training refers to students in a CACREP-accredited masters counseling program at a large southeastern state university.

Group Coursework

CACREP's (2009) standards define group coursework as "studies that provide both theoretical and experiential understandings of group purpose, development, dynamics, theories, methods, skills, and other group approaches in a multicultural society..." (p. 13).

Group Dynamics and Methods course

Group Dynamics and Methods course refers to the course at the institution where I collected data. This course meets the group coursework standards established by CACREP (2009).

Keywords

Keywords refer to words within each level of Bloom's Cognitive Taxonomy (Table 1). I use these keywords to code the content of the written reflection assignments.

Delimitations

To hone this study's focus, this study analyzed the written reflections of 10 counselors-in-training during the course of a one-semester Group Dynamics and Methods course. The course was one core course within two master's in counseling CACREP-approved programs: mental health and school counseling. These participants attended a large, public southeastern university. Additionally, these written reflections represent only one indication of their development. Lastly, this study did not distinguish among counselors-in-trainings based upon previous experiences of participating or leading groups.

Limitations

Several limitations exist in this study. The most apparent limitation of qualitative inquiry is the lack of generalizability (Creswell, 2013; Merriam, 1998, 2009). The sample size of 10 counselors-in-training enrolled in a Group Dynamics and Methods course at large, public, southeastern study limited this study's generalizability; therefore, I cannot generalize results to all counselors-in-training learning group work. Researcher bias represents another limitation of qualitative research (Creswell, 2013; Yin, 2003). I outline procedures in Chapter Three to minimize researcher bias in this study. Merriam (2009) stated "...the integrity and sensitivity of the investigator" (p.52) limit qualitative studies. An additional limitation of qualitative research centers on ethical concerns such as the roles of the investigator and the participant (s) (Marshall & Rossman, 2011). Finally, the content analysis approach within qualitative methodology also contains limitations. For example, Hsieh and Shannon (2005) maintained, "an overemphasis on the theory can blind researchers to contextual aspects of the phenomenon" (p. 1283). I provided a complete discussion of limitations in Chapter Three.

Researcher Interest

My interest in cognitive complexity of counselors-in-training learning group work developed from both my professional experiences leading group and from teaching group dynamics to counselors-in-training and paraprofessional group leaders. With over 10 years of experience facilitating task/work and counseling groups with adolescents, adults, and college students, I have led groups in community mental health, school, and university settings. In addition to leading group, I have also taught Group Dynamics at East Tennessee State University and co-taught this course at The University of Tennessee. In developing as a counselor educator, one of my goals is to specialize in the training of competent group leaders.

Organization of the Study

I organized the study into five chapters, beginning with the present chapter, which introduces this study and summarizes research on cognitive complexity, group work training, counselors-and in-training, and Bloom's Cognitive Taxonomy. Chapter Two reviews the relevant literature and thoroughly examines research in the areas listed above. Chapter Three provides a detailed explanation of methods of inquiry. Chapter Four describes the results after analyzing and synthesizing the collected data. This study ends with Chapter Five, in which I discuss implications and make recommendations for further research.

Chapter Two: Review of Literature

Introduction to the Review of Literature

Chapter Two begins by establishing the importance of group work historically and therapeutically. The review of the literature then defines group work as outlined by CACREP (2009) and ASGW (2000). Following these introductory topics, the review discusses research in two main areas: teaching/training of counselors-in-training and counselors-in-training learning group work. In both areas, this reviews focuses on cognitive complexity. In the area of teaching and training of counselors, this review examines studies that seek to promote cognitive complexity. In discussing the population under investigation—counselors-in-training learning group work— this review examines studies that attempt to measure cognitive complexity. Finally, this chapter concludes with research related to the use of Bloom’s Cognitive Taxonomy as a tool to assess cognitive complexity.

Group Work

Because this study focuses on cognitive complexity within the context of group work, this section of the literature review provides an overview of group work practice and research. This section first traces the history of group work including the development of professional associations. This section then summarizes research related to the efficacy of group work.

Brief History of Group Work

The formal use of groups to help people began in the early 1900’s, though the informal use of groups dates back to the beginning of mankind (Barlow et al., 2004; Berg, Landreth, & Fall, 2006). Prior to the 1900’s, group leaders conducted groups primarily for educational and practical purposes, such as distributing information to immigrants, the poor, and the mentally ill (Gladding, 2008). Researchers attributed the first therapy group to J.H. Pratt, who began a group for tuberculosis patients (Barlow et al., 2004; Berg et al., 2006). Barlow et al. (2004) pointed out

that formal groups such as Pratt's probably occurred at different places at one time, such as in schools. Other important dates in development of therapeutic group include Alfred Adler's groups for children and prisoners in 1922 (Berg et al., 2006). In 1932, Jacob Moreno first introduced the term group therapy (Berg et al.), which Barlow et al. claimed as a significant moment in the progress of group therapy indicating "...once it had been named, it could be studied" (p. 5). From this point to the mid-1900's, Carl Rogers, Kurt Lewin, and Samuel Slavson, and other researchers continued exploring group dynamics.

The use of groups expanded dramatically in the 1950's and 1960's (Gladding, 2008; Stockton, 2010). Rudolph Dreikers, Virginia Satir, John Bell, Carl Rogers, and others advanced the understanding of group dynamics and group practice (Gladding). The 1970's marked a substantial increase in research on group dynamics and group practice, in large part due to the development of sophisticated statistical tools (Barlow et al., 2004; Gladding).

Along with this growing body of research, professional organizations such as The Association of Specialists in Group Work (ASGW) emerged to improve the practice of group counseling (Gladding, 2008). In 1991, the American Psychological Association (APA) created a division known as the Group Psychology and Group Psychotherapy (APA, 2002). Today, these organizations advocate and promote the practice and study of group counseling and group psychotherapy.

The Value of Group Work

Several reasons exist for group work's rise in popularity (Corey, 2000). First, group counseling's versatility allows group counselors to facilitate groups in virtually any setting and with most populations or clientele (Corey; Corey & Corey, 1997). Second, according to Gladding (2008), a swelling body of research demonstrated the efficacy of group counseling.

Third, other researchers established that group counseling is at least as effective as individual counseling in terms of counseling outcomes (Alonso & Rutan, 1993; Burlingame, et al., 2003; Burlingame & Hoag, 1998; Fuhriman & Burlingame, 1999; MacKenzie, 1997; McRoberts, Yalom, & Leszcz, 2005). To this point, Barlow et al. (2004) stated, “the efficacy of group psychotherapy has been undeniably established in the research literature” (p.4). Fourth, in an increasingly managed-care health care system, groups represent an economical way to treat a large number of clients at one time (Gladding). Above and beyond all of these factors, however, is the value groups offer human beings struggling with life’s pain and difficulty. In support of the value of groups, Barlow et al. indicated, “...because the human condition will always include, at any given time, experiences of suffering, mental disorder, lack of adequate education, and the like. Group counseling is an intervention that can ameliorate many of these ills” (p. 18).

Moreover, Rex Stockton said this of group counseling/work in his 2010 ASGW keynote address:

Group work is not just work with extremely distressed individuals. In all its uses it can provide a way for individuals to learn more about themselves, solve problems, and live a fuller, more meaningful life. Being a skilled group work provider is an excellent way for each of us to have a meaningful career. (Stockton, 2010, p. 329).

Group Work Process Research

Given the well-established efficacy and value of group counseling, researchers such as Stockton et al. (2004) and Burlingame et al. (2004) investigated the underlying mechanisms/processes of effective group counseling. These researchers asserted that group leaders and those that teach future group leaders must understand the factors and processes underlying change just as they need to understand the skills of group leadership: “The development of any training in group counseling and therapy that does not provide group leaders

with a solid understanding of the dynamics that make groups therapeutic is a futile effort” (Stockton et al., 2004, p. 66).

According to Burlingame et al. (2004), while researchers investigated the underlying processes of effective group for decades, the 1990’s marked the beginning of a systematic effort in investigate these processes. Burlingame et al. summarized four processes of group counseling: group structure, verbal interaction, therapeutic relationship, and therapeutic factors. First, group structure refers to establishing norms and expectations and the degree to which the group is structured. Second, verbal interaction includes group counselor interpersonal feedback and self-disclosure. Third, Burlingame discussed the process of establishing the therapeutic relationship. According to Burlingame et al. and Yalom and Leszcz (2005), the therapeutic relationship in group counseling is complex, because there is not only the therapist and the client (as with counseling with individuals), but there is also the therapist and members of the group. Fourth, the group counseling literature also focuses a great deal on Yalom’s (1995) eleven therapeutic factors: installation of hope, universality, imparting of information, altruism, interpersonal learning, direct advice, catharsis, cohesiveness, imitative behavior, development of socialization techniques, and the corrective recapitulation of the primary family group. Although research substantiates all four of these “mechanisms of change”, Burlingame et al. stressed the importance of further studies that link these specific processes to client outcomes. These study’s findings represent an additional aspect that counselors-in-training must integrate into their overall understanding of group work—i.e. cognitive complexity.

The previous section substantiated group counseling as an effective counseling method and established the importance of teaching the skill within counselor education. This section presented the history of group work, summarized research on the efficacy of group work, and

discussed the processes that guide effective group work. This next section broadly discusses counselor training and specifically discusses group work training.

Research in Counselor Training: An Overview

This section's purpose is to provide an overview of research in counselor training. This section first discusses the necessity of creating curriculum that meets the developmental needs of counselors-in-training. Next, this section looks at examples of models of counselor education including the Skilled Counselor Training Model (SCTM) and the Declarative-Procedural-Reflective Model (DPR). Third, this section reviews studies that examine instruction designed to improve and develop specific counseling skills (e.g., case-conceptualization skills). This section concludes with research specific to group work training.

The recognized complexity of counselor development presents challenges in training counselors (Lambie, Hagedorn, & Ieva, 2010; Skovholt & Rønnestad, 2003). Challenges for counselors-in-training typically surface during the required practicum courses where they experience the first opportunity to transition from theory to practice (O'Connell & Smith, 2005; Skovholt & Rønnestad, 2003; Stockton, 2010). These challenges include feelings of frustration, confusion, incompetence, and anxiety with the ambiguity of working with clients (Cummings, 1992; O'Connell & Smith; Skovholt & Rønnestad, 1992; Skovholt & Rønnestad, 2003). To help counselors-in-training work through these struggles, counselor educators must create curriculum to meet the developmental needs of counselors-in-training (Bennett-Levy, 2006; Cummings; Furr & Barrett, 2000; Hiebert & Johnson, 1994; Stoltenberg, McNeil, & Delworth, 1998; Zimmick, Smaby, & Maddux, 2000). Unfortunately, counselor educators often base their training programs more on tradition than on empirically-based pedagogy (Fong et al., 1997).

Counselor Training Models and Training for Specialized Areas of Practice

Within the broader discussion of counselor training, this section examines specific models of counselor training as well as research on training strategies for specific skills. This section begins by reviewing the Skilled Counselor Training Model (SCTM) and the Declarative Process Reflective Model (DPR). This section then discusses research on training for specific areas such as multicultural competence and case conceptualization.

Skilled Counselor Training Model (SCTM)

The SCTM is a highly structured, systematic training model that teaches counselors-in-training one-on-one and self-appraisal skills (i.e., skills that help counselors-in-training assess their own level of counseling performance). Adapted from the Skilled Group Counselor Training Model (SGCTM; Smaby, Maddux, Torres-Rivera, & Zimmick, 1999), SCTM focuses on developing greater levels of self-efficacy in counselors-in-training. Several research studies supported the SCTM in building greater levels of one-on-one counseling skills and higher levels of self-efficacy (Buser, 2008; Crews et al., 2005; Little et al., Urbani et al., 2002).

Declarative Process Reflective Model (DPR)

In a 2006 study focusing on the training of psychotherapists, Bennett-Levy created a three-stage cognitive model of training counselors at varying levels of expertise. Bennett-Levy's model contained three layers or systems of training: (a) declarative, (b) procedural, and (c) reflective. In the declarative-stage of training, psychotherapy training programs provide counselors-in-training information about counseling (e.g., theory). In the second stage of the DPR model, the procedural stage, psychotherapy training programs teach students the "how-to" or skill-based aspects of counseling. In the third and final stage of the DPR model, training program encourage counselors-in-trainings to reflect on their experiences with clients. According

to Bennett-Levy (2006) and Skovholt and Ronnestad (1992), the reflective stage is essential in promoting professional development.

Specific counseling skill training

Though variation exists among graduate programs in counseling, counselors-in-training typically begin their training by learning skills and techniques to work with clients individually (Hiebert & Johnson, 1994). These skills may include such basics as active listening, reflection and paraphrasing, empathy and other fundamental skills (Myers & Smith, 1994; O'Connell & Smith, 2005). Counselors-in-training may learn these individual counseling skills by practicing them in class with their peers, role-playing various approaches, watching therapy videos, or by observing one another in class. The acquisition of these individual counseling skills lays the foundation for future practice with individual clients and further skill development (Cummings 1992; Myers & Smith).

Multicultural competence training. Multicultural competence represents a critical component and core area of counselor (CACREP, 2009; Haynes, Corey, & Moulton, 2003; Pedersen, 2000). Constantine and Gushue (2005) studied the relationship between school counselors' ethnic tolerance attitudes and their ability to learn multicultural case conceptualization. Surveying 200 school counselors, these researchers confirmed their hypotheses: School counselors who had higher levels of racial/ethnic tolerance (as measured by the TM scale) more effectively integrated important cultural information in their case conceptualization; school counselors who had higher levels of racist attitudes were less effective at integrating relevant cultural information (p. 186). This study discovered that counselors' multicultural training significantly helped counselors-in-trainings conceptualize their clients from a multicultural perspective.

Case Conceptualization Skill Training. Buser (2008) reviewed studies on the effects of training programs on cognitive skill development. Buser asserted that research literature largely ignored training for specific cognitive skills such as case conceptualization skills, an assertion supported by other researchers (Bennett-Levy, 2006; Fong, Borders, Ethington, & Pitts, 1997). Starting with Robert and Kelly (1984), the following paragraphs examine research related to case conceptualization and cognitive complexity.

It is imperative that counselors-in-training develop case conceptualization skills, which is the ability to synthesize multiple pieces of information about their clients (Bernard & Goodyear, 2004; Haynes, Corey, & Moulton, 2003; Mayfield, Kardash, & Kivlighan, 1999; Murdock, 2011; Robert & Kelly, 2010). To investigate methods to improve counselors-in-training case conceptualization skills, Robert and Kelly used metaphor to teach case-conceptualization skills. Citing the power of metaphors in working with clients, these researchers asserted that metaphor could also help counselors-in-training better understand the complexity of clients' presenting problems. Using a case-study design, Robert and Kelly examined the "intentional use" by counselor educators in practicum. Following the use of metaphors in practicum, counselors-in-trainings reported better understanding of their clients. In addition, counselor educators reported that counselors-in-trainings' were able to apply the use of metaphors in others classes.

Hiebet and Johnson (1984) suggested that counselor education programs should include case conceptualization skill training as part of the overall curriculum. To evaluate counselors-in-training ability to conceptualize information about clients (i.e., case conceptualization), these researchers presented six counselors-in-training with a cognitive mapping test. From pretest and posttest interviews, Hiebert and Johnson discovered that participants demonstrated notable changes in counseling skill and problem conceptualization. For example, counseling participants

in the posttest interview used more open-ended questions versus closed-ended questions. In terms of cognitive changes, counselor participants exhibited “more conceptual clarity and distinctiveness.” Other observations were that participants in the posttest interviews were more “organized”, “differentiated”, and integrated with respect to their conceptualization of the clients’ problems. Hiebert and Johnson (1984) qualified these findings by stating that it was impossible to conclude skill improvement from conceptual changes. Nevertheless, these researchers observed that participants planned their sessions in a more meaningful way to facilitate client growth. Participants also showed improvement in providing feedback. By and large, participants demonstrated better all-around counseling skills.

In another study investigating training in case-conceptualization skills, Busacca (2002) offered a conceptual model for counselors-in-training to use in assessing career-counseling difficulties. Busacca noted that it is often difficult and confusing for counselors-in-training to understand when to use theory with clients. To assist counselors-in-training, this researcher offered a conceptual tool that guides counselors-in-trainings in assessing career problems. Busacca constructed this map or tool into six assessment areas (career guidance, career placement, career education, career counseling, career development, and career adjustment) and each area has two domains (interpersonal and intrapersonal) (p. 132). Once counselors-in-training can identify a client’s assessment area, counselors-in-training can then select an appropriate intervention.

Promoting Cognitive Complexity in training. Because researchers established the link between higher levels of cognitive complexity with greater counseling efficacy (Erikson & McAuliffe, 2006; Welfare & Borders, 2010), other researchers investigated ways to promote further levels of cognitive complexity in counselors-in-training. For example, Spurgeon et al.

(2012) asserted that counselor educators must find and implement critical thinking opportunities to promote increasing levels of cognitive complexity in counselors-in-training. The following paragraphs review studies that examine teaching/training strategies that foster increasing levels of cognitive complexity in different skills.

Darcy Granello published numerous articles on cognitive complexity (2000, 2001, 2002, 2010) and proposed a number of strategies for promoting counselors-in-training cognitive complexity across a wide variety of skills. First, Granello (2000) offered counselor educators a strategy to enhance counselors-in-training cognitive complexity in supervision sessions. This strategy involved using Bloom's Cognitive Taxonomy, a model that classifies cognitions into hierarchically arranged levels of complexity (a full discussion of Bloom's Cognitive Taxonomy appears on p. 52). Once the supervisor assesses his or her supervisee's level of cognitive complexity, the supervisor then asks questions to help the supervisee progress to the next level in the hierarchy. Granello offered several examples of supervisee at different levels of Bloom's Cognitive Taxonomy and demonstrated specific strategies to facilitate their movement to the next level of cognitive complexity.

In a similar study, Granello (2001) suggested using Bloom's Cognitive Taxonomy as a strategy to enhance counselors-in-training literature reviews. Citing a lack of information regarding how to teach critical writing skills, Granello asserted that Bloom's Taxonomy offers counselor educators an easy-to-use model for developing increasingly complex literature reviews. Granello outlined examples of counselors-in-trainings at every level of Bloom's Taxonomy and provides strategies for advancing them to the next level of cognitive complexity. The last section of this review discusses research related to Bloom's Cognitive Taxonomy.

Evaluating Counselor Training Effectiveness

Several researchers investigated the effectiveness of training in counselor education. Baker, Daniels, and Greeley (1990) compared Human Resource Training/Human Resource Development, Interpersonal Process Recall, and Microcounseling and found empirical support for each procedure. Similarly, Crews et al. (2005) found support for skills training and Interpersonal Process Recall. Granello (2000) investigated instructional practices in counselor education programs and contended that current counselor education curricula reflect outdated teaching models where the instructor “hands down” information to counselors-in-trainings without giving them a context from which to relate this information. Instead of instruction dominated by didactic teaching methods, Granello (2000) advocated for the inclusion of more contextual or real-world-type activities (e.g., case studies, role plays, etc.) stating that “the goal is to blend pedagogical experiences that best prepare counselors for the world in which they will live and work” (p. 281). Lastly, Buser (2008) reviewed the literature on counselor training/preparation.

The body of knowledge in counselor training continues to expand (Ridley, Kelley, & Mollen, 2011). The previous section provided an overview of the literature on counselor training. I discussed several aspects of counselor training including counselor education pedagogy, specific models of counselor training (SCTM and DPR), and specific training strategies that target skill development in specific areas such as cognitive complexity. While these studies revealed support both for these training models and training interventions for specific skills, methodological studies remain a concern (Buser, 2008). Ridley et al. (2011) expressed concerns about training models advocated for a “reexamination” of several of these models. These researchers asserted that counselor training models of yesteryear are in need of expansion and

revision. Indeed, work remains in the field of counselor training, especially empirically-based studies that account for individual differences (Bennett-Levy, 2006; Busar). This next section shifts from a broad discussion of counselor training to a core area of counselor training: group work.

Group Work Training

Group work training is a multifaceted effort (Furr & Barr, 2000) intended to develop expertise in counselors-in-training (Kivlighan & Tibbits, 2012). The following section examines the following facets of group work training in the following order. First, this section provides CACREP (2009) and ASGW (2000) definitions of group work training. Second, this section summarizes studies on experiential components of group training. The third part of this section compares conventional models of group training to the Skilled Group Counselor Training Model (SGTCM; Smaby, Maddux, Torres-Rivera, & Zimmick, 1999). The fourth and final section investigates curricular strategies aimed such at developing counselors-in-training sense of self-efficacy or focused on improving specific group counseling skills.

Counsel for Accreditation of Counseling and Related Educational Programs (CACREP)

CACREP is an accrediting body that promotes excellence in counselor preparation programs by providing standards of excellence (CACREP, n.d.). CACREP (2009) outlined learning objectives in eight core areas of training, one of which is group work, defined “as studies that provide theoretical and experiential understandings of group purpose development, dynamics, theories, methods, skills, and other group approaches, in a multicultural society, including all of the following...” (p. 13). This definition offers counselor educators a framework to construct their group work curriculum.

Association of Specialists in Group Work (ASGW)

ASGW is an organization that is “devoted to the best practices, research, and training of group workers” (ASGW, n.d.). Starting in 1969, ASGW was designated a division of the American Counseling Association (ACA) in 1973 (Forester-Miller, 2008). Currently, ASGW publishes *The Journal for Specialists in Group Work*. ASGW (2000) defines Group Work as

A board professional practice involving the application of knowledge and skill in group facilitation to assist an interdependent collection of people to reach their mutual goals, which may be intrapersonal, interpersonal, or work related. The goals of the group may include the accomplishment of tasks related to work, education, personal development, personal and interpersonal problem solving, or remediation of mental and emotional disorders. (pp. 2-3)

ASGW standards outline a list of “core” or foundational competencies that all group workers should possess. ASGW also outlines a series of “specialization” standards that group workers in targeted areas of group work (e.g., psychotherapy groups) should possess. In both the core and specialization standards, ASGW includes a series of learning outcomes in skill and knowledge areas. To meet objectives set forth by ASGW, Guth & McDonnell (2004) created a program that provides specific didactic, experiential, and observational activities and assignments at the beginning, middle, and ending phases of the group class. Guth and McDonnell’s program offers group work instructors a practical guide to fulfill the objectives established by ASGW.

Experiential Education in Group Work

A number of researchers asserted that effective group work training includes an experiential component. (Anderson & Price, 2001; Bennett-Levy, 2006; Corey & Corey, 1997;

Erwin & Toth, 1998; Furr & Barrett, 2000; Osborn, Daninshirsch, and Page, 2003; Zimmick, Smaby, & Maddux, 2000). Experiential components of group work training include those experiences that allow members to participate and lead a group (Furr & Barret, 2000). The following section reviews research on experiential components of group work curriculum.

Anderson and Price (2001) investigated counselors-in-training attitudes regarding the use of experiential groups in their graduate training programs. Specifically, the study aimed to survey counselors-in-training attitudes regarding (a) the effectiveness of experiential methods in learning group counseling skills and (b) concerns about participating in these groups and being evaluated based on their participation. This study also raised ethical concerns of counselors-in-training and instructors of experiential groups. For example, because counselors-in-training participate in an experiential group within the larger context of the class, they feared that lack of participation or disclosure could result in a negative grade. In addition, counselors-in-training reported feeling pressure and ambivalent about disclosing certain types of person information. This creates a dual role for both counselors-in-training and instructor: The counselors-in-training interact with the instructor on a teacher-pupil level as well a therapist-client level; similarly, the instructors interact with counselors-in-trainings across these roles.

The authors raised several implications for counselor educators. One implication is the quandary of balancing the value of experiential groups with the risk of violating the privacy of counselors-in-training. This research supported previous research that experiential groups are indeed effective, especially if the goal is to elicit empathy in counselors-in-training for their future clients. Another implication is that instructors must be cognizant and empathic to counselors-in-training concerns about these conflicting roles. In summary, counselor educators should carefully consider integrating experiential learning into activities and assignments.

Osborne, Daninirsch, and Page (2003) also examined the use experiential education in counselor education, focusing on the specific use of experiential methods. Noting the increased use in recent years of experiential components in group classes, Osborne et al. stated that counselors-in-training are also group members and must experience the group process first-hand. These researchers provided several experiential training exercises in a 15-week group course. For example, some of these training exercises include here-and-now interventions, feedback forms, leader debriefing, and other activities that allow counselors-in-training to integrate concepts with purposeful activities. All of these activities serve to strengthen counselors-in-training understanding of various group-related concepts.

Conventional group classes versus the Skilled Group Counselor Training Model (SGCTM)

Several studies have demonstrated that conventional counseling classes (i.e., lecture-oriented classes) were not as effective in teaching counseling skills as those who were skill-based in nature (Smaby et al., 1999; Urbani et al., 2002; Zimmick, et al., 2000). Although counselors-in-training learning group work in conventional classes may have acquired knowledge about theory, leadership styles, and types of group, they may still not have acquired the requisite skills to lead group when practicum rolls around (Smaby et al.). Consequently, counselors-in-training learning group work (in conventionally taught classes) may not be as prepared (as counselors-in-trainings from skill-based training) and may even overestimate their abilities (Little, Packman, Smaby, & Maddux, 2005; Urbani).

