Complex Thought for Complex Work: Preparing Cognitively Complex Counselors for Work in Diverse Settings

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COMPLEX THOUGHT FOR COMPLEX WORK: PREPARING COGNITIVELY COMPLEX COUNSELORS FOR WORK IN DIVERSE SETTINGS

by

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B.S. December 2016, Liberty University
M.A. May 2019, Liberty University

A Dissertation Submitted to the Faculty of Old Dominion University in Partial Fulfillment of the Requirements for the Degree of

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EDUCATION - COUNSELING

OLD DOMINION UNIVERSITY
May 2022

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ABSTRACT

COMPLEX THOUGHT FOR COMPLEX WORK: PREPARING COGNITIVELY COMPLEX COUNSELORS FOR WORK IN DIVERSE SETTINGS

Alexandra C. Gantt
Old Dominion University, 2022
Chair: Dr. Gülşah Kemer

Counselor education researchers have explored the need for high levels of cognitive complexity (CC) in mental health counselors due to its relationship with high quality counseling skills and counselor ways of being (e.g., Castillo, 2018; McAuliffe & Lovell, 2006; Ridley et al., 2011; Welfare & Borders, 2010b). In these studies, researchers have called for continued study of means of enhancing CC in counselors in training (CITs) through andragogical efforts (e.g., Castillo, 2018; Duys & Hedstrom, 2000; Welfare & Borders, 2010a). However, we do not have an understanding of minimally acceptable CC for graduating CITs. In this study, I explored counselor educators’ perspectives of a minimally acceptable level of CC in master’s level CITs at the end of internship. I followed three primary steps of Q method which yielded two factors, titled: (1) Trainee’s Conceptual Integration Ability and (2) Trainee’s Ability to Apply Integrated Knowledge. The findings of this study inform teaching, supervision, and gatekeeping practices in counselor education programs, filling in the gaps for how we assess CC and prepare students to be more cognitively complex in their thinking. This dissertation outlines and details the background, purpose, significance, methodology for the present study, including a review of the existing literature, explanation of results, and a discussion pertinent to counselor educators.
This dissertation is dedicated to my parents, the first to show me unconditional positive regard. I am here because of your love and support.
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CHAPTER I

Introduction

In Chapter I, I introduce and define the concept of cognitive complexity and explain the importance of cognitive complexity according to the extant literature in relation to the field of mental health counseling. Next, I will present the purpose of the current study along with its significance to our practices. I will conclude this chapter with the definitions of key terms and a brief overview of the following chapters.

Background of the Problem

Stemming from various theories of development (e.g., Kohlberg, 1987; Perry, 1970/1981; Piaget, 1932), cognitive complexity (CC) has become an increasingly focused and valued topic in the counseling and counselor education literature over the last 40 years, though the body of research on the topic remains small (Castillo, 2018). Granello (2010, p. 92) defined CC as “…the ability to absorb, integrate, and make use of multiple perspectives” and suggested that higher levels of CC in counselors have been associated with various benefits pertinent to the complex work of counseling. Given the need for counselors who can convey empathy, act as social justice advocates, and consider the intersectionality of innumerable client factors, Castillo (2018) implored counselor educators to embrace and seek to increase CC in counselors in training (CITs) through teaching and supervision practices. However, CC is challenging to assess (Castillo, 2018) and researchers have called for further exploration of CIT CC and its development (e.g., Castillo, 2018; Duys & Hedstrom, 2000; Endicott et al., 2003; Granello, 2010; Kindsvatter & Desmond, 2013; Little et al., 2005; McAuliffe & Lovell, 2006; Welfare & Borders, 2010a).
The practice of counseling itself was defined by Blaas and Heck (1978) as “the mutual exchange and process of complex verbal and nonverbal information” (p. 257). By nature, the counselor’s work includes “identify[ing] each client’s unique combination of characteristics” (Welfare & Borders, 2010b, p. 188). Since such work includes gray areas where the counselor must be able to approach from multiple perspectives (McAuliffe & Lovell, 2006) as they work with clients from diverse backgrounds, an integral aspect of training is increasing counselor CC (Branson & Branson, 2020; Castillo, 2018; Duys & Hedstrom, 2000; Granello, 2010; Kindsvatter & Desmond, 2013; Wilkinson et al., 2019). On the other hand, multiple other definitions of CC exist in the counseling and counselor education literature (Castillo, 2018).

Duys and Hedstrom (2000) defined CC as "the degree of cognitive differentiation or the number of interpersonal constructs a person can use to define social reality" (p. 11), while Tangen (2017) emphasized the role of emotion, stating that “...perhaps an important component of cognitive complexity is the ability to develop sophisticated schemata around the experience of emotion and use this knowledge to understand the self and others better” (p. 65). Furthermore, in their definition of CC, Welfare and Borders (2010a) emphasized the constructs of counselor integration and differentiation of client characteristics. Integration and differentiation are integral aspects of understanding CC, which stems from Kelly’s (1955) Personal Construct Theory and Crockett’s (1965) later conceptualizations of the individual’s cognitive system as expanding through new experiences and constantly making inferences (i.e., integration) based on a few perceptions (i.e., differentiation). Welfare and Borders (2010a) remarked: “…differentiation refers to the number of client characteristics the counselor can recognize, whereas integration refers to the counselor’s system for understanding how those characteristics fit together” (p.
Thus, the more cognitively complex the counselor, the more client characteristics they are able to identify (i.e., differentiation; Welfare & Borders, 2010a).

Wilkinson and Dewell (2019) defined integration as identifying relationships within information and highlighted the importance of making connections and refining conceptualizations which inform treatment as more information is gathered. Similarly, Wilkinson et al. (2020) described the process of integration as “identify[ing] meaningful connections” across categories of information (p. 56). In practice, this may look like a counselor identifying relationships between different pieces of client information (e.g., reported past experiences, body language in session, various multicultural factors) and making sense of these connections in ways that are practical and experiential, not just theoretical in nature (Wilkinson et al., 2020).

These presentations of CC suggest that counselors with higher levels of CC formed more complex conceptualizations of clients (Ladany et al., 2001; Ridley et al., 2011) and had more accurate understandings of clients (Blocher, 1983). Additionally, Wilkinson and Dewell (2019) contended that understanding the uniqueness of integration and differentiation as comprising CC is essential to the continued development of these attributes in CITs through unique counselor education andragogies. Overall, as suggested by Castillo (2018) in a systematic review of the CC literature, CC can be understood as the counselor’s ability to integrate, synthesize, and make sense of the complex, often ambiguous information presented by clients. In the present study, CC is defined using Granello’s (2010, p. 92) definition: “…the ability to absorb, integrate, and make use of multiple perspectives.”

In addition to the formation of more complex client conceptualizations as described above (Ladany et al., 2001; Ridley et al., 2011), various other benefits to higher levels of CC have been identified in the counseling and counselor education literature. These benefits include
higher levels of and more consistent empathy (Blaas & Heck, 1978; McAuliffe & Lovell, 2006),
greater flexibility in thought and use of skill (Borders, 1989; McAuliffe & Lovell, 2006), higher
tolerance of ambiguity (Granello, 2010; McAuliffe & Lovell, 2006), and the abilities to
effectively utilize counseling skills and integrate disparate client information for the sake of
conceptualization (Branson & Branson; 2020; Castillo, 2018; Welfare & Borders, 2010b).
Additionally, counselor education researchers have suggested various training and supervision
models purposed to address and increase CIT CC (Choate & Granello, 2006; Granello &
Underfer-Babalis, 2004; Ober et al., 2009; Little et al., 2005; Ridley et al., 2011).

Additionally, research has been conducted concerning CIT cognitive development over
time (Fong et al., 1997; Granello, 2002; Granello, 2010; Kindsvatter & Desmond, 2013; Welfare
& Borders, 2010b; Wilkinson & Dewell, 2019). Researchers have suggested that increases in CC
occur over time as more time is spent in the counseling field (Granello, 2010) or in training
programs (Kindsvatter & Desmond, 2013). However, researchers also found no significant
changes in cognitive development throughout the counselor training process in their samples of
CITs (Fong et al., 1997; Granello, 2002). Thus, while the literature is clear that CC is positively
related to critical counseling skills and thinking processes, and that counselor educators should
focus attention on increasing this construct in CITs (Castillo, 2018; Duys & Hedstrom, 2000;
Endicott et al., 2003; Granello, 2010; Kindsvatter & Desmond, 2013; Little et al., 2005;
McAuliffe & Lovell, 2006; Welfare & Borders, 2010a), there seems to be a lack of clarity
regarding how the process of cognitive development occurs and may be best supported by
counselor educators. Further exploration of the development and CC in CITs before, throughout,
and after the training process is warranted.
Furthermore, the field of counseling has progressively moved towards an increased focus on multicultural competence (Ratts et al., 2016), and researchers have explored the relationship between CC and related issues of multicultural competence. For instance, Ober et al. (2009) highlighted the role of increased CC in promoting multicultural competence in their Synergistic Model of Multicultural Supervision. They suggested the promotion of supervisees’ CC as a means to enhance multicultural competence due to the relationship between CC and greater tolerance for ambiguity (Jennings & Skovholt, 1999). Similarly, Wendler and Nilsson (2009) explored CC as a predictor of universal-diverse orientation (UDO), “...an awareness and acceptance of both the similarities and differences among people” (Miville et al., 1999, as cited in Wendler & Nilsson, 2009, p. 28). They suggested that more cognitively complex CITs tend to exhibit higher UDO, providing more complex and less stereotypical judgments about their clients concerning issues of diversity. Additionally, CITs with higher levels of CC engaged in more sociopolitical action-related efforts, urging counselor educators to emphasize CIT consideration of multicultural factors when conceptualizing clients.

Little et al. (2005) called specifically for continued exploration of how levels of CC may differ according to CIT stage of training. Similarly, Castillo (2018) emphasized the need for continued research focus on increasing CIT CC, highlighting the need for researchers to determine “…a contemporaneous scope of cognitive complexity and its influence on counseling and supervisory skill and skill development” (p. 25). Although accredited counseling programs adhere to the standards set forth by the Council for Accreditation of Counseling and Related Educational Programs (CACREP; 2016) and specific programs often utilize unique means of CIT skill assessment at different points throughout the training, minimal competence concerning CIT CC for graduation has yet to be determined. Kemer et al. (2017) emphasized the importance
of understanding and defining minimal competencies for training, highlighting developmental differences between CITs. They also found that skills and attributes like multicultural competence and self-awareness were often not evaluated by counselor training programs. Specifically, Kemer et al. suggested that minimal competency could be defined and thereby differentiated for students at the practicum and internship levels of training.

In sum, there are various benefits to higher levels of CC and counselor educators have emphasized the importance of increasing this construct in CITs, evidenced by the creation of various practical models concerning CIT CC. However, despite the importance of CC for counselors and the call for focused efforts to increase CIT CC, researchers have yet to explore a minimally acceptable level of CC for CITs at the end of their training program. To that end, I explored counselor educators’ perspectives on the specific characteristics of a CIT at the end of internship with the minimally acceptable level of CC required to enter the counseling field as a resident.

**Purpose of the Study**

Castillo (2018) described CC in the extant counseling and counselor education literature as “a small yet established niche” (para. 1). The studies within this niche have yielded findings suggesting the vitality of CC for counselors and thereby the importance of counselor educators assessing for and seeking to increase this quality in CITs (e.g., Castillo, 2018; Granello, 2010; Granello & Underfer-Babalis, 2004; Ladany et al., 2001; McAuliffe & Lovell, 2006; Welfare & Borders, 2010a/b). Additionally, the field of counseling has progressed towards greater emphasis on multicultural competence and social justice activism (Ratts et al., 2016), and such competence has been found to be associated with higher levels of CC (Ober et al., 2009; Wendler & Nilsson, 2009).
However, to date, researchers have not explored what counselor educators perceive as a minimally acceptable level of CC, or what role multicultural competence does or does not play within that minimally acceptable level. Information in this area of minimal competence would serve to fulfill researchers’ calls for further exploration of CC and CIT development (e.g., Castillo, 2018; Duys & Hedstrom, 2000; Endicott et al., 2003; Granello, 2010; Kindsvatter & Desmond, 2013; Little et al., 2005; McAuliffe & Lovell, 2006; Welfare & Borders, 2010a) and, more specifically, contribute to a foundational understanding of what comprises this minimally acceptable level of CC for a graduating CIT, informing teaching, supervision, and gatekeeping practices. Therefore, I utilized Q method, a mixed-methods approach, to examine counselor educators’ perspectives regarding the characteristics of a CIT at the end of internship with a minimally acceptable level of CC required to enter the field, including their perspectives of multicultural competence pertinent to this question.

**Significance of the Study**

This study yields valuable research and training implications for counselor educators and supervisors pertinent to establishing an understanding for a minimally acceptable level of CC among CITs. Specifically, the anticipated research and training implications of this study were three-fold: (1) an identification of counselor educators’ primary foci regarding assessment for CC; (2) a foundational understanding of the minimally acceptable level of CC necessary to graduate from a master’s level counseling program; and (3) an insight on counselor educators’ perspectives concerning multicultural competence in particular related to CC.

Firstly, the findings of this study provide novel information on what counselor educators focus on when assessing CC in CITs. Although CC is understood as integral to the work of the counselor, numerous definitions of the term exist in the counseling and counselor education
literature (Castillo, 2018), and, to date, there is no consensus on how counselor educators understand CC. Furthermore, researchers have yet to explore what assessment and consideration of CC by counselor educators looks like, outside of the use of assessment tools. Thus, the patterns and themes generated by this study reveal and fill gaps in training, faculty supervision, and gatekeeping – all of which occur during the internship experience. Specifically, the information from this study may be used to alter assessment practices and inform focus on specific topics (e.g., multiculturalism, client conceptualization, use of particular counseling skills) by counselor educators and supervisors.

Next, the findings of this study provide a foundational understanding of the minimally acceptable level of CC necessary for successful completion of a clinical mental health counseling program. This information provides counselor educators and supervisors with a more specific understanding of what in particular (i.e., specific behaviors, attributes, and ways of thinking) they should be assessing for and thereby focusing on in their training and supervision practices of CITs at the end of internship. Such understanding can assist with assessing CC pertinent to CITs at specific developmental levels, in this case at the end of internship, leading to increased standardization of assessment processes. Supervisors and counselor educators alike could utilize this information to better ensure CITs are prepared to enter the field as residents in counseling and receive the pre-graduation support necessary to do so.