As an answer to this gap between knowledge and practice, Smaby et al. presented the Skilled Group Counseling Training Model (SGCTM). Citing a glaring absence of research and information in group texts and other group literature about developing specific group skills, the

researchers' hypothesized that SGCTM offers counselor educators a model to teach simple and advanced group-counseling skills. SGCTM systematically teaches group counselors-in-training simple skills (e.g., reflection) and advanced skills (e.g., immediacy) by using a three-staged model of exploring, understanding, and acting (Smaby et al., 1999). In the exploration stage, counselors-in-training identify the needs and problems in the group. In the understanding stage, counselors-in-training focus on identifying the collective and individual goals of the group and its members. The final stage (acting) counselors-in-training decide on a plan of action to meet the needs and goals of the group. Smaby et al. stated that each stage identifies a purpose, two counseling processes, and six counseling skills. Overall, SGCTM's purpose is to "...help counselor educators go beyond merely training counselors-in-trainings to perform basic group-counseling skills, and it teaches them to perceive, interpret, and respond appropriately to the reactive cues that portray the feelings of the group members during counseling sessions" (Smaby et al., p.156).

To test the effectiveness of SGCTM, Smaby et al. (1999) assessed 78 master's degree counselors-in-trainings by using the Skilled Group Counselor Scale (SGCS). The researchers found greater acquisition of simple and advanced skills among the 63 counselors-in-training trained using the SGCTM versus the 15 counselors-in-trainings who were trained using conventional group training methods. The researchers' concluded that the SGCTM holds promise of developing group counseling skills before counselors-in-trainings enter practicum.

Summary of Group Work Training

This section reviewed research related to group work training. First, this section reviewed CACREP (2009) and ASGW (2000) training standards. This section then discussed conventional and SGCTM models of group work training. Third, this section reviewed experiential

components of group work training and the issue of issues dual roles in group work training. Overall, the review revealed that group work training is most effective when it contains an experiential component.

Counselors-in-Training: Developing expertise

Regardless of discipline or field of study, training programs seek to develop a certain level of expertise in counselors-in-training. As such, researchers in various disciplines and training programs recognized that studying novice-expert differences may lend valuable insight into the very skills, behaviors, and traits that their training programs seeks to develop (Kivlighan, Markin, Stahl, & Salahuddin, 2007; Rubel & Kline, 2010). For example, Davis and Yi (2004) studied differences between novices and in the training of computer skills (Davis & Yi, 2004). In another study, Chi, Glasser, and Far (1988) studied expertise in roles ranging from waiting tables to sports and medicine

Researchers in counselor training studied difference between novices and experts across a variety of behaviors, skills, and thought processes. For example, Skovholt and Ronnestad (2002) examined some of the struggles of the novice counselor (e.g., evaluation fears and performance anxiety). Mayfield, Kardash, and Kivlighan investigated differences between novices and experts in the area of case conceptualization. Studying novices and experts and differences therein will help inform research on the field of counselor training (Etinger, Hillibrand, & Claiborn, 1995; Kivlighan et al, 2007; Kivlighan & Quigley, 1991; Kivlighan & Tibbits, 2012; Mayfield, et al. 1999). This next section reviews studies on the process of becoming a counselor.

Counselor Development

Researchers focused considerable attention to the process of becoming a counselor. A complex subject, researchers studied counselor development by examining its many sides and by

examining different points in development. For example, some researchers examined supervision approaches that account for the development of their supervisees (e.g., Skovholt & Ronnestad, 1992, 2003; Stoltenberg, 1981; Stoltenberg, McNeill, and Delworth, 1998). Other researchers have zeroed in on counselors' development while in training (Fong, et al, 1997), while others have focused how counselors' develop during the entire course of their professional lives (Skovholt and Ronnestad, 1992). Some research focused on cognitive development (Blocher, 1983; Granello, 2002, 2010), while other research focused on counselor development in terms of ethical and legal decision making (Lambie, Hagedorn, & Ieva, 2010). Researchers also investigated other aspects of counselor development such as identity development (Auxier, Frances & Kline, 2003) and self-efficacy (O'Connell & Smith, 2005).

This next section presents an overview of relevant studies related to counselor development, including those aspects noted above. The purpose of this section is to discuss the numerous sides of counselor development in an effort to better understand how counselors develop within their training and after their training. By understanding how counselors develop, counselor educators can create more effective curriculum and provide more effective supervision. (Granello, 2010; Lambie et al., 2010; Stoltenberg, 1981; Stoltenberg, McNeill, & Delworth, 1998).

Counselor Development and Supervision. Stoltenberg (1981) recognized the importance of understanding counselor development. In his first four-stage model of supervision, Stoltenberg said this of counselors-in-training: "...the trainee is viewed not just as a counselor lacking specific skills but as an individual who is embarking on a course of development that will culminate in the emergence of a counselor identity" (p. 59). At each stage of professional development, Stoltenberg's model listed an "optimal environment" that fosters

his or her professional development. For example, Stoltenberg noted that counselors-in-training rely heavily on their supervisors; consequently, supervisors should provide structured and supportive supervision. At the last stage of counselor development (i.e., “master counselor”, Stoltenberg stated that counselors have greater self-awareness, are interdependent; consequently, experienced counselor likely need only “collegial supervision” (p. 60).

Along with his colleagues, Stoltenberg, McNeill, and Delworth (1998) built on this earlier four-stage model of supervision. This model, the Integrated Developmental Model (IDM), described three structures (motivation, autonomy, and awareness) within four levels of counselor development. According to IDM, level 1 counselors depend on their supervisee and also have high levels of self-focus and anxiety. Level 2 counselors become more autonomous, confident, and empathetic, but still depend occasionally on their supervisors. Level 3 counselors build a sense of confidence and competence about themselves and use their reactions to guide their work with clients (Bernard & Goodyear, 2004, p. 88). In the last level (3i), Stoltenberg et al. asserted that counselor s-in-training possess high levels of self-awareness and personalize their approach with clients. In addition to these stages, the IDM also provides supervisors with a vast array of techniques and strategies to help move the counselor-in-training to the next stage (Haynes, Corey, & Moulton, 2003).

Recognizing that counselors do not stop developing after graduation from a graduate program, Skovholt and Ronnestad (1992) studied counselors’ development over the course of a professional lifetime. Using qualitative research methods, Skovholt and Ronnestad identified 20-themes from research on 100 counselors at various stages of professional development (first-year graduate counselors-in-training, advanced doctoral counselors-in-training, counselors with five years post-doctoral experience, counselors with 15-post-doctoral years, and counselors with

20-post-doctoral years). 20 themes and were found from this research. For example, Skovholt and Ronnestad discovered that “professional development is growth towards individuation” (p. 507). This means that as counselors gain experiences, their personal and professional values begin to align. These researchers also discovered the essential element of ongoing reflection. In fact, Skovholt and Ronnestad stated that continued reflection throughout the course of a counselor’s professional life is key to growth and development. A final finding of note from this research was that counselors move from relying on “external authority” to their own internal experience. In time, rather than relying on supervisors and peers for advice, experienced counselors and therapists turn more to their own feelings, thoughts, and ideas. Understanding the course of development can aid supervisors better understand their supervisees (Haynes, Corey, & Moulton, 2003).

In a later study, Skovholt and Ronnestad (2003) shifted their focus from describing counselor development over the course of a professional lifetime to detailing challenges of counselors at the beginning of their journeys. These researchers stated first that the main source of stress of novice counselors is dealing with the inherent ambiguity, uncertainty, and complexity of working with clients. Skovholt and Ronnestad acknowledged that working through conflicting ideas, thoughts, and feelings was indeed a long process: “Expertise within the web of ambiguity takes years to master” (p. 46). In addition, these researchers identified seven struggles from their review of research on novice counselors: (a) acute performance anxiety and fear, (b) illuminated scrutiny by professional gatekeepers, (c) porous or rigid emotional boundaries, (d) the fragile or incomplete practitioner self, (e) inadequate conceptual maps, (f) glamorized expectations, and (g) the acute need for positive mentors. Within each of these challenges faced

by novice group counselors, Skovholt and Ronnestad offered strategies for counselor educators in helping novice counselors work through these struggles.

Ego Development. Following Fong and colleagues (1997) recommendation for further studies in counselors-in-training ego development, Lambie et al. (2010) explored the relationship of ego development to ethical/legal knowledge and ethical/legal decision making. The authors stated that ego development is a construct derived from other developmental theories, and essentially refers to the maturity of a counselor across multiple domains (personal, interpersonal, ethical, cognitive, values, etc.). Results from this study indicated that counselors-in-training did significant improve their legal/ethical knowledge as well as their legal/ethical decision making at the end of their ethics courses. In addition, the higher the participant scored on ego development prior the ethics course, the higher they scored on the legal/ethics test following the course. Fong et al. concluded that these findings indicate that counselor educators may want to find a way to develop the construct of ego development.

Identity Development. Auxier, Frances and Kline (2003) conducted a qualitative study describing the identity development of master's-degree counselors-in-training. These researchers interviewed eight full-time master's-degree candidates to formulate a tentative theory of counselor identity development. The study revealed that counselors-in-training develop a counseling identity through a developmental process referred to as "recycling identity formation." According to Auxier et al., initially, counselors-in-training start their respective programs with a strong sense of dependence on their supervisors. This style of learning carries over from prior educational experiences with an authority figure who "hands down" information to his or her counselors-in-trainings. Because counselors-in-trainings find comfort and familiarity in this style of learning, the transition from didactic to experiential learning

experiences elicits anxiety and apprehension about “practicing”. Consequently, counselors-in-training report feeling confused and ambivalent about their identity as counselors.

Auxier, Frances & Kline (2003) also found that as counselors-in-trainings advanced through their programs, the frequency of experiential classes increased. Counseling-technique classes, role-playing activities and practicum courses forced counselors-in-trainings to apply their skills from theory. Participants in this study commented that this was extremely uncomfortable and foreign to them, and elicited emotions that they were not anticipating. Several counselors-in-trainings commented that these emotions centered on confusion about their professional identity.

In addition to the anxiety surrounding practicing counseling skills, students also frequently cited the anxiety of being evaluated. This evaluation was often interpersonal in nature. The article cited that counselors-in-training reaction to this feedback depended on the feedback itself. Thus, if the feedback was consistent with their beliefs, they experienced it as validating. Conversely, however, if the feedback did not fit with their perception, a complex process ensued. The process involved several responses including reflection, verification, and a desire to find meaning from that evaluation. Reflection often involved thinking about the feedback and deciding whether to accept, dismiss, or retain it. Verification involved consulting with peers or supervisors to receive additional information about the feedback.

These counselors-in-trainings continued to have an ebb and flow of both validating and confusing experiences, particularly with their experiential classes. In time and with experience, however, counselors-in-trainings indicated a better sense of who they were. The researchers expressed that, “Participants identified, clarified, and re-clarified their self-concepts as counselors through their learning experiences as counselors in-training” (p.35). The researchers

termed this process the “Recycling Identify Formation Process.” Thus, despite feeling confused and insecure about their counseling identity, these counselors-in-trainings ended their programs with a more integrated sense of who they were.

Self-Efficacy. Self-efficacy refers to one’s sense of competence or mastery over the specific task at hand (Bandura, 1997). Novice counselors have often reported feeling confused and incompetent, especially when they start practicum. (Orlinsky, 2005; Skovholt & Ronnestad, 1992; Stoltenberg, 1998). Developing self-efficacy is key as counselors work these initial struggles (Auxier, Hughes, & Kline, 2003; Hiebert & Johnson, 1994). O’Connell and Smith (2005) analyzed counselors-in-trainings and their sense of self-efficacy during their first practicum and provided three different experiential activities to increase their sense of competence. It is the authors’ belief that self-efficacy issues and ambivalence about competence typically characterize counselors-in-trainings’ early practical experiences. To facilitate a stronger sense of self-efficacy, this study reviewed the benefits of experiential learning and offers specific strategies.

First, the study described the typical challenges that counselors-in-trainings face during beginning practicum. These challenges generally occur when counselor educators ask counselors-in-trainings to apply knowledge from the classroom. For example, counselor educators emphasize listening skills during pre-practicum training. However, when it comes time to use these skills, counselors-in-trainings struggle with listening for meaning and observing non-verbal cues. In addition, supervision during practicum challenges counselors-in-training. Often times, when receiving feedback and constructive criticism, the researchers found that counselors-in-training experienced feelings of incompetence. To reduce counselors-in-training feelings of incompetence and help foster a sense of self-efficacy and reduce feelings of

incompetence, O'Connell & Smith offered specific experiential activities. The researchers noted that awareness of these struggles and the use of these activities can help counselor educators help counselors-in-training through this challenging time in their training.

Cognitive Complexity. The 1990's marked an increase in the exploration of cognitive complexity (Wilkinson, 2011); that is, the degree to which counselors-in-training and counselors can synthesize the multitude of variables in a client's situation (Granello, 2010). As stated in Chapter One, researchers established that cognitive complexity correlates to a number of therapeutic outcomes in counseling (Bernard and Goodyear, 2004; Erikson & McAuliffe, 2006; Granello and Underfer-Babalis, 2004; Welfare & Borders). Whereas the previous section discussed research related to promoting cognitive complexity in counselor training, this section discusses research related to measuring cognitive complexity.

Granello (2010) measured the cognitive complexity of 122-licensed counselors. Using stepwise regression to analyze participants' responses from Learning Environment Preferences Inventory, Granello discovered that "...of all the predictor variables included in the study, years in the counseling profession emerged as the best predictor of counselor cognitive complexity" (p. 97). That is, a positive correlation existed between years of counseling experience and levels of cognitive complexity. Of particular importance in this finding was that movement towards greater cognitive complexity occurred between five and 10 years of experience and 10 or more years of experience. Another critical finding from this research was that post-graduate years represented growth and development. As with the conclusions of other studies on cognitive complexity, Granello recommended that counselor educators should strive to foster increasing further levels of cognitive complexity in counselors-in-training.

In another study that measured cognitive complexity, Fong, Borders, Ethington, and Pitts (2000) explored the cognitive complexity of 48-master's level counselors-in-trainings over the duration of a counseling program. These researchers assessed changes in counselors-in-training cognitive development at different points of their program using paper-and-pencil measures as well as audio-taped measures. Using parametric, non-parametric, and chi-square analyses, Fong et al. discovered that various measures of counseling performance did increase over the course of a graduate program in counseling. However, these researchers did not find an increase in these counselors-in-training levels of cognitive complexity. Fong et al. (1997) concluded by stating that graduate programs must create curriculum and training opportunities that foster increasingly greater levels of cognitive complexity in counselors-in-training.

In addition to Fong et al.'s (1997) work on cognitive complexity, Granello (2002) focused on developing a general theory of counselor-in-training develop cognitive development. Surveying 205 masters' counselors-in-trainings, Granello used Perry's (1970) theory to ground the study. Granello found that counselors-in-training entering their programs were frustrated that there was not a "right" way to counsel. Counselors-in-training expressed frustration about the realization that professors did not have all the answers. Granello also found that counselors-in-training at the end of their graduate training were typically at the "multiplistic stage"—that there are multiple "truths", each one possessing its own validity. Granello suggested that few counselors-in-training entered into Perry's relativistic stage by the time they graduated. A counselor-in-training in the relativistic stage acquired the ability to see alternative perspectives, but is at the same time committed to his or her point of view, based on facts and evidence. Granello concluded that knowledge and awareness of cognitive development could assist

counselor educators in supporting counselors-in-training individualized needs and could also inform curriculum development.

In a recent study, Spurgeon et al. (2012) measured the cognitive complexity of 18 masters-level counselors-in-trainings enrolled in a semester-long professional orientation and ethics course. Following each weekly class session of the 10-week course, counselors-in-trainings provided written responses to questions about that particular class session. Using Bloom's Taxonomy, these researchers used a qualitative approach to analyze the counselors-in-trainings' written responses. The researchers' analysis suggested a relationship between certain content in the course and cognitive complexity. Spurgeon et al. concluded that counselor educators must implement a variety of critical thinking strategies (e.g., using current events) to promote cognitive complexity in counselors-in-training.

Duys and Hedstrom (2000) measured the cognitive complexity of 72-counselors-in-trainings (36-control group; 36-experimental group) enrolled in a master's level counseling program. The experimental group participated in a basic skills course that focused on teaching microskills and offered systematic feedback of these counselors-in-trainings' performance. The control group consisted of counselors-in-trainings who had not yet taken a basic skills course. Following the basic skills course, Duys and Hedstrom (2000) used an analysis of covariance (ANOVA) to measure the differences in cognitive complexity between the control and experimental groups. These researchers discovered that participants in the experimental group demonstrated substantially higher levels of cognitive complexity than did those participants in the control group.

Welfare and Borders (2010) assessed the cognitive complexity of 80-master's level counselors-in-training and 39 post-master's degree counselors using the Counselor Cognitions

Questionnaire (CCQ) and the Washington University Sentence Completion Test (WUSCT). These researchers asserted that cognitive complexity is domain specific: One can have high cognitive complexity in clinical skills but low cognitive complexity in other disciplines (e.g., engineering). Thus, Welfare and Borders stated that measuring cognitive complexity in a certain domain would allow counselor educators to intervene in a more effective manner. Using simultaneous multiple regression analysis, these researchers discovered that a counseling related experience (counseling experience, supervisory experience, counselor education experience, highest degree earned) all correlated positively to cognitive complexity.

Counselors-in-training Summary

The previous section discussed multiple aspects related to the development of counselors-in-training. Beginning with the works of Stoltenberg (1981) and Stoltenberg et al. (1998), this first section examined the challenges of counselors at various stages of their training. The second section turned to the work of Skovholt and Ronnestad, who looked at counselor development throughout the professional lifespan, not just during the graduate training years. The third section examined various aspects of the novice group counselor, ego-development (Lambie et al., 2010), identity development (Auxier, Frances and Kline, 2003), self-efficacy (O'Connell and Smith, 2005), and cognitive complexity (Fong et al., 1997; Granello, 2002, 2010; Spurgeon, et al., 2012; Welfare & Borders, 2010). Taken together, these studies revealed some of the qualitative and quantitative changes that take place as counselor acquire training and experience. The next section transitions from a broad discussion of counselors-in-training to a discussion focused on counselors-in-training learning group work.

Counselors-in-training Learning Group Work: An Introduction

The previous section discussed the various developmental and training issues of counselors-in-training. This section shifts from a broad discussion of counselors-in-training to a focused examination of counselors-in-training learning group work. According to Stockton (2010), counselors-in-training learning group work struggle applying knowledge and demonstrating skills when they begin practicum. Like any set of skills, counselors-in-training learning group work acquire these skills through practice and experience (Anderson & Price, 2001; Furr & Barret, 2000; O'Connell & Smith, 2005; Osborn, Daninhirsch & Page, 2003). Learning group work confronts counselors-in-training with the daunting challenge of processing real-time, voluminous amount of data (Ettinger, Hillerbrand, & Claiborn, 1995; Hines et al., 1995; Kivlighan & Quigley, 1991). The challenge of learning group work is a continuing challenge for experienced group counselors and an overwhelming challenge for counselors-in-training learning group work (Forester-Miller & Kottler, 1997).

The overarching purpose of this section is to describe differences between novices and experts across multiple domains of group leadership. To this end, this section first identifies key differences between novices and experts and discusses implications of identifying these differences for counselor training. Second, this section reviews different aspects of cognitive processes (e.g., self-talk, intentions, conceptualization, and knowledge structures). The third part of this section concludes by discussing cognitive complexity in group work.

Developing Group Work Expertise

As discussed, the field of counselor training and the core area of group counseling therein can be well served by studying and expanding the counseling expertise literature (Kivlighan, 2008; Kivlighan et al, 2007; Kivlighan & Kivlighan, 2010; Kivlighan & Tibbitt, 2012). After all,

“a major goal in the supervision of training of novice group practitioners is to help these counselors-in-trainings think and perform like expert group practitioners” (Kivlighan & Kivlighan, 2010, p. 175). Therefore, the following section reviews studies on differences between the novice and the expert group counselor.

Novice and expert group leaders

Differences exist between expert group counselors and their counselor-in-training counterparts. This section discusses this question and identifies those qualities, behaviors, and processes that expert group leaders consistently exhibit and novice group leaders need developing. Although the differences between novices and experts are not black and white (Kottler, 1994), this section’s purpose is to illuminate the desired qualities of the expert to inform group counselor training for the novice. Identifying the qualities of expertise in group leadership may give counselor educators a clearer picture of the desired qualities they are wishing to foster and develop (Rubel & Kline, 2010). Kivlighan et al. (2007) validated this assertion, stating that “taking a closer look at how experts and novices differ qualitatively and quantitatively helps us to develop better training programs for counselors that are developmentally appropriate” (p.185). To this end, the purpose of this section is to review research on these differences in order to get a fuller picture of counselors-in-training.

Kottler (1994) devoted an entire book to study of the expertise in group leadership. In contrasting differences between novices and experts, Kottler stated that expert group leaders “process information quickly and tend to think more abstractly than do novices. Experts have more habitual responses, take more shortcuts, and focus more on narrowly restricted sectors for their diagnostic scanning” (p. 5). In addition, Kottler stated that expert group leaders are

“procedurally quicker” and have more of an intuitive style. On the other expert leaders’ novice counterparts, are more deliberate, sequential, and cautious.

Rubel and Kline (2010) also were interested in exploring the processes of expert group leaders. Using a qualitative, grounded-theory methodology, these researchers asked eight expert group therapists questions about perceptions, experiences, conceptualizations, and feelings while leading group. Several key themes emerged from this investigation. First, these expert group leaders reported that their collective experiences in leading groups substantially influenced their present group leadership. A second theme that emerged was leadership resources, or the knowledge and attitudes that these participants had acquired about over the course of their career leading groups. Group process, the third main theme, referred to how these participants understood group dynamics and the inner workings of groups. In addition this third theme reflected how advanced group leaders make decisions in group. Within each of these three main themes, Rubel & Kline uncovered several sub-themes as well. To name a few, participants reported that they experienced greater confidence as their gained experience and knowledge in leading group. These participants also reported a heightened sense of concern for the well.

Leading group involves various cognitive processes (Ettinger, Hillderbrand, & Claiborn, 1995; Hines, Stockton, & Morran, 1995). Etringer, Hillerbrand, & Claiborn reviewed differences between novice and expert group leaders in several areas of “cognitive competencies” (memory and knowledge structures, declarative and procedural knowledge, pattern recognition, reasoning processes and goals, and problem structuring are reviewed). In each one of these cognitive areas, Etringer et al. identified specific areas of differences between novices and experts along with implications for counselor educators in using this knowledge for more effective counselor preparation.

Other researchers focused on specific aspects of cognitive processes, and how do those aspects differ in novices and experts. For example, what do group counselors say to themselves while leading group (i.e., self-talk)? What do they group counselors intend with a particular interventions (i.e., intentions)? Or, how does a novice group counselor conceptualize different aspects of group (e.g., group process or group member) versus how an expert conceptualizes those same aspects? This next section discusses these questions and covers three aspects of cognitive processes that have received research attention: group leader self-talk, intentions, and conceptualization.

Self-talk. Hines, Stockton, and Morran (1995) explored “categories of thought” in group therapists as well as if the thoughts of novice group counselors differed from experts’ thoughts. Participants for this study included 60 group therapists and were placed in three different groups based on their level of experience (novice, beginner, expert). These participants watched a 20-minute segment of a mock group session, and then were asked to list their thoughts using the “thought-listing” technique. Two-faculty members (both of whom taught group) at this university created 17 “thought categories” and then categorized the participants’ 1,299 thoughts into these 17-categories.

Several key findings emerged from this study. First, Hines, et al. (1995) discovered that group leaders must process several questions simultaneously. For example, group leaders must ask themselves “What is going on in the individual and what is going on at the group level?” (p. 246). Second, the researchers found that interpreting group process (category) predicted experience level. In addition, the thought category of internal questioning predicted experience level. Hines et al. concluded by stating that understanding the differences in self-talk between novice and experts could assist counselor educators in training group counselors. Specifically,

these researchers stated that counselor educators could focus specifically on group process training. For example, Browne (2005) in reviewing Hines et al.'s (1995) study, stated that these findings have been implemented into group training by using the "fishbowl technique". This technique allows novice group leaders to observe expert group leaders and then ask them question about the leaders' self-take, intentions, and thoughts about critical incidents in group.

Bartley-Smith (1995) also examined the thoughts of group counselors, but focused specifically on the novice group counselor. Bartley-Smith (1995) investigated the impact of viewing emotionally-intense videotaped groups (one low and one-high intensity video tape) on counselors-in-training thoughts, hypotheses, and intervention selection. Using the thought-listing procedure, this researcher identified 22-categories from the 2,257 thoughts listed by the 69 participants. Bartley-Smith found that emotional intensity did in fact have an impact on participants' cognitions: Participants who viewed the high intensity vignette wrote more complex hypotheses than those participants who watched the low-intensity vignettes. These findings provide counselor educators with better understanding of counselors-in-training, which can in turn inform the design and implementation of their group counselor training and curriculum.

Intentions. Stockton, Morran, and Berardi-Clark (2004) investigated group-leader intentions, which they defined as "what a counselor desires to accomplish as the result of a selected intervention" (p. 197). The purpose of this study was to identify and categorize group leader intentions. To accomplish this, Stockton et al. had 34 participants (who were all currently leading a group) list their thoughts (i.e., thought-listing procedure) following one of their group sessions. This yielded 835 group-leader intentions, which researchers then categorized into six intention categories (directing the group, assessing, challenging members, validating members' experiences, directing self). Several finding emerged from this study. First, from the six

categories of leader intentions, Stockton et al. identified connections between categories and condensed these categories into two clusters: On one axis, was the “planning/guiding versus promoting change” and on the other axis was the cluster of “attending versus assessing growth” (204). According to the researchers, promoting insight and change accounted for a significant percentage of these participants’ intentions (43%). This cluster of intentions’ purpose was to move members to the working stage. The second cluster, planning/guiding, referred to intentions that managed the norms and administrative aspects of the group, and accounted for 26% of all the leaders’ intentions. These researchers stated that counselor educators could use these findings to help group counselors-in-training use and better understand leader intention as it relates to group process.

Conceptualization. Kivlighan and Quigley (1991) explored the following research question: How do novices and experts differ in their conceptualization of group members? To investigate this question, 30 participants (15 novice and 15 expert participants) watched a one-hour video group session. After viewing the session, participants’ rated possible pairs of group members. Using multidimensional scaling (MDS) to study the differences between novice and expert group counselors, Kivlighan and Quigley found that advanced group leaders had a more complex view of group members than their novice counterparts. In addition, the researchers identified that novice group counselors in this study understood group members along two-dimensions (dominant/submissive, low/high participation rate), whereas advanced group leaders understand group members along three dimensions (dominant/submissive, friendly/unfriendly, and supporting therapeutic work/hindering therapeutic work). These researchers stated that the experts’ more complex understanding of group members and their interactions can result in more effective interventions within the group session.

Knowledge structures

In addition to differences in cognitive processes between the novice and the expert discussed above, others researchers honed in how novices and experts organize “data” into conceptual categories. These conceptual categories of organized data, known as knowledge structures, hold significant promise in understanding the depth of cognitive differences between how novices and experts arrange information about group (Kilvighan et al., 2007). This next section discusses research on knowledge structures.

Knowledge structures refer to “how one mentally organizes information, according to perceived similarity or differences between stimuli” (Kivlighan et al., 2007, p. 176). As stated in the introduction of this section, previously researchers conducted considerable research investigating differences in knowledge structures between novices and experts outside of counselor training literature (e.g., Davis & Yi, 2004; Chi, Glasser, Farr, 1998; Kokosk & Housner, 1994). Etringer et al. (1995) stated that “experts and novices, regardless of discipline, differ in their encoding of information, the organization of information in memory, and the use of this information in reasoning or problem solving” (p. 5). If researchers are looking to identify key differences between novices, and experts, then it stands to reason that knowledge structures represent another key area that distinguishes these groups.

In the area of individual counseling, Mayfield, et al. (1999) investigated the degree of match between the knowledge structures of clients of novices versus those of experts. Researchers gave conceptual mapping tasks (CMT) of selected cases to four novice counselors and five experienced counselors. To analyze the results from this CMT, the researchers used a cluster analysis. Findings from this study revealed that novice counselors structured their knowledge a particular in distinctly different way from the manner in which expert counselors

structured their knowledge about the same case. Specifically, Mayfield et al. discovered that while both novice and expert counselors used the same number of concepts or categories in their case conceptualizations, experts tended to identify themes and patterns while novices tended to notice idiosyncratic themes and patterns (p. 511). Also, it appeared that novices tended to organize their thoughts about the client based on when the client revealed a particular piece of information. On the other hand, expert counselors did not tend to conceptualize these cases based on the temporal order of client statements. Finally, these researchers noted that experienced counselors were far faster and more efficient at categorizing client statements. Implications from this study included the use of conceptual maps and conceptual mapping tasks (CMT's) with counselors-in-training.

With the exception of a few studies on knowledge structures within the counselor training literature, most counselor training research focused more on what counselors-in-trainings learn (i.e., knowledge acquisition) versus how counselors-in-trainings categorize this knowledge (Kivlighan et al., 2007). While the knowledge that counselor gain during their course of their training is important, Kivlighan et al. maintained that research from other disciplines has concluded that knowledge structures are “a far better predictor of skill performance” (p. 185). As one example, Kivlighan (2008) discovered that clients (in individual counseling) rated sessions with novices more favorably when the novice counselors’ knowledge structures matched closely that of the experts. Identifying differences in how novices and experts structure their knowledge about various aspects of group may help inform counselor training (Kivlighan et al., 2007; Kivlighan & Tibbitts, 2012; Mayfield, Kardash, & Kivlighan, 1999).

Knowledge structures of group counseling interventions. In a recent study, Kivlighan & Tibbitts (2012), attempted to identify the differences in sets of knowledge structures between

novices and experts. Specifically, these researchers were curious about how the expert group counselor assesses his or her feeling about that particular group (i.e., one set of knowledge structures) to therapeutically intervene to the feelings of group members (another knowledge structure)? The researchers hypothesized that expert group counselors correctly link an intervention based his or her feelings and group members' feelings. Participants for this study included four expert group leaders (20-30 years of experience) and 50 counselors-in-training. To study this, Kivlighan and Tibbits administered the Revised Group Therapy Questionnaire (GTQ) to the counselors-in-training learning group work and the four expert group leaders. Using Pathfinder Analysis, the researchers then compared the novice group counselors' responses on the GTQ with those of the advanced group leaders. Kivlighan and Tibbits noted two types of errors among the novice group counselors. First, the most common form of error was when counselors-in-training learning group work did not have a link in their "network maps" (i.e., the set of knowledge structures) that the expert group counselor had. Kivlighan and Tibbits referred to this as "error of omission". Far less often, the second type of error that novice group leaders' committed was having a map that was not there in the experts' network map (error of "commission"). Errors of commission included things such as reading silence in the group as attacking (referred to by the authors as "silence to attack". Expert group leaders, on the other hand, interpreted this silence to mean as at time for empathy and caring. Errors of omission included things such as failing to allow the group to assume responsibility. In contrast, expert group leaders trust the group and the group process more. In addition, often times group counselors-in-training learning group work failed to see the importance of reinforcing desired behavior in group members, whereas expert group leaders identified these behaviors and reinforced them.

Kivlighan and Kivlighan (2010) also examined differences in knowledge structures of novice and expert group leader interventions. Specifically, this study looked at the similarity between novice group counselors' interventions and the interventions of experienced group counselors. These researchers hypothesized that the greater the similarity between novice and expert knowledge structures of leader interventions, the more likely that group members will be satisfied with the group experience. Participants for this study included five experienced group therapists and 13 counselors-in-training. To measure responses to certain real-world group scenarios, the researchers used the revised Group Therapy Questionnaire (GTQ). Group members assessed the counselors-in-training learning group work with the Leadership Profile (LP). To analyze the data from these measures, Kivlighan and Kivlighan used the Pathfinder Network Analysis. Results from this study indicated that group members desired less change from counselors-in-training learning group work when the trainees' structure of interventions matched those of the expert's knowledge structures of interventions; members were more satisfied when there was similarity between novice and advanced leader interventions. Because intervening in group is a complex subject, the researchers suggested more than two courses in group training. In addition, the researchers suggested that it is important for counselors-in-trainings to understand how experts structure their interventions, or how "...they use them [interventions] in tandem" (p. 194).

Knowledge structures of group members. In another study about knowledge structures and group members, Kivlighan, Markin, Stahl, and Salahuddin (2007) examined how group counselors-in-training' knowledge structures (about group members) changed with training. Defined as categories of information, Kivlighan et al. stated that knowledge structures are superior predictors of skill performance; therefore, they sought to measure the knowledge

structures of novice group counselors. Specifically, Kivlighan et al. aimed to measure how novice group counselors' knowledge structures develop with training and if these knowledge structures become similar to the knowledge structures of an expert group counselor. Using Multidimensional Scaling (MDS) and Pathfinder analyses, the researchers interviewed nine doctoral students who were participating in their first group training course. The expert, who researchers compared counselors-in-training knowledge structures to, was a faculty member in counseling psychology with over 20 years of experience both in leading and teaching group. Following the observation of a group, researchers asked participants to rate group members on an index of similarities and differences.

One finding of this study was that knowledge structures of group counselors-in-training did in fact become more complex with training. Second, with training, the knowledge structures of counselors-in-training became more congruent with the knowledge structures of the expert group counselor. Both findings are important because researchers discovered knowledge importance in predicting skill performance (Davis & Yi, 2004). Kivlighan et al. (2007) concluded that these findings can assist counselor training programs in creating curricula that address knowledge structures.

The research above advanced our understanding of counselors-in-training learning group work. Research on specific cognitive processes such as intentions, self-talk, and knowledge structures offers counselor educators a better understanding of counselors-in-training. Still, this body of research does not address cognitive complexity in group work. This next discusses the only study found focused specifically on cognitive complexity.

Cognitive Complexity in Counselors-in-Training Learning Group Work

This review of the literature discovered Granello and Underfer-Babalis (2004) as the only study to investigate cognitive complexity in counselors-in-training learning group work. This study proposed a model of supervision to facilitate further levels of cognitive complexity in counselors-in-training learning group work. Utilizing Bloom's Cognitive Taxonomy, these researchers outlined a series of concrete interventions at every level of Bloom's Cognitive Taxonomy and at every stage of group. For example, if a counselor-in-training operated at the "knowledge" level of Bloom's Cognitive Taxonomy during the working stage of group, Granello and Underfer-Babalis suggested using role play as a means to encourage them to the comprehension level of Bloom's Cognitive Taxonomy. While this suggested model offers supervisors a relatively straightforward series of interventions to promote cognitive complexity in counselors-in-training learning group work, the researchers recommended further research to validate this model's efficacy. In contrast, this study's hopes to provide an in-depth description of counselors-in-training learning group work.

Summary of Counselors-in-training learning group work

The previous section reviewed literature on various aspects of counselors-in-training learning group work. This review differentiated novices and experts across multiple aspects of cognitive processes. These aspects included differences between novices and experts in in conceptualization, self-talk, intentions, knowledge structures, and cognitive complexity. Although a relatively substantial amount of research exists on several of these aspects, researchers know less about cognitive complexity in counselors-in-training learning group work. In fact, this review discovered Granello and Underfer-Babalis (2004) as the only study to investigate cognitive complexity in counselors-in-training learning group work. Research

centered on cognitive complexity of counselors-in-training learning group work will ultimately help counselor educators promote further levels of cognitive complexity.

Bloom's Cognitive Taxonomy

Bloom et al.'s (1956) Cognitive Taxonomy offered educators one of the first models to assess and promote cognitive complexity (Granello & Underfer-Babalis, 2004) and remains one of the most widely used classification systems in education (Krathwohl, 2002). For instance, researchers in management education (Athanassiou, McNett, Harvey, 2003), business education (Nentl & Zietlow, 2008), accounting education (Reinstein & Bayou, 1997), and online education (Whiteley, 2006) employed Bloom's Cognitive Taxonomy to foster higher levels of critical thinking and cognitive complexity in students. This section discusses Bloom's Cognitive Taxonomy (1956), describes a revision (Anderson & Krathwohl, 2002) of Bloom's original theory, and reviews research studies that utilize Bloom's Cognitive Taxonomy within counselor education research.

Bloom's Cognitive Taxonomy is a system of classification arranged in six hierarchical categories, with each level building on the previous. In the first level, knowledge, students can recite facts and figures, but cannot apply these facts and figures and have no further level of understanding. Comprehension, the second level, students can organize and understand the main ideas on a deeper level than regurgitating the information. At the third level of Bloom et al.'s Cognitive Taxonomy, application, students can apply their understanding of events and ideas to other areas and situations. In the fourth level, analysis, students can begin to problem solve through deduction and can see the relationship among various parts of a problem. Synthesis, the final level of Bloom et al.'s model, students developed the ability to pull together information and ideas from different areas and create novel ideas and problem solving approaches.

In an updated version of Bloom et al.'s model, Krathwohl (2001) created a two-dimensional framework consisting of knowledge and cognitive processes. Krathwohl stated that the knowledge dimension represents the knowledge level of the former version of Bloom's, while the cognitive processes dimension represents all six categories of the original version. In addition to creating a two-dimensional framework, Krathwohl revised the terminology in each of the six levels, listed as follows: remembering, understanding, applying, analyzing, evaluating, and creating. According to Krathwohl, this two-dimension framework and revised terminology offered educators a useful table to classify students' cognitive abilities.

Bloom's Cognitive Taxonomy in Counselor Education

Within counselor education, Bloom's Cognitive Taxonomy offers counselor educators a ready-made tool to assess cognitive complexity in counselors-in-training (Granello, 2000, 2001, 2004). Researchers in counselor education examined the use of Bloom's Cognitive Taxonomy in conducting supervision (Granello, 2000; Granello & Underfer-Babalis, 2004), teaching advanced writing skills (2001), and assessing cognitive complexity in counselors-in-training (Spurgeon et al., 2012). This section reviews those studies within counselor education that used Bloom's Cognitive Taxonomy to assess or promote cognitive complexity in counselors-in-training.

Granello (2000) provided a model of supervision using Bloom's Cognitive Taxonomy. In this model, the author detailed six scenarios and provided specific questions for advancing counselors-in-training to the next level of Bloom's Cognitive Taxonomy. For instance, if the topic in supervision was working with difficult clients, the supervisor could first ask knowledge-type questions. Counselor educators could then focus on comprehending or understanding the particular clinical issue. The supervisor could continue asking question in a manner that

facilitated movement through all six levels (knowledge, comprehension, application, analysis, synthesis, and evaluation) of Bloom's Cognitive Taxonomy.

In a similar study, Granello (2001) proposed a model using Bloom's Taxonomy to promote complexity in counselors-in-training literature reviews. Citing the importance of teaching critical writing skills in counselor education, the author provided examples of counselors-in-trainings writing at each level of Bloom's Cognitive Taxonomy and then listed specific interventions to advance the counselors-in-training to the next level of complexity. For example, to advance a counselors-in-training from knowledge to comprehension, Granello recommended having counselors-in-trainings summarize articles. If a counselors-in-training was writing at the comprehension level, the author suggested having counselors-in-trainings explicitly address how an article links to their topics.

In a recent study, Spurgeon, Woodside, McClam, Heidel, & Catalana (2012) utilized Bloom's Cognitive Taxonomy to assess the cognitive complexity of 18 pre-practicum counselors-in-trainings enrolled in a professional orientation and ethics course. Using a qualitative methodology, the researchers found that participants' cognitive complexity increased during this course. The researchers recommended the use of a wide-variety of curricular strategies to promote cognitive complexity throughout counselor training programs.

Summary of Bloom's Cognitive Taxonomy

This section provided an overview of Bloom's Cognitive Taxonomy (Bloom et al., 1956) and discussed a revised model of Bloom's original theory (Krathwohl, 2002). This section also reviewed studies within counselor education that used Bloom's to assess and promote cognitive complexity in counselors-in-training. Overall, Bloom's Cognitive Taxonomy offers counselor

educators a practical tool for assessing and promoting cognitive complexity in counselors-in-training (Granello, 2000).

Literature Review Summary

This review of literature covered four main areas of research related to the present study: history and effectiveness of group work, counselor training (including group work training), counselor-in-training development (including cognitive complexity), and Bloom's Cognitive Taxonomy. Collectively, this review revealed a need for further understanding of cognitive complexity of counselors-in-training in the context of group work. This section summarizes major themes from each section of review. This literature review first discussed the history of group work and research related to its effectiveness. Group work as a formal practice began in the early 1900's as a practical way to distribute information to groups of people and gained popularity in the 1950's as the result of prominent figures such as Carl Rogers, Rudolph Dreikers, Alfred Alders, among others (Barlow et al., 2004; Berg et al., 2006; Gladding, 2008). As the practice of group work continued to develop, professional associations such as the Association for Specialists in Group Work (1969) and Society of Group Psychology and Group Psychotherapy (1991) developed to promote and advance the practice of group work. Since these events, researchers substantiated group work as a viable treatment modality in producing positive outcomes in counseling (Yalom & Leszcz, 2005).

The next section in this review of literature examined research related to counselor training. This section reviewed studies examining of counselor training, including the Skilled Counselor Training Model (SCTM; Smaby, Maddux, Torres-Rivera, & Zimmick, 1999) and Declarative-Procedural Model (DPR; Bennett-Levy, 2006). This section also reviewed research on specific instructional strategies. These strategies focused on developing specific counseling

skills, such as case conceptualization skills (Murdock, 2011), multicultural training (Pedersen, 2000), and cognitive complexity (Granello, 2000, 2001). The final part of this section reviewed research specific to group work training, including CACREP (2009) and ASGW (2000) standards and studies on experiential training (Furr & Barret, 2000). Altogether, this body of research supported the need for developmentally-based curricula in the context of both individual counseling and group work (McAuliffe & Eriksen, 2000).

The third section of this literature review examined research related to counselors-in-training and counselors-in-training learning group work. These studies focused on various aspects of counselor-in-training development, including struggles of counselors-in-training (Skovholt, & Rønnestad, 2003), cognitive development during graduate training (Fong et al., 1997), and cognitive complexity (Granello, 2002). Studies specific to counselors-in-training learning group work focused on knowledge structures (Kivlighan & Quigley, 1991), self-talk (Hines, Stockton, & Morran, 1995), leader intentions (Stockton, Morran, & Berardi-Clark, 2004), and cognitive complexity (Granello & Underfer-Babalis, 2004).

The final section reviewed Bloom's Cognitive Taxonomy (Bloom et al., 1956) and a revised version of Bloom's original taxonomy (Anderson & Kratwohl, 2001). This section discussed the use of Bloom's Cognitive Taxonomy as an assessment tool in various fields of study such as business education (Nentl & Zietlow, 2008) and accounting education (Reinstein & Bayou, 1997). Finally, this section examined studies using Bloom's Cognitive Taxonomy with counselor education research (Granello, 2001, Spurgeon et al., 2012). Studies across disciplines and within counselor education research demonstrated the utility of Bloom's Cognitive Taxonomy as an assessment tool (Granello, 2002).

Chapter Three: Methodology

Introduction

This chapter focuses on the methods used to explore the following question: What levels of cognitive complexity do counselors-in-training enrolled in a Group Dynamics and Methods course demonstrate in written reflection assignments as measured by Bloom's Cognitive Taxonomy? Given that this study's goal is to provide description, I used a qualitative approach, content analysis, to analyze the content of written reflection assignments using Bloom's Cognitive Taxonomy. The following section discusses the rationale for the use of qualitative research and content analysis. I describe steps I took to ensure trustworthiness. Following these topics, I provided detailed descriptions of the participants, data collection and data analysis procedures, limitations and strengths, and potential ethical issues.

Qualitative Research: An Overview

Researchers use qualitative research when they wish to better understand and fully describe a complex phenomenon (Creswell, 2013). Merriam (2009) stated that "qualitative researchers are interested in understanding the meaning people have constructed, that is, how people make sense of their world and the experiences they have in this world" (p.13). Accordingly, I am interested in describing the cognitive complexity of counselors-in-training enrolled in a Group Dynamics and Methods course. Creswell maintained that qualitative research strives to empower individuals by listening to their stories. This study seeks to empower counselors-in-training learning group work by listening to them through their written reflections over a semester's time. Finally, according to Creswell and Merriam, researchers use qualitative research to develop theory. By exploring the cognitive complexity of counselors-in-training learning group work using Bloom's Cognitive Taxonomy as a framework, findings provided

unique insight into counselor-in-training growth and development. In summary, a qualitative content analysis research method corresponds best to this study's purpose.

Given the number of approaches to qualitative research, Creswell (2011) asserted that researchers should select an approach based on the research question at hand. Creswell maintained that following an approach adds depth to the study, gives the researcher a specified format to follow, and offers a clearer format for reviewers to follow. To this end, I used a content analysis approach to qualitative research and analyze existing text of counselors-in-training studying group work. The next section explains this approach and its application to the present study.

Content Analysis Approach to Qualitative Research

Content analysis represents an established method to qualitatively describe phenomena (Merriam, 2009). A widely utilized approach in health care research, content analysis seeks to find meaning in the text of data (Elo & Kyngas, 2008) or in a document's keywords (Hsieh & Shannon, 2005). Merriam stated that content analysis is a "...process that involves the simultaneous coding of raw data and the construction of categories that capture relevant characteristics of the document's content" (p.205). Saldana (2011) offered a similar definition of content analysis, stating that content analysis is "the systematic examination of texts and visuals (e.g., newspapers, magazines, speech transcripts), media (e.g., films, television episodes, internet sites), and/or material culture (e.g., artifacts, commercial products) to analyze their manifest and latent meanings" (p. 10). Finally, Elo and Kyngas (2008) defined the content analysis approach as "...a research method for making replicable and valid inferences from data to their context, with the purpose of providing knowledge, new insights, a representation of facts and a practical

guide to action” (p. 108). In summary, content analysis is an excellent and supported qualitative approach using written documents as a source of data.

When using the content analysis approach, Elo and Kyngas (2008) described inductive and deductive methods to analyze the data. According to the authors, researchers use an inductive approach when no studies exist on that phenomenon. In contrast, researchers employ a deductive approach when “...the aim is to test an earlier theory in a different situation or to compare categories at different time periods” (Elo & Kyngas, p.113). In relation to the present study, several researchers used Bloom’s Cognitive Taxonomy to code levels of cognitive complexity in counselors-in-training in the context of individual counseling. Similarly, I wish to build on previous studies using Bloom’s Cognitive Taxonomy, but use it in a new context—that of counselors-in-training studying group work. Thus, this study followed a deductive approach.

According to Hsieh and Shannon (2005), there are three primary approaches to content analysis: conventional, direct, and summative. In the conventional approach to content analysis, the researcher’s primary goal is describing some phenomenon, especially when limited theory exists on that particular topic. The direct approach, in contrast, uses existing theory to code content in documents. The third approach outlined by Hsieh and Shannon is the summative approach. In this approach the researcher “starts with identifying and quantifying certain words or content in text with the purpose of understanding the contextual use of the words or content” (p. 1283). Overall, each of these approaches provides researchers with strategies to build new theory on a relatively unexplored phenomenon (conventional), use existing theory to construct a more complete understanding of some phenomenon (direct), and to explore the usage of certain words in a certain context (summative).

Content Analysis in Counselor Education Research

Counselor educators routinely assign writing activities that assess learning and provide counselors-in-training opportunities to reflect on their training experiences (Cobia, Carney, & Shannon, 2000; Granello, 2001). These written documents, in turn, supply researchers with a fertile source of readily accessible data that "...are potentially quite rich in portraying the values and beliefs of participants in the setting" (Marshall & Rossman, 2009, p. 160; Merriam, 2009). As evidence of the utility of a content analysis approach, numerous researchers in counselor education conducted research using the content analysis method to focus on topics ranging from school counselor reform (Wilkerson, 2010), LGBTQ concerns (Singh & Shelton, 2010), race and spirituality (Baker, Bowen, Butler, & Shavers, 2013), counselor advocacy (Eriksen, 1999), and supervision practices (Neswald-McCalip, Sather, Strati, & Dineen, 2003).

Summary of Qualitative Research and the Content Analysis Approach

This section provided an overview of qualitative methodology and discussed specific approaches within qualitative research. Because of the utility of the content analysis approach and the potential for discovery within written documents, this study used written reflection assignments from counselors-in-training enrolled in a 15-week Group Dynamics and Methods course. Using Bloom's Cognitive Taxonomy, I analyzed the content from these written reflections assignments. The next section addresses trustworthiness in qualitative research and this study's plan to address trustworthiness.

Trustworthiness in Qualitative Research

Trustworthiness is a system that specifies criteria for evaluating the quality of a study (Marshall & Rossman, 2011). Lincoln and Guba (1985) stated that trustworthiness ensures that a study's findings are "worth paying attention to" (p.290). Accordingly, this study employs four

strategies to ensure trustworthiness (Creswell, 2013, p. 250). First, I discuss my analysis using a process referred to as peer debriefing (Marshall & Rossman, 2011). Hsieh and Shannon (2005) noted that a direct approach to content analysis by a sole researcher may cause the researcher to inadvertently choose evidence that fits into the predetermined categories (e.g., each level of Bloom's Cognitive taxonomy). Thus, peer debriefing is particularly important with this approach. In relation to the present study, I debriefed with this study's dissertation co-chairs on an ongoing basis to discuss my analysis in an effort to minimize bias to the highest degree possible. Second, I wrote detailed notes of the procedures followed and "decision points" made throughout the study. Qualitative researchers refer to this strategy as an "audit trail". This process allows me to "return" to previous decision and the rationale behind those decisions. Third, I provided excerpts from participants' written reflections as data examples to support the analysis of content. Fourth, I provided "thick, rich descriptions" based on the findings to allow the reader to form his or her own opinion (Creswell, 2013). Implementing these four qualitatively-based strategies established trustworthiness in the research process and in the research findings.

In summary, qualitative research seeks to describe and understand the complexity of the "lived experiences of people" (Marshall & Rossman, 2011). Social scientists across disciplines utilized qualitative research to gain understanding of their respective problems and questions. Within qualitative methodology, researchers elaborated on several distinct approaches that serve different purposes according to the research question at hand (Creswell, 2013). Further, each one of these approaches possesses relative strengths and limitations (Creswell). For this study, a directed approach to content analysis best matches the goal of exploring the cognitive complexity of counselors-in-training learning group work.

Participants

Participants for this study included 10 counselors-in-training from a Master's in Counseling program in school counseling and mental health counseling concentrations. These participants enrolled in a Group Dynamics and Methods course during the fall semesters of 2011 and 2012 at a large, public southeastern university. Practicum served as a prerequisite or a co-requisite for this course. This Group Dynamics and Methods course is a core course in two CACREP-accredited masters in counseling concentrations, clinical mental health counseling and school counseling. Three of these 10 participants were male, and seven were female with a mean age of 28.6 years. All seven female participants and two male participants were Caucasian, and one male participant was African-American.

Data Collection Procedures

Data collection is much more than the mere assembly of data, but rather a “collection of interrelated activities...a process of engaging in activities that include but go beyond collecting data” (Creswell, 2013, p. 145). In the spring semester of 2013, the instructor of this Group Dynamics and Methods course emailed counselors-in-training enrolled during the fall semesters of 2011 and 2012 to inform them of this study's purpose and to request their participation (Appendix A). The email requested that counselors-in-trainings wishing to participate resubmit a complete collection of written reflections (the course instructor had returned these written reflections to counselors-in-trainings during that semester). The instructor of this course informed participants that I would use the written reflections for research purposes and that by resubmitting their work they gave me consent to use their for research, publication, and presentation purposes.