Finally, insight on counselor educators’ perspectives of how multicultural competence is or is not related to CC is an area yet to be explored by counselor education researchers. Such insight would perhaps reveal gaps in counselor educators’ understandings of CC and multicultural competence alike. With this information, counselor educators of doctoral-level students may be able to better prepare future counselor educators to address CC in general and
emphasizing multicultural competence in the CITs they work with. Furthermore, the findings of this study may also provide a basis for future studies of counselor educator CC, multicultural competence, and the like.

**Theoretical Framework**

Various theories of cognitive development (e.g., Harvey et al., 1961; Loevinger, 1976; Perry, 1970) undergird the understanding of CC in counseling. For this mixed-methods study, I utilized Perry’s (1970/1981) theory of cognitive development to explore participants’ subjective perspectives of the characteristics of a CIT at the end of internship with a minimally acceptable level of CC. This theory has been utilized by counselor education researchers to examine CC (e.g., Granello, 2002/2010a; Lyons & Hazler, 2002; McAuliffe & Lovell, 2006) and provided a basis for understanding development as movement towards thinking which is more relativistic, or cognizant of varying experiences and beliefs amongst people, and accepting of the idea that there are not always “right” answers (Perry, 1970/1981).

In this study, I conceptualize the final stage of Perry’s (1970/1981) theory, *commitment*, as aligning with high CC. Perry describes individuals within this final stage as committed to a certain belief system or set of values, having chosen these beliefs for themselves, not solely based on the instruction of authority figures; however, individuals in this stage of cognitive development are also accepting of others’ perspectives, experiences, and beliefs, reflecting the aforementioned stage of relativism. Similarly, cognitively complex individuals reflect similar ways of thinking, evidenced by empathy towards others (Blaas & Heck, 1978; McAuliffe & Lovell, 2006), tolerance of ambiguity (Granello, 2010; McAuliffe & Lovell, 2006), and the ability to consider the influences of innumerable factors in their client conceptualizations (Duys & Hedstrom, 2011; Ladany et al., 2001; Welfare & Borders, 2010b; Wilkinson & Dewell, 2019).
Research Questions

Through this mixed-methods study, I sought to answer the following research questions:

(1) What are counselor educators’ perspectives on the characteristics of a CIT at the end of internship with a minimally acceptable level of CC?

(2) How do these characteristics of a CIT with a minimally acceptable level of CC reflect multicultural competency?

Research Design

I utilized Q method to examine how counselor educators define a cognitively complex CIT at the end of internship. Q method is a systematic, mixed methods approach that allows researchers to study subjective human experiences (McKeown & Thomas, 2013). McKeown and Thomas (2013) defined subjectivity as “...a person’s communication of a point of view on any matter of personal or social importance” (p. ix) and emphasized that, as part of Q method, such subjective viewpoints are communicable and measurable. Moreover, the authors also defined the purpose of Q method as “...to discern people’s perceptions of their world from the vantage point of self-reference” (p. 1). Thus, through this study, I explored counselor educators’ subjective viewpoints regarding the definition of a cognitively complex CIT who is at the end of their internship experience.

Definition of Terms

Cognitive Complexity (CC)

For this study, CC is defined using Granello’s (2010) definition: “...the ability to absorb, integrate, and make use of multiple perspectives” (p. 92).
**Cognitive Development**

Cognitive development is defined as progression towards thinking, which is more flexible, considerate of multiple perspectives, and detailed in understanding (Castillo, 2018; Perry, 1970/1981; Welfare & Borders, 2010b). This definition is based on Perry’s (1970/1981) theory of cognitive development which describes movement away from more dualistic thinking towards thinking which is more relativistic, including greater embrace of ambiguity and the idea that “right” answers may not subsist. As CITs develop cognitively, they become more cognitively complex in their thinking.

**Counselor Educator**

In this study, a counselor educator is defined as an individual actively teaching CITs in a CACREP-accredited master’s in clinical mental health counseling program in the United States and who has provided group, individual, or triadic supervision for internship students for at least three semesters within the last three years.

**Counselor in Training (CIT)**

For the purposes of this study, a counselor in training (CIT) is defined as an individual currently enrolled in their second semester internship and actively taking classes in a CACREP-accredited master’s in clinical mental health counseling program in the United States.

**Internship**

Internship is defined as the supervised counseling experience CITs are to complete prior to graduation. According to the CACREP Standards (2016), the internship experience includes 600 hours of combined direct and indirect supervised counseling work over the course of one or two semesters, including one and a half hours per week of group supervision led by a faculty member.
**Minimal Competence**

Minimal competence is defined for the purposes of this study as the base level of proficiency or capability in a particular area, in this case CC.

**Multicultural Competence**

Multicultural competence is defined based on Ratts’ et al. (2016) description of multicultural and social justice competence:

(a) understanding the complexities of diversity and multiculturalism on the counseling relationship, (b) recognizing the negative influence of oppression on mental health and well-being, (c) understanding individuals in the context of their social environment, and (d) integrating social justice advocacy into the various modalities of counseling (pp. 30-31).

In this study, multicultural competence encompasses each of these four actions or ways of thinking and can be understood as ever-changing or growing as counselors develop and engage in lifelong development of self and other-awareness.

**Overview of the Chapters**

The following chapters include a review of the literature and a detailed overview of the methodology. In Chapter II, I provide a literature presentation of CC and the theories undergird understanding of the CC concept. I also include information on CC relative to counselor training, in particular assessments and andragogical methods. In Chapter III, I provide an overview for the proposed methodology, including an explanation of Q method, the sample, and means of data collection and analysis. Chapter IV describes the results of the study, while Chapter V includes discussion of the results pertinent to counselor educators, researchers, and supervisors.
CHAPTER II

Literature Review

Chapter II begins with an overview of Perry’s (1970/1981) stages of cognitive development, the guiding theory for this study. I particularly provide an explanation of the relationship between Perry’s theory and cognitive complexity (CC) along with the examples of studies utilized this theory to assess cognitive development. Next, I offer an overview of the cognitive development of counselors in training (CITs), followed by the role of CC in the counselor development process. As I present the role of CC in counselor education, I conclude the chapter with the information on assessment of CC and the relationship between the construct and multicultural competence.

Theories of Cognitive Development

Various theories (Kohlberg, 1987; Loevinger, 1976; Perry, 1970/1981; Piaget, 1932; Vygotsky, 1980) have guided and influenced the exploration of CC and thereby the extant counseling literature. However, the literature concerning the development of CC has been largely guided by Perry’s (1970/1981) theory of cognitive development (Granello, 2010). I am conceptualizing the present study through the lens of Perry’s Stages of Cognitive Development, given that Perry suggests a movement towards more relativistic, flexible thinking aligning with higher levels of CC, and is an often-utilized conceptualization of CC in the extant counseling literature (Blocher, 1983; Granello, 2002/2010a; McAuliffe & Lovell, 2006; Wilkinson & Dewell, 2019).

Perry’s Stages of Cognitive Development

Upon studying the cognitive development of undergraduate students, William Perry (1970/1981) developed his Scheme of Intellectual and Ethical Development. Perry proposed that
students’ thinking changes, or develops, over time, particularly related to what they think about knowledge (i.e., how one comes to know). This scheme includes four categories: dualism, multiplicity, relativism, and commitment. Within these four categories are nine stages which serve to better describe each stage.

In the first stage, dualism, Perry (1970/1981) suggested that individuals “receive” knowledge, or more simply, believe that knowledge comes from those in positions of authority. Individuals in this dualistic stage of thinking are often looking for “right” answers, seeing or believing that morality and immorality are clearly distinguishable, and that such distinctions are applicable to all people in all circumstances. Perry described two positions within the stage of dualism: basic dualism and full dualism. Thinking within the former position is marked by reliance on authority and regurgitation of facts as a measure of knowledge, while the latter position emphasizes a way of thinking which separates those who are “right” from those who are “wrong.” Individuals whose ways of thinking fall within the full dualism position are untrusting of complex answers, believing instead in distinct, black and white differentiation between right and wrong.

Perry’s (1970/1981) second stage of ethical and moral development, multiplicity, reflects more acceptance of complexity than the stage of dualism. The stage of multiplicity includes the concept of subjective knowledge, or that individuals begin to listen to and trust their own thoughts, rather than primarily the thoughts and ideas of authorities. In the stage of multiplicity, Perry suggested that individuals may begin to embrace some level of ambiguity, though still hold to a certain level of dualism, maintaining that problems either can or cannot be solved, revealing little tolerance for the in-between. In position three of multiplicity, Perry suggested that while there may be greater acceptance that authorities may not have all the answers, the multipleist
thinker still maintains that the answers that can be “found,” and will be found. The second stage also includes two positions describe a realization that authorities do not always have the answers and a focus on following the rules set by authorities, so that the “right” answers may be provided.

In Perry’s (1970/1981) third stage, relativism, ambiguity is further embraced, along with the importance of context and considering ideas from other perspectives. Perry suggested that students whose thinking falls within this third stage are tasked with evaluating solutions, recognizing that perhaps there are not always “right” answers, and that such answers cannot always be provided by those in authority. Positions five and six, within relativism, describe the often difficulty to embrace of the fallibility of authorities, recognition of paradoxes, and realization of pre-commitment, or the idea that the individual may choose for themself what to believe (Perry, 1970/1981).

Finally, the fourth stage in Perry’s (1970/1981) theory of cognitive development is commitment, inclusive of the final three positions. Commitment is individual to the student, as the student may commit to a set of values, a career, or another sort of idea or endeavor. Individuals in this stage of Perry’s theory have greater autonomy than those in the previous stages, making choices for themselves rather than depending wholly on the dictates or opinions of others, authority or otherwise. The commitment stage is also marked by even greater tolerance of ambiguity and acceptance of uncertainty (Perry, 1970/1981).

Perry’s Theory and Cognitive Complexity in Counseling

In relation to CC, Perry’s theory of cognitive development (1970/1981) has been studied by researchers in relation to counselor development (Benack, 1988; Blocher, 1983; Granello, 2002/2010a; Lyons & Hazler, 2002; McAuliffe & Lovell, 2006). McAuliffe and Lovell (2006),
motivated by a desire to better train person-centered and helpful clinicians, qualitatively examined the relationship between CIT epistemological positions, according to Perry (1970/1981) and their counseling behaviors. The researchers noted differences between the dualistic and relativistic CITs, which aligned with Perry’s positions. Overall, the CITs with more dualistic ways of thinking were unquestioning in their beliefs, maintained that there are single truths revealed by authorities, were more concrete in their thinking, and tended to seek out “right” answers. Meanwhile, the CITs who were more relativistic in their thinking were better able to consider other points of view, displayed greater metacognition, and were more self-aware than the CITs who were more dualistic in their thinking. McAuliffe and Lovell concluded that “…personal epistemology, is itself a cogent factor in counselor trainees’ counseling decisions” (p. 313). The researchers also suggested that their findings implicate continued study of counselor education through a developmental lens, alongside the exploration of how specific CIT traits, like multicultural awareness, may be positively associated with more relativistic thinking. The present study takes McAuliffe and Lovell’s findings and suggestions for future research into consideration through investigation of counselor educators’ perspectives surrounding CC, as well as regarding multicultural competence.

Additionally, researchers have found positive relationships between cognitive development according to Perry’s (1970/1981) positions and counselor development (Duys & Hedstrom, 2000; Granello, 2002). Utilizing a sample of 205 CITs, Granello (2002) quantitatively examined the relationship between CIT cognitive development across the counselor training process. Granello found that participants began their counselor training with more dualistic thinking, described by Positions 3 and 4 of Perry’s model, and then found themselves “more firmly entrenched in Position 4” by the end of their programs (p. 290). Granello suggested that
these results may indicate the ability to and benefit of utilizing a developmental model such as Perry’s for broad conceptualization of CITs. Similarly, in a sample of 72 beginning CITs, Duys and Hedstrom (2000) found a positive relationship between skills training and CC through a quantitative comparison of CITs who completed a basic skills training course and a group which did not. The researchers’ suggested their findings lend to consideration of curriculum development and course order pertinent to CIT cognitive development. Given these findings which suggest the developmental nature of CIT cognitive processes and importance of counselor educators’ focus on supporting this sort of development, exploration of counselor educators’ perspectives of CC at a particular developmental level (i.e., the end of internship) is warranted. Such information will likely inform teaching, assessment, and gatekeeping practices pertinent to supporting the development of CIT cognitive complexity.

Cognitive Development of Counselors in Training

The cognitive development of counselors has often been conceptualized and described using Perry’s (1970/1981) schema, as described above (e.g., Benack, 1988; Duys & Hedstrom, 2000; Granello, 2002; Granello, 2010; Lyons & Hazler, 2002; McAuliffe & Lovell, 2006), as well as by other types of models. More specifically, the process of cognitive development includes both changes in CIT ways of thinking as described by developmental models of supervision (Borders, 1989; Stoltenberg & McNeil, 2010) and development of counseling skills (Fong et al., 1997). For example, Borders (1989) suggested that CITs develop cognitively as their awareness of self, awareness of others, and counseling skills improve. Borders also described beginning practicum CITs as having more limited self-awareness and as being more dualistic in their thinking. As CITs progress through the practicum and internship experience, they typically become more self-aware, empathic, complete in their client conceptualizations,
and less dependent on experts (e.g., Borders, 1981; Castillo, 2018; Fong et al., 1997; Granello, 2010; Jennings et al., 2003; Pompeo & Levitt, 2014; Skovholt & Ronnestad, 1992; Welfare & Borders, 2010a). These findings suggest the importance of exploring differences and expectations of CIT CC at different developmental levels; namely, and at the focus of the present study, a minimally acceptable level of CC for CITs by the end of internship. However, Granello (2010) also reported that, it is

...impossible to say...what is the normative developmental path for professional counselors or whether there are typical stages of development through which professional counselors pass over the course of their careers (p. 93).