From this email, the instructor received 22 responses with attached written reflection assignments from the fall 2011 semester and 20 responses with attached written reflection assignments from the fall 2012 semester. Of the 42 total responses, 14 were from graduate students in several non-counseling programs, including sports psychology, social work, school psychology, psychology undergraduate program, undeclared graduate programs, and public health. The other 28 respondents were counselors-in-training in the Mental Health and School Counseling concentrations in a Master's in Counseling program. 10 of the 28 counselors-in-training respondents submitted all five written reflection assignments. Because my focus was counselors-in-training, I eliminated the 14 participants from other programs of study (e.g., counseling psychology, social work) and those counselors-in-training who did not submit a complete collection of written reflections. I received University Institutional Review Board (IRB) approval to conduct this study.

Source and Description of the Data

The data for this study originated from written reflection papers assigned over a 15 week one-semester Group Dynamics and Methods course taught in two different semesters. The instructor of this course required counselors-in-trainings to write a total of five written reflections as a part of their in-class and small-group experiences. The assignment from the instructor's syllabus follows:

Weekly Written Reflections on Small and Large Group Class Experiences

During the 15-week semester, you must complete 5 written reflections (WR). No more than one may be submitted each week. Written reflections are to be approximately 4 chronological number of the written reflection, 1-10 – do not use folders, 3-ring binders, plastic covers, inserts, etc.). Each written reflection must contain the following four

subheadings: (1) summary of course content (classroom instruction or text information), (2) the feelings you experienced during large or small group activities (inside or outside classroom activities), (3) lessons you learned about the facilitator's role and application of how you will use this as a facilitator in the future, (4) the most significant group lesson (i.e., either experiential or didactic) you learned that week and application of how you will use this as a facilitator in the future. Each WR must include at least one citation from a text or journal article blending course concepts and theory into your experience (this last element is to be blended into your journal, not a "stand alone" element). Stay on topic within each subheading. Students are encouraged to share your written reflections with your small group facilitator (Diambra, 2011).

The written reflection assignments contained the following sections: summary of course content, feelings experienced in group, facilitator lesson, and group dynamic lesson. In the summary of course content section, counselors-in-training discuss the factual or knowledge-based aspects read or reviewed in class (e.g., group theory, terms, stages, therapeutic factors, concepts, etc.). In the feelings section, counselors-in-training reflected on their feelings during the large class or the small-group experience. In this section, the assignment prompted the counselors-in-training to focus on their feelings during group, rather than discussing the factual aspects of group. The facilitator lesson section prompted the counselors-in-training to focus on the facilitator's role, responsibilities, and actions in the large class or small group. For example, a counselor-in-training may discuss and evaluate critical incidents in group and the facilitator's approach in handling these incidents. In the final section of the written reflection, the assignment prompted counselors-in-training to discuss the most significant group dynamics lesson. This

section required them to identify a salient experience from the large class or small group activities and connect this experience to a salient group lesson learned.

Storage of the Data

To store these written reflections safely and securely, I followed two main procedures. First, the instructor of the course, who collected participants' emails with returned written reflection assignments, saved these emails to an UTK email file folder within Outlook on a password protected computer. Second, to protect the anonymity of participants, the instructor removed all identifiable information; I cannot identify the participants' identities. The instructor coded (Participant A, B, C) and labeled (WR1, WR2, etc.) hard copy documents without reference to counselors-in-training identity and transferred these documents to me. I stored these hard copies of the written reflections in a locked filing cabinet in my home.

Data Analysis

Simply put, the goal of data analysis is to make sense out of data (Merriam, 2009). Marshall and Rossman (2011) expounded on this, stating that said "the process of bringing order, structure, and interpretation to a mass of collected data is messy, ambiguous, time-consuming, creative, and fascinating. It does not proceed in a linear fashion; it is not neat" (p. 207). To analyze the data in this study, I followed Marshall and Rossman's (2011) seven-step data analysis procedure. In the first step, I organized the data into 10 sets of written reflections (10 counselors-in-training each wrote five written reflections). In the second step, I read each written reflection multiple times while taking notes about my ideas, questions, insights, and observations in each "read through". In the third step, I engaged with the data to "generate categories and themes". According to Marshall & Rossman (2011), this step involves "Identifying salient themes, recurring ideas or language, and patterns of belief..." (p. 214). In

the present study, I searched for and identified categories and themes in the written reflection assignments. In the fourth step, I coded the data. To code the data, I read through and code each sentence of every set of written reflections assignments using Bloom's Cognitive Taxonomy. To code each sentence into one of Bloom's Cognitive Taxonomy six levels (knowledge, comprehension, application, analysis, synthesis, evaluation), I used keywords at every level of Bloom's Cognitive Taxonomy. To assist me in coding each sentence, I created a table (refer to Table 1) that describes and provides key words from each level of Bloom's Cognitive Taxonomy. I did not code introductory, transition, concluding, and other sentences that writers used for the purpose of prose.

The following examples demonstrate how I coded a discussion of resistance in group work at every level of Bloom's Cognitive Taxonomy. In the knowledge level, I coded a sentence into this level if the counselor-in-training *defined* resistance. If the counselor-in-training *identified an example* of resistance from his or her small-group experience, I coded this sentence into the comprehension level of Bloom's Cognitive Taxonomy. If the counselor-in-training discussed how he or she would *apply* a leadership technique to address resistance in group work, I coded this into the application category of Bloom's Cognitive Taxonomy. If the counselors-in-training *differentiated* resistance in group work from, different cultural norms of behavior in group work, for example, I coded this into the analysis category of Bloom's Cognitive Taxonomy. If the counselor-in-training *related* resistance in group work to other group dynamics and processes, coded this statement into the synthesis category. Finally, if the counselor-in-training *evaluated* the group leader's choice of interventions based on group work theory, course concepts, or research, I categorized this statement into the most complex level of Bloom's

Cognitive Taxonomy, evaluation. I followed this coding procedure with each sentence of every written reflection.

Once I coded the data, I moved to step five, offering interpretation. Marshall Rossman (2011) stated that offering interpretation "...brings meaning and coherence to the themes, patterns, and categories..." (p.219). Similarly, I searched for order, meaning, and significance from the categories and themes in the previous step. In the sixth step of the data analysis procedure, I proceeded to "search for alternative understandings". In this step, I scrutinized my data coding to ensure the highest degree of consistency and accuracy. I accomplished this by continuing to consult with my co-chairs when questions arise about coding certain sentences. In the seventh and final step, I wrote the findings. After completing this step, I emailed drafts of my analysis to my co-chairs to ensure clarity.

Advantages and Limitations of a Content Analysis Approach to Qualitative Research

The content analysis approach to qualitative research offers researchers many advantages. First, Cavanagh (1997) stated that the content analysis approach is flexible. Because there are many forms of written documents, the content analysis approach gives researchers an adaptable method to analyze the data. Second, written documents offer researchers an easily accessible source of data (Merriam, 2009). In counselor training/preparation programs, faculty members regularly assign writing assignments (Granello, 2001); thus, these assignments are an existing source for researchers to analyze. Third, Marshall and Rossman (2011) asserted that documents offer researchers insights into the ideas and beliefs of participants. This study hopes that written reflections offer a clearer understanding of counselors-in-training cognitive complexity. Finally, as evidence of the value of the content analysis approach in the counseling discipline, researchers in counselor education used the content analysis approach in topics ranging from school

counselor reform (Wilkerson, 2010) to supervision practices (Neswald-McCalip, Sather, Strati, & Dineen, 2003).

While the content analysis approach provides many advantages to researchers, this approach also contains disadvantages. First, according to Hsieh and Shannon (2005), the use of theory in content analysis can bias the researcher. Specifically, the researcher may unintentionally find evidence to support the theory used to code the data. For example, in this present study, this could have involved “forcing” data into one of the levels of Bloom’s Cognitive Taxonomy. Second, researchers may have inadvertently ignore contextual aspects of the data because of the “overemphasis of theory” (Hsieh & Shannon, 2005, p. 1283). In this study, because I was searching for evidence of cognitive complexity, it is possible that I might have overlooked the context (the small-group or classroom experiences) and affective qualities of the participants’ experiences.

Potential Ethical Issues

As with any research study, ethical issues exist at every stage of the research process (Creswell, 2013). Marshall and Rossman (2011) advised to think of the process of addressing ethical issues as “relational” rather than perfunctory: “Explicitly valuing participants and recognizing the potential interpersonal impact of the inquiry helps demonstrate that the researcher will be deeply ethical” (p. 50). To this end, the following section addresses potential ethical issues in the present study.

This study’s first step to prevent potential ethical issues is to fully inform participants about this study and their role in it. To solicit participants, the instructor collected rosters from the 2011 and 2012 Fall Semesters and emailed these students (see Appendix A). In this email the instructor explained this study, the researcher’s name, and the steps taken to ensure

confidentiality and anonymity. Finally, the email concluded by informing participants that by submitting written reflection assignments, they consent to the study.

Chapter Summary

In this chapter, I provided an overview of qualitative methodology and discussed distinct approaches within qualitative research. I then reviewed this study's approach, content analysis. Following these topics, I identified strengths, limitations, and steps to ensure trustworthiness in this study. I also covered my data collection procedure and data analysis procedure using Marshall and Rossman's (2011) seven-step procedure. In the data analysis section, I explained how I used Bloom's Cognitive Taxonomy to code the content of the written reflection assignments. I concluded this chapter by addressing potential ethical concerns and offered specific steps to safeguard the welfare of the participants.

Chapter Four: Findings

Introduction

In this chapter I report findings from a content analysis of written reflection assignments of 10 counselors-in-training learning group work. I discuss these findings in two major sections. In section one, the individual-participant analysis, I discuss “categories and themes” or salient features of *each* participant’s set of written reflections. I also describe levels of cognitive complexity and explore development of cognitive complexity for each participant. In section two of this chapter, I discuss categories/themes and describe cognitive complexity *across* the group of 10 participants.

Individual-Participant Analysis

In this section I discuss categories/themes and describe cognitive complexity participant-by-participant. To identify categories and themes, I analyzed each participant’s written reflections for recurrent ideas, language, and patterns (Marshall & Rossman, 2011). I consider these categories fluid and overlapping, rather than separate and distinct. I discuss these categories/themes and provide supporting examples.

In addition to categories/themes, I describe cognitive complexity for each of the 10 counselors-in-training learning group work. To this end, I detail findings and cite direct quotes from each participant’s written reflections to demonstrate his or her level of cognitive complexity. To explore cognitive complexity development, I compare frequency of analysis, synthesis, and evaluation level statements from the first written reflection assignment to these levels in subsequent ones. Because the written reflection instructions prompt students to summarize (knowledge level of Bloom’s Cognitive Taxonomy), discuss (comprehension), and apply (application) lessons learned from their small- and large-group experiences, I did not

compare cognitive complexity levels from written reflection-to-written reflection in these expected levels of Bloom's Cognitive Taxonomy. I conclude each participant's report with a summary of findings.

Participant 1: "Mary"

Mary is a 24-year old white female enrolled in the school counseling concentration. The categories/themes and levels of cognitive complexity reported below originated from three of five written reflection assignments (two of five written reflection assignments were alternative assignments and did not follow the format described in chapter three).

Categories and Themes. I identified two main categories from Mary's written reflection assignments: group leader styles/techniques and planning/preparation. I describe each theme below and provide direct quotes to illustrate these categories/themes.

Leader Styles/Techniques. In this category, Mary discussed leadership aspects of group work. For example, when discussing a classmate's use of a discussion prompt, she said "I think it was great because it helped us reflect on that time, and hopefully helped people connect more with the material about to be presented". In another part of her written reflection, she discussed her group leader's use of the "priming effect". Throughout her written reflections, Mary identified and discussed various leader styles and techniques.

Preparation/planning. Mary frequently discussed preparation and planning in leading groups. For example, when discussing her small-group leader, Mary said "Lesson learned: know what you're walking into". In another instance, she stated that "...I will try to think farther in advance about the consequences of discussing an issue when the person isn't there to defend themselves, even if the issue or discussion around the issue is not intended to malicious."

Cognitive Complexity Levels According to Bloom's Cognitive Taxonomy. In this section I describe findings from coding data into Bloom's Cognitive Taxonomy. For each level of Bloom's Cognitive Taxonomy, I discuss findings and provide direct quotes from Mary's written reflections. To explore evidence of cognitive complexity development, I compare frequency of analysis, synthesis, and evaluation-level statements from the first written reflection assignment to subsequent ones.

Knowledge. I coded 6 of 48 statements (13%) in the knowledge level of Bloom's Cognitive Taxonomy. These statements came from the summary of course content section of the written reflection assignments. In this section, Mary recited facts from the small and large group experiences. For example, when discussing group for children and adolescents, Mary stated "It is very important to consider factors such as gender, age, maturity, and purpose of the group."

Comprehension. The vast majority of Mary statements, 42 of 48 (88%), fit into Bloom's Cognitive Taxonomy comprehension level. In these instances Mary explained principles and procedures of her small and large-group experiences. For example, when discussing giving feedback, Mary stated "I really liked how after each presentation, you kept the presenters up front and asked for feedback from the class, both positive and negative."

Application. Four of 48 statements (8%) fit into the application category of Bloom's Cognitive Taxonomy. In these instances, Mary described a principle/skill and wrote about applying this principle/skill in the future. For example, when discussing debriefing group members who were not in the previous session, she said "I will utilize this method of recapping the last session, in anyone's absence, and as a warm up exercise". As a follow-up statement, she stated "If I do this sporadically, I will be able to draw on previous groups and any changes that occurred, in any event."

Analysis. Six of 48 statements (13%) fit into the analysis category of Bloom's Cognitive. In these statements, Mary identified several aspects of a particular problem, situation, or experience. For example, when discussing a classmate's group presentation, she stated that "[classmate 1 and classmate 2] managed to put a humorous twist on the situation, while still giving the different dimensions the weight they deserved." In discussing the importance of prompting students, Mary stated that "It can mentally prepare the individual to receive the information, and if they are able to make a connection to the material because of that, I feel confident saying it had a part in helping them retain the information better than they would have otherwise."

Synthesis & Evaluation. I did not code any statements in Mary's written reflections into the synthesis and evaluation categories of Bloom's Cognitive Taxonomy.

Cognitive Complexity Development. From the first written reflection to subsequent ones, Mary demonstrated increases in analysis-level statements (see Table 3). In the first written reflection assignment, I coded one statement into the analysis level. In the second and third written reflections, I coded three and two statements respectively into the analysis level (Mary's set consisted of three written reflections).

Summary of Findings

Mary demonstrated cognitive complexity at the knowledge through analysis levels of Bloom's Cognitive Taxonomy. Overall, her written reflection indicated the comprehension level of Bloom's Cognitive Taxonomy (88% of coded statements). Additionally, she demonstrated application-level cognitive complexity in 8% of statements and analysis-level cognitive complexity in 13% of statements. Finally, she focused on two major categories/themes throughout her written reflection: leader styles/techniques and preparation/planning.

Participant 2: “Jennifer”

Jennifer is a 25-year old white female enrolled in the mental health concentration. The categories/themes and levels of cognitive complexity discussed below originated from four of five written reflection assignments (one of the five written reflections was an alternative written reflection assignment and did not follow the format described in chapter three).

Categories and Themes. From Jennifer’s written reflections, I identified three main categories/themes: member choice/autonomy, sharing/disclosing, and leadership styles/techniques. I describe each category/theme below and provide direct quotes to illustrate these categories/themes.

Choice/Autonomy. In the first category, Jennifer discussed the leadership challenge of balancing autonomy and choice to members with direction and structure when necessary. She recognized and explained the value of giving members a stake in the group and in this instance (about her large group) stated that “While most classes have to take whatever the teacher decides, we not only were allowed a say but [had] complete control over a test. Even if individuals did not want to voice an opinion, they still had the power by having a vote.” At the same, she observed the consequence of too much choice and not enough direction from the leader that: “As I noticed this, I wondered if the group had too much flexibility, if the members were collectively indecisive, or if members were just laid back”. Finally, Jennifer discussed her plans to apply her understanding of giving member’s choice while still providing direction: “For my group, I would want to allow for flexibility but also have formats and activities in place to facilitate discussion and help members ‘warm up’ faster.”

Sharing/Disclosing: On several occasions, Jennifer discussed the benefits of creating a sharing/disclosing environment and her plans to create this environment in future group work.

Speaking from her own experiences sharing/disclosing in group, she explained “I shared for the first time this week, and although I was wary at first, hearing that other group members understood and could relate to my situation was comforting and helpful.” Jennifer also explored the role of sharing/disclosing to the concept of universality: “The most evident group dynamics for me was the sharing of experience, which I feel brought the group together in a different way compared to typical universality.” Additionally, she discussed her ideas in creating an atmosphere of sharing/disclosing in future group work: “During meetings, I would invite members to disclose struggles connected to the topic or to what another members has shared.

Leader style/techniques: In the third category, Jennifer explored her small- and large-group leaders’ behaviors, styles, and techniques. For example, she noted her small-group leader’s ability to self-evaluate: “Her ability to critique her role as a leader and subsequent changes are aspects that would want to bring to my own facilitation style as it shows regard and recognition for group dynamics.” In another instance, Jennifer identified her small-group leader striking the balance of direction and autonomy: “Throughout the meeting, I noticed the leader playing a more active role while still allowing members to interact. She attempted to give all group members an opportunity to contribute by asking their opinion directly”.

Jennifer also discussed her plans to apply lessons learned from group leadership into his/her interest in fitness. For example, when discussing the leadership lesson of giving members autonomy and choice, she stated “As they become more educated, I can give members the opportunity to design their own or decide what exercises will be performed during that session. In another instance, she stated, “For my group, I want to incorporate creative ideas to help members embrace and the success of becoming healthier.”

Cognitive Complexity Levels According to Bloom's Cognitive Taxonomy. In this section I describe findings from coding the data into Bloom's Cognitive Taxonomy six levels. For each level, I discuss this analysis and provide direct quotes from Jennifer's written reflections to demonstrate the corresponding level of Bloom's Cognitive Taxonomy. In the final paragraph of this section, I explore evidence of developing cognitive complexity from the first written reflection to latter ones in the analysis, synthesis, and evaluation levels.

Knowledge. I coded 78 of 145 statements (54%) into the knowledge level of Bloom's Cognitive Taxonomy. The largest proportion of these statements came from the content summary of the content summary section of the written reflections. For example, in discussing the stages of group, she stated that "Storming occurs as members struggle to find their place in group."

Comprehension. I coded 45 of 145 statements (31%) into the comprehension level of Bloom's Cognitive Taxonomy. Jennifer frequently identified certain group leadership techniques and group dynamics and demonstrated an understanding of these leadership techniques/group principles. For example, when discussing the group dynamic of cohesion, she stated that "The lesson also made me aware of common experiences in classes and how comforting they can be." In this instance, she demonstrated comprehension of universality by connecting it to an experiential activity in her large group.

Application. In the application level of Bloom's Cognitive Taxonomy, I coded 25 of 145 (17%) statements as application. When discussing applications to her own group work, Jennifer provided applications specific to her area of interest (fitness). For example, she stated "Since I will be leading both the workouts and workouts following, I will need to be aware of how my direction affects members, making sure I can be assertive enough to keep members on track and

motivated, while maintaining positive counselor qualities so members do not become afraid of disclosing during discussion.”

Analysis. I coded four of 145 (3%) statements into the analysis level of Bloom’s Cognitive Taxonomy Cognitive Taxonomy. The first of these statements came in her second written reflection, and three came from her third written reflection. In her third written reflection, she analyzed various elements to the struggles of her small group’s struggles. When discussing the group’s difficulty in making a decision and the relative balance of structure/flexibility, Jennifer wrote “As I noticed this, I wondered if the group had too much flexibility, if the members’ were collectively indecisive, or if members’ were just laid back”.

Synthesis. In the synthesis level of Bloom’s Cognitive Taxonomy, I coded one of 145 (.7%) statements, which came in the fourth written reflection assignment. In this instance, the Jennifer analyzed the various results of a leader’s techniques and identified a new dimension as a result of the leader’s technique: “Through her techniques, she helped the client approach his problem from an alternative perspective with the additional challenge to how he typically interacts within group. This added depth, not only to the member’s understanding, but to the group’s experience as well”. Jennifer demonstrated an ability to analyze the situation, but also recognized that the leader’s intervention resulted in a newly formed experience for her small group.

Evaluation. Lastly, I coded one of 145 (.7%) statements into the evaluation level of Bloom’s Cognitive Taxonomy. In her fourth written reflection assignment, Jennifer critiqued the group’s progress: “The new norm of rounding was established at this meeting, and the interactions following were productive, but this came near the end with few meetings left. Had more structure been present, we may have even greater strides by this point.” In this instance,

Jennifer identified several group work concepts such as norms, structure, and timing and evaluated her group's progress based on these criteria.

Cognitive Complexity Development. Jennifer's statements in the analysis, synthesis, and evaluation levels occurred primarily in the third and fourth written reflection assignments (see Table 3). In the analysis level, three of the four came from the fourth written reflection assignment, and both synthesis and evaluation statements occurred in the fourth written reflection assignment. This contrasted her first and second written reflection assignments where her discussion remained at the knowledge and comprehension levels. Her final written reflection remained primarily in the knowledge, comprehension, and application levels of Bloom's Cognitive Taxonomy.

Summary of Findings

In her written reflections, Jennifer explored the following categories/themes from her small- and large group-experiences: sharing/disclosing, leadership/styles/techniques, and member choice/autonomy. Jennifer discussed these categories/themes at all levels of Bloom's Cognitive Taxonomy. For the most part, she demonstrated comprehension (31% of coded statements) of group work concepts and the ability to apply (17% of coded statements) these concepts her in interest area of personal fitness. She also demonstrated cognitive complexity at the analysis (3%), synthesis (.7%), and evaluation (.7%) levels of Bloom's Cognitive Taxonomy.

Participant 3: "Megan"

Megan is a 23-year old, white female enrolled in the school counseling concentration. The categories/themes and levels of cognitive complexity discussed below originated from five written reflection assignments.

Categories and Themes. From Megan's written reflections, I identified four main categories/themes: activities, environment, leader style/techniques, and roles. I describe each category/theme below and provide direct quotes to illustrate these categories/themes.

Activities. In the first category, Megan identified the purpose and value of experiential activities to facilitate group dynamics and learning. She discussed these activities in terms of their impact in her group and usefulness in future activities. For example, when reflecting on the impact of a group activity, she stated that "I know I am not the only person that experiences these feelings when talking in front of groups so this kind of activity can be very beneficial." In another instance, Megan explained the effectiveness of the "decorated bag" activity, stating that "I observed that having a sort of ice breaker activity such as this opens to group up more and can potentially increase the level of comfort within the group."

Environment. Megan discussed environmental factors such as room temperature and the arrangement of chairs. In one section of written reflection assignment, she noted the room's hot temperature: "Our classroom continued to get hotter and hotter as time passed by. I felt the effects as a facilitator and it distracted me a little bit because I was thinking it was just me who was noticing it." In another example the role the physical environmental on group dynamics, Rachel discussed the impact of empty chairs in her small group: "Leaving the empty chairs would definitely be distracting for other members because it would be a constant remind that people were not there..."

Leader styles/techniques. In the third theme, the Megan discussed leadership styles/techniques that both facilitate and impede group cohesion and engagement. During these discussions, the she identified specific leadership behaviors that positively impacted the dynamics of the group. For example, she noted the leader "linking" her experiences with her

fellow group member's: "Not only did it bring a new viewpoint to my conversation, making me think of it in a way I had not before, it linked me to that other person..." Megan continued by describing her idea to apply this technique: "As a facilitator, I would employ the linking skill to show group members that they are not alone in their issues." Lastly, she offered a critique of related to assuming group members know about a particular concept: "I think this is an important lesson because just because a group of people says they know what a concept is, that does not automatically mean that they do."

Roles. Megan explored the varying roles of members in small and large groups. In one part of her written reflection, she discussed the effect of having group member absent and the importance of each member's role: "Having two less members in our group affected the dynamic of the group....I could personally feel the voice that was left by not having our whole group there, it just felt off.". On another occasion, Megan discussed the role of a group member who disrupted Megan's small group's work: "After last week I interpreted this as the member taking on sort of a blocking role in the form of dominating the group and being, in my opinion, a bit of recognition seeker."

Cognitive Complexity Levels According to Bloom's Cognitive Taxonomy. In this section I describe findings from coding the data into Bloom's Cognitive Taxonomy six levels. For each level, I discuss this analysis and provide direct quotes from Megan's written reflections to demonstrate the corresponding level of Bloom's Cognitive Taxonomy. To explore evidence of developing cognitive complexity in the analysis, synthesis, and evaluation levels of Bloom's Cognitive Taxonomy, I compare her first written reflection assignment to subsequent ones.

Knowledge. I coded 74 of 175 statements (42%) into the knowledge level of Bloom's Cognitive Taxonomy, most of which came from the content summary section of the written

reflections. In these statements Megan simply stated facts, such as “Leaders strive to motivate group members and achieve a workable unit.”

Comprehension. I coded 73 of 175 (42%) of Megan’s statements into the comprehension level of Bloom’s Cognitive Taxonomy. She identified certain group work concepts and principles and explained these concepts/principles. For example, in observing her small-group leader, Megan stated that “Throughout the meeting, I noticed the leader playing a more active role while still allowing member to interact.”

Application. I coded 25 of Megan’s statements (14%) into the application level of Bloom’s Cognitive Taxonomy. For example, after discussing this instance of linking in his/her small group, she stated “As a facilitator I would employ the linking skill to show group members that they are not alone in their issues.” Megan discussed using creativity in groups stating that “For my group, I want to incorporate creative ideas to help members embrace and enjoy the process of becoming healthier.”

Analysis. I coded three statements (2%) into the analysis level of Bloom’s Cognitive Taxonomy. In these instances, Megan demonstrated the ability to analyze elements of a problem in her small or large group. For example, when discussing a fellow class member’s attempts to monopolize, she stated “The original topic the first person brought up became unimportant because this other individual jumped in and continued talking ...It appeared to me that even though this person said they did not want the attention, they really do.”

Synthesis. I did not code any of Megan’s statements into the synthesis level of Bloom’s Cognitive Taxonomy.

Evaluation. I coded one (.6%) of Megan’s statements into the evaluation level. In this example, she showed an ability to critique the facilitator: “When the facilitator first did this it

made sense since a majority of the people in the class are in theories, but when I thought about it more I realized that this facilitator failed to take into account that not everyone is in the counseling program...”

Cognitive Complexity Development. Megan demonstrated that greatest frequency analysis and evaluation statements in the final written reflection (see Table 3). In the first four written reflection assignments, she consistently demonstrated cognitive complexity at the comprehension and application levels; however, she did not demonstrate cognitive complexity at the analysis, synthesis, or evaluation-levels of Bloom’s Cognitive Taxonomy in the first four written reflections. In contrast, in the final written reflection, she demonstrated analysis- and evaluation-level statements.

Summary of Findings

In each of the four categories/themes—group activities, physical environment, leadership styles/techniques, and member roles—Rachel consistently demonstrated an ability to connect course concepts to her small-and large group experiences (comprehension). Additionally, Rachel understood concepts well enough to apply them to her specific areas of interest. In the analysis, synthesis, and evaluation categories, Rachel’s statements did not meet the criteria for these levels of Bloom’s Cognitive Taxonomy (except in the noted examples).

Participant 4: “Sarah”

Sarah is a 25 year-old, white female enrolled in the mental health concentration. The categories/themes and levels of cognitive complexity originated from five written reflection assignments.

Categories and Themes. Four themes emerged from “Sarah’s” written reflections: leader style/techniques, group norms, member sharing/disclosure, and roles.

Leader style/techniques. In the first category, Sarah discussed on her small- and large group leader's style of providing structure and direction to the group. In some instances, she discussed her small group leader's excessive amount of direction: "I felt that the facilitator dominated too much of the conversation during group. After each person talked about their box, she had several questions and/or comments. It seemed to me that the group went along with her comments the majority of the time and didn't generate much discussion on its own". In another occasion, Sarah noted that the facilitator was less directive: "All of this group members provided their insight and take on the situation...All of this happened without any prompting by the facilitator. She made a few comments on her own, but in no way attempted to direct the flow of conversation." Sarah offered several application-level statements about the level of direction she wishes to provide in future group work.

Norms. In this category, Sarah explored the norms of her small and large-group. For example, Sarah discussed how member's look to one another to discern the appropriate norms of the group: "I learned from this group session how much members of a group look to one another to see if what they are saying or doing is appropriate or normal." In other instance, Sarah shared a specific group norm and the consequence of violating this norm: "The group took this new norm seriously and would immediately let someone who spoke without the stick know that they were violating the rule."

Sharing/Disclosure. In this category, Sarah seemed to struggle with weighing the benefits and potential concerns with sharing too much. She discussed on several occasions the value of "imparting information" to all members of the group, stating that "Everyone in the group gave feedback on a personal level. Each group member had a unique perspective based on their own experiences that they were willing to share." Sarah noted the therapeutic benefits of

bringing a personal problem to group and allowing members to offer support and potential problem-solving strategies. At the same time, Sarah questioned at times how much time she was willing to share. For example, she stated “Something, likely fear of conflict, had prevented other group members from saying anything. This fear of conflict was expressed by one member, but I suspect it was present in all or most of the group members who desired a change.”

Roles. Sarah discussed her understanding of group members’ roles and responsibilities. She often discussed the importance of each member’s role. In one instance Sarah stated “The past two classes have demonstrated an effective way for a group to make a decision that affects all of the members and go forward with a specific plan in place that has been agreed upon by all the members”. Sarah also discussed how she plans to apply her understanding of the importance of group member’s in her work with others: I might someday facilitate a group responsible for planning an event, such a banquet. I would make sure that everyone has a specific role associated with specific tasks...This would ensure that the event went smoothly and everything was taken care of.”

Cognitive Complexity Levels According to Bloom’s Cognitive Taxonomy. In this section I describe findings from coding the data into Bloom’s Cognitive Taxonomy six levels. For each level, I discuss this analysis and provide direct quotes from Sarah’s written reflections to demonstrate the corresponding level of Bloom’s Cognitive Taxonomy. I also explore the development of cognitive complexity by analyzing the increases in analysis, synthesis, and evaluation-level statements from the first written reflections to subsequent ones.

Knowledge. I coded 26 of 145 (18%) statements into the knowledge category of Bloom’s Cognitive Taxonomy. The statements all came from the content summary sections of Bloom’s

Cognitive Taxonomy. For example, she stated “specialty groups are centered around a certain population or issue.”

Comprehension. I coded the vast majority of Sarah’s statements (76 of 145; 52%) in the comprehension category of Bloom’s Cognitive Taxonomy. Throughout the written reflection assignments, Sarah explained and gave examples of group concepts and theories. For example, she stated that “The norming stage occurred as we each figured out what our role in the group would be and how we would go about completing the items on the list.”

Application. In the application category of Bloom’s Cognitive Taxonomy, I coded 26 of 145 (18%). In these instances, Sarah discussed specific ways to apply concepts and lessons learned from her small and large-group experiences. For example, in discussing leading a group for divorced women, she stated that “Knowing that I do have to be physical present to influence their behavior, I would feel comfortable giving them an assignment to complete outside of group...”

Analysis. In the analysis category of Bloom’s Cognitive Taxonomy, I coded 16 (11%) statements. In these analysis-level statements, Sarah described experiences in group and separated the problem into various group-related concepts. For instance, in discussing conflict in her small group, she stated that “Once the topic was broached, we agreed as a group that we needed to do something differently so that everyone else had a chance to share.”

Synthesis. I did not code any of Sarah’s statements into the synthesis level of Bloom’s Cognitive Taxonomy.

Evaluation. I coded one (.7%) statement into the evaluation category. In this instance, Sarah assessed the progress of group before and after the implementation of new group norm: “By establishing a new temporary group norm that you must hold a talking stick in order to

speak ensured that we would not be shouting over each other...A process that could [have] turned loud and unruly was rendered orderly and efficient.”

Cognitive Complexity Development. Sarah demonstrated analysis and evaluation-level statements throughout her written reflection assignments (see Table 3). In fact, in her second written reflection, I coded the highest number of analysis-level statements (6). In this written reflection, she focused on analyzing a particular incident in small-group. Her evaluation statement came in the third written reflection where she offered a critique of group process.

Summary of Findings

I identified four major categories/themes from Sarah’s set of written reflections: group leader styles/techniques, norms, sharing/disclosing, and roles. In each category/theme, Sarah consistently demonstrated an ability to explain (i.e., comprehension) and apply course concepts from her small- and large group experiences. In addition, she understood several course concepts and theory well enough to differentiate these aspects during her group experiences (i.e., analysis). Except for two statements, Sarah’s statements did not meet the criteria for inclusion to the synthesis and evaluation levels of Bloom’s Cognitive Taxonomy.

Participant 5: “David”

David is a 26-year old, white male enrolled in the school counseling concentration. The categories/themes and levels of cognitive complexity discussed below originated from five written reflection assignments.

Categories/Themes. I identified four themes in David’s written reflections: group member autonomy/responsibility, group norms, leader style/techniques, and group activities.

Choice/autonomy. In this category, David discussed choices and responsibility of group members and the group leader’s role in providing autonomy among group members. He

discussed allowing group member's to make choices during the course of group. For example, David reflected that "Everyone in the group contributed ideas, suggestions, and comments about norms that were being discussed, especially when we were discussing autonomy." In another instance, David stated, "When the facilitator began and described the goals that we needed to meet in that first night, he continued to stress that it was the choice of the group as to how we wanted to deal with confidentiality, and the rules/norms that the group were to follow." In addition, David also discussed the relative responsibility of the group member's and the group leader's responsibility. In reflecting on how he plans to apply lessons learned from group with respect to group member/leader responsibility, David stated "By the facilitator stressing that it was the group's responsibility to generate the norms and he would follow the decisions of the group, he gave us control and power to decide how group was going to be handled and we responded."

Norms. Throughout David's written reflections, David observed and discussed the norms of his small and large group. First, David recognized that the group leader allowed the group members to create the norms of the group: "Our small group facilitator simply describe to us that we needed norms and gave a few suggestions for what the norms should concern and the group took off." David also noted that his small group established a collaborative spirit: "Without ever conversing with each other, for the most part, we all gathered discussed worked together, and successfully completed the task that we were assigned to do." Finally, David also noted when the group norms shift: "This was very interesting to me because we have gone through the entire semester without having deadlines, schedules, or requirements." In this instance, the small group leader imposed a to-do list for the small group to complete.

Leader style/techniques. David identified leaders styles, techniques, and behaviors that in both his small- and large-group experiences. For example, he reflected on the leader's use of humor: "By using humor, the facilitator breaks the barrier nervous and uptight feelings and the group is more productive and comfortable." David also discussed other group leader skills and techniques, such as the leader's use of silence: "I have also noticed that when the awkward silence is happening he looks at the floor instead of around the circle at the other group members..." David also explained how he plans to use some of these leader style/techniques, "When I am facilitator of a group, I may not necessarily use this exact idea....but I will remember how the facilitators was open to ideas, suggestions, and inputs."

Activities. David discussed the value of group activities and his experiences with several activities that occurred in his small- and large group activities. For example, in a "blind-fold" activity, David stated that "I really enjoyed doing the blindfold activity that the facilitator assigned this week because it is a good exercise to get people within a group to trust each other and show responsibility for the people within their group. In addition, he added how he would like to apply those activities in future group work: "Some possible examples where I could specifically use this is when we begin group and manufacture group norms and planning activities that extend beyond the normal events of group."

Cognitive Complexity Levels According to Bloom's Cognitive Taxonomy

In this section I describe findings from coding the data into Bloom's Cognitive Taxonomy six levels. For each level, I discuss this analysis and provide direct quotes from David's written reflections to demonstrate the corresponding level of Bloom's Cognitive Taxonomy. I also explore the development of cognitive complexity by analyzing increases in

analysis, synthesis, and evaluation-level statements from his first written reflections to subsequent ones.

Knowledge. I coded 54 of the 109 (50%) statements in the knowledge level of Bloom's Cognitive Taxonomy. The vast majority of these statements came from the content summary section of the written reflection assignments. For example, in discussing type of groups, David stated that "Task/Work Groups are formed to accomplish identified goals effectively and efficiently."

Comprehension. I coded 23 of the 109 (21%) statements into the Comprehension level of Bloom's Cognitive Taxonomy. In these statements, David demonstrated that he understood a group concept by describing it or giving an example. For example, when discussing group norms, David stated that "Everyone in the group contributed ideas, suggestions, concerns, and comments about norms that were being discussed, especially when we were discussing confidentiality."

Application. In the application level of Bloom's Cognitive Taxonomy, I coded 16 statements (15%). David demonstrated the understanding of certain course concepts and the ability to apply them in other situations. In discussing activities to foster group cohesion, David stated, "I would use this in the future by breaking into small groups with the same personnel, and having them complete activities to promote group cohesion between specific people."

Analysis. In the analysis level of Bloom's Cognitive Taxonomy, I coded 15 statements (14%). In these instances, David demonstrated the ability to separate aspects of a particular problem or situation. For example, when discussing his group leader's handling of group decision, David stated "By the facilitator stressing that it was the group's responsibility to

generate norms and he would follow the decisions of the group, he gave us power to decide how group was going to be handled and we responded.

Synthesis. I did not code any of David's statements into the synthesis level of Bloom's Cognitive Taxonomy.

Evaluation. I did not code any of David's statements into the evaluation level of Bloom's Cognitive Taxonomy.

Cognitive Complexity Development. Seven of David's 15 analysis-level statements occurred in the second written reflection assignment (see Table 3). In the second written reflection, David analyzed potential concerns when leading groups. He also analyzed the leader's decisions in this written reflection.

Summary of Findings

I identified four categories/themes in David's written reflections: choice/autonomy, norms, leader style/techniques, and activities. In each of these categories/themes, I provided direct quotes from his written reflections. In terms of cognitive complexity, he wrote in the knowledge through analysis levels of Bloom's Cognitive Taxonomy; the knowledge level (50% of coded statements) and comprehension level (21%) accounted for the highest frequency of statements. David's second written reflection contained the highest frequency (7) of analysis-level statements.

Participant 6: "Susan"

Susan is a 34-year old white female enrolled in the mental health concentration. The categories/themes and levels of cognitive complexity discussed below originated from four written reflection assignments (the fifth written reflection was an alternative written reflection and did not follow the written reflection format outlined in chapter three).

Categories and Themes. I identified three main categories/themes from a content analysis of Susan's written reflection assignments: sharing/self-disclosure, leader styles/techniques, and choice/autonomy. I describe each category theme below and provide associated quotations.

Sharing/Self-Disclosure. Susan discussed various aspects of sharing/self-disclosure throughout her written reflections. For example, she noted disclosure's impact on the entire group: "Although I am only one piece of the collective pie and my learning was almost completely intrapersonal what I attained was, I believe, applicable to the entire group because what affects me will, in turn influence my interactions with the group, and thus will affect the group." Susan also discussed ways to balance sharing/self-disclosure among group members "My group dynamics lesson is that sometimes it may be necessary to stifle an outgoing member in order to provide more balance within the group which is what I would do as a facilitator...to curb their comments to coax out quieter members." Lastly, Susan reflected on the role (not) self-disclosing played in her own small-group experience. "As I mentioned previously, I withheld sharing an experience with the group after which I almost immediately regretted. The cognitive and emotional consequence of not disclosing was the lesson I learned."

Leader Styles/Techniques. Susan focused on the group leaders styles/techniques that foster cohesion and trust in group work. In one aspect, Susan discussed ways she plans to foster cohesion when leading group: "As a facilitator of the previous mentioned peer counseling group, I would strive for group cohesion by facilitating discussions to deal with present issues..." In addition, Susan identified the factors that lead to greater cohesion. In the following instance, Susan discussed the relationship between member autonomy and group cohesion:

“Discovering our autonomy as a group increased the cohesion and that is the lesson I learned that day.”

Susan also focused on group leader styles/techniques that foster trust in group work. In one instance, she stated that “I learned that in order for the group to mature beyond shallow discussion there must be shared trust between not only the facilitator and group members but also amongst the members of the group.” In discussing her experiences with trust in the group, Susan stated “Learning to trust the other members has certainly given me a sense of security and warmth in our group. With this security I feel like I can disagree with another member without the fear of offending or upsetting them.” She also discussed her plans to create an atmosphere of trust in her work as a future group worker: This particular lesson is one I would be open to using...allowing the group to choose their own path would be particularly effective given I, the facilitator, establish trust by involving the group in an icebreaker exercise...”

Autonomy/Choice. Susan discussed the autonomy of group members in making their own choices about the course of group, as opposed to the group leader dictating these choices. Susan reflected on the importance of members making choices for the group, stating that “the facilitator role lesson I learned was allowing the group to decide the direction in which to proceed.” Susan also explored the function of autonomy in creating change within her small group: “I’ve tried to pinpoint the dynamics involved in these transformations and there are many involved but the one that most applies to the group is the fact that we were left leaderless and had to rely on ourselves and each other.

Cognitive Complexity Levels According to Bloom’s Cognitive Taxonomy

In this section I describe findings from coding the data into Bloom’s Cognitive Taxonomy six levels. For each level, I discuss this analysis and provide direct quotes from

Susan's written reflections to demonstrate the corresponding level of Bloom's Cognitive Taxonomy. I also explore the development of cognitive complexity by analyzing the frequency in analysis, synthesis, and evaluation-level statements from the first written reflections to subsequent ones.

Knowledge. I coded 42 of 109 statements (39%) into the knowledge level of Bloom's Cognitive Taxonomy. These statements came primarily from the content summary section of the written reflections. In these knowledge-based statements, Susan stated a definition or fact about a certain concept. For example, when discussing the different types of groups, Susan stated that "Task/Work groups are formed for the purpose of accomplishing a goal."

Comprehension. In the comprehension level of Bloom's Cognitive Taxonomy, I coded 24 statements (22%). In these statements, Susan explained certain concepts from small- or large group and provided examples of these statements in her written reflection. For example, when discussing "sub-grouping", Susan stated that "It didn't even occur to me that by referring to intro- and extroverts that I was forming a sort of subgroup in which members' responses or lack thereof could be explained away without real reflection". In this instance, Susan demonstrated comprehension of subgrouping by identifying and explaining this concept.

Application. I coded 12 statements (12%) into the application level of Bloom's Cognitive Taxonomy. In these instances, Susan gave examples of how she plans to use the given concept. For example, in discussing a safe group atmosphere, Susan stated that "...I would try to lessen the group's anxiety about disclosing and create an atmosphere of trust by modeling courage, openness, and honest...." In these application statements, Susan demonstrated comprehension of group work concepts and the ability to apply them in leading group in the future.

Analysis. I coded 8 statements (7%) in the analysis level of Bloom's Cognitive Taxonomy. In these instances, Susan separated various elements of a particular dynamic within her small- or large group. For example, in discussing the roles of group members, Susan stated, "The cognitive and emotional consequence of not self-disclosing was the lesson I learned." In this instance, she demonstrated an ability to distinguish two aspects (cognitive and affective) of her experience.

Synthesis. I did not code any of Susan's statements into the synthesis level of Bloom's Cognitive Taxonomy.

Evaluation. I did not code any of Susan's statements into the evaluation level of Bloom's Cognitive Taxonomy.

Cognitive Complexity Development. Four of eight analysis-level statements occurred in the second written reflection assignment (see Table 3). In her second written reflection, Susan analyzed group dynamics related to a personal experience in her small group. Susan wrote two analysis-level statements in the third written reflection. As in the second written reflection, these analysis-level statements occurred in the group dynamics section of the written reflection.

Summary of Findings

I identified four major categories/themes in analyzing Susan's written reflections: sharing/self-disclosure, leader styles/techniques, and autonomy/choice. Overall, the largest percentage of Susan's statements fit into the knowledge (39%) and comprehension (24%) levels of Bloom's. Beyond the comprehension level, I coded 12% of her statements into the application level and 7% into the analysis level. I did not code any of her statements into the synthesis or evaluation levels of Bloom's.

Participant 7: “Brian”

Brian is a 34-year old, white male enrolled in the school counseling concentration. The categories/themes and levels of cognitive complexity discussed below originated from five written reflection assignments.

Categories and themes. I identified four categories/themes from Brian’s written reflections: leader styles/techniques, sharing/disclosing, group activities, and group preparation. I discuss each category/theme below and provide examples from Brian’s written reflections.

Leader styles/techniques. Brian discussed leadership styles and techniques in his small- and large-group experiences. On several occasions, he identified the leadership styles of his group leaders: “The facilitator’s style of leadership during this small group activity was democratic” and “This led the facilitator switching to of a more laissez-faire style in which he provided no more information or direction for the group but rather allowed the group to make decisions on their own which created a group centered perspective.” Brian also discussed applying certain leadership styles in future group work with children/adolescents: “In working with a group of young adolescent boys, my planning style will need to be democratic and high energy.”

Brian also discussed leader styles/techniques that foster an inclusive environment throughout his written reflections. For example, in discussing the purpose of arranging chairs in a circle, Brian stated “This initially is set up by the circle formation in which he has the group sitting. This allows the group to feel equal and empowers them.” When discussing inclusion in his small group experience, Brian stated that “The collaboration and unity of our group along with our preparation allowed us to be comfortable in front of the large group when sharing our information.” Finally, Brian recognized how he plans to create an inclusive culture when he’s

leading groups in the future “I will lead this activity by sharing some of my past personal experiences and hope to gain universality and group cohesiveness.”

Sharing/Disclosing. Brian talked about various aspects of sharing/disclosing in his written reflections. In particular, when discussing his plans to use certain activities in future group work with children and adolescents, he stated, “The goal of this activity will be to show these young boys that they are not alone in their family situations and that being from a divorced home does not define who they are.” Brian also discusses the role of the facilitator in creating an environment conducive to sharing: “I like how the facilitator leads the group and lets the other members openly share their thoughts and feelings while keeping direction and focus to moving the group forward.” Brian also identified that members “opened up” in one particular group session: “After this activity occurred I recognized that more people were willing to open up and share with comfort than earlier in the class period.”

Activities. Brian discussed several group activities in written reflections, the effects of these activities, and his plans to use these activities in the future. For example, in discussing the role of one activity, Brian stated, “Using an activity like this early in a group’s formation breaks down uncomfortable barriers and provides cohesion for the members of the group.” In another instance, Brian stated that “Discussing an activity that we all participated in together allows others the freedom to share their personal experiences with group.” When discussing using an activity in his future group work, Brian stated “The goal of this activity will be to show these young boys that they are not alone in their family situations and that being from a divorced home does not define who they are. In externalizing this family situation I hope that I will be able to increase a therapeutic alliance and build on trust through more group activities and team sports.”

Preparation. Brian discussed the importance of preparation throughout his written reflections. Sometimes these statements focused on preparing for the needs of the group members' themselves: "The most significant lesson I learned in this process was knowing your group and being able to plan according to their styles." Brian's other statements focused on the technical aspects of leading group, such making sure the audiovisual equipment is working: "With our presentation being on an on-line website and encompassing video clips, it was essential that we could connect our computer to the projection system...videos in the presentation have played a major component in providing visual examples in how these theories work in the group setting."

Cognitive Complexity Levels According to Bloom's Cognitive Taxonomy

In this section I describe findings from coding the data into Bloom's Cognitive Taxonomy six levels. For each level, I discuss this analysis and provide direct quotes from Brian's written reflections to demonstrate the corresponding level of Bloom's Cognitive Taxonomy. I also explore the development of cognitive complexity by analyzing frequencies in analysis, synthesis, and evaluation-level statements from the first written reflection to subsequent ones.

Knowledge. I coded 46 of 127 Brian's statements (36%) into the knowledge category of Bloom's Cognitive Taxonomy. These statements came primarily from the content summary section of his written reflections. For example, in discussing various theoretical approaches, Brian stated that "Transactional Analysis is a relatively useful and easy therapeutic process in group settings."

Comprehension. I categorized 65 of 127 of Brian's statements (51%) into the comprehension category of Bloom's Cognitive Taxonomy. Brian explained a myriad of concepts

from his small- and large-group experiences. For example, when discussing an interaction between the group leader and group member, Brian stated “I like how he reestablished eye contact with [my classmate] and led him through some constructive steps to curb his anger.” In this instance, Brian understood the group leader’s steps in helping this group member deal with his anger.

Application. In the application level of Bloom’s Cognitive Taxonomy, I coded 13 statements (10%). In these instances, Brian clearly understood group work concepts and provided future applications. For example, in discussing the purpose of ice breaker activities, Brian stated “I would definitely use the ice breaker activity to build cohesion and to have my group share a similar experience.”

Analysis. Finally, in the analysis category, I coded 3 statements (2%). In these statements, Brian demonstrated understanding of multiple aspects of a situation. For example, when discussing instructions given by a group leader, Brian offered this analysis: “But in an activity that has a goal in mind for all group members to experience a similar feeling or to arrive at a certain destination together, instruction must be clear and provided often to the group”

Synthesis. I did not code any of Brian’s statements into the synthesis level of Bloom’s Cognitive Taxonomy.

Evaluation. I did not code any of Brian’s statements into the evaluation level of Bloom’s Cognitive Taxonomy.

Cognitive Complexity Development. Brian demonstrated cognitive complexity primarily in the knowledge through application levels of Bloom’s Cognitive Taxonomy throughout his written reflection assignments. In the second written reflection, Brian discussed a group activity at the analysis level of Bloom’s Cognitive Taxonomy. He analyzed this activity both in terms of

its effect and its execution (by the leader). In comparison with other written reflections, Brian explained (i.e., comprehension level of Bloom's Cognitive Taxonomy) group leader and group dynamic lessons from his small- and large-group experiences, but did not demonstrate cognitive complexity at the analysis, synthesis, and evaluation levels of Bloom's Cognitive Taxonomy.

Summary of Findings

I identified four major categories/themes from a content analysis of Brian's written reflections: leader styles/techniques, sharing/disclosing, activities, and preparation. In terms of cognitive complexity, I coded over half (51%) of Brian's statements into the comprehension level of Bloom's. Brian consistency showed an understanding of a myriad of group work concepts. In 10% of Brian's statements, he displayed an ability to apply group concepts. Lastly, I coded only 2% of his statements into the analysis category and did not code any statements into the synthesis or evaluation levels of Bloom's Cognitive Taxonomy.

Participant 8: "Karen"

Karen is a 25-year old, white female enrolled in the mental health concentration. The categories/themes and levels of cognitive complexity discussed below originated from three written reflection assignments (two written reflection assignments were alternative assignments and did not fit the format described in chapter three).

Categories and Themes. I identified four themes from Karen's written reflection assignments: choice/autonomy, sharing/disclosing, and leader styles/techniques. I describe and provide direct quotes for each of these categories/themes below.

Choice/Autonomy. Karen discussed multiple aspects of member choice/autonomy in her written reflection assignments. She identified when her small-group facilitator gave member's choice and autonomy in dictating the course of group: "She let us decide the rules for the

evening. I felt empowered by her letting us take the lead during the session.” Karen also explained giving group member’s choice in her future group work practice: “As a facilitator I will give the group members the chance to decide the direction of the session.”