Thus, although the cognitive development of CITs has been explored and explained by developmental theories of supervision (Hogan, 1964; Loganbill et al., 1982; Stoltenberg & McNeil, 2010) and researchers alike (e.g., Borders, 1989; Granello, 2010; King & Kitchener, 1994; Welfare & Borders, 2010b), the process is not linear and is often elusive (Jennings et al., 2003). Notably, Branson and Branson (2020) highlighted that there is a “remarkable degree of consistency” in how different supervisory and educational models of CC describe the developmental process (p. 5). According to the researchers, this consistency is seen through how beginning supervisees are conceptualized as reliant upon authority figures, and then progress towards more independent thinking and greater awareness of various worldviews throughout the training process. In sum, the existing literature comprehensively supports the importance of considering and seeking to increase the CC of CITs throughout the training experience (e.g., Castillo, 2018; Duys & Hedstrom, 2000; Granello, 2010; Kindsvatter & Desmond, 2013; Welfare & Borders, 2010b; Wilkinson & Dewell, 2019; Wilkinson et al., 2020). However, to
date, researchers have not explored counselor educators’ perspectives of minimally acceptable competence in the area of CC at different developmental levels (i.e., practicum, internship, etc.).

**Cognitive Complexity and Counselor Development**

The literature cites CC as playing an integral role in the development of CITs (Castillo, 2018), due to the often ambiguous, complex nature of counseling (McAuliffe & Lovell, 2006). Specifically, researchers have noted various positive associations between CC and other important counselor traits, including: empathy (Benack, 1988; Heck & Davis, 1973; McAuliffe & Lovell, 2006), tolerance of ambiguity (Granello, 2010; McAuliffe & Lovell, 2006), flexibility of thought (Granello & Underfer-Babalis, 2004), and multicultural competence (Ober et al., 2009). Researchers have also noted the importance of CC in relation to client conceptualization (Ladany et al., 2001; Ridley et al., 2011).

Granello and Underfer-Babalis (2004) presented a model of group supervision which emphasizes increasing CIT CC. This model utilizes Bloom’s (1956) Taxonomy of Educational Objectives and aligns with other developmental models of supervision purposed to expand students’ ways of thinking. More specifically, utilizing Granello and Underfer-Babalis’ model, the supervisor may ask questions which progress through Bloom’s taxonomy, becoming progressively more complex. The researchers posited that as the group develops, so should the complexity of the supervisor’s questions. For instance, the researchers suggested that at Bloom’s most advanced level, synthesis, “...the goal is to help the trainee break down all the information into its component parts....to facilitate deep, comprehensive understanding” (p. 169). Similarly, other means of seeking to increase CC in the counseling classroom and through supervision may be considered, as well as particular traits which perhaps encompass and contribute to higher...
levels of CC. Therefore, researchers have also pondered whether CC is a trait or state variable (Spengler & Strohmer, 1994).

Spengler and Strohmer (1994) noted that when considering whether CC can be altered in the classroom, one may also consider whether the construct is a trait or state variable. Findings from personality and social psychology as well as counseling literature suggest that CC has both trait and state aspects (Harvey et al., 1961; Woodard et al., 2021). According to Woodard et al. (2021), as both a state and trait variable, CC was reported to be influenced by situations while being more constant, or trait, ways of being alike. However, the researchers also suggested a dearth of research concerning the trait components of the construct. Thus, through a review of the personality and social psychology literature, Woodard et al. “[evaluated] the degree that specific measurements of cognitive complexity at given points in time (‘state cognitive complexity’) can be categorized as resulting from a more generalized trait (‘trait cognitive complexity’)” (p. 98). In their efforts to increase CC in CITs, counselor educators may specifically attend to increasing CIT multicultural competence.

**Importance of Cognitive Complexity for Multicultural Competence**

The relationship between CC and multicultural competence in counselors is a sparsely studied area (Martinez & Dong, 2020). Among those literature, Martinez and Dong (2020) concluded that there may be a positive relationship between CC and the development of multicultural competence. Thus, the researchers examined potential associations between mindfulness, CC, and cognitive flexibility with multicultural competence. CC was measured using the Abbreviated Three-Dimensional Wisdom Scale (3D-WS-12; Thomas et al., 2017), where higher scores indicated higher levels of CC through three subscales of wisdom: cognitive, reflective, and affective/compassionate. Through multiple regression analyses, a positive
relationship was found between CC and multicultural competence, as well as mindfulness and cognitive flexibility. The researchers stated that supporting the previous findings (e.g., Cannon, 2008; Chung & Bemak, 2002; Granello, 2002), the positive relationship between CC and multicultural competence may be attributable to the ability of counselors with complex thinking to consider multiple, diverse perspectives, and more complex means of addressing the needs of clients. Martinez and Dong called for future studies to further examine this relationship and, particularly, training implications.

Researchers have also found that more cognitively complex counselors are less stereotypical in their conceptualizations of others (Chung & Bemak, 2002; Ware & Harvey, 1967). To a sample of 18 undergraduate psychology students, Ware and Harvey (1967) showed various negative (e.g., “Ran over his neighbor’s dog with his car”) and positive inputs (e.g., “Frequently sent flowers and get-well wishes to hospitalized friends”). The researchers first showed the positive inputs to some of the individuals while others received the negative inputs first (p. 41). They then asked the participants about an individual’s likelihood of positive or negative future behavior, and measured concreteness-abstractness using the This I Believe Test (Harvey, 1964/1965; White & Harvey, 1965). Ware and Harvey concluded that less cognitively complex, or “concrete,” thinkers tend to reach conclusions more quickly and based on less information than more abstract, cognitively complex thinkers. Similarly, Chung and Bemak (2002) suggested a relationship between more complex cognitive processes and cultural empathy, requiring the counselor to consider their own worldview and that of the client without confounding the two. Finally, developmental models (Blocher, 1983; King & Kitchner’s, 1994) and empirical studies alike (Cannon, 2002; Granello, 2002) point towards increased multicultural
awareness in counselors as cognitive development occurs. Thus, further examination of CC in relation to CIT multicultural competence is warranted (Martinez & Dong, 2020).

Assessment of CIT Cognitive Complexity

Researchers have differentiated between general and domain-specific CC (Crocket, 1965/1982; Welfare & Borders, 2010a). For example, concerning general CC, Fong et al. (1997) utilized a sample of 48 CITs to explore changes in cognitive functioning throughout the counselor training process, beginning with the first semester. Fong et al. utilized a measure of ego development, Loevinger and Wessler’s (1970) Sentence Completion Test of Ego Development-Form, to assess for changes in participants’ CC. Measures were taken after participants’ first semester, completion of a skills course, the practicum course, and their entire internship experience. The researchers did not find significant differences in ego development in participants, which may be related to how general the measure is, a noted limitation of the study.

Welfare and Borders (2010a) stated that “...the complexity of an individual’s understanding varies from topic to topic” (p. 163). Welfare and Borders examined the relationship between counseling and experience and both general and domain-specific CC in a sample of 120 CITs and post-master’s degree counselors using the Counselor Cognitions Questionnaire (CCQ; Welfare & Borders, 2007) and the Washington University Sentence Completion Test (WUSCT; Hy & Loevinger, 1996). Welfare and Borders suggested that domain-specific assessments of CC provide more information than general assessments, reporting that counseling experience positively impacts counselor CC. They also suggested that researchers continue to examine domain-specific means of assessing CC in particular. Other researchers have also explored the assessment of domain-specific CC (Brendel et al., 2002; Duys & Hedstrom, 2000).
Therefore, beyond other assessment tools for CC [e.g., the Paragraph Completion Test (PCT; Hunt et al., 1967), the Paragraph Completion Method (PCM; Hunt et al., 1978), the Learning Environment Preferences (LEP; Moore, 1987), the Washington University Sentence Completion Test (WUSCT; Hy & Loewing, 1996)], the Counselor Cognitions Questionnaire (CCQ; Welfare & Borders, 2007) is the only specific instrument in the current literature to measure counselor CC, an area that needs to be further understood to promote the cognitive growth of counselors. Such an understanding will be deepened in the current study through provision of a foundational understanding of the behaviors, thoughts, and thought processes of CITs at the end of internship with minimally acceptable cognitive complexity. Such understanding will inform the focuses of counselor educators and supervisors in their efforts to increase CIT CC.

**Enhancement of CIT Cognitive Complexity**

Given researchers’ emphasis on the integral nature of CC for CITs (Castillo, 2018), the literature includes apt suggestions for increasing the construct in CITs. Empirical studies (e.g., Duys & Hedstrom, 2000; Fong et al., 1997; Little et al., 2005) as well as conceptual articles (e.g., Branson & Branson, 2020; Choate & Granello, 2006; Kindsvatter & Desmond, 2013; Tangen, 2017; Wilkinson et al., 2019) have emphasized the role of counselor educators in this process, noting andragogical practices and particular activities most likely to support the increase of CC in CITs. For example, Sias et al. (2006) found a positive association between education and CC in a sample of 188 substance abuse counselors, calling for increased focus on CC in the counseling classroom. Specific andragogical processes and emphases include utilizing counseling faculty advisors to attend to students’ developmental needs (Choate & Granello, 2006), opportunities for complex problem-solving (Kindsvatter & Desmond, 2013), and specific
writing assignments, such as Wilkinson and Dewell’s (2020) “Call-and-Response Assignment” (p. 61) used to promote the consideration of meaning and considering experiences and ideas from other perspectives.

Researchers have also emphasized the roles of phenomenological and constructivist teaching practices in accomplishing the goal of increased CC in CITs (Wilkinson & Hanna, 2016; Wilkinson & Dewell, 2019; Wilkinson et al., 2020). Wilkinson and Dewell (2019) emphasized the importance of considering both integration and differentiation when seeking to increase CC in CITs. The researchers presented a phenomenological method to this end, noting emphasis on the subjectivity of experience. Specifically, Wilkinson and Dewell explained differentiation as increasing through exposure to multiplistic perspectives, while integration, or “...the ability to translate abstract concepts into immediate experiences...,” may increase through articulation-focused and abductive reasoning-focused training methods (p. 322). Moreover, Wilkinson et al. (2020) suggested that through certain focuses and training methods, counselor educators may assist CITs in becoming more relativistic thinkers earlier on in their training programs. Such training methods may be informed by the findings of the present study through more concrete understanding of how and what a cognitively complex CIT may specifically think and do.

In addition to teaching practices, researchers have also suggested means of supervision pertinent to CIT CC (Glossoff & Durham, 2010; Granello & Underfer-Babalis, 2004; Hillerbrand, 1989; Ober et al., 2009). It has been suggested that the process of supervision inherently promotes the development of CC (Granello & Underfer-Babalis, 2004). Thus, it is logical to conclude that understanding of what in particular counselor educators are actually considering, such as CITs’ actions, ways of thinking, and knowledge, may reveal gaps in assessment,
education, and supervision, informing changes in teaching and supervision practices. As another example of a CC focus within supervision, Ober et al.'s (2009) Synergistic Model of Multicultural Supervision maintains a focus on increasing supervisee CC to move supervisees towards more complex thinking regarding clients’ multicultural factors. Using this model, supervisors may attend to both content and process aspects of supervision and promote increases in supervisees’ CC using Bloom’s (1956) taxonomy. For example, the supervisor may encourage a supervisee to move beyond simply talking about (i.e., understanding) a client’s multicultural factors, and instead toward considering (i.e., evaluating) how those multicultural factors may be influencing the client’s experiences (Ober et al., 2009). Counselor education researchers have yet to explore how counselor educators consider multicultural competence in their assessments of CIT CC.

**Conclusion**

In sum, higher levels of CC in counselors have been associated with various positive skills and outcomes of counseling. These skills and outcomes include more accurate empathic responses (Blaas & Heck, 1978; McAuliffe & Lovell, 2006), more complex client conceptualizations (Ladany et al., 2001; Ridley et al., 2011), and greater tolerance for ambiguity (Jennings & Skovholt, 1999). However, researchers have yet to provide a more comprehensive description of a cognitively complex CIT at the end of internship; namely, the specific behaviors, thoughts, and ways of thinking which signify a minimally acceptable level of CC. Understanding of CC and its significance in CIT development is rooted in theories of cognitive development (e.g., Perry, 1970), and although the construct has been studied in both general and domain-specific capacities, researchers have called for both the continued exploration of domain-specific means of assessment (Welfare & Borders, 2010b) and how to increase CC in CITs (Castillo,
2018; Little et al., 2005; Wilkinson & Dewell, 2019; Welfare & Borders, 2010a). Thus, the present study provides a foundational understanding of a minimally acceptable level of CC for CITs at the end of internship, according to counselor educators.
CHAPTER III

METHODOLOGY

In this chapter, I provide an overview of the methodology for the study, including information on the research design, participants, and data analysis. More specifically, I explain Q method alongside detailed information on each step.

Q Method

I employed an exploratory sequential mixed methods approach known as Q method, a research design utilized to explore subjective viewpoints through specific operations and statistical analyses (McKeown & Thomas, 2013). Q method employs the strengths of quantitative and qualitative methods and allows for rigorous exploration of subjectivity (Stickl et al., 2018). Stickl and colleagues (2018) described five steps to Q method. They also presented that Q method increases “...understanding of the internal perspectives that shape human behavior,” thus informing our work as counselors, as a central purpose of the methodology (para. 1). Q method is rooted in the study of subjectivity (McKeown & Thomas, 2013), but unique from other methods in that it allows for operationalization of subjective viewpoints through the sorting process (McKeown & Thomas, 2013; Stickl et al., 2018).

Stickl et al. (2018) also suggested that Q method is a particularly good fit for social science research, noting its focus on subjective experience and unique coupling of quantitative and qualitative methods. For example, Stickl et al. referenced the method’s founder, William Stephenson’s (1961), emphasis on the centrality of self, or that individuals are unique from one another until determined otherwise. According to Brown (1993), through Q method, “...new meanings arise, bright ideas are hatched, and discoveries are made” (p. 95). Stickl et al. (2018) also noted the fit of Q method for social science research, citing the method’s exploration of
subjective thought “...expressed in a behaviorist manner” (para. 2), which, in this study, are the behaviors, thoughts, and thought processes of counselors in training (CITs) at the end of master’s level internship with minimally acceptable levels of cognitive complexity (CC). Thus, Q method is well suited for the purposes of the present study: to identify commonalities, differences, and patterns in counselor educators’ understandings of what makes for a minimally acceptable level of CC in CITs who are at the end of internship.