Sharing/Disclosing. Karen discussed instances of sharing/disclosing and the role it played in her small- and large group. From an intra-personal perspective, Karen discussed the importance of sharing in group: “I believe the most significant group lesson was allowing ourselves to be vulnerable by displaying real emotions and being ok with it.” Karen also explained her small group facilitator’s role in creating a sharing environment: “As each person talked [our group leader] listened and then paraphrased something we said or asked questions to make us think. I felt understand and made me happy.”

Leader Styles/Techniques. Karen focused on leader styles/techniques that fostered inclusion in group work. She discussed inclusion both from her perspective as a group member and as a group leader. For example, when discussing her own personal experience, Karen stated that “When they sang me happy birthday I felt overwhelmed with the feelings of inclusion and genuineness by the group. I was making friends and they wanted to share in my special day.” She went on to discuss inclusion within her small group: “The group was great in accepting what was said and what was being felt at that moment in time. All of us demonstrated and received empathy and positive regard and that helped us feel comfortable.”

Cognitive Complexity Levels According to Bloom’s Cognitive Taxonomy

In this section I describe findings from coding the data into Bloom’s Cognitive Taxonomy six levels. For each level, I discuss this analysis and provide direct quotes from Karen’s written reflections to demonstrate the corresponding level of Bloom’s Cognitive Taxonomy.

Knowledge. I coded only one of 50 statements (2%) into the knowledge level of Bloom's Cognitive Taxonomy. Instead of summarizing content from small and large-group experiences, Karen discussed and explained these experiences; thus, I coded these statements into the comprehension level of Bloom's Cognitive Taxonomy.

Comprehension. I coded 39 of Karen's statements (78%) into the comprehension level of Bloom's Cognitive Taxonomy. Throughout her written reflections, Karen explained group work concepts and identified examples from small- and large-group experiences. For example, when discussing her small-group facilitator, Karen stated that "She initiated the conversation about going deeper and would prompt us when we got stuck."

Application. In the application level of Bloom's Cognitive Taxonomy, I coded 10 statements (20%). In these instances, Karen discussed how she plans to apply in future group work. For example, Karen stated that "As a facilitator, I will give the group members the chance to decide the direction of the session. I will be in the background and let the group take charge..." Here, Karen understood the purpose of giving group member's choice and demonstrated how she could apply this in group work.

Analysis. I did not code any of Karen's statements into the analysis level of Bloom's Cognitive Taxonomy.

Synthesis. I did not code any of Karen's statements into the synthesis level of Bloom's Cognitive Taxonomy.

Evaluation. I did not code any of Karen's statements into the evaluation level of Bloom's Cognitive Taxonomy.

Cognitive Complexity Development. Karen's written reflection assignments indicated cognitive complexity in the knowledge through application levels of Bloom's Cognitive

Taxonomy. While she consistently demonstrated comprehension of concepts from the didactic and experiential components of class, she did not demonstrated cognitive complexity at the analysis, synthesis, and evaluation levels of Bloom's Cognitive Taxonomy.

Summary of Findings

I identified major themes of choice/autonomy, sharing/disclosing, and leader styles/techniques from analyzing Karen's written reflections. In terms of cognitive complexity, Karen demonstrated cognitive complexity primarily in knowledge (2% of coded statements) and comprehension (78% of coded statements) levels of Bloom's Cognitive Taxonomy. In 20% of coded statements, Karen's demonstrated application-level statements.

Participant 9: "Matthew"

Matthew is a 22-year old, African-American male enrolled in the mental health concentration. The categories/themes and levels of cognitive complexity originated from four written reflection assignments (one written reflection assignments was an alternative assignments and did not fit the format described in chapter three).

Categories & Themes. I identified three main themes in analyzing Matthew's written reflection assignments: roles, leadership styles/techniques, and activities.

Roles. Matthew discussed roles of members in his group and discussed group member roles in general. In terms of his small group experience, Matthew talked about the importance of each member's role. In discussing a particular experiential activity, Matthew stated that "Through the processing of this activity the participants realized the importance of each role and its relation to group roles in general." Matthew also discussed a lesson learned about group member roles: "From this experience I was reminded of the importance of choosing the correct members for your group as well as assigning the correct roles to team members of a task group."

Leader Styles/Techniques. Matthew discussed leadership styles and techniques in his small- and large-group experiences. On several occasions, he identified the leadership styles of his group leaders: “For a moment, I felt as though they took on a more laissez-faire leadership role only to quickly re-ascertain a more democratic leadership role at the end.” Matthew also discussed applying certain leadership styles/techniques in future group work practice: “If I am leading a lecture or psycho-educational group, I will remember to make a summary of what happened in the session with the group as we process out of each session..”

Activities. Matthew discussed group activities in his written reflections both in terms of their effect and in terms of how he plans to apply them. In terms of describing their effect, Matthew stated that “The first group used two interactive activities fairly early into the presentation that focused the class’ attention in the topic. The activities demonstrated the power of communication in new ways with other group members.” In terms of applying some of the activities he learned, Matthew discussed how he plans to apply some of the lessons learned about group activities in future group work practice: “As I facilitate groups in the future, I will remember to use activities that are purposeful and facilitate group understanding and growth.”

Cognitive Complexity Levels According to Bloom’s Cognitive Taxonomy

In this section I describe findings from coding the data into Bloom’s Cognitive Taxonomy six levels. For each level, I discuss this analysis and provide direct quotes from Matthew’s written reflections to demonstrate the corresponding level of Bloom’s Cognitive Taxonomy.

Knowledge. I coded 54 of 107 statements (50%) into the knowledge level of Bloom’s Cognitive Taxonomy. These statements originated primarily from the content section of the written reflections, where Matthew summarized group concepts from small- and large-group.

Comprehension. In the comprehension level of Bloom's Cognitive Taxonomy, I coded 20 statements (19%). In these instances, Matthew explained a concept/theory/technique and connected this concept by providing an example from his small- or large-group experiences. For example, when discussing stages of group, he identified that his group was in the forming stage: "Initially, as we were still in the forming stage, there were many one-sided conversations about topics."

Application. In the application level of Bloom's Cognitive Taxonomy, I coded 17 statements (16%). In these examples, discussed applications of group work techniques in future group work practice. For example, in discussing the importance of summarizing and clarifying the content within a group session, Matthew stated that "If I am leading a lecture or a psychoeducational group, I will remember to make a summary of what happened in the session with the group as we process out of each session."

Analysis. In the analysis level, I coded five statements (5%). Matthew identified multiple aspects of a problem or situation occurring in group and explained these aspects. For example, in discussing a group norm of his large group, Matthew stated that "While this was readily accepted as the norm, very early in class, [The group leader] would notice those who did not communicate to the group often, but openly gave non-verbal cues for those students to speak up".

Synthesis. I coded one of Matthew's statements (.9%) into the synthesis category of Bloom's Cognitive Taxonomy. In this instance, Matthew formed a new understanding from his small-group understanding: "The lesson that I drew from that experience was to be authentic with my groups, not to look greater than them, but instead to allow them to experience and model vulnerability within the group."

Evaluation. I coded 10 statements (9%) into the evaluation level of Bloom’s Cognitive Taxonomy. On these occasions, Matthew critiqued a decision in small- or large group with a set of criteria. For example, when discussing his small group leader, Matthew stated that “Her improvisational of the distressed group member with empathy and insight showed the importance of being an attentive group facilitator who observes the needs of the group members over the objectives of the group session.”

Cognitive Complexity Development. Matthew demonstrated cognitive complexity at analysis, synthesis, and evaluation levels of Bloom’s throughout his written reflections (see Table 3). The largest increase in evaluation-level statements occurred from the first written reflection to the second one, where he went from zero evaluation-level statements to four in the second one. In the second written reflection, Matthew evaluated his group leaders by using several group work concepts as criteria for evaluation.

Summary of Findings

I identified the following categories/themes from Matthew’s written reflection assignments: roles, leadership styles/techniques, and activities. He demonstrated knowledge and comprehension levels of Bloom’s Cognitive Taxonomy in 50% and 19% of statements respectively. In one instance, Matthew synthesized his understanding of group leadership and added a new element to it. Lastly, in approximately 10% of his statements, Matthew demonstrated an ability to use group work concepts as criteria to evaluate the group leader’s decisions.

Participant 10: “Lauren”

Lauren is a 26- year old, white female enrolled in the mental health concentration. The categories/themes and levels of cognitive complexity discussed below originated from five written reflection assignments.

Categories and Themes. I identified group leader styles/techniques, activities, and roles as major categories/themes from Lauren’s written reflections.

Leader Style/Techniques. Lauren identified numerous group leader styles and techniques and discussed the impact of these styles/techniques. Many times she discussed the techniques and resulting impact of his small group leader’s techniques. For example, she stated that “[He] allowed the discussion go long enough that the concern be heard, but also recognized that the group was veering off course. I think this intervention was well executed and appropriate.” She also noted that “He practiced empathy and unconditional positive regard, being very validating of her issue...” Lauren also explained techniques that he would look to employ in future group work practice: “If I am leading a group of adolescents who come from an abusive home...I would attempt to engage that client and ask what it was they wanted to say and see how far the client was willing to go with it.

Activities. Lauren discussed specific group activities in her written reflections and explored the purpose and role of these activities. For example, when considering his own experience with a particular group activity, she stated that “This activity forced me to be more open and spontaneous and I feel appreciative of this activity in regards to helping me develop into a more effective counselor.” Lauren also examined these activities in terms of their impact on the group dynamics. She stated that “The most significant group lesson would have to come from the human knot exercise we did for the chapter on adolescent groups...we had to learn to

work as a group and would only be successful through group cohesiveness.” Lastly, Lauren discussed applications for certain group activities. In this instance, she stated that “If I was facilitating an adult group of recovering drug users, I could facilitate an activity where group members get to put me in the hot seat...”

Roles. Lauren discussed different aspects of group member roles in her written reflections. One aspect she considered was her own role within the group. For example, when discussing her role as a leader in one particular group session, she stated that “The opportunity for each person to experience the role of leader and led is extremely useful in offering perspective.” She also observed the usefulness of experiencing different roles within group: “Perspective wise, students are able to get a sense of control related to being in charge, and the negative and positive aspects of this experience can greatly increase insight and awareness.”

Cognitive Complexity Levels According to Bloom’s Cognitive Taxonomy

Knowledge. I coded 77 of the 132 statements (58%) into the knowledge level of Bloom’s Cognitive Taxonomy. These statements came primarily from the content summary section of Lauren’s written reflections. In discussing stages of group, “The forming stage is representative of first impressions and a certain amount of caution associated with initial contact among group members.”

Comprehension. I coded 40 statements (30%) into the comprehension level of Bloom’s Cognitive Taxonomy. In these statements, Lauren explained group concepts and usually gave supporting examples in her small- or large group. For example, she identified the leader’s use of silence: “There was silence in which [the group leader] tried to get the class to respond to the teachings, and when responses were not immediate, there was a bit of tension in the air.”

Application. In the application level of Bloom's Cognitive Taxonomy, I coded 14 statements (11%). Lauren applied her understanding of course concepts/theories to leading groups in the future: "This type of group may feel powerless from being bullied, and giving them the ability to be in charge and have control over how the group functions for a period of time may help them to be more assertive and confident".

Analysis. I did not code any of Lauren's statements into the analysis category.

Synthesis. I did not code any of Lauren's statements into the synthesis category.

Evaluation. I did not code any of Lauren's statements into the evaluation category.

Cognitive Complexity Development. Lauren's written reflection assignments remained in the knowledge through application levels of Bloom's Cognitive Taxonomy. While she consistently demonstrated comprehension of concepts from the didactic and experiential components of class, she did not demonstrate cognitive complexity at the analysis, synthesis, and evaluation levels of Bloom's Cognitive Taxonomy.

Summary of Findings

I identified member roles, leadership styles/techniques, and activities as major categories/themes from Lauren's written reflection assignments. Lauren's often discussed these categories/themes in terms of her specific interest area, children and adolescents. In terms of cognitive complexity, Lauren demonstrated an ability to connect course concepts from the didactic component of class to the experiential component of her class. These comprehension-level statements accounted for roughly 30% of statements in her written reflections. In approximately 11% of her written reflections, Lauren displayed an ability to apply these concepts into groups with children and adolescents. She did not demonstrate cognitive complexity in the analysis, synthesis, and evaluation levels of Bloom's Cognitive Taxonomy.

Summary of Individual-Participant Analyses

In this section I discussed participant-by-participant analyses of 10 counselors-in-training learning group work. For each participant, I explored categories/themes that represented salient features of each participant's set written reflections. In addition to categories/themes, I described levels of cognitive complexity and explored cognitive complexity development for each participant. Overall, these individual analyses revealed distinct individual differences and varying levels of demonstrated cognitive complexity and inferred cognitive complexity development. Lastly, these 10 sets of analyses also revealed overlap among the participants. This overlap, or across-participant findings, represents the next section's focus.

Across-Participant Analysis

Introduction

In this section I report findings from an analysis across the group of 10 participants. This across-participant analysis focused on discovering trends and similarities in cognitive complexity and in categories/themes. In part one of this section, I focus on similarities across participants in categories/themes. In part two, I describe trends, patterns, and similarities in cognitive complexity across participants. In the final part of this section, I report findings from an analysis across written reflection assignments in an attempt to infer cognitive complexity development.

Across-Participant Analysis of Categories/Themes

I outline the following across-participant discussion with the eight categories/themes generated from the individual-participant analyses: leader styles/techniques, roles, sharing/disclosure, norms, activities, environment, and preparation (Table 2). In each of these eight categories/themes, I explore trends, similarities, and commonalities across participants' written reflection assignments.

Leader Styles/Techniques

All 10 participants focused on leader styles/techniques. Several participants (Lauren, Karen, Susan, Megan) focused on the leader's role in creating "core conditions" (e.g., empathy, unconditional positive regard). Other participants focused on specific leader skills/techniques, such as listening (Megan, Karen), and humor (Mary, David). Four participants (Susan, Jennifer, Sarah, David) explored the extent to which their leaders imposed direction on small- or large group (as opposed to members' dictating the choices in group). Finally, with one notable exception (Susan), most participants focused on the positive aspects of their small- or large group leaders.

Roles

Four participants (Megan, Sarah, Matthew, Lauren) explored the roles group members in their small- and large group experiences. These four acknowledge "the importance of each group member's role" in their small group. Often times these four discussed member roles in relation to performing a particular group activity. Additionally, all four spoke to the importance of the facilitator's role in highlighting each group member's role. Megan and Matthew specified roles in their groups, referring to those members taking "maintenance" roles or the "silent" group member. Lauren and Megan noted the leadership roles that group members sometimes assume. Lastly, Sarah and Matthew offered specific applications of member roles in their respective areas of group work interest.

Sharing/Disclosure

Jennifer, Sarah, Susan, Brian, and Karen discussed sharing/disclosing within their small groups. While all five struggled with the extent to which to share, they all acknowledged the personal and group benefits of sharing and disclosing. For example, Jennifer, Sarah, Susan, and

Brian linked sharing to the therapeutic concept of universality or feelings of “oneness” among group members. Similarly, Brian and Karen used the term “freedom” with sharing and disclosing. Other phrases connected throughout these participants written reflections included “normalizing”, “other perspectives”, and “common experiences”. These five also recognized that sharing in their small group represented a different context from their typical experiences in group contexts (not necessarily group work).

Norms

Sarah and David focused on norms within their small- and large-groups. Both Sarah and David identified group norms in their small groups, and elaborated on ways that those norms affected the dynamics within their groups. Sarah, for example, discussed the lack of depth at a particular junction in her small group. Similarly, David noted that his small group possessed the group norm of “working together”. Finally, both elaborated on instances when norms shifted in their small groups.

Activities

While discussions about group activities occurred throughout all participants’ written reflections, five participants (Megan, David, Brian, Matthew, Lauren) focused on the activities themselves and the value of these activities. Megan and David referred to the specific names of activities (e.g., “scavenger hunt”, “decorated bag”) and discussed the effects of these activities. All five recognized that these activities served as a conduit for the larger purposes of cohesion (David, Lauren), trust (David, Brian), sharing (Megan) and growth and understanding (Matthew). Finally, these five participants all discussed utilizing these activities in future group work.

Choice/Autonomy

Jennifer, David, Susan, and Karen discussed the relative balance of group member choice/autonomy with the direction provided by the group leader. They all discussed the value of having choice and “a say” in their groups. For example, David, Susan, and Karen explained that giving group members choices offers those members sense of purpose and meaning. These five discussed their small-group leader’s role in giving members the choice in dictating the course of their group experiences.

Preparation

Mary and Brian discussed the importance of preparation in leading groups. In particular, both talked about preparing for the needs of group members. In Brian’s written reflections, he discussed preparing group activities to meet the learning styles of all group members. In Mary’s written reflections, she focused on preparing for difficult situations in group and “anticipating potential consequences”.

Environment

Megan represented the only participant to discuss the role of environment in her small- and large groups. Specifically, she discussed the effects of room temperature on group dynamics and the inclusion of chairs of absent group members. The remaining nine members did not discuss the environment and its effect on group dynamics.

Summary of Categories/Themes from Across-Participant Analysis

The previous section explored findings from an across-participant analysis of categories/themes. This analysis revealed similarities across participants in each of the seven categories/themes (only one participant discussed the eighth category/theme, environment). All 10 participants addressed leader styles/techniques, which, in part, reflected the written reflection

instructions. Nevertheless, participants focused on similar aspects within this category/theme. Half of the participants also addressed sharing/disclosure and group activities in their written reflections. Four participants focused on choice/autonomy and (member) roles, and two participants focused on norms and preparation. Within each of these categories/themes, I provided similar examples across participants.

Across-Participant Analysis of Cognitive Complexity

In this part I review findings from analyzing levels of cognitive complexity across-participants. To outline this review, I list and discuss similarities in each level of Bloom's Cognitive Taxonomy. In addition, I explore cognitive complexity development across participants and across written reflection assignments; that is, I compare trends in frequency of analysis, synthesis, evaluation level statements from the first written reflection to subsequent ones. Table 3 provides a composite chart of this analysis.

Knowledge

The knowledge level of Bloom's Cognitive Taxonomy represented the highest frequency of coded statements. Across participants, the majority of these knowledge-level statements came from the "content summary" section of the written reflections. This section prompted participants to summarize lessons learned from the didactic component of class. Therefore, the frequency of knowledge-level statements across participants reflects the parameters of the instructions.

Comprehension

The comprehension level represented the second highest frequency of coded statements. Participants consistently demonstrated the ability to explain, interpret, and understand group work concepts. These statements commonly originated from discussion about small-group

experiences; participants showed an ability to comprehend these concepts by identifying them in small group.

Application

The application level of Bloom's Cognitive Taxonomy accounted for the third highest frequency of coded statements. Participants routinely took comprehension of group concepts and offered applications of these concepts. As stated above, the instructions prompted participants to apply lessons learned from the small- and large groups. Many times, these application-level statements related directly to participants' areas or populations of interest, such as working with children or adolescents (Sarah, David, Brian, Lauren), or with groups on fitness and nutrition (Jennifer).

Analysis

The analysis level of Bloom's Cognitive Taxonomy represented the fourth highest frequency of coded statements across participants. Sarah and David offered the most analysis-level statements, 16 & 14 statements respectively; they took situations and problems in their small groups and "dissected" aspects of these situations/problems. Other participants also demonstrated the ability to analyze a problem or situation by identifying multiple group work concepts within that problem/situation.

Synthesis

The synthesis level of Bloom's Cognitive Taxonomy comprised the least number of statements. While participants routinely identified aspects of a situation or problem, they rarely took these disparate parts to form a new plan or idea. Jennifer and Matthew represented exceptions to this overall trend; both offered one synthesis-level statement in their respective written reflection assignments.

Evaluation

Participants rarely demonstrated evaluation-level statements in their written reflection assignments; Jennifer, Matthew, Megan, and Sarah represented the only participants to offer evaluation-level statements. In select incidents, these participants showed an ability evaluate an experience (usually this was a critique of a decision of their small group facilitator) using some set of criteria. Matthew accounted for 10 of the 14 total evaluation-level statements in entire data set of written reflections.

Cognitive Complexity Development: A Comparison across Written Reflection Assignments

In this section I explore cognitive complexity development across participants by examining trends throughout the separate, individual-participant analyses. To recap, in the individual-participant section I explored cognitive complexity development by comparing each participant's set of written reflection assignments. Specifically, I compared frequency of analysis, synthesis, and evaluation-level statements from written reflection to written reflection. I chose to isolate and compare these levels of Bloom's Cognitive Taxonomy because the written reflection assignments prompt participants to summarize (knowledge), discuss (comprehension), and apply (application) lessons learned. My purpose centered on exploring instances when participants surpassed these expected levels and demonstrated cognitive complexity at the analysis, synthesis, and evaluation levels of Bloom's Cognitive Taxonomy. I continue this analysis of cognitive complexity development, only with a shift to an across-participant focus. Table 3 provides a composite look at this analysis.

Cognitive Complexity Development across WR's 1-5 in the Analysis Level of Bloom's Cognitive Taxonomy

As shown in Table 3, this group of participants demonstrated the greatest number of analysis-level statements (25 of 60) in the second written reflection. In analyzing the second written reflection, some participants offered analysis-level statements when discussing the approach of their facilitators. For example, Sarah stated in her second written reflection “It seemed to me that the group just went along with her comments the majority of the time and didn’t generate much discussion on its own.” David also analyzed his leader’s approach in the second written reflection, stating “I like that our leader doesn’t put pressure on us to start because I think that it would inhibit the effectiveness of small group.” Other participants focused on analyzing group dynamics in the second written reflection. For example, Brian stated “Using [an] activity like this early in the group’s formation breaks down uncomfortable barriers and provides cohesion for the members of the group.” Mary also analyzed group dynamics in her second written reflection, stating “It can mentally prepare the individual to receive the information, and if they are better able to make a connection to the material because of that, I feel confident saying it had a part in helping them retain the information better than they would have otherwise.”

Cognitive Complexity Development across WR's 1-5 in the Synthesis Level of Bloom's Cognitive Taxonomy

Across participants and across written reflections, the synthesis level of Bloom’s Cognitive Taxonomy contained the lowest frequency of statements (2). While participants demonstrated the ability to break down a situation (analysis) into separate parts, in only two instances did they demonstrate the ability to use these parts to form a new solution or whole.

These synthesis level statements occurred in the fourth (Jennifer) and second written reflections (Matthew). Both statements involved taking different aspects of a group leader's facilitation and forming a new aspect of facilitation; that is, Matthew and Jennifer synthesized their understanding of various aspects of group facilitation to create a new way to facilitate. For example, Matthew stated "The lesson that I drew from that experience was to be authentic with my groups, not to look greater than them, but instead to allow them to experience and model vulnerability within the group." Similarly, Jennifer stated "Through her [the group leader's] techniques, she helped the client approach his problem from an alternative perspective with the additional challenge to how he typically interacts within group. This added depth, not only to the member's understanding, but to the group's experience as well."

Cognitive Complexity Development across WR's 1-5 in the Evaluation Level of Bloom's Cognitive Taxonomy

As shown in Table 3, four participants (Jennifer, Sarah, Megan, Matthew) demonstrated 13 total evaluation-level statements, or approximately 1% of all coded statements. These 13 statements occurred in the following frequency distribution: written reflection one (0), written reflection two (4); written reflection three (4), written reflection four (1), and written reflection five (4). Evaluation-level statements occurred when these participants offered critiques of their respective group leaders' decisions. For example, in only her only evaluation-level statement, Megan stated in her fifth written reflection "When the facilitator first did this it made sense since a majority of the people in the class are in theories, but when I thought about it more I realized that this facilitator failed to take into account that not everyone is in the counseling program..." Similarly, Matthew offered this evaluation of his small-group facilitator, "Her improvisational of the distressed group member with empathy and insight showed the importance of being an

attentive group facilitator who observes the needs of the group members over the objectives of the group session.”

Summary of Cognitive Complexity from Across-Participant Analysis

The knowledge, comprehension, and application levels of Bloom’s Cognitive Taxonomy accounted for 93% of all participants’ coded statements. Beyond these expected levels of cognitive complexity—those levels prompted by the written reflection instructions—participants demonstrated cognitive complexity at the analysis, synthesis, and evaluation levels in approximately 7% of all coded statements. Lastly, an exploration of cognitive complexity development examined frequency of analysis, synthesis, and evaluation-level statements from the first written reflection to subsequent ones. This exploration revealed two-and-a-half times as many analysis-level statements from the first written reflection (10 analysis-level statements) to the second one (25 analysis-level statements).

Summary of Findings from Individual- and Across-Participant Analyses

In this chapter I reported findings from a content analysis of written reflection assignments from counselors-in-training learning group work. I presented these findings from two major foci: individual-participant and across-participants. In the individual-participant analysis, I discussed the categories/themes and described cognitive complexity for each participant. In the across-participant analysis, I explored similarities, trends, and patterns across participants in categories/themes and in cognitive complexity according to Bloom’s Cognitive Taxonomy. In the following chapter, I offer my interpretation and highlight key aspects from these findings.

Chapter Five: Discussion

Chapter Overview

In this chapter I provide an overview of the study, including limitations. In addition, I discuss findings related to the research question, consider implications for counselor educators, and propose suggestions for researchers in counselor education.

Overview of Study

This study used content analysis, a qualitative methodology to describe levels of cognitive complexity in 10 counselors-in-training studying group work. Currently, scant research exists on cognitive complexity in the group work domain. The research question that framed this study was: “What levels of cognitive complexity do counselors-in-training enrolled in a Group Dynamics and Methods course demonstrate in written reflection assignments as measured by Bloom’s Cognitive Taxonomy?” I found that participants in this study demonstrated cognitive complexity primarily in knowledge through application levels of Bloom’s Cognitive Taxonomy, and rarely demonstrated cognitive complexity at the highest levels (analysis, synthesis, and evaluation). This finding bears further discussion. Before this discussion, I review the limitations of the study.