Steps of Q Method

There are five steps of Q method followed in this study: (1) gathering the P set, (2) forming the Q sample (data collection part one), (3) conducting a pilot test, (4) the Q sort (data collection part two), and (5) data analysis (Stickl et al., 2018). Additionally, I utilized both Qualtrics and QMethod Software (Lutfallah & Buchanan, 2019) for data collection and analysis. These steps are described below in detail.

Step 1: The P Set

The P set is the sample of participants for the present study (Watts & Stenner, 2012). I determined a specific criterion to ensure that the participants have the necessary knowledge and experience working with internship students to speak for the level of CC at the end of internship experience for their readiness to complete the program – perhaps signaling preparedness to become residents in counseling (Watts & Stenner, 2005). Participants for this study were asked to meet the following criteria: (1) holding a PhD degree from a CACREP-accredited counseling or counselor education program; (2) had completed at least two semesters of a supervised supervision experience during their doctoral studies; (3) currently being employed as a counselor educator in a counseling program in the United States; and (4) has provided individual, triadic, or group supervision for internship-level counselors in training for at least three semesters in the
last three years as a counselor education faculty member at their current and/or previous institution.

Using purposeful and convenience sampling methods, I aimed to recruit approximately 20 participants for this study (McKeown & Thomas, 2013; see Appendix A and B for the recruitment and informed consent materials). However, I recognized that I may have a smaller sample size due to the involved procedures of the study. Also, as noted by McKeown and Thomas (2013), other Q method studies have utilized samples smaller than what is suggested by Watts and Stenner (2005) due to the specificity of their target population (e.g., Baltrinic et al., 2020; Innes et al., 2018). I recruited participants by sending emails to the CESNET Listserv, through social media posts to my Twitter account, and by contacting CACREP-accredited clinical mental health counseling program chairs and/or directors. Moreover, in addition to recruiting participants from across the United States, I sought to further enhance the diversity of the sample in terms of their demographic backgrounds by utilizing “snowball sampling,” by which I directly asked individuals to provide me with the email addresses of other individuals who may qualify to participate (Patton, 2015). Participants were asked to complete a demographic questionnaire using Qualtrics software, purposed in part to determine whether they meet the following participation criteria (Appendix C).

Seventeen participants \((n = 17)\) completed part one of data collection, contributing to the Q sort, while 12 participants \((n = 12)\) completed the study in its entirety (i.e., parts one and two of data collection). See Table 1 below for the demographic information for the 17 individuals who completed part one of data collection. Participants had approximately three weeks to complete the Q sort and post-Q sort questions, and each received an initial invitation email and
two reminders via email to complete the second round of data collection. Table 2 describes the
demographic characteristics of the 12 participants who completed the study in its entirety.

Table 1

Demographic Characteristics of Participants who Completed Round 1

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Category</th>
<th>Number of Participants</th>
</tr>
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<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
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</tr>
<tr>
<td></td>
<td>Male</td>
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</tr>
<tr>
<td></td>
<td>Other</td>
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<tr>
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<tr>
<td></td>
<td>Black or African American</td>
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<td></td>
<td>Eastern European</td>
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</tr>
<tr>
<td></td>
<td>Hispanic or Latinx</td>
<td>1</td>
</tr>
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<td>Master’s Degree</td>
<td>Clinical Mental Health</td>
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<tr>
<td></td>
<td>Community Counseling</td>
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<tr>
<td></td>
<td>Counseling Psychology</td>
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<td>LPC-Supervisor</td>
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<td>NCC</td>
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<td></td>
<td>Licensed School Counselor</td>
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<tr>
<td></td>
<td>Approved Clinical Supervisor</td>
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<td>LPCS</td>
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<td>PhD Degree</td>
<td>Counselor Education and Supervision</td>
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<tr>
<td>Program?</td>
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<td>Number of years as a</td>
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<td>counselor education faculty</td>
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<tr>
<td>member?</td>
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<td>3</td>
</tr>
<tr>
<td>Number of semesters</td>
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<tr>
<td>supervised master’s-level</td>
<td>6-10</td>
<td>6</td>
</tr>
<tr>
<td>internship as a counselor</td>
<td>11-15</td>
<td>2</td>
</tr>
<tr>
<td>education faculty member</td>
<td>16+</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: The sum of participants for some categories in this table (e.g., Professional Credentials) total more than 17, as participants selected more than one category.
### Table 2

*Demographic Characteristics of Participants who Completed Rounds 1 and 2*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Category</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>2</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Black or African American</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Eastern European</td>
<td>1</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clinical Mental Health</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Counseling Psychology</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Psychology</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Counselor Education</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>MEd School Counseling</td>
<td>1</td>
</tr>
<tr>
<td>Professional Credential(s)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LPC</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>LPC-Supervisor</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>NCC</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Licensed School Counselor</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Approved Clinical Supervisor</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>LIMHP</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>LAC</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>LPCS</td>
<td>1</td>
</tr>
<tr>
<td>PhD Degree</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Counselor Education and Supervision</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Counseling</td>
<td>2</td>
</tr>
<tr>
<td>Employed by a CACREP Program?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>1</td>
</tr>
<tr>
<td>Number of years as a counselor education faculty member?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1-5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>6-10</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>11+</td>
<td>3</td>
</tr>
<tr>
<td>Number of semesters supervised master’s-level internship as a counselor education faculty member</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3-5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>6-10</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>11-15</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>16+</td>
<td>2</td>
</tr>
</tbody>
</table>

*Note:* The sum of participants for some categories in this table (e.g., Professional Credentials) total more than 12, as participants selected more than one category.

**Step 2: Creating the Q Sample**

The Q sample is a representative group of statements gathered from the larger body of information on a topic (Stickl et al., 2018). The “concourse” can be understood as the “flow of communicability surrounding any topic,” in this case CC (Brown, 1993, p. 94). The Q sample
consists of items gathered from the extant literature, meaning various themes related to the topic should be identified, along with an equal number of items which represent each theme (Watts & Stenner, 2012). The Q sample comprises the statements that participants sorted (i.e., ranked) according to their perceived significance pertinent to a minimally acceptable level of CC for a CIT at the end of internship using the Q grid (see Figure 1). Brown (1993) describes the goal in developing a Q sort as to “...create a miniature which, in major respects, contains the comprehensiveness of the larger process being modeled” (p. 99). This may occur in a structured or unstructured manner (Stickl et al., 2018), and each statement should be written as subjective statements which may elicit emotion (Gaebler-Uhing, 2003). For this study, creation of the Q sample occurred through four sources detailed below: (1) thematic analysis of the extant counseling and counselor education literature, (2) participants, (3) an expert panel through a pilot test, and (4) an auditor.

Firstly, to create the Q sample in part, I conducted a thematic analysis of the extant literature, yielding 16 statements in total (Braun & Clarke, 2006). To do this, I first developed three themes pertinent to the topic of CC, including definitions, constructs considered related to high CC, and associated concepts from the extant literature in an unstructured manner, as there are currently no theories related to counselor educators’ conceptualizations of CC in the extant literature. As described by McKeown and Thomas (1988), I developed a “ready-made” concourse, utilizing already existing sources including 20 peer-reviewed scholarly journal articles published between 1967 and 2020. These journal articles were located through keyword searches of the following terms in various journal article databases: counselor cognitive complexity and counselor cognitive development. Through review of this extant counseling literature on CC, I developed these three broad, initial themes related to CC represented by 16
statements in total: (1) Cognitively complex counselors consistently and accurately utilize various basic counseling skills like empathy and reflection; (2) Cognitively complex counselors conceptualize clients thoroughly and from different perspectives; and (3) Cognitively complex counselors are less dualistic and more relativistic in their thinking, aware of the myriad of complex beliefs and experiences held by individuals and groups.

These statements represent a variety of ideas, beliefs, and research findings related to CC in counseling. In an attempt to reduce researcher bias and ambiguity, I critically reviewed the themes and corresponding statements, combining, eliminating, and altering the themes and statements throughout the process (Brown, 1993; Watts & Stenner, 2012). My dissertation chair, an associate professor of counselor education with expertise in counselor and supervisor training, also reviewed the themes and corresponding statements and provided feedback to further scrutinize the material and make revisions. Table 1 displays each theme and the corresponding statements selected from the literature for this study, alongside the related reference(s).

Table 3

Themes and Statements from the Literature

<table>
<thead>
<tr>
<th>Theme</th>
<th>Statements</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitively complex counselors consistently and accurately utilize various basic counseling skills like empathy and reflection</td>
<td>...is empathic</td>
<td>Blaas &amp; Heck, 1978; Castillo, 2018; Heck &amp; Davis, 1973</td>
</tr>
<tr>
<td></td>
<td>...uses basic skills like reflection often and well</td>
<td>Duys, 2000</td>
</tr>
<tr>
<td></td>
<td>...is aware of their own emotions</td>
<td>Alcorn &amp; Torney, 1982; Tangen, 2015</td>
</tr>
<tr>
<td></td>
<td>...provides consistently varied responses to clients</td>
<td>Lichtenberg &amp; Heck, 1979</td>
</tr>
<tr>
<td>Cognitively complex counselors conceptualize clients thoroughly</td>
<td>...conceptualizes clients thoroughly</td>
<td>Ladany et al., 2001; Ridley et al., 2011</td>
</tr>
<tr>
<td></td>
<td>...identifies many different multicultural factors for each client</td>
<td>Ober et al., 2019</td>
</tr>
</tbody>
</table>
and from different perspectives... takes various multicultural factors into consideration when conceptualizing and creating treatment plans for clients Cannon, 2008; Chung & Bemak, 2002; Granello, 2002; Martinez & Dong, 2020; Ober et al., 2009; Ware & Harvey, 1967

...can identify many different types of characteristics for each client they work with (differentiation) Welfare, 2007; Welfare & Borders, 2010

...is able to synthesize, or put together, the many different pieces of information they know about a client (integration) Welfare & Borders, 2010; Dolan et al., 2013

...can identify connections between different types of client information Wilkinson et al., 2020

...can identify multiple means of treatment which may be beneficial to a client Martinez & Dong, 2020

Cognitively complex counselors are less dualistic and more relativistic in their thinking, aware of the myriad of complex beliefs and experiences held by individuals and groups Cannon, 2008; Chung & Bemak, 2002; Granello, 2002; Martinez & Dong, 2020; Ober et al., 2009; Ware & Harvey, 1967

...has flexible thought processes Borders, 1989; McAuliffe & Lovell, 2006

...is comfortable with ambiguity Granello, 2010; McAuliffe & Lovell, 2006

...is less stereotypical in their thinking about clients Chung & Bemak, 2002; Ware & Harvey, 1967

... demonstrates metacognition, or the ability to think about their own thoughts Ridley et al., 2011

...does not always believe there is a “right” answer McAuliffe & Lovell, 2006

Data Collection: Part 1

Additionally, due to the dearth of literature on counselor educators’ perspectives of minimally acceptable CC in CITs, participants’ views are represented in the Q sample. More specifically, immediately following completion of the demographic questionnaire (Appendix C)
via Qualtrics, participants were offered the following prompt and open-ended question (Appendix D):

Cognitive complexity is defined by Granello (2010) as “…the ability to absorb, integrate, and make use of multiple perspectives” (p. 92). In your opinion, what characterizes a counselor in training at the end of their internship with a minimally acceptable level of cognitive complexity? In the form of phrases and/or short sentences, please list as many characteristics, attributes, skills, behaviors, etc. that come to mind.

Participants ($n = 17$) provided 74 statements in total (Appendix D). After a one-month recruitment period, I reviewed the statements provided by participants by editing and synthesizing the literature-based and participant-created statements to create the final Q sample to be reviewed by the expert panel as part of the pilot test and the auditor. This review process eliminated redundancy and promoted language consistency.

**Step 3: Pilot Test**

Next, I conducted a pilot test of the current Q sample to further refine the Q sample (Stickl et al., 2018) using QMethod Software (Lutfallah & Buchanan, 2019). As suggested by Watts and Stenner (2012), the pilot test was conducted utilizing four subject matter experts (i.e., tenured counselor educators). I purposefully recruited four subject matter experts who each hold a PhD degree in counselor education and supervision, are currently employed as a counselor educator, are tenured, have a substantial record of empirical research focused on multicultural and social justice advocacy, and/or have completed two semesters of a supervised supervision experience during their doctoral studies. The purpose of this pilot test was to examine the accuracy and coverage of the statements. The members of the expert panel were asked to provide general feedback on whether they understand the sorting task, understand the statements, and
whether anything appeared to be missing from the statements. The expert panel suggested two additional statements be added to the Q sample (Appendix E). I reviewed the feedback the expert panel provided through the pilot test to further refine the Q sample and ensure participant understandability of the sorting task.

Finally, after reviewing and synthesizing the 92 statements in total from the literature, participants, and expert panel (see Table 3), the updated Q sample included 45 items. I sent this Q sample to the auditor, a member of my dissertation committee who had not yet been involved in the Q sample creation process. The auditor is a tenured associate professor with a PhD in Educational Technology and Mathematics Education. She is an expert in educational technology and has authored/co-authored over 100 publications on the topic. The auditor reviewed a document which listed all 92 statements gathered through a review of the literature (Table 1), from participants, and the expert panel (Appendix E), alongside the updated Q sample, to determine if anything may be missing from the Q sample. Upon review, the auditor stated that nothing appeared to be missing from the Q sample. Thus, the final Q sample included 45 items (Appendix F).

**Table 4**

*Numbers of Statements*

<table>
<thead>
<tr>
<th>Source</th>
<th>Number of Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counseling and counselor education literature</td>
<td>16</td>
</tr>
<tr>
<td>Participants</td>
<td>74</td>
</tr>
<tr>
<td>Expert panel</td>
<td>2</td>
</tr>
</tbody>
</table>
Step 4: Q Sort

Data collection occurred through various means, beginning with the aforementioned demographic questionnaire and prompt for statements completed via Qualtrics (see Appendix C). To ensure all participants met the necessary participation criteria, the demographic questionnaire was created so that potential participants would not be able to progress past the initial questionnaire unless they selected answers which indicated they meet the necessary criteria for participation. If potential participants did not meet the necessary criteria, they were brought to a screen thanking and informing them that they do not meet the requirements necessary to participate. Participants who completed the demographic questionnaire and met all participation requirements were invited to participate in the second round of data collection, or Q sort.

Data Collection: Part 2

Approximately 6 weeks after completing the demographic questionnaire and completing the initial prompt for statements, the 17 qualifying participants were asked to complete a Q sort and answer a post-Q sort questionnaire about the sorting process through QMethod Software (Lutfallah & Buchanan, 2019) and Qualtrics, respectively. See Appendix G for the post-Q sort questionnaire and Appendix H for the instructions emailed to participants regarding the second part of data collection. For this round of data collection, participants completed the following steps: (1) watch an approximately four-minute instructional video on the Q sort procedures; (2) pre-sort each statement according to their significance to aid in the ranking process (see Figure 1); (3) complete the Q sort; and (4) answer a post-Q sort questionnaire.
Participants were provided the following definition of CC and directions:

Cognitive complexity is defined by Granello (2010) as “…the ability to absorb, integrate, and make use of multiple perspectives” (p. 92). Please sort (i.e., drag and drop) each statement into the grid according to how significant you believe each statement is in defining a minimally acceptable level of cognitive complexity for a counselor in training at the end of internship. From left to right, the grid ranges from least significant to most significant.

For the Q sort, each item was randomly presented in one of three categories according to how they pre-sorted the statements (i.e., less significant, neutral, or more significant) allowing participants to individually rank (i.e., sort) each item according to their perspective of the item’s significance in defining a minimally acceptable level of CC in a master’s-level CIT at the end of internship. Statements could be placed anywhere in the grid regardless of how they were pre-sorted. The grid ranged from least significant (on the left) to most significant (on the right). The Q grid is displayed below in Figure 2.
The distribution of the grid (-5, through 0, to +5) was determined according to the guidelines suggested by Watts and Stenner (2012) and, originally, Stephenson (1936). Stephenson suggested the importance of utilizing a prearranged frequency distribution. The prearranged frequency distribution, as used in this study, increases standardization of the Q sort task, and mirrors a normal bell curve, as more statements are grouped towards the middle of the distribution, rather than the peripheries. Furthermore, Watts and Stenner described this prearranged frequency as convenient and the standard for Q method studies.

Following the Q sort activity, participants then answered questions about their selection processes (e.g., information on why they sorted a certain way; Brown, 1993) using Qualtrics (see Appendix G). Each participant who completed the study in full was compensated with a $10 Amazon gift card, sent via email, funded by a grant from the Southern Association for Counselor Education and Supervision (SACES).
**QMethod Software**

QMethod Software (Lutfallah & Buchanan, 2019) is an online program which reduces error, simplifies the processes of Q method, and runs the associated analyses. According to Lutfallah and Buchanan (2019), QMethod Software “‘mimic[s]’ the traditional Q-sort process while also allowing for increased security and ease of use.” All aspects of the Q method process, from demographic questionnaire to post-Q-sort questions, may be completed through this software, and the software has been found to be both valid and reliable for the assessment of subjective viewpoints (Lutfallah & Buchanan, 2019).

**Step 5: Data Analysis**

All aspects of data analysis were conducted through QMethod Software (Lutfallah & Buchanan, 2019). Brown (1993) noted that in Q method, the “...the role of mathematics is quite subdued and serves primarily to prepare the data to reveal their structure” (p. 107). Therefore, I completed the following steps as part of the data analysis process, as suggested by Brown (1993) and Stickl et al. (2018): (1) calculated the Q sort correlations; (2) conducted principal component analysis (PCA) with varimax factor rotation, and (3) interpreted the extracted factors. These steps are explained in detail in Chapter Four.

After calculating the correlation between participants’ Q sorts displayed through a correlation matrix (Brown, 1993), I performed principal component factor analysis, or PCA. Brown (1993) stated that “factor analysis examines a correlation matrix...[and] determines how many basically different Q sorts are in evidence” (p. 111). This aspect of the data analysis process may be considered more quantitative in nature, as factor loadings, or “the extent to which each Q sort is associated with each factor,” are purely empirical (Brown, 1993, p. 111).
McKeown and Thomas (2013) described factor loadings as essentially correlation coefficients. Furthermore, Webler et al. (2007) also described factor analysis process:

In the case of Q method, the factor analysis looks for patterns among the Q sorts. The analysis produces a number of ‘factors,’ which are particular arrangements of the Q statements – they are Q sorts. These are called ‘idealized sorts’ since they are produced by the analysis averaging together the Q sorts of several people. The job of the researcher is to read the idealized Q sorts and write a narrative for each one. These narratives summarized shared perspectives (p. 19).

As suggested by Stickl et al. (2018) and Watts and Stenner (2012), I began the factor analysis process by first taking significant participant factor loadings into account at the .05 level. McKeown and Thomas suggested utilizing the eigenvalue criterion, “…whereby a factor’s significance (importance) is estimated by the sum of its squared factor loadings…,” to determine which factors are significant (p. 53). I also took context and the theoretical importance of factors into account in this process (McKeown & Thomas, 2013).

Following the initial factor analysis, I conducted varimax factor rotation of two extracted factors (McKeown & Thomas, 2013). This process assists in determining final factor extractions (Stickl et al., 2018). However, it should be noted that as I determined which factors to rotate and retain, there are subjective aspects to this seemingly very quantitative process (Brown, 1993). To determine how many final factors to rotate, I conducted numerous analyses to find the most conceptually meaningful factor solution. Next, factor loadings, or total weighted scores which normalize factor scores, were created (Stickl et al., 2018). I then examined the related correlations to determine the uniqueness of each extracted factor (Brown, 1993; Stickl et al., 2018).
Finally, factor interpretation, an interpretive and subjective process, occurred (Stickl et al., 2018). I examined the distinguishing statements for each factor, along with the consensus statements provided. The distinguishing statements are those which differentiate “…one factor’s view from another at a statistically significant level” (Ramlo, 2008, p. 180). I also sought to make sense of these findings using participant responses to the demographic questionnaire and post-Q sort questions (Stickl et al., 2018). The information from the factor analysis process, my theoretical understanding of CC, and explanations from participants which created a “narrative of each of the subjective perspectives that transpired” (Stickl et al., 2018, p. 9), are described in detail in Chapters Four and Five.

Confidentiality and Ethical Considerations

This study was approved by Old Dominion University’s Institutional Review Board. Participants were asked to provide an email address and phone number only if they wished to be compensated for completing all aspects of the study (demographic questionnaire, Q-sort, and post-Q-sort questions). No other identifying information was gathered. Participants were informed of the minimal risks and benefits associated with this study through an informed consent form (Appendix B) prior to participation. They were also informed that they may withdraw from the study at any time without repercussions. Participant emails were stored on a password locked computer accessible only to myself and my dissertation chair, the primary investigator for this study.

Chapter Summary

In sum, Q method is a mixed methods design which allows for exploration of subjective perspectives, in this case what counselor educators believe makes for a cognitively complex CIT at the end of internship. An integral aspect of the Q method process is determining the Q sort
from the extant literature. In the next chapter, I present the quantitative and qualitative results of the statistical analyses described in Chapter III in efforts to best understand the unique viewpoints of the participants.
CHAPTER IV

RESULTS

There were three primary steps I took as part of the data analysis procedures following Brown (1993) and Stickl et al.’s (2018) guidelines for Q method: (1) calculating the Q sort correlations, (2) conducting principal component analysis (PCA) with varimax factor rotation, and (3) interpreting the extracted factors. In this chapter, I will describe each step of the data analysis as well as obtained results.

Q Sort Correlation

First, using QMethod Software (Lutfallah & Buchanan, 2019), I created a Pearson correlation matrix for the 12 participants, displayed below in Table 5. According to Watts and Stenner (2012), the correlation matrix reveals the total variability in the study through display of similarity amongst the individual participants. I chose to utilize a p-value of .05 to decrease the risk of incorrectly concluding significance (i.e., 5% risk). Moreover, Brown (1980) noted that the standard error must be calculated to determine the significance of the correlations, and suggested use of the following formula, where \( SE \) is standard error and \( N \) is the total number of Q sort statements: \( SE = 1 / \sqrt{N} \) (p. 222). The z-score for a p-value of .05 is 1.96. Since this study included 45 total statements, the standard error was calculated as \( SE = 1.96 (1 / \sqrt{45}) \), or .29. Therefore, significant correlations at the .05 level must be greater than or equal to .29.

Factor Analysis and Extraction

In Q method, researchers primarily utilize one of two means of factor analysis: centroid or principal component analysis (PCA; McKeown & Thomas, 2013; Stickl et al., 2018). An integral difference between Q method and traditional factor analysis is that in Q method, participants are loaded onto the factors, rather than the individual statements (Stickl et al., 2018).
Moreover, in Q method, factor analysis is how participants are grouped according to their Q sorts (McKeown & Thomas, 2013). However, researchers have suggested that the specific means of factor analysis (e.g., centroid, PCA, or otherwise) “makes little difference” (Burt, 1972; McKeown & Thomas, 2013, p. 52). Therefore, to determine which method of factor analysis is most appropriate for this study, I ran multiple analyses using QMethod Software (Lutfallah & Buchanan, 2019) to determine which means of analysis yielded the most conceptually meaningful report. Based on these analyses and consultation with a counselor educator familiar with Q method and my dissertation chair, I determined that the use of PCA with varimax factor rotation yielded the most conceptually meaningful report.

PCA provides a more detailed and structured analysis inclusive of information on how the variables uniquely relate to one another and are dispersed, otherwise known as eigenvectors (Lutfallah & Buchanan, 2019). Similarly, according to McKeown and Thomas (2013), Eigenvalues display a factor’s significance “by the sum of its squared factor loadings” (p. 53).

Table 5

*Correlation Matrix [p > .05 (Brown, 1980)]*

<table>
<thead>
<tr>
<th>Participant</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.00</td>
<td>0.27</td>
<td>0.27</td>
<td>0.15</td>
<td>0.03</td>
<td>-0.02</td>
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<td>0.17</td>
<td>0.42*</td>
<td>0.18</td>
<td>0.18</td>
<td>0.18</td>
</tr>
<tr>
<td>2</td>
<td>0.27</td>
<td>1.00</td>
<td>0.25</td>
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</tr>
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<td>0.06</td>
<td>0.25</td>
<td>0.06</td>
<td>0.03</td>
<td>0.03</td>
</tr>
<tr>
<td>4</td>
<td>0.15</td>
<td>0.01</td>
<td>0.04</td>
<td>1.00</td>
<td>0.14</td>
<td>0.12</td>
<td>0.01</td>
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<td>0.05</td>
<td>0.06</td>
<td>0.01</td>
<td>0.10</td>
</tr>
<tr>
<td>5</td>
<td>0.03</td>
<td>0.09</td>
<td>0.04</td>
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<td>0.13</td>
<td>0.15</td>
<td>0.19</td>
<td>0.00</td>
<td>0.17</td>
<td>-0.02</td>
<td>-0.23</td>
</tr>
<tr>
<td>6</td>
<td>-0.02</td>
<td>0.24</td>
<td>0.05</td>
<td>0.11</td>
<td>0.13</td>
<td>1.00</td>
<td>0.38*</td>
<td>0.46*</td>
<td>0.20</td>
<td>0.04</td>
<td>0.04</td>
<td>0.23</td>
</tr>
<tr>
<td>7</td>
<td>0.29*</td>
<td>0.09</td>
<td>0.04</td>
<td>0.01</td>
<td>0.15</td>
<td>0.38*</td>
<td>1.00</td>
<td>0.52*</td>
<td>0.24</td>
<td>0.23</td>
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<td>0.08</td>
</tr>
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<td>8</td>
<td>0.17</td>
<td>0.12</td>
<td>0.06</td>
<td>0.27</td>
<td>0.19</td>
<td>0.46*</td>
<td>0.52*</td>
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<td>0.37*</td>
<td>0.14</td>
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<td>0.24</td>
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<td>0.04</td>
</tr>
<tr>
<td>10</td>
<td>0.18</td>
<td>0.20</td>
<td>0.06</td>
<td>0.06</td>
<td>0.17</td>
<td>0.04</td>
<td>0.23</td>
<td>0.14</td>
<td>0.38*</td>
<td>1.00</td>
<td>0.14</td>
<td>0.23</td>
</tr>
<tr>
<td>11</td>
<td>0.18</td>
<td>0.14</td>
<td>0.03</td>
<td>-0.01</td>
<td>-0.02</td>
<td>0.04</td>
<td>0.01</td>
<td>0.08</td>
<td>0.20</td>
<td>0.14</td>
<td>1.00</td>
<td>0.02</td>
</tr>
<tr>
<td>12</td>
<td>0.18</td>
<td>0.05</td>
<td>0.03</td>
<td>0.10</td>
<td>-0.23</td>
<td>0.24</td>
<td>0.08</td>
<td>0.06</td>
<td>0.04</td>
<td>0.23</td>
<td>0.02</td>
<td>1.00</td>
</tr>
</tbody>
</table>
PCA is also often used when variables are independent of one another and may assist the researcher in determining significant factors by automatically dropping some eigenvectors (Lutfallah & Buchanan, 2019). According to McKeown and Thomas, generally speaking, eigenvalues greater than 1.00 are considered significant, although this is not always the case.

When using PCA, the number of initial extracted factors is automatically selected by the QMethod Software (Lutfallah & Buchanan, 2019), which in this case was eight. Table 6 below displays the eight extracted factors, including the unrotated factor loadings for each q-sort. Again, significant factor loadings at the .05 level for this study was .29. I then applied the Kaiser-Guttman Criterion to the data. Application of the Kaiser-Guttman Criterion yields retention only of factors with eigenvalues greater than 1.00 (Lutfallah & Buchanan, 2019), also suggested by McKeown and Thomas (2013). The first five factors met this criterion. I also applied Humphrey’s Rule to the data. Brown (1980) defined Humphrey’s Rule as: “a factor is significant if the cross-product of its two highest loadings (ignoring the sign) exceeds twice the standard error” (p. 223). The standard error for this study was .29, making $2(\text{SE}_r) = 0.58$. None of the cross products from the eight factors exceeded .58. However, according to Brown (1980), less strict use of Humphrey’s Rule may be applied, meaning cross products which exceed just $\text{1(SE}_r)$, or .29, are significant. Less stringent application of Humphrey’s Rule revealed that four of the eight factors (Factors 1, 2, 3, and 4) met this criterion. I utilized the scree plot produced by QMethod Software (Figure Three) to help determine the final number of factors to extract, as the scree plot displays where the slope levels off (Lutfallah & Buchanan, 2019).