Limitations of Study

Because this study’s limitations influence discussion related to the research question, I first review these limitations. Readers should consider these limitations while interpreting this discussion to inform research or practice. These include limitations in this study’s method, selection of participants, and inference of cognitive complexity.

Using content analysis, a practical and adaptable qualitative approach, comes with limitations. A central concern with this approach, according to Hsieh and Shannon (2005),

involves the use of theory. Hsieh and Shannon (2005) maintained that researchers can inadvertently collect evidence to fit the theory that frames their study. In this study, I used Bloom's Cognitive Taxonomy to code written reflections assignments. In coding statements, it was possible that I coded the statement to fit levels of Bloom's Cognitive Taxonomy.

Participants in this study included counselors-in-training enrolled in a group dynamics and methods course at a large, southeastern university during the fall semesters of 2011 and 2012; therefore, generalizing these findings to other counselors-in-training learning group work limits this study's findings. In addition, I conducted a descriptive study to provide a foundation for further research, rather than to theorize about cognitive complexity of all counselors-in-training learning group work. To address this limitation, I included 10 participants and analyzed the data for all. In many qualitative studies, researchers collect and analyze data until saturation (Creswell, 2013). Saturation refers to the threshold where no new themes emerge from the data collection and analysis. Although considering generalizability is not possible, the amount of data collected and analyzed strengthens the findings (Creswell, 2013).

A third limitation of this study centers on the inability to control for participants' prior group work experience or training. I chose participants for this study based on criteria for inclusion, which included those participants who had complete sets of written reflections and those enrolled in the school counseling or mental health counseling concentrations of the Master's in counseling programs. I did not specify criteria for prior group work experience. As a result, these participants could have had group training or experience, which would have, perhaps, influenced demonstration of cognitive complexity.

In addition to prior group work experience, I could not control for other programmatic experiences of these counselors-in-training. These 10 participants enrolled in either the school

counseling or mental health counseling concentrations, but, since the data were previously collected, I could not ascertain prior coursework, practicum or internship experiences, and other programmatic or curricula experiences. These programmatic experiences likely influenced participants' demonstration of cognitive complexity, but consideration was beyond the scope of this study.

Finally, the analysis of cognitive complexity development limits interpretations of these findings. In the discussion of cognitive complexity development, I described cognitive complexity development by looking at frequencies of analysis, synthesis, and evaluation statement from written reflection to written reflection. I note when participants demonstrated increases or decreases in analysis, synthesis, and evaluation-level responses from the first written reflection to subsequent ones. Table 3 displays frequencies of responses for participants at each level of Bloom's Cognitive Taxonomy across all five written reflection assignments. However, readers of this study should not infer cognitive complexity development from any increase in these analysis, synthesis, or evaluation level statements. I examined frequencies of responses to describe when (which written reflection) and how often participants responded with analysis, synthesis, and evaluation-level statements, not to imply cognitive complexity development. To counter this limitation, I provide thick, rich descriptions (Creswell, 2013) of these responses in the findings and the discussion of each participant's set of written reflections.

In conclusion, the limitations described above influence the interpretation of findings; therefore, it is imperative that counselor educators, researchers, and group work trainers consider the following discussion in light of these limitations. In the next section I discuss three aspects of findings related to the research question.

Discussion of Findings

The main finding related to cognitive complexity specifically addressed the research question: Participants overwhelmingly demonstrated cognitive levels of knowledge through application of Bloom's Cognitive Taxonomy. In fact, 93% of participants' statements (1057 of 1132) met criteria for knowledge through application levels (see table 3, p. 166). For example, in the knowledge level, Jennifer stated, "Leaders strive to motivate group members and achieve a workable unit." In the comprehension level, Megan expressed "I know I am not the only person that experiences these feelings when talking in front of groups so this kind of activity can be very beneficial." In the application level, David wrote, "This is a great tool in group and whenever I'm conducting group and I hear silence, no matter how long, I will not be the first one to speak."

Alternatively, only 7% of participants' statements (75 of 1132) met criteria for the analysis, synthesis, and evaluation levels of Bloom's Cognitive Taxonomy. For instance, in the analysis level, Brian expressed, "The role of the facilitator made the group experience therapeutic factors such as universality, imitative behavior, and cohesiveness." An example at the synthesis level included the following statement from Matthew: "The lesson that I drew from that experience was to be authentic with my groups, not to look greater than them, but instead to allow them to experience and model vulnerability within the group." At the highest level of cognitive complexity, evaluation, less than 1% of statements met evaluation-level criteria; those statements that met evaluation criteria were concentrated in only four participants' written reflections. Sarah demonstrated evaluation-level cognitive complexity when she wrote, "By establishing a new temporary group norm that you must hold a talking stick in order to speak ensured that we would not be shouting over each other...A process that could turned loud and unruly was rendered orderly and efficient." Megan also demonstrated an evaluation-level

statement, “When the facilitator first did this it made sense since a majority of the people in the class are in theories, but when I thought about it more I realized that this facilitator failed to take into account that not everyone is in the counseling program...”

Overall, the lack of evidence at analysis, synthesis, and evaluation levels suggests that most participants did not conceptualize group dynamics and methods at highest levels of cognitive complexity. This supports Granello and Underfer-Babalis’ (2004) contention, “Although the specific of the journey vary by theorist researcher, generally it is believed that beginning level therapists...are more dichotomous in their thinking” (p. 160). Similarly, Stoltenberg et al. (1998) maintained that counselors-in-training exhibit “categorical thinking”. Evidence from this study support the models proposed by Granello and Underfer-Babalis (2004) and Stoltenberg et al. (1998). Lauren, for example, demonstrated categorical thinking in different aspects of group work. When discussing group leadership in her second written reflection, Lauren offered a blanket approach to leading group, “As a facilitator I will give the group members the chance to decide the direction of the session.” Lauren also suggested in her final written reflection that group leaders have complete control over the group environment: “This activity showed that a facilitator has true control over creating environments for group members...” Lastly, when discussing therapeutic effects of group work in her third written assignment, Lauren reflected in a general, linear fashion, “Therapy is not designed to be easy and painless, and when facing issues it is almost expected that things will get worse before they get better.” Given the challenge of learning group dynamics, methods, therapeutic effects, and other facets required of group work (Hines, et al., 1995), I turn to specific aspects within the finding of demonstrated cognitive complexity.

This discussion focuses on three aspects of the findings: the role of theory in analysis-level responses; the relationship between group activities and comprehension-level responses; and, the influence of written reflection instructions on application-level responses. I explore the relationship of these three aspects related to demonstrated cognitive complexity and speculate with theory and research.

First, I discuss the possible relationship between participants' underlying theories and analysis-level responses. In chapter two, I reviewed several studies related to counselors' -in-training understanding of group work (i.e., theory). These studies examined specific aspects that collectively comprise one's theory of group work, including knowledge structures (Kivlighan & Quigley, 1991), self-talk (Stockton, Morran, & Berardi-Clark, 2004), case conceptualization (Murdock, 2011), among others. For the second aspect of the findings, I speculate on the influence of experiential components in promoting higher levels of cognitive complexity. The experiential components of this group dynamics and methods course surfaced as central elements in all 10 participants' responses. Additionally, I discussed in chapter two counselor education studies (Auxier, Frances & Kline, 2003; Osborne, Daninhirsch, and Page, 2003) and scholarly works (Kolb, 1984) related to the role of experiential methods in promoting learning. In the third aspect of the findings, I discuss the assignment itself and its possible impact on application-level cognitive complexity. Because the written reflections assignments served as the study's data source, and since written assignments represent a ubiquitous part of all counselor-training programs (Granello, 2001), I discuss this assignment's specific instructions related to cognitive complexity. For this aspect of the findings, I speculate using the theory central to this study: Bloom's Cognitive Taxonomy. I support all three aspects with direct responses and research

beyond the scope of counseling and counselor education literature. Finally, I speculate on each aspect of the findings with alternative explanations.

Key Finding 1: Analysis-Level Responses and the Role of Theory

Eight of 10 participants wrote at least three analysis-level statements (i.e., statements that identified and differentiated aspects of group dynamics or methods). These eight participants responded beyond the expected levels of cognitive complexity (i.e., knowledge, comprehension, and application levels prompted by the written reflection instructions) and in a few instances responded at the analysis level. When writing analysis-level responses, these eight participants selected and discussed various skills of their group work leaders. For example, Brian (34-yr old, school counseling) identified the effects of his small-group leader's use of open-ended prompts (versus closed-ended prompts), "This continued to give the group a new dynamic as time transpired and the group began to take a new look." In another analysis-level statement, Mary (24-yr old, school counseling) stated "[Classmate 1] and [Classmate 2] managed to put a humorous twist on the presentation, while still giving the different dimensions the weight they deserved." Jennifer (25-year old, mental health counseling) identified several elements of her group leader's methods: "Consistently encouraging the class to take chances and express here-and-now feeling....extends and invitation to be open." As a final example of analysis-level cognitive complexity, David (26-years old, school counseling) wrote "When the facilitator began and described the goals that we needed to meet in that first night, he continued to stress that it was the choice of the group as to how we wanted to deal with confidentiality, and the rules/norms that the group were to follow." Across these eight counselors-in-training, highlighted in these four instances, participants attended to distinct group work concepts, especially those concepts related to group leadership. David, for example, first attended to his

group leader's overall behavior. Then, he differentiated those specific techniques salient to him (confidentiality, autonomy/choice, rules/norms). As David parsed his group leader's behavior into distinct techniques, he demonstrated the ability to respond with analysis. Overall, these eight participants distinguished group work concepts—they demonstrated analysis-level cognitive complexity.

Karen (26-year old, white female) and Lauren (25-year old, white female), both in school counseling, represented the only participants who did not write any analysis statements. Instead of analyzing group experiences into group work concepts, Karen and Lauren focused more on explaining and recounting their group experiences. For example, Karen stated in the "Most Significant Group Lesson" section of the written reflection, "I believe the most significant group lesson from the party was: to involve the birthday person—me—in the party plans to so he [or she] feels special." Similarly, Lauren responded to the "Most Significant Group Lesson" prompt by stating, "There were so many factors that connected me to this person." Again, these statements reflect a focus on the group experience rather than analyzing the methods of group work. In the following paragraphs, I present two explanations for responding or not responding to the prompts in an analytic way.

Participants' implicit theory represents one possible interpretation of this aspect of the findings. Wenger and Vallacher (1977) described implicit theory in terms of the influence of expectations on the assessment of interpersonal behavior. According to the researchers, an individual forms assessments from his or her expectations and beliefs about behavior in particular situations. For example, an individual would assess interactions between two friends differently than interactions between two colleagues. These beliefs underlie individuals' assessment (i.e. implicit beliefs), and are not readily known to the individual assessing the

situation. These authors noted that an implicit theory contributes to understanding how individuals evaluate interpersonal situations. They also asserted that an individual's implicit theory informs his or her focus and interpretation in interpersonal situations. Relevant to this study, perhaps participants' underlying theories directed their attention to certain interpersonal aspects of group. For example, Jennifer's implicit theoretical orientation might have guided her focus with the following statement regarding her group leader: "Consistently encouraging the class to take chances and express here-and-now feeling....extends and invitation to be open." Her implicit theory may rest on expectations and beliefs about group counselor and "client", and about facilitating change, such as immediacy and genuineness. Her implicit theory, then, might have led her to focusing on those aspects of group leadership that facilitate change between group leader and group member. Similarly, Brian's statement, "This continued to give the group a new dynamic as time transpired and the group began to take a new look", may also reflect an implicit theoretical orientation. Whereas Jennifer's implicit theory guided her focus to the therapeutic interaction between group leader and group member, Brian's implicit theory might have directed his focus and subsequent response to the larger dynamics of the group. The eight participants who demonstrated analysis-level responses attended to group work concepts related to group leader behaviors and techniques. In turn, this attention, directed by their beliefs and expectations about group leader/member behavior (i.e. implicit theories) led them to analyze salient aspects of group leadership. Conversely, it is possible that Karen and Lauren's implicit theory reflected an experiential-centered theory, such as Gestalt Theory. This led Karen and Lauren to summarize and explain their group experiences, rather than analyze them.

Participants' self-efficacy provides an alternative theory to understanding this aspect of the findings. Bandura (1977) said this of self-efficacy:

The stronger the perceived self-efficacy, the more active the efforts once they are initiated. Efficacy expectations determine how much effort people will expend and how long they will persist in the face of obstacles and aversive experiences. The stronger the perceived self-efficacy, the more active the efforts. Those who persist in subjectively threatening activities that are in fact relatively safe will gain corrective experiences that reinforce their sense of efficacy. Those who cease their coping efforts prematurely will retain their self-debilitating expectations and fears for a long time. (p.194)

Perhaps the eight participants who demonstrated analysis-level cognitive complexity also possessed greater levels of self-efficacy in group work. For example, Jennifer's analysis of her group leader's techniques ("Consistently encouraging the class to take chances and express here-and-now feeling....extends and invitation to be open") may have reflected her assessment of her own ability (i.e., self-efficacy) to understand group dynamics and methods. Consequently, the effort she put forth in conceptualizing and reflecting on her group experiences may have directly reflected her self-efficacy related to these experiences. The case for "perceived self-efficacy" and commensurate effort reflecting on experiences could be made across all eight participants: These eight participants greater sense of self-efficacy related to their understanding of group work influenced them to respond more intently and "actively" beyond the assignment's expected levels (knowledge, comprehension, and application). Conversely, it is possible that Karen and Lauren's self-efficacy in group work remained lower than their eight counterparts. Karen, for example, reflected, "I believe the most significant group lesson from the party was: to involve the birthday person—me—in the party plans to so he [or she] feels special." Through this statement, Karen demonstrated comprehension-level cognitive complexity (she displayed understanding group work concepts of inclusion, member involvement, etc.), but did not develop this understanding to the analysis-level of cognitive complexity throughout her written reflections. Similarly, Lauren consistently demonstrated comprehension-level cognitive complexity, but did not pursue this comprehension to analysis-level cognitive complexity. The

possibility exists that both Lauren and Karen's lack of analysis-level responses reflected perceived self-efficacy and subsequent effort responding beyond expected levels.

Key Finding 2: Comprehension-Level Cognitive Complexity and Group Activities

Throughout the written reflection assignments, all 10 participants consistently demonstrated understanding of group work concepts—they responded with comprehension-level cognitive complexity. In fact, participants responded at the comprehension level in 39% of statements (Table 3), which accounted for the second highest percentage of responses (knowledge-level responses represented 40% of statements). In responding with comprehension-level statements, participants regularly explained group work concepts related to group activities. For example, Matthew differentiated the “forming stage” when discussing a group activity: “Initially, as we were still in the forming stage, there were many one-sided conversations about topics.” Similarly, Sarah described the norming stage: “The norming stage occurred as we each figured out what our role in the group would be and how we would go about completing the items on the list.” These and other comprehension-level responses related to group activities followed two trends: Five of 10 participants identified specific group activities and connected them to what they were learning when explaining group work concepts. The other five participants focused instead on explaining group activities without identifying the group activity by name. A description of these two types of responses, “identifying, connecting, and explaining” and “explaining” follows.

Five of 10 participants (Megan, David, Brian, Matthew, Lauren) connected group work concepts to specific group activities. These five participants demonstrated the ability to clearly explain group work concepts they related to a specific group activity. For example, Megan said, “I was the last person to share my decorated bag with the group...I saw how it [decorated-bag

activity] served as a guide for the sessions and promoted self-disclosure by group members.”

Brian responded to the “whatcha thinking, whatcha feeling” activity with, “I would definitely use this icebreaker or a group activity to build cohesion and have my group share a similar experience.” As a final example, Matthew explained “This week, I observed the power of sub-grouping for group activity. The class participated in a trust walk activity in which groups of threes set out to perform three roles...” These five participants responses, illustrated by the examples previously provided, demonstrated the participants’ ability to understand group work concepts from group activities; that is, they responded with comprehension-level cognitive complexity.

The five participants who did not identify specific activities (Mary, Jennifer, Sarah, Susan, Karen) discussed activities in general terms and explained the activity’s affect on group dynamics. For example, Mary stated, “In one activity, we were asked to reminisce about something...I noticed that several classmates who their memories had tied them to older adults, even though they weren’t instructed to do so.” Jennifer reflected “Usually, group members bond by realizing they have all had a similar feeling or situation in the past, but this group activity allowed members to have a unique experience together.” As one final example, Susan expressed “One by one, almost each member exposed a totally different aspect of their personality and surprised me. Members who were normally barely coherent during small group were outgoing, creative, and funny as heck.” As with the five participants who discussed specific group activities, these five participants who discussed activities in general terms also understood group work concepts; they too responded with comprehension-level cognitive complexity. What is the relationship between activities and comprehension-level responses? I speculate with two possibilities in the following paragraphs.

Whether participants referred to activities by name or by general reference, these activities facilitated understanding of group work concepts. Kolb's (1984) Theory of Experiential Learning may explain this relationship between activities and comprehension-level cognitive complexity. Kolb's (1984) theory hinged on the role of experience in learning: "Learning is the process whereby knowledge is created through the transformation of experience" (p. 38). Kolb's (1984) theory posits that learning occurs in a four-stage cycle of concrete experience, reflective observation, abstract conceptualization, and active experimentation. The structure of this Group Dynamics and Methods course generally followed this cycle outlined in following example. First, participants learned concepts, theory, and research from the didactic portion of class (abstract conceptualization). For example, Brian probably learned about cohesion from lecture and class discussion. Then, participants "tried out" certain methods and approaches in in-class experiential activities as well as the stand-alone small-group experience (active experimentation). Brian "sampled" cohesion by participating in the "whatcha thinking, whatcha feeling" activity. Third, participants interacted with group work concepts in their small-group and in-class experiences (concrete experience). In the "watcha thinking, whatcha feeling" activity, Brian and his group members felt cohesion through direct experience with the activity. Finally, participants wrote about their experiences in their written reflection assignments (reflective observation). Brian demonstrated reflective observation when he wrote, "I would definitely use this icebreaker or a group activity to build cohesion and have my group share a similar experience." Invariably, comprehension-level responses involved discussion related to group activities. In short, the experience of these group activities "transformed" participants' learning and comprehension of group work concepts.

In addition to Kolb's (1984) Theory of Experiential Learning, Lave and Wenger (1991) Situational Learning Theory may also explain these comprehension-level responses. According to Lave and Wenger (1991), learning is not merely receiving knowledge; learning is "situated" in a social context. Lave and Wenger (1991) referred to this process as "legitimate peripheral participation":

"Legitimate peripheral participation provides a way to speak about the relations between newcomers and old-timers, and about activities, identities, artifacts, and communities of knowledge and practice. A person's intentions to learn are engaged and the meaning of practice. This social process, includes, indeed it subsumes, the learning of knowledgeable skills. (p. 29)

Participants' comprehension-oriented responses might be explained through Lave and Wenger's (1991) theory. In essence, group activities provided participants with a meaningful social context to "situate" learning of certain group work concepts. For example, the "whatcha thinking, whatcha feeling activity" provided a social context for Brian to situate his understanding of group cohesion. Similarly, the "trust walk" activity provided a context for Matthew to situate his learning of sub-grouping. Finally, the written reflection assignment framed these responses and provided a context for the participants to situate their comprehension of group activities (I explore the written reflection assignment in the following key finding). In conclusion, all 10 participants, whether identifying group activities by name or by general reference, demonstrated comprehension of group work concepts. Group activities facilitated this comprehension by providing a meaningful social context for participants to situate their understanding of group work concepts.

Key Finding 3: Application-Level Cognitive Complexity and Written Reflection Instruction

Prompts

The consideration of this key finding directly relates to situated learning proposed by Lave and Wenger (1991) and described in Key Finding 2. I suggest that the written reflection assignment framed responses, and, therefore, provided a context to situate their understanding. As detailed in chapter three, the written reflection instructions prompted students to apply lessons learned from their small- and large-group experiences. Specifically, the instructions read, "...lessons you learned about the facilitator's role and application of how you will use this as a facilitator in the future and....the most significant group lesson (i.e., either experiential or didactic) you learned that week and application of how you will use this as a facilitator in the future." This section describes the range of responses related to this instruction prompt and speculates on explanations for these varied responses. Ultimately, the section reinforces the importance of and influence of class assignments and the directions provided.

To briefly recap the findings related to application-level cognitive complexity, participants demonstrated this level in 14% of statements (162 of 1132). These statements included such responses as "I will lead this activity by sharing some of my past personal experiences and hope to gain universality and group cohesiveness" (Brian). Similarly, Megan expressed, "As the facilitator I would remove the chairs of members who are not present in an effort to maintain the dynamics of the group as much as possible even if members are missing." Finally, Mary reflected "I will utilize the method of recapping the last session, in anyone's absence, and as a warm-up exercise." In these and other application-level statements, participants predicted ways to use group work concepts.

Participants responded to the application prompt in one of three ways. First, some participants offered general applications. For example, Susan wrote, “I would try to lessen the group’s anxiety about disclosing and create an atmosphere of trust by modeling courage, openness, and honesty....” Second, other participants identified situations to apply particular group work concepts or procedures. For example, David reflected on a group activity that involved breaking into small groups: “I would use this in the future by breaking into small groups with the same personnel, and having them complete activities to promote group cohesion between specific people.” Third, other participants applied group work concepts and procedures to specific areas of interest. Sarah, David, Brian, and Lauren discussed applying group work concepts in work with children and adolescents. Lauren, for instance, stated “If I’m running a group of five adolescent girls who are not taking therapy very seriously or engaged, I could facilitate an activity where each member would have an allotted time as a group leader.” In short, all 10 participants addressed the instruction prompt to apply group work concepts. However, participants responded to this prompt either with a general application, an application in a specific situation, or an application with a specific population or group. In the following paragraphs, I speculate on these three types of responses by relating these responses to two theories: Bloom’s Cognitive Taxonomy and Constructivism.

As described in Chapter One, mastery at each level in Bloom’s Cognitive Taxonomy provides the foundation for mastery at higher levels of complexity (Bloom et al., 1956): the knowledge level provides the foundation for the comprehension level; the comprehension level provides the foundation for the application level, and so on. Thus, what an individual knows (knowledge level) about a particular concept impacts how he/she would explain (comprehension level) and apply that concept (application level). Krathwohl (2002) suggested that knowledge

represents three ways of knowing about something. First, knowledge reflects “specific skills and algorithms;” second knowledge reflects “specific techniques and methods;” third, knowledge reflects criteria for determining when to use appropriate procedures” (p. 214).

Related to this study, I suggest that distinctions in participants’ knowledge-levels resulted in three variations of application-level responses. Participants responded with application-level statements in one of three ways because they possessed different aspects of knowledge for a given group work concept. For example, in the above paragraph, Brian demonstrated “knowledge of specific skills...” when he stated “I would use this in the future *by breaking into small groups...*[italics added]” Susan displayed “knowledge of specific methods...” when she remarked, “I would try to lessen the group’s anxiety about disclosing *and create an atmosphere of trust by modeling courage, openness, and honesty...*[italics added]” Lastly, Lauren demonstrated “knowledge of criteria...” when she reflected, “If I’m running a group of five adolescent girls *who are not taking therapy very seriously or engaged* [italics added] I could facilitate an activity where each member would have an allotted time as a group leader. Overall, all 10 participants responded to the application prompt and did so in ways that reflected their knowledge of that particular concept.

The theory of constructivism provides an alternative perspective related to the three types of responses described above. According to constructivism, teachers do not just transfer knowledge directly to their students; rather, learning is a collaborative process where students use their unique set of experiences to construct knowledge with interaction with teachers and others (Jonassen, 1994). In this study, participants arrived at this group class with unique backgrounds and developed shared experiences through their class-related small- and large-group experiences. When prompted to apply group work concepts, participants’ responses

reflected their background and experiences in class. For example, while reflecting on her small-group experience, Lauren provided an application-level response related to her background working with female adolescents: “If I’m running a group of five adolescent girls who are not taking therapy very seriously or engaged, I could facilitate an activity where each member would have an allotted time as a group leader. Similarly, Sarah stated “Knowing that I do [not] have to be physically present to influence their behavior, I would feel comfortable giving them [women who are divorced] an assignment to complete outside of group...” In summary, the collaborative nature of this class—a central component of constructivism—allowed participants to respond to the application prompt in a manner related to their experiences in this class and their unique background experiences.

Summary of Key Aspects of Findings

In this section I speculated on three key aspects within this study’s overall findings: analysis-level responses and the role of implicit theory; comprehension-level responses and the relationship between activities; and application-level responses and role of the written reflection instructions. By citing evidence from this study, I highlighted the importance of these aspects and positioned them in the theoretical and research literature. These specific aspects and overall findings supply counselor educators’ preliminary evidence to inform the cognitive complexity component of group work training.

Role of Researcher

In the analysis stage and discussion phases, I found an alternative meaning of embracing the process: While grinding my way through frustrating sticking points worked well for me in the proposal phase, forcing the issue in final two chapters most times led to less clarity. Paradoxically, I found the remedy in thinking less and listening more. This meant listening to my

ideas, hunches, and seemingly tangential thoughts without worry or over analysis: to notice and acknowledge ideas, thoughts, and reactions. Often times, I had to distance myself from the written reflections in order to immerse myself in them. If I did not, I became so mired in thought that I could not make sense of meaning embedded in the written responses. In the words of Fritz Perls, I had to “lose my mind and come to my senses.” My senses of intuition and curiosity allowed me to let the process unfold, rather than to force it as I done in the proposal phase. Admittedly, this did not come naturally for me and took discipline to learn this new practice. I discovered that it took a different kind of trust, a leap of faith. While I had a relatively clear conceptual and practical template for my proposal, I had no template for the final two chapters. The outcome was unknown. This newfound practice resulted in learning new research skills and an unknown part of me.