I also ran a parallel analysis using data from a similar study (i.e., a Q method study with the same number of statements and participants, as suggested by Lutfallah and Buchanan (2019), displayed in Table 7. The researchers suggested that should the 95% eigenvector be less than the
actual eigenvector, then the factor should be retained for rotation. Only the first factor met this criterion.

Table 6

_Eight Factor Model of Unrotated Factor Loadings (\(* = Humphrey’s Rule applied\)_

<table>
<thead>
<tr>
<th>Factor</th>
<th>Eigenvalue</th>
<th>% of Explained Variance</th>
<th>% of Cumulative Variance</th>
<th>Humphrey’s Rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.71*</td>
<td>22.57</td>
<td>22.57</td>
<td>0.49</td>
</tr>
<tr>
<td>2</td>
<td>1.58*</td>
<td>13.17</td>
<td>35.74</td>
<td>0.29</td>
</tr>
<tr>
<td>3</td>
<td>1.42*</td>
<td>11.85</td>
<td>47.59</td>
<td>0.42</td>
</tr>
<tr>
<td>4</td>
<td>1.07*</td>
<td>8.90</td>
<td>56.50</td>
<td>0.33</td>
</tr>
<tr>
<td>5</td>
<td>1.00*</td>
<td>8.34</td>
<td>64.87</td>
<td>0.23</td>
</tr>
<tr>
<td>6</td>
<td>0.95</td>
<td>7.93</td>
<td>72.80</td>
<td>0.25</td>
</tr>
<tr>
<td>7</td>
<td>0.85</td>
<td>7.09</td>
<td>79.88</td>
<td>0.21</td>
</tr>
<tr>
<td>8</td>
<td>0.69</td>
<td>5.77</td>
<td>85.65</td>
<td>0.17</td>
</tr>
</tbody>
</table>

Figure 3

_PCA Scree Plot_

Table 7

_**PCA Parallel Analysis**_

<table>
<thead>
<tr>
<th>Factor</th>
<th>Actual EV</th>
<th>95th Percentile EV</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.71</td>
<td>2.22</td>
</tr>
<tr>
<td>2</td>
<td>1.58</td>
<td>1.85</td>
</tr>
<tr>
<td>3</td>
<td>1.42</td>
<td>1.60</td>
</tr>
<tr>
<td>4</td>
<td>1.07</td>
<td>1.40</td>
</tr>
<tr>
<td>5</td>
<td>1.00</td>
<td>1.24</td>
</tr>
<tr>
<td>6</td>
<td>0.95</td>
<td>1.09</td>
</tr>
<tr>
<td>7</td>
<td>0.85</td>
<td>0.96</td>
</tr>
<tr>
<td>8</td>
<td>0.69</td>
<td>0.85</td>
</tr>
</tbody>
</table>
Factor Rotation

After taking into consideration all the above means of considering the statistical strengths of the factors and their relationships, I decided to rotate two factors at the .05 level using varimax factor rotation, allowing for greater ease in distinguishing participants’ viewpoints (Webler et al., 2009). Varimax factor rotation is an often suggested means of rotation for PCA (Lutfallah & Buchanan, 2019). The two extracted factors account for 36% of the explained variance, as displayed in Table 8, which is acceptable according to Watts and Stenner (2012). Furthermore, of the 12 participants, six loaded onto the first factor and five onto the second factor. Only one participant, Participant 12, loaded onto neither factor. This is displayed by Table 8. QMethod Software automatically flags significant factor loadings (Lutfallah & Buchanan, 2019).

Table 8

<table>
<thead>
<tr>
<th>Participant</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.72366</td>
<td>flagged</td>
</tr>
<tr>
<td>2</td>
<td>0.53731</td>
<td>flagged</td>
</tr>
<tr>
<td>3</td>
<td>0.56953</td>
<td>flagged</td>
</tr>
<tr>
<td>4</td>
<td>-0.02098</td>
<td>0.30886</td>
</tr>
<tr>
<td>5</td>
<td>0.01287</td>
<td>0.34637</td>
</tr>
<tr>
<td>6</td>
<td>-0.00411</td>
<td>0.77334</td>
</tr>
<tr>
<td>7</td>
<td>0.25625</td>
<td>0.68008</td>
</tr>
<tr>
<td>8</td>
<td>0.2296</td>
<td>0.78821</td>
</tr>
<tr>
<td>9</td>
<td>0.70959</td>
<td>flagged</td>
</tr>
<tr>
<td>10</td>
<td>0.48985</td>
<td>flagged</td>
</tr>
<tr>
<td>11</td>
<td>0.43308</td>
<td>flagged</td>
</tr>
<tr>
<td>12</td>
<td>-0.02624</td>
<td>0.21515</td>
</tr>
</tbody>
</table>

% Explained Variance

22.57 13.17
Table 9

Correlations Between Factors

<table>
<thead>
<tr>
<th></th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>1.00</td>
<td>0.30</td>
</tr>
<tr>
<td>Factor 2</td>
<td>0.28</td>
<td>1.00</td>
</tr>
</tbody>
</table>

The “flagged” factor loadings indicate the most representative Q sorts (Zabala, 2014). The purpose of flagging, according to Zabala (2014), is to differentiate participant perspectives and is often done automatically, as in this case. Automatic flagging occurs when two criteria are met (Brown, 1980; Zabala, 2014). Firstly, the loading must be high at a statistically significant level. In this case, greater than .29 based on the aforementioned equation for SE described by Brown (1980). Additionally, the factor’s square loading should be higher than the combined square loadings of the other factors (Brown, 1980).

Interpretation

The two extracted factors revealed unique points of view representative of the participants. QMethod Software (Lutfallah & Buchanan, 2019) yielded a composite Q sort for each factor (see Appendix I and Appendix J), including a list of distinguishing and consensus statements for each factor (Tables 8 and 9). Distinguishing statements are those which differentiate participants’ viewpoints with statistical significance (Ramlo, 2008). Consensus statements, however, can be understood as statements of agreement, or those which all participants utilized similarly in describing a CIT with a minimally acceptable level of cognitive complexity (Rahma et al., 2020). Unlike the distinguishing statements, consensus statements do not distinguish among factors at a statistically significant level (Ramlo, 2008). These statements provide “…insight into how participants perceive the problems, express their logic, and put the
essential issues into context,” as Q method by nature seeks increased understanding through exploration of various points of view (Rahma et al., 2020, p. 4).

Therefore, to interpret the findings of this study, I first examined and compared the distinguishing statements of the two factors, followed by the consensus statements. I also considered the demographic characteristics of the participants who loaded onto each factor to better understand the data. Ramlo (2008) suggested that examination of this information in addition to any additional qualitative information provided by participants (i.e., participants’ demographic information and answers to the post-Q sort questions) can be used cooperatively to understand the unique perspective represented by each factor. Additionally, I followed the factor interpretation process as described by Watts and Stenner (2005). Watts and Stenner noted how the positioning of items in the composite (i.e., summarizing) Q sort for each factor (displayed in Appendices I and J) are of particular and first importance in the factor interpretation process; they also emphasized the consideration of demographic information in the interpretation process. Therefore, I included the positioning of each distinguishing and consensus statement for each of the two factors, displayed below in Tables 10 and 11. The positioning of each statement reflects its placement in the composite Q sort; for example, the first distinguishing statement for Factor 1, “Integrates feedback from multiple sources, recognizing what is useful”, is placed at +5, meaning it is positioned on the far right side of Factor 1’s composite Q sort, indicating participants’ strong view of this statement as significant when describing a CIT at the end of internship with a minimally acceptable level of CC.
Table 10

**Distinguishing and Consensus Statements: Factor 1**

<table>
<thead>
<tr>
<th>Distinguishing Statements</th>
<th>Statement Positioning on Composite Q Sort</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrates feedback from multiple sources, recognizing what is useful</td>
<td>+ 5</td>
</tr>
<tr>
<td>Demonstrates metacognition, or the ability to think about their own thoughts</td>
<td>+ 5</td>
</tr>
<tr>
<td>Can identify and explain multiple perspectives</td>
<td>+ 4</td>
</tr>
<tr>
<td>Conceptualizes clients thoroughly and from multiple angles</td>
<td>+ 3</td>
</tr>
<tr>
<td>Able to work with clients of differing cultural backgrounds, beliefs, and values from their own</td>
<td>+ 3</td>
</tr>
<tr>
<td>Understands the client’s worldview</td>
<td>+ 3</td>
</tr>
<tr>
<td>Comfortable with ambiguity</td>
<td>+ 2</td>
</tr>
<tr>
<td>Conceptualizes clients from a biopsychosocial perspective</td>
<td>+ 2</td>
</tr>
<tr>
<td>Demonstrates flexibility in their thought processes</td>
<td>+ 2</td>
</tr>
<tr>
<td>Interprets and applies codes of ethics in their work</td>
<td>+ 1</td>
</tr>
<tr>
<td>Able to conceptualize cases through a variety of theoretical lenses</td>
<td>+ 1</td>
</tr>
<tr>
<td>Identifies multiple means of treatment for a client</td>
<td>0</td>
</tr>
<tr>
<td>Skilled in assessment</td>
<td>0</td>
</tr>
<tr>
<td>Open to work with a variety of different counseling concerns/presenting problems</td>
<td>0</td>
</tr>
<tr>
<td>Aware of their own emotions</td>
<td>- 1</td>
</tr>
<tr>
<td>Provides consistently varied responses to clients</td>
<td>- 2</td>
</tr>
<tr>
<td>Demonstrates desire for and commitment to continual professional development</td>
<td>- 2</td>
</tr>
<tr>
<td>Consults with other professionals</td>
<td>- 2</td>
</tr>
<tr>
<td>Compassionate</td>
<td>- 3</td>
</tr>
<tr>
<td>Demonstrates self-care</td>
<td>- 3</td>
</tr>
<tr>
<td>Uses counseling techniques (e.g., role play) well as needed</td>
<td>- 4</td>
</tr>
<tr>
<td>Recognizes when to terminate therapy</td>
<td>- 4</td>
</tr>
<tr>
<td>Engages in interprofessional collaboration</td>
<td>- 5</td>
</tr>
<tr>
<td>Acts as a leader</td>
<td>- 5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Consensus Statements</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Aware of their own biases, values, and privileges</td>
<td>+ 4</td>
</tr>
<tr>
<td>Takes various multicultural factors into consideration when creating treatment plans for clients</td>
<td>+ 4</td>
</tr>
<tr>
<td>Identifies many different relevant multicultural influences or factors for each client to inform conceptualization</td>
<td>+ 3</td>
</tr>
<tr>
<td>Shows cultural sensitivity and knowledge through respectful approaches</td>
<td>+ 2</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>Does not always believe there is a singular “right” answer</td>
<td>+ 1</td>
</tr>
<tr>
<td>Acts as an advocate, recognizing and responding to barriers, obstacles, and oppression faced by clients</td>
<td>+ 1</td>
</tr>
<tr>
<td>Recognizes and avoids use of stereotypes in their thinking about clients</td>
<td>+ 1</td>
</tr>
<tr>
<td>Challenges clients appropriately</td>
<td>+ 1</td>
</tr>
<tr>
<td>Uses basic skills (e.g., reflection) often and well</td>
<td>0</td>
</tr>
<tr>
<td>Empathic from cognitive, behavioral, and affective perspectives</td>
<td>0</td>
</tr>
<tr>
<td>Formulates appropriate goals</td>
<td>0</td>
</tr>
<tr>
<td>Meets clients where they are at</td>
<td>0</td>
</tr>
<tr>
<td>Synthesizes the information they know about a client</td>
<td>- 1</td>
</tr>
<tr>
<td>Works well under uncomfortable presentations from clients</td>
<td>- 1</td>
</tr>
<tr>
<td>Understands the stages of change (e.g., pre-contemplation, action)</td>
<td>- 1</td>
</tr>
<tr>
<td>Identifies connections between different types of client information</td>
<td>- 1</td>
</tr>
<tr>
<td>Utilizes theory</td>
<td>- 1</td>
</tr>
<tr>
<td>Identifies many different types of characteristics for each client they work with</td>
<td>- 2</td>
</tr>
<tr>
<td>Thoughtful</td>
<td>- 3</td>
</tr>
<tr>
<td>Identifies differential diagnoses</td>
<td>- 3</td>
</tr>
<tr>
<td>Humble</td>
<td>- 4</td>
</tr>
</tbody>
</table>

Table 11

*Distinguishing and Consensus Statements: Factor 2*

<table>
<thead>
<tr>
<th>Distinguishing Statements</th>
<th>Statement Positioning on Composite Q Sort</th>
</tr>
</thead>
<tbody>
<tr>
<td>Able to work with clients of differing cultural backgrounds, beliefs, and values from their own</td>
<td>+ 5</td>
</tr>
<tr>
<td>Demonstrates self-care</td>
<td>+ 4</td>
</tr>
<tr>
<td>Interprets and applies codes of ethics in their work</td>
<td>+ 4</td>
</tr>
<tr>
<td>Consults with other professionals</td>
<td>+ 4</td>
</tr>
<tr>
<td>Uses counseling techniques (e.g., role play) well as needed</td>
<td>+ 3</td>
</tr>
<tr>
<td>Aware of their own emotions</td>
<td>+ 3</td>
</tr>
<tr>
<td>Open to work with a variety of different counseling concerns/presenting problems</td>
<td>+ 2</td>
</tr>
<tr>
<td>Compassionate</td>
<td>+ 1</td>
</tr>
<tr>
<td>Integrates feedback from multiple sources, recognizing what is useful</td>
<td>+ 1</td>
</tr>
</tbody>
</table>
Recognizes when to terminate therapy + 1
Comfortable with ambiguity 0
Understands the client’s worldview 0
Engages in interprofessional collaboration 0
Demonstrates desire for and commitment to continual professional development 0
Demonstrates flexibility in their thought processes - 1
Conceptualizes clients thoroughly and from multiple angles - 1
Demonstrates metacognition, or the ability to think about their own thoughts - 1
Conceptualizes clients from a biopsychosocial perspective - 2
Identifies multiple means of treatment for a client - 3
Can identify and explain multiple perspectives - 3
Able to conceptualize cases through a variety of theoretical lenses - 3
Skilled in assessment - 4
Acts as a leader - 5
Provides consistently varied responses to clients - 5

**Consensus Statements**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Takes various multicultural factors into consideration when creating</td>
<td>+ 5</td>
</tr>
<tr>
<td>treatment plans for clients</td>
<td></td>
</tr>
<tr>
<td>Aware of their own biases, values, and privileges</td>
<td>+ 3</td>
</tr>
<tr>
<td>Shows cultural sensitivity and knowledge through respectful approaches</td>
<td>+ 3</td>
</tr>
<tr>
<td>Acts as an advocate, recognizing and responding to barriers, obstacles,</td>
<td>+ 2</td>
</tr>
<tr>
<td>and oppression faced by clients</td>
<td></td>
</tr>
<tr>
<td>Identifies many different relevant multicultural influences or factors for</td>
<td>+ 2</td>
</tr>
<tr>
<td>each client to inform conceptualization</td>
<td></td>
</tr>
<tr>
<td>Uses basic skills (e.g., reflection) often and well</td>
<td>+ 2</td>
</tr>
<tr>
<td>Empathic from cognitive, behavioral, and affective perspectives</td>
<td>+ 1</td>
</tr>
<tr>
<td>Recognizes and avoids use of stereotypes in their thinking about clients</td>
<td>+ 1</td>
</tr>
<tr>
<td>Does not always believe there is a singular “right” answer</td>
<td>+ 1</td>
</tr>
<tr>
<td>Challenges clients appropriately</td>
<td>0</td>
</tr>
<tr>
<td>Meets clients where they are at</td>
<td>0</td>
</tr>
<tr>
<td>Statement</td>
<td>Score</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Formulates appropriate goals</td>
<td>0</td>
</tr>
<tr>
<td>Works well under uncomfortable presentations from clients</td>
<td>-1</td>
</tr>
<tr>
<td>Synthesizes the information they know about a client</td>
<td>-1</td>
</tr>
<tr>
<td>Utilizes theory</td>
<td>-1</td>
</tr>
<tr>
<td>Identifies connections between different types of client information</td>
<td>-2</td>
</tr>
<tr>
<td>Identifies many different types of characteristics for each client they work with</td>
<td>-2</td>
</tr>
<tr>
<td>Understands the stages of change (e.g., pre-contemplation, action)</td>
<td>-2</td>
</tr>
<tr>
<td>Identifies differential diagnoses</td>
<td>-3</td>
</tr>
<tr>
<td>Thoughtful</td>
<td>-4</td>
</tr>
<tr>
<td>Humble</td>
<td>-4</td>
</tr>
</tbody>
</table>

**Factor 1: Trainee’s Conceptual Integration Ability**

Six participants (1, 2, 3, 9, 10, and 11) loaded onto Factor 1, titled *Trainee’s Conceptual Integration Ability*. This factor represents 22.57% of the explained variance, with the highest Eigenvalue of 2.71. The focus of Factor 1 appears as the CIT’s ability to identify, understand, and integrate (i.e., conceptualize) various types of information from different sources. The top three distinguishing statements for this factor include: “Integrates feedback from multiple sources, recognizing what is useful” (Statement 23, + 5); “Demonstrates metacognition, or the ability to think about their own thoughts” (Statement 18, + 5); and “Can identify and explain multiple perspectives” (Statement 25, + 4). Additionally, the CIT’s ability to conceptualize information from multiple sources is also highlighted by Statement 7 (+ 3): “Conceptualizes clients thoroughly and from multiple angles.”

Factor 1 also highlights the CIT’s ability to conceptualize, or process and integrate, different types of information from different sources. For example, while Statement 23 broadly highlights the ability to “[integrate] feedback from multiple sources,” Statement 18 more specifically highlights the CIT’s own thoughts (“metacognition”). Additionally, Statement 24 (+...
3) emphasizes clients’ “cultural backgrounds, beliefs, and values,” and Statement 35 (+ 2) notes the integration of information from a “biopsychosocial” perspective. Furthermore, the fourth distinguishing statement (Statement 7, + 3), emphasizes the value participants have for the CIT’s ability to conceptualize clients utilizing different types of information: “Conceptualizes clients thoroughly from multiple angles.”

The neutral statements from Factor 1’s composite Q sort (i.e., placed at 0) include: “Identifies multiple means of treatment for a client,” (Statement 14) “Skilled in assessment,” (Statement 20) and “Open to work with a variety of different counseling concerns/presenting problems” (Statement 30). Additionally, some distinguishing statements viewed as less significant in defining a minimally acceptable level of CC include “Provides consistently varied responses to clients” (Statement 6, - 2), “Consults with other professionals” (Statement 32, - 2), “Demonstrates self-care” (Statement 34, - 3), and “Recognizes when to terminate therapy” (Statement 22, - 4). Statement 37 (“Acts as a leader”) and Statement 33 (“Engages in interprofessional collaboration”) are placed at - 5 on the composite Q sort for Factor 1, making them the least significant characteristics in defining a minimally acceptable level of CC for graduating CITs, according to participants.

Regarding the demographic characteristics of the six participants who loaded onto Factor 1 (1, 2, 3, 9, 10, & 11), 83% (n = 5) identified as female, 83% (n = 5) identified as white, and 83% (n = 5) are licensed professional counselors. The participants had an average of 10.83 years of experience as a counselor education and supervision faculty, along with an average of 10 semesters of experience as internship supervisors. The three participants who loaded most highly in this factor (Participants 1, 2, and 3) had an average of nearly 13 years of experience as counselor education and supervision faculty members. Both Participants 1 and 2 are licensed
counselors, while Participant 3 reported 32 years of experience as a faculty member and having supervised a master’s-level counseling internship course for 25 semesters.

**Post-Q Sort Questionnaire Responses**

In their responses to the post-Q sort questionnaire (Appendix K), the six participants provided qualitative insight into their selection processes in completing the Q sort. Participants were asked to describe “…the items [they] placed as ‘least significant’ and ‘most significant,’” and were also asked to provide information on any other items, should they wish to do so. For example, Participant 1 described how the items they ranked as “…least significant were single word answers like ‘humble’ and ‘thoughtful.’” The participant also reported that although they value those characteristics as general dispositional qualities a counselor should possess, the more significant items pertinent to minimally acceptable CC reflected “…a process of being able to take on multiple perspectives and see from outside one’s own perspective.” Participant 9 expressed similar decision-making processes in their ranking of “general characteristics of competent counselors (e.g., thoughtful…)” as less significant.

According to Participant 1, these abilities require flexibility and complexity, as minimally acceptable CC entails “…being able to see things from multiple perspectives, but also being able to identify and choose what is valuable among multiple sources of feedback.” Similarly highlighting the significance of CITs’ thought processes over more practical clinical abilities, Participant 2 stated:

*I'd like to say that I think *all* of the items are important for therapeutic growth in counselors, but I tried to cluster the "non-negotiables" (i.e., the ability to conceptualize clients from a biopsychosocial perspective, understanding that there are multiple ways of doing therapy, knowing how to set a goal for a client, etc.) towards the "most significant"
side of the grid. Again, these are all important skills to develop, but some are more important for counselors-in-training to be able to do "right out of the gate," as they say.

Moreover, Participant 3 described the counseling process as "a cross-cultural experience," emphasizing the importance of the CIT’s “...capacity to think on multiple levels simultaneously...by the end of internship,” and self-reflect. Overall, five of the six participants (1, 2, 9, 10, 11) described how in some way all statements describe important counselor characteristics in some way or another, though did not all necessarily describe characteristics which describe a minimally acceptable level of CC required for program completion.

Consensus Statements: Factor 1

There are multiple consensus statements, or those with which all participants from Factor 1 found significant, less significant, or neutral. Concerning statements of agreement, Statement 10 (“Takes various multicultural factors into consideration when creating treatment plans for clients”) was viewed as significant for all participants, being placed at + 4 for Factor 1. Another statement of agreement is Statement 26 (“Aware of their own biases, values, and privileges), which was placed at +4. Participants also valued the CIT’s ability to “[identify] many different relevant multicultural influences or factors for each client to inform conceptualization” (Statement 8; + 3). Finally, “Shows cultural sensitivity and knowledge through respectful approaches” (Statement 9) was placed at + 2, while two statements (“Formulates appropriate goals” [39] and “Meets clients where they are at” [45]) were considered neutral, neither significant nor insignificant, for the participants from Factor 1. Finally, some statements were viewed as less significant by the participants. For example, “Humble,” Statement 36, was placed at – 4, and Statement 21 (“Identifies differential diagnoses”) was also considered less significant, being placed at - 3 on the composite Q sort.
Factor 2: Trainee’s Ability to Apply Integrated Knowledge

Five participants (4, 5, 6, 7, and 8) loaded onto Factor 2, *Trainee’s Ability to Apply Integrated Knowledge*. This factor accounts for 13.7% of the explained variance and has an Eigenvalue of 1.58. According to the participants from this factor, the CIT’s ability to practically apply their integrated knowledge about a client is significant in defining a minimally acceptable level of CC for graduating CITs. For example, on the composite Q sort, the two most highly positioned (+ 5) statements are Statement 10 (“Takes various multicultural factors into consideration when creating treatment plans for clients”) and Statement 24 (“Able to work with clients of differing cultural backgrounds, beliefs, and values from their own”). These statements emphasize application of knowledge, in this case multicultural and value-related knowledge.

Moreover, other highly ranked distinguishing statements for Factor 2 include: “Demonstrates self-care” (Statement 34, + 4), “Interprets and applies codes of ethics in their work” (Statement 27, + 4), “Consults with other professionals” (Statement 32, + 4), and “Uses counseling techniques (e.g., role play) well as needed” (Statement 4, + 3). Neutral statements, or those which the five participants collectively deemed neither significant nor insignificant, included “Comfortable with ambiguity” (Statement 16), “Understands the client’s worldview” (Statement 42), and “Demonstrates desire for and commitment to continual professional development” (Statement 28). Less significant items according to participants included “Can identify and explain multiple perspectives” (Statement 25, - 3), “Able to conceptualize cases through a variety of theoretical lenses” (Statement 40, - 3), and “Acts as a leader” (Statement 37, - 5).

The demographic characteristics of these five participants yields further information on counselor educators’ perspectives regarding minimally acceptable CC. For Factor 2, 80% (n = 4)
of participants identified as white, 100% \((n = 5)\) identified as female, and 60% \((n = 3)\) identified as licensed professional counselors. The participants had an average eight years of experience as counselor education and supervision faculty members and an average of nearly 11 semesters of experience supervising a master’s-level internship course. Compared to Factor 1, the participants in this factor had, on average, fewer years of experience as counselor education faculty members. The two participants who loaded highest in this factor (Participants 4 and 5) were both female and respectively identified as white and Black/African American. Participant 4 was a licensed counselor with 17 years of faculty experience and nine semesters of internship supervision experience, while Participant 5 had three years of faculty experience and three semesters of internship supervision experience.

The demographic information of Participant 12, the only participant who did not load onto either factor, should also be noted. With only one year of experience, Participant 12 had the least amount of experience as a faculty member of all the participants. They had four semesters of experience supervising master’s-level internship. Finally, Participant 12 was the only Black/African American identifying male in this study, and they were a licensed professional counselor.

**Post-Q Sort Questionnaire Responses**

Consideration of the qualitative responses provided by participants after their completion of the Q sort yields further insight on participants’ viewpoints concerning a minimally acceptable level of CC for second semester internship students. Of the five participants who loaded onto Factor 2, Participants 4 and 6 respectively described the Q sort activity as “hard” and “difficult,” as they viewed many of the statements as similar and descriptive of important counselor
characteristics in general. Both participants also highlighted their consideration of CITs’ developmental level as second semester internship students. Participant 6 stated:

_The most significant items pertained to Master's level ability and competence at the level of their experience. Things such as self care and meeting a client where they are at are very important; whereas things such as applying multiple theoretical perspectives at this level is not as significant as they are not skilled enough at this time to do that as easily as they can after a year or more of counseling practice._

Additionally, Participant 8 described how they selected more significant items based on “…the adage, ‘counselor know thyself,’” as they believed that “…the other items will come with time and experience.”

**Consensus Statements: Factor 2**

Concerning statements of agreement for the participants from Factor 2, Statement 10 (“Takes various multicultural factors into consideration when creating treatment plans for clients”) was viewed as significant for all participants, being placed + 5. Another statement of agreement is Statement 26 (“Aware of their own biases, values, and privileges), which was placed at + 3 for Factor 2. Participants from Factor 2 also valued the CIT’s abilities to “[show] cultural sensitivity” (Statement 9; + 3) and “act as an advocate” (Statement 29; + 2). Finally, “Shows cultural sensitivity and knowledge through respectful approaches” (Statement 9) was also placed at + 3. Two statements (“Formulates appropriate goals” [39] and “Meets clients where they are at” [45]) were considered neutral, neither significant nor insignificant, for the participants. Finally, some statements were viewed as less significant by the participants. For example, “Humble,” Statement 36, was placed at – 4. Additionally, Statement 21 (“Identifies differential diagnoses”) was also considered less significant, being placed at – 3.
Conclusion

In sum, adherence to three primary steps of Q method data analysis included the use of PCA with varimax factor rotation, resulting in the extraction of two factors, titled: (1) Trainee’s conceptual integration ability, and (2) Trainee’s ability to apply integrated knowledge.
Consideration of the distinguishing statements, consensus statements, participants’ qualitative responses, and demographic characteristics of participants unique to each factor informed the interpretation process. Respectively, the two extracted factors demonstrated participants’ value for both conceptualization ability and practical ability to make use of client conceptualizations, guided by self-awareness and general multicultural competence.
CHAPTER V

Discussion

In this chapter, following a brief reintroduction of the purpose and significance of this study, I will discuss the results pertinent to the existing literature. Implications for counselor educators and supervisors are provided, in addition to explanation of potential limitations of this study and possibilities for future research.