Although scholars and researchers suggest traditional and trustworthy ways to conduct qualitative research, each research study remains a unique experience for the researcher, the participants, and ultimately, the readers of the work. This research project is no exception. The following ideas may inform researchers and readers of insights I gained related to the research process. These ideas include using archival data (data previously collected), valuing written assignments as data sources, and suggesting revisions to my research approach were I to conduct this study again.

To begin, using preexisting data, written assignments collected by the faculty member teaching the group dynamics course, carried advantages and disadvantages. The most obvious advantage was that I had a readily available data source. This removed many of the practical constraints of data collection and allowed me, after developing a research proposal, to quickly engage in the data analysis. Another advantage of using pre-existing data is that participants did

not have to rely on their memories to provide information; participants wrote these written reflections while enrolled in the group dynamics course. Hence, the data provided me a snapshot of participant thoughts and ideas as they were learning group dynamics and methods. A third advantage of using pre-existing data is it provided me a unique perspective to explore the thoughts of participants: Because I did not directly interact with these participants, I could read each written reflection from a place of naiveté; I was not influenced by my personal feelings toward any participants. On the other hand, not having direct access with participants also came with disadvantages. Had I interviewed participants, I would have gained valuable insights from their direct verbal responses and maybe from my interpersonal experiences with these interviews. These interviews may have led me to questions, ideas, or offshoots of exploration. Additionally, interviewing participants would have given me the flexibility to explore my curiosity and build from the previous answers in the live interview. Lastly, participants would have likely responded in face-to-face interviews in distinct ways from written responses. Thus, I could have captured aspects of cognitive complexity that I could not from written responses. In short, having data already collected both benefitted and limited this study.

The richness of the data contained in these written reflection assignment shifted my thinking regarding assignments as data sources. In the proposal-writing phase, I was skeptical about the value of assignments as data. Part of my skepticism, I suppose, arose from an assumption that the accessibility of these assignments somehow made them less viable. My skepticism also stemmed from the assumption that assignments can be sterile academic exercises, not a medium to access inner thoughts of participants. In time, especially as I wrote the discussion of the findings, I discovered my previous assumptions were faulty. To the contrary, I discovered these written reflection assignments contained valuable information and

provided insights about participants' thoughts, struggles, processes, and feelings—the essence of a qualitative research focus. In addition, because each participant wrote five written reflections, I was able to explore the evolution of each participant's thoughts as he or she gained experience and knowledge about group work. In short, these assignments captured more than I imagined, and still contain areas yet unexplored (e.g., in the future research section I discuss the feelings section of the assignments). As I address in the implications section, counselor educators may be overlooking a wealth of data for which they have access.

Finally, were I to conduct this study again, I would change two main aspects. First, as I alluded earlier, I would trust, explore, and record all of my reactions, thoughts, and ideas. I was tentative at times throughout this process, and I think that came at the expense of creativity. Procedurally, related to this first aspect, I would spend copious amounts of time organizing my notes. While I organized all written notes into electronic ones, during future research projects I will spend more time thinking about the conceptual organization of these ideas; that is, I would put more effort into thinking about how these ideas fit with one another. Overall however, I am satisfied with how the research process unfolded.

Implications for Counselor Educators

Findings from this study revealed implications for promoting and assessing cognitive complexity in counselors-in-training learning group work. In the following paragraphs, I review these implications and discuss them in light of current literature. These implications may inform counselor education group work curricula and supervision of counselors-in-training learning group work.

First, Bloom's Cognitive Taxonomy equips counselor educators with a useful tool to assess cognitive complexity in supervision and structure activities to facilitate cognitive

complexity (Granello & Underfer-Babalis, 2004). In this study, I used Bloom's Cognitive Taxonomy to assess cognitive complexity in written reflection assignments. In a similar vein, counselor educators could use Bloom's Cognitive Taxonomy to assess cognitive complexity in group work training and supervision and in other areas of supervision. For example, Ober, Granello, and Henfield (2011) utilized Bloom's Cognitive Taxonomy to promote cognitive complexity in multicultural training.

Assignments with intentional, cognitive-oriented components may provide counselor educators with opportunities to promote cognitive complexity. For example, Lloyd-Hazlet and Foster (2013) suggested strategies to increase cognitive complexity in school counselor trainees working with LGBT adolescents. One activity included an assignment that prompted school counselor trainees to create a proposal for a counseling group with LGBT students. As Lloyd-Hazlet and Foster (2013) demonstrated, counselor educators can address cognitive complexity with purposeful activities and assignments.

As shown in this study, assignments' written instructions bear implications for promoting cognitive complexity in counselors-in-training. Researchers across disciplines examined the influence of written instructions in promoting critical thinking and cognitive complexity. For example, MacPherson and Stanovich (2007) found that "decontextualizing instructions" (i.e. instructions prompting participants to set aside prior knowledge and beliefs about topics) significantly reduced undergraduates' biases on certain topics. In terms of group work training, counselor educators could incorporate instructions that prompt students to list preconceived notions about a particular theory, practice, or intervention to encourage less bias in an attempt to expand their consideration of the material and concepts. In a recent study, Heijltjes, van Gog, Leppink, and Paas (2014) discovered Economics students who trained with explicit instructions

(i.e., rules for selecting evidence) performed better on critical thinking tasks than participants who did not train with explicit instructions. Counselor educators might apply this study's findings by creating assignments with intentional, step-by-step instructions. Related to group work training and cognitive complexity, counselor educators could write instructions to prompt counselors-in-training to respond at higher levels of Bloom's Cognitive Taxonomy. For example, to facilitate evaluation-level responses, written instructions might state "Select evidence from your small-group experience to evaluate your group leader's interventions." Writing instructions intentionally and explicitly provide counselor educators with another tool to promote cognitive complexity in counselors-in-training. In addition, it might be helpful to talk to the students about Bloom's Taxonomy and introduce the different stages into the discourse in the didactic instruction. To involve students in this meta-cognitive understanding of their learning might also increase their cognitive complexity (McAuliffe & Ericksen, 2011).

In addition to assignments and the written instructions therein, this study's findings related to the experiential component of training represent another key implication for counselor educators. Bore, Armstrong, and Womack (2010) discovered that school counselors trained with experiential methods were more likely to conduct psycho-educational groups in school settings. V. Barr (personal communication, September 16, 2014) described a group work program comprised of training experiences at the participant, process observer, and leader roles. In the present study, participants identified group work concepts in the experiential components; the experiential component seemed to illuminate group work concepts acquired in the didactic component of class. Thus, experiential training lends counselor educators another tool to promote cognitive complexity.

In conclusion, this study yielded implications related to cognitive complexity for teaching and supervising counselors-in-training learning group work. These implications include specific curricula strategies (including assignments and written instructions) that promote and assess cognitive complexity in didactic and supervision components of training. The following section shifts to possible next steps in this area of research.

Areas of Future Research

The descriptive nature of this study marks a preliminary exploration of cognitive complexity in counselors-in-training learning group work. In this section, I present ideas for future research, which include studies with varying methodology and populations. I conclude this section by suggesting studies that investigate promoting cognitive complexity in group work training. Though not an exhaustive list of possible research ideas, I hope these ideas generate further exploration into cognitive complexity in the group work domain.

Future studies with methodological variations

Replication studies present one obvious area for future research. Because counselor educators routinely assign various forms of written work, they possess readily available data sets. This study provides counselor educator researchers a methodology to analyze the content of written assignments prepared for a group work class. In addition, reanalyzing this study's data set presents multiple possibilities for future research. First, a research team interested in the topic could reanalyze the 10 sets of written reflections following this study's exact methodology. Because of the subjective nature of analysis, reanalyzing these 10 sets of written reflection assignments could yield both nuance and/or fundamental difference in categories/themes, data coding, and interpretation and findings (Creswell, 2013).

Second, cognitive-based theories other than Bloom's Cognitive Taxonomy, such as Perry's (1970) Scheme of Intellectual and Ethical Development, represents another way to reanalyze these written reflection assignments. Perry's (1970) Scheme of Intellectual and Ethical Development consists of nine progressively complex intellectual and ethical "positions". Reanalyzing this data set using Perry's Scheme of Intellectual and Ethical Development might uncover participants' beliefs about group work concepts, versus describing the complexity participants' responses (as in this study). For example, participants' first written reflection responses might reveal beliefs indicative of the dualistic scheme (e.g., "right/wrong" ways to lead group) and subsequent written reflection responses might reveal beliefs indicative of the "relativistic" scheme (e.g., "the situation dictates how to lead group".) In summary, Perry's Scheme of Intellectual and Ethical Development would help researchers explore participants' underlying beliefs of group work concepts rather than assessing levels of responses.

Third, in addition to cognitive complexity, researchers could also reanalyze this data set for "affective complexity". As described in chapter three, these written reflections contain a "feelings" section or prompt where participants reflected on feelings experienced during their group experiences. Researchers could use the affective domain of Bloom's Taxonomy (Bloom's Taxonomy of Learning Domains, 2013) to analyze this portion of data. According to Krathwohl, Bloom, and Masia (1973), the affective domain addresses how individuals manage their feelings, beliefs, and attitudes. As with the cognitive domain of Bloom's Taxonomy, the affective domain outlines progressive levels (from the simplest level, awareness, to the most complex affective level, internalizing values) of affective complexity (Krathwohl, Bloom, & Masia, 1973). Because this study's research question relates to cognitive complexity, I did not use the feelings sections of the written reflection assignments. The affective domain of Bloom's Taxonomy offers a way

to analyze the feeling section of this data set and provides another possible study. I found only one study in the counselor education literature (Tansey, Schopieray, Boland, Lane, & Pruett, 2009) related to Bloom's Affective Taxonomy. Studies such as this one could help counselor educators assess and promote counselors-in-training levels of affective complexity.

To understand cognitive complexity in group work from new perspectives, researchers could employ other qualitative approaches such as phenomenology or case studies. A phenomenological approach could allow researchers to gain better understanding of the subjective experiences of counselors-in-training in group work. A more subject-directed approach might lend itself to explore the experience more purely from the participant perspective. Results may provide a deep and rich description of the experience from the counselor-in-training perspective (Thomas & Pollio, 2002). The case study approach would allow researchers to explore the cognitive complexity of a counselor-in-training in the context of his or her group work training (Yin, 2002). A case study such as this one might provide further understanding into "how" and "why" aspects of learning group work (Yin, 2002). Phenomenology and case studies represent only two possible qualitative methodologies to further study cognitive complexity in group work.

In addition to qualitative methods, quantitative methods would allow researchers to measure quantitative changes in cognitive complexity during training, compare training programs influence on cognitive complexity, or explore cognitive complexity in certain domains of counseling practice. Quantitative methods would allow researchers to measure changes in cognitive complexity during training. For example, Fong et al. (1997) examined changes in cognitive complexity during the course of master's in counseling program. Quantitative methods could also measure differences in cognitive complexity in training programs. Duys and

Hedstrom (2000) compared differences in cognitive complexity between counselors-in-training enrolled in a basic skills course versus those enrolled in a lecture-oriented course. This could provide a way researchers could explore the variables responsible for promoting cognitive complexity. Finally, Welfare and Borders (2010) examined cognitive complexity in different domains or aspects of counseling practice (e.g., individual counseling, group counseling, etc.). In conclusion, quantitative research studies such as these could help track some of the changes in cognitive complexity.

As a final suggestion, future research could benefit from longitudinal studies. The present study explored counselors-in-training enrolled in a one-semester group dynamics and methods course. Longitudinal studies could identify the qualitative and quantitative changes that occur during over the course of training or professional practice.

Future studies with different populations

Research possibilities abound with cognitive complexity and different populations of counselors-in-training. For instance, the research literature could benefit from studying counselors-in-training learning group work from specific concentrations, such as school counseling or mental health counseling. The participants for the present study included both counselors-in-training from both concentrations and did not distinguish participants by concentration in the analysis. Hill, Vereen, McNeal, and Stotesbury (2013) examined the influence of counseling “specialties” (i.e. concentrations) on multicultural awareness, knowledge, and skills and found no differences between counselors-in-training in school and mental health specialties. As with these studies, the literature could benefit from studies focused on exploring cognitive complexity in counselors-in-training learning group work from different concentrations.

Future studies could also explore cognitive complexity about multicultural understanding in counselors-in-training learning group work. In the present study, I analyzed participants' written reflections as one group and did not distinguish participants according to age, ethnicity, or gender. Future studies could focus on exploring qualitative and quantitative distinctions and similarities in cognitive complexity related to multiculturalism. These studies, in turn, could inform teaching, supervision, and other aspects of counselor education. For example, Ober, Granello, and Henfield (2009) proposed a supervision model to enhance cognitive complexity related to multicultural competence among counselors-in-training. These researchers maintain that counselors-in-training must possess cognitive complexity related to multiculturalism. Future studies could build on the work of Ober, Granello, and Henfield (2009) and focus on cognitive complexity related to multicultural understanding in counselors-in-training learning group work.

Along with studies focused on counselors-in-training, other possible studies include research focused on cognitive complexity of professional counselors who conduct group work. Research with this population could reveal the specific aspects of cognitive complexity among professional counselors practicing group work. This, in turn, may assist counselor educators identify those expert qualities they wish to promote in training (Kivlighan, Markin, Stahl, & Salahuddin, 2007; Rubel & Kline, 2010). For example, Mayfield et al. (1999) discovered that expert therapists conceptualize clients' situations in terms of patterns and themes; identifying themes and patterns allowed the expert therapist to be more effective and efficient with treatment planning. If counselor educators know that identifying themes and patterns represent an important skill of effective case conceptualization, then they can intentionally promote this skill through specific training. Future research could benefit from studies such as Mayfield et al. (1999) that identify specific aspects of cognitive complexity in professional counselors.

Counselor training strategies that promote cognitive complexity in group work

Counselor educators could benefit greatly from future studies that explore training strategies that promote cognitive complexity in counselors-in-training learning group work. Findings from this study indicated a possible link between the experiential and didactic components of this particular group dynamics and methods course; at best, I could only describe and speculate on this relationship. Future studies could identify the specific instructional practices that promote cognitive complexity in group work. Additionally, future research could benefit from studies on group work curricula that discern underlying mechanisms that promote cognitive complexity in counselors-in-training learning group work.

In this section I attempted to bridge the present study with suggestions for future research. The research literature needs rigorous qualitative and quantitative studies with several populations and with training strategies that promote further levels of cognitive complexity. The ideas presented here may help researchers generate new ideas or conceptualize these suggestions in novel ways.

Conclusion of Discussion

In this chapter, I discussed three key aspects of the findings: theory and analysis-level responses; group activities and comprehension-level responses; and, written reflection instructions and application-level responses. This discussion revealed implications for counselor educators including strategies to assess and promote cognitive complexity in didactic and supervision components of training. Additionally, this discussion uncovered research ideas for counselor education researchers. These included studies with varying methodology and population and studies focused on promoting cognitive complexity in group work training.

Overall, in light of its limitations, this study provided a preliminary, descriptive examination of cognitive complexity of counselors-in-training learning group work.

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APPENDICES

APPENDIX A
IRB APPROVAL FORM B

THE UNIVERSITY of TENNESSEE 
KNOXVILLE
Office of Research & Engagement
INSTITUTIONAL REVIEW BOARD (IRB)

1534 White Ave.
Knoxville, TN 37996-1529
865-974-7687
fax 865-974-7400

October 29, 2013

IRB#: 9321 B

Title: Describing the Cognitive Complexity of Counselors-in-Training Enrolled in a Group Dynamics and Methods Course

John Davison
Educational Psychology & Counseling
329 Chestnut Grove Church Road
Jonesborough, TN 37659

Marianne Woodside
Educational Psychology & Counseling
449 Claxton Education Complex
Campus - 3452

Your project listed above has been reviewed and granted IRB approval under expedited review.

This approval is good for a period ending one year from the date of this letter. Please make timely submission of renewal or prompt notification of project termination (see item #3 below).

Responsibilities of the investigator during the conduct of this project include the following:

1. To obtain prior approval from the Committee before instituting any changes in the project.
2. If signed consent forms are being obtained from subjects, they must be stored for at least three years following completion of the project.
3. To submit a Form D to report changes in the project or to report termination at 12-month or less intervals.

The Committee wishes you every success in your research endeavor. This office will send you a renewal notice (Form R) on the anniversary of your approval date.

Sincerely,


Brenda Lawson
Compliances

Enclosure

Big Orange. Big Ideas.

Attachment 1
Original Email Requesting Participation

From: Joel F Diambra [<mailto:jdiambra@tennessee.edu>]
Sent: Monday, March 11, 2013 8:16 AM
Subject: CounselorEducation55445505FA2011: Fall 2011 COUN 554 Group Dynamics Students - Request for Help!

This is a call out to all Fall 2011 Group Dynamics Students,

I need your help!

One of our doctoral students, John Davison, wants to analyze written reflections (WRs) from group dynamics course students for his dissertation. If you are willing to submit ALL 5 of your WRs to me electronically or hard copy, ideally versions without my comments on them, I will ensure your name and identifying information is removed from WRs and pass these along to John for analysis. We DO NEED the WR # on each so we know the order in which you wrote them.

Written Reflections will be analyzed for themes across the developmental period of the course and responses will remain anonymous; no student author will be identified. As I said before, names will be removed from WRs and these data will be stored in a locked file cabinet within a locked office for security purposes. All data will be destroyed three years following the end of the study.

Thanks for considering my request. Because I know you all, have your emails, and can screen out identifying information before John receives the data, I offered to collect the WRs for him. This provides one additional step to ensure anonymity of responses. By submitting your WRs you agree that John Davison can use these data for purposes of his dissertation and for future presentation and publication purposes.

If you have any questions or concerns, please contact me: jdiambra@utk.edu or 865 974-8774. ~ dr.d.

UTK EXPEDITED Approval:

OCT 29 2013 - OCT 29 2014

APPENDIX B

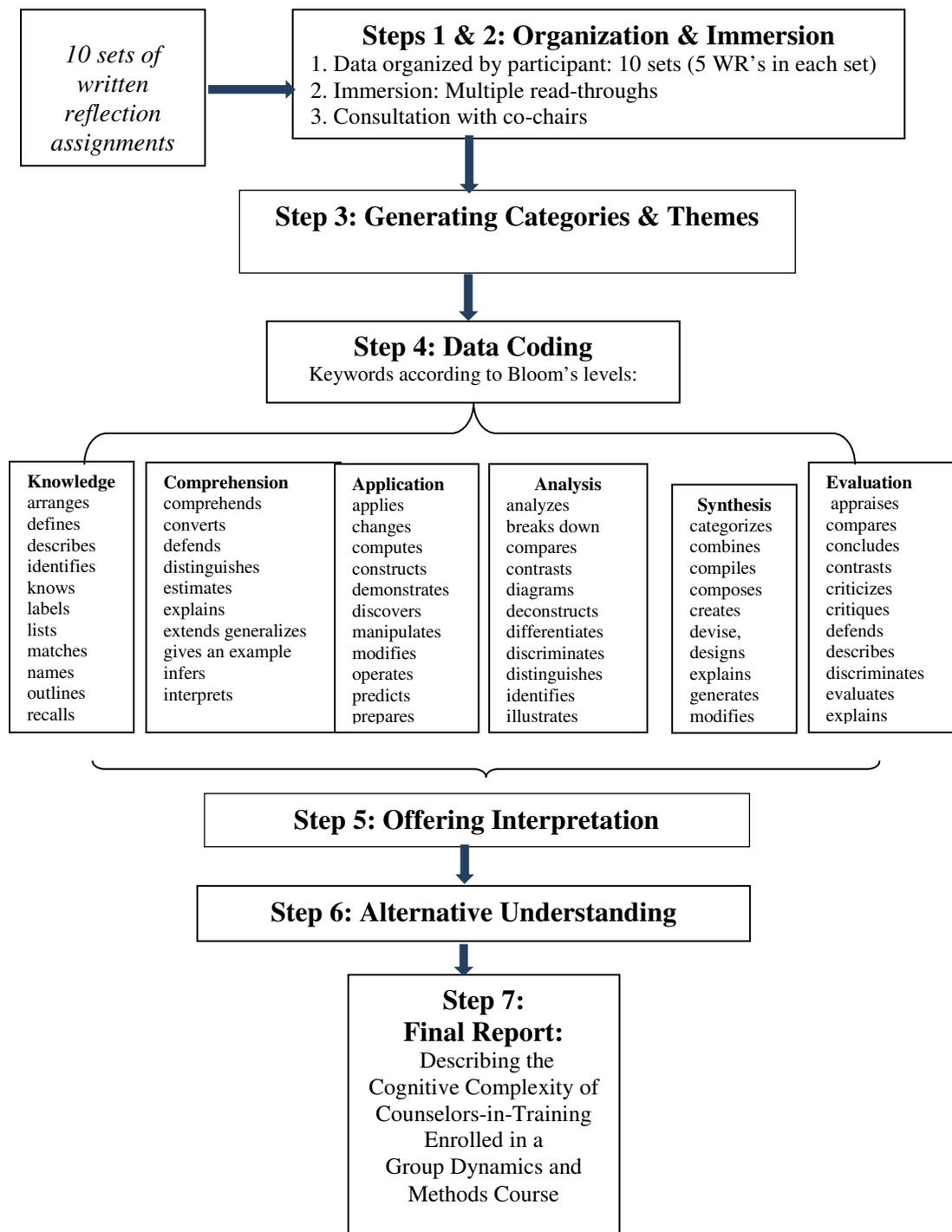


Figure 1: Marshal & Rossman's (2011) Data Analysis Procedures

APPENDIX C

Table 1: Key Words According to Blooms' Cognitive Taxonomy

Bloom's Cognitive Taxonomy Level	Description of Level	Key Words
Knowledge	The ability to recite facts, figures, statistics, etc.	arranges, defines, describes, identifies, knows, labels, lists, matches, names, outlines, recalls, recognizes, reproduces, selects, states.
Comprehension	The ability to understand, interpret, compare, contrast, etc.	comprehends, converts, defends, distinguishes, estimates, explains, extends, generalizes, gives an example, infers, interprets, paraphrases, predicts, rewrites, summarizes, translates.
Application	The ability to use knowledge to solve problems in novel situations.	applies, changes, computes, constructs, demonstrates, discovers, manipulates, modifies, operates, predicts, prepares, produces, relates, shows, solves, uses.
Analysis	The ability to separate a problem into parts.	analyzes, breaks down, compares, contrasts, diagrams, deconstructs, differentiates, discriminates, distinguishes, identifies, illustrates, infers, outlines, relates, selects, separates.
Synthesis	The ability to assemble parts of a problem or situation to form a new, unified whole.	categorizes, combines, compiles, composes, creates, devises, designs, explains, generates, modifies, organizes, plans, rearranges, reconstructs, relates, reorganizes, revises, rewrites, summarizes, tells, writes.
Evaluation	The ability to judge or evaluate a decision based on a set of criteria.	appraises, compares, concludes, contrasts, criticizes, critiques, defends, describes, discriminates, evaluates, explains, interprets, justifies, relates, summarizes, supports.

Bloom's Taxonomy of Learning Domains (n.d.).

APPENDIX D

Table 2: Categories and Themes

	Roles	Sharing/ Disclosing	Norms	Activities	Leader Styles/ Techniques	Environment	Preparation	Choice/ Autonomy
Mary					*		*	
Jennifer		*			*			*
Megan	*			*	*	*		
Sarah	*	*	*		*			
David			*	*	*			*
Susan		*			*			*
Brian		*		*	*		*	
Karen		*			*			*
Matthew	*			*	*			
Lauren	*			*	*			
Totals	4	5	2	5	10	1	2	4

APPENDIX E

Table 3: Frequency Table of Statements across levels in Bloom's Cognitive Taxonomy

	Knowledge	Comprehension	Application	*Analysis WR 1, 2, 3, 4, 5	*Synthesis WR 1, 2, 3, 4, 5	*Evaluation WR 1, 2, 3, 4, 5	Totals
Mary	6	32	4	6	0	0	48
				-1,3,2,-	-----	-----	
Jennifer	78	45	25	4	1	1	154
				-0,1,3,0	-0,0,1,0	-0,0,1,0	
Megan	74	73	25	3	0	1	176
				0,0,0,0,3	-----	0,0,0,0,1	
Sarah	26	76	26	16	0	1	145
				2,6,2,1,5	-----	0,0,1,0,0	
David	54	23	16	15	0	0	108
				4,7,2,0,2	-----	-----	
Susan	42	24	12	8	0	0	86
				1,4,2,1,-	-----	-----	
Brian	46	65	13	3	0	0	127
				0,3,0,0,0	-----	-----	
Karen	1	39	10	0	0	0	50
				-----	-----	-----	
Matthew	54	20	17	5	1	10	107
				2,2,0,-,1	0,1,0,0,0	0,4,3,0,3	
Lauren	77	40	14	0	0	0	131
				-----	-----	-----	
Totals	458	437	162	60	2	13	1132
				10, 25, 9, 5, 11	0,1,0,1,0	0,4,4,1,4	

*I compared frequency of statements across written reflection assignments 1-5 in the analysis, synthesis, and evaluation levels only.

VITA

John Davison was born in Hagerstown, Maryland on January 27, 1976. He earned a Bachelor of Science in sociology from Radford University and a Master of Arts in counseling from East Tennessee State University. John's professional background includes experience in higher education, residential treatment, and inpatient hospitalization. He has co-authored peer-reviewed journal articles and presented at local, regional, and national conferences. John is a National Certified Counselor and serves as an Assistant Professor of Psychology at Northeast State Community College in Blountville, TN. John will graduate with a Ph.D. in counselor education in December 2014.