Purpose and Significance

Despite consensus on the importance of cognitive complexity (CC) for counselors (e.g., Castillo, 2018; Granello, 2010; McAuliffe & Lovell, 2006), researchers have yet to explore counselor educators’ perceptions of minimally acceptable CC for counselors in training (CITs) at the end of internship, including the role of multicultural competence in this minimally acceptable level. Thus, through this Q method study, I sought to explore what skills, characteristics, and ways of being comprise a minimally acceptable level of CC for graduating CITs, according to a sample of counselor educators. This study uniquely contributes to the existing knowledge on CC in counselor education by directly informing teaching and supervision practices purposed to enhance CC, as well as potential means of assessment and gatekeeping. I sought to answer two research questions:

(1) What are counselor educators’ perspectives on the characteristics of a CIT at the end of internship with a minimally acceptable level of CC?

(2) How do these characteristics of a CIT with a minimally acceptable level of CC reflect multicultural competency?
Discussion of Factors

Through adherence to three primary steps of Q method described by Brown (1993) and Stickl et al. (2018), I determined two factors which described participants’ views on a minimally acceptable level of CC for CITs at the end of their master’s-level internship. These two factors distinctively described the particular CIT characteristics, skills, and ways of being participants from each of the two factors viewed as more significant and less significant. Factor 1, *Trainee’s Conceptual Integration Ability*, focused more so on CIT conceptualization of clients, including the CIT’s ability to identify, understand, and integrate (i.e., conceptualize) various types of information from different sources. Factor 2, *Trainee’s Ability to Apply Integrated Knowledge*, however, emphasizes CIT practical application of integrated knowledge.

**Factor 1: Trainee’s Conceptual Integration Ability**

The views of the six participants who loaded onto Factor 1 centered upon CIT thinking processes. More specifically, the participants collectively valued the CIT’s ability to identify different pieces of client information from different sources and make sense of that information through integration, or client conceptualization. According to participants, this ability was evidenced by capabilities such as considering information from various sources, explaining different points of view, engaging in metacognition, and thorough case conceptualization. One participant described the process of counseling as “a cross-cultural experience,” and other participants echoed related sentiments in their qualitative responses, such as emphasizing “…non-negotiables [like] …understanding there are multiple ways of doing therapy.”

This focus on the trainee’s cognitive processes and ability to identify and integrate various types of client information aligns with findings on the cognitive development of CITs describing client awareness and self-awareness as integral (Borders, 1989; Castillo, 2018;
Granello, 2010; Granello & Underfer-Babalis, 2004). For example, Borders (1989) described a process of cognitive development marked by greater CIT awareness of others and awareness of self, and improved counseling skills. Similarly, Granello and Underfer-Babalis’s (2004) model of group supervision mirroring Bloom’s (1956) taxonomy suggested synthesis of information for deeper understanding as a primary goal of supervision. The emphases from Factor 1 also reflected the concept of integration described by Welfare and Borders (2010a), as CITs attempt to make sense of the information they have gathered from various sources.

Additionally, participants’ consideration of integration and self-awareness, or metacognition, as significant in defining a minimally acceptable level of CC aligns with Perry’s (1970/1981) theory of cognitive development. Perry suggested that as students develop, they move away from more dualistic thinking and towards thinking which reflects an acceptance of others’ worldviews, paradoxes, individual thought, and ambiguity. Participants valued the trainee’s ability to “identify and explain multiple perspectives,” as well as to work with clients from numerous backgrounds different from their own. As Perry suggested that more flexible and relativistic thinkers are more accepting of ideas which differ from their own and able to identify and make sense of various pieces of information, so did the participants representative of Factor 1. Moreover, McAuliffe and Lovell (2006) found that CITs who were more relativistic thinkers tended to give greater consideration to others’ worldviews and displayed greater metacognition when compared to less-relativistic thinkers. Similarly, the participants who represent Factor 1 valued trainee metacognition, comfort with ambiguity, and ability to work with and integrate information pertinent to clients of various backgrounds in defining a CIT with a minimally acceptable level of CC. These findings revealed that counselor educators’ view of minimally
acceptable CC was representative of the more complex and relativistic ways of thinking valued in the extant counselor education literature.

Additionally, rather than emphasizing the more practical action CIT takes, as in Factor 2, participants from Factor 1 deemed trainee thought processes as most significant in describing a CIT with minimally acceptable CC. This may signify a perspective that CIT integration ability may lead to and signify the CIT’s current and/or future ability to perform other important counseling skills and abilities, like appropriate treatment planning. This was evidenced by more practical items, such as “Skilled in assessment,” being considered neutral. Correspondingly, researchers’ findings on associations between greater CC and less stereotypical client conceptualizations (Chung & Bemak, 2002; Ware & Harvey, 1967) and greater multicultural awareness (Cannon, 2002; Granello, 2002) may explain the participants’ valuing of how CITs identify and integrate different information, rather than what the trainee does, when defining a minimally acceptable level of CC. This idea is further evidenced by a statement from one participant who described the more significant items as reflecting “… being able to take on multiple perspectives.”

Finally, the themes of Factor 1 were in line with the literature’s suggestions concerning the enhancement of CC. Various researchers (e.g., Branson & Branson, 2020; Ober et al., 2009; Wilkinson & Dewell, 2019) have emphasized the role of counselor educators in seeking to enhance CIT CC. More specifically, both Welfare and Borders (2010a) and Wilkinson and Dewell (2019) suggested counselor educators attend to both differentiation and integration in their work with CITs, while Wilkinson et al. (2020) further emphasized the counselor educator’s role in helping train CITs with more relativistic ways of thinking. Ober et al. (2009) suggested counselor educators seek to move CITs towards more complex thinking particularly concerning
multicultural factors. Participants’ emphasis on the trainee’s integration abilities, inclusive of comfort with ambiguity, an ability to consider multiple perspectives, and consideration of the client’s worldview as separate from one’s own echoes both Perry’s (1970/1981) theory of cognitive development, reflected in much of the counseling literature (e.g., Duys & Hedstrom, 2000; Granello, 2002; McAuliffe & Lovell, 2006), and suggestions from the literature pertinent to enhancing CC.

**Factor 2: Trainee’s Ability to Apply Integrated Knowledge**

For the five participants who comprise Factor 2, *Trainee’s Ability to Apply Integrated Knowledge*, a minimally acceptable level of CC for master’s-level CITs at the end of internship moves beyond just the trainee’s conceptualization to include the trainee’s more *practical* work with clients, when compared to Factor 1. For instance, participants perceived the CIT’s ability to “work with clients of different cultural backgrounds, beliefs, and values from their own” as significant. Participants also valued trainee abilities surrounding self-care, application of the codes of ethics, consultation, and appropriate use of counseling techniques. Neutral items centered more so around cognitive processes, like “Comfortable with ambiguity” and “Understands the client’s worldview.” Altogether, in considering participants’ perspectives on a minimally acceptable level of CC, Factor 2 describes various client characteristics and actions surrounding the “how-to” of providing multiculturally competent counseling to clients of diverse backgrounds.

Given the literature’s consensus on increasing cognitive development as marked by greater self-awareness and less dualistic thinking (e.g., Castillo, 2018; Granello, 2010; McAuliffe & Lovell, 2006; Perry, 1970/1981), it is unsurprising that counselor educators would value behaviors require greater acceptance of ambiguity, self-awareness, and relativistic thinking.
Additionally, Ratts’ et al. (2016) explanation of multicultural competence emphasizes the complexity of this issue, as well as the counseling relationship. The Multicultural and Social Justice Counseling Competencies (MSJCCs; Ratts et al., 2016) emphasized “(1) counselor self-awareness, (2) client worldview, (3) counseling relationship, and (4) counseling advocacy and interventions” (p. 3). Participants’ valuing of various actions and behaviors pertinent to defining minimally acceptable CC reflected these developmental domains and may be explained by an increased focus on multiculturalism and social justice issues over time (Hays, 2020).

An overarching emphasis of Factor 2, participants viewed the trainee’s ability to work with diverse clients including those different from oneself as significant, in addition to an openness “…to work with a variety of different counseling concerns/presenting problems.” Participants also viewed various behaviors related to counselor self-awareness as significant, including actions like self-care, consultation, and emotional awareness. Additionally, participants viewed compassion as more significant, perhaps reflecting the need for CITs to build a strong rapport with clients, including those of differing backgrounds. These results aligned with the findings of Wendler and Nilsson (2009), which described more cognitively complex CITs as exhibiting higher universal diverse orientation, or “…awareness and acceptance of both similarities and differences among people” (p. 28).

Moreover, participants’ valuing of CIT engagement in self-care supports the literature surrounding greater CC/cognitive development and self-awareness (e.g., Borders, 1989; Castillo, 2018; McAuliffe & Lovell, 2006; Perry, 1970/1981). Participants’ valuing of CIT engagement in self-care practices may be explained by the perspective that work with diverse clients with a variety of needs requires not only counselor self-awareness which yields self-care but reflects consistency and genuineness from the counselor through modeling, as the counselor provides
therapy and acts as an advocate on behalf of the client. The participants may have taken into consideration the potential for counselor burnout, possibly leading to negative impacts on counselor wellness (e.g., Limberg et al., 2021), when working with clients of varying backgrounds, needs, and experiences. Additionally, in line with the suggestions of Ratts et al. (2016), these participants may have valued self-care in light of issues related to “…stereotypes, discrimination, power, privilege, and oppression…,” and in consideration of the broader socio-economic and political landscape (p. 7). Participants may have deemed counselor self-care as a more significant aspect of minimally acceptable CC given their view that CITs at the end of internship should be aware of how current events, discrimination, and broader instances of systemic oppression may influence themselves and their clients. With this knowledge, CITs may thereby respond with appropriate self-care efforts to benefit themselves both personally and professionally.

**Consensus Statements**

The consensus statements, or statements which all participants utilized similarly when describing their perspectives on a minimally acceptable level of CC for a CIT completing their master’s-level internship (Rahma et al., 2020), were reflected uniquely but with a number of similarities by Factors 1 and 2. The consensus statements provided a foundation for what all participants from each of the two factors perceive as the qualities, characteristics, and skills of a CIT at the end of internship with a minimally acceptable level of CC.

Firstly, there are several similarities between the two Factors. For example, participants from both factors perceived the trainee’s ability to “[take] various multicultural factors into consideration” when treatment planning as significant. Other abilities and characteristics generally viewed as more significant by participants from both factors included CIT awareness
of their own worldview and biases and display of cultural sensitivity. The consensus statements of greater significance reflected a general perspective from the participants that self-awareness and multicultural competence were important attributes of a CIT at the end of internship with a minimally acceptable level of CC. Meanwhile, the abilities and characteristics participants collectively perceived as less significant included constructs like humility and an ability to identify differential diagnoses. Additionally, participants across factors also viewed similar statements as neutral, such as “Formulates appropriate goals” and “Meets clients where they are at.” This may suggest that participants valued conceptualization processes (Factor 1) and practical actions (Factor 2) which directly related to those ways of thinking.

Furthermore, when compared across Factors, the consensus statements mirror the above stated interpretation of the distinguishing statements for each factor. For example, Statement 29 (“Acts as an advocate, recognizing and responding to barriers, obstacles, and oppression faced by clients”) was similarly valued by participants from each factor. Participants from Factor 2 viewed a CIT’s ability to act as an advocate as somewhat more significant in describing a CIT with minimally acceptable CC when compared to those from Factor 1. This reflects application of integrated knowledge and may be explained by participants’ value for CIT knowledge and awareness of the need for advocacy, resulting in actual advocacy work. However, in comparing the consensus statements from Factor 1 to those of Factor 2, the similarities seemed to outweigh the nuanced differences. Thus, it appeared that overall, all participants had a similar foundational understanding of CC for CITs, though there were differences in the participants’ perceptions of a CIT at the end of internship with a minimally acceptable level of CC. Moreover, the foci of the two factors may be understood as a continuum, with the emphasis of Factor 2 (practical action) necessitating the skills and characteristics emphasized by Factor 1 (e.g., thorough integration
ability). Thus, although there are similarities observable through the distinguishing and consensus statements, participants from the two factors seemed to differ in how they perceived where CITs “should be” developmentally upon completion of internship.

As a collective and foundational understanding of a CIT at the end of internship with a minimally acceptable level of CC, participants’ view of CIT self-awareness and CIT multicultural competence as more significant is reflected in the extant literature on CC and current suggestions pertinent to multicultural competence and social justice. For example, Perry’s (1970/1981) theory of cognitive development, which informs much of the counseling and counselor education research on CC (e.g., Benack, 1988; Granello, 2002/2010a; McAuliffe & Lovell, 2006), presented that individuals who were more cognitively developed exhibited more relativistic thinking processes and were more comfortable with ambiguity. As also described by McAuliffe and Lovell (2006), this may include greater consideration of others’ beliefs and require greater self-awareness in counseling.

Additionally, the field of counselor education’s increased focus on multicultural competence (Hays, 2020; Ratts et al., 2016) may have informed participants’ foundational valuing of statements related to multiculturalism. For example, Ratts et al.’s (2016) Multicultural and Social Justice Counseling Competencies provide direction to counselor educators to prepare CITs with multiculturally competent counseling skills. These competencies also focus on counselor self-awareness, including one’s biases and personal experiences. Therefore, findings in this study may reveal a consensus amongst counselor educators concerning their understanding of CC; more specifically, that graduating CITs with a minimally acceptable level of CC could demonstrate the self-awareness necessary to provide culturally sensitive and multiculturally competent counseling services. The distinctions between Factors 1 and 2 revealed differences in
how the participants observe these characteristics in CITs (i.e., Factor 1 emphasizes conceptual ability while Factor 2 emphasizes more practical response). However, more practical abilities emphasized by Factor 2 may build upon and require the skills and attributes portrayed by Factor 1; thus, these developmental differences revealed by participants’ perspectives may be considered as a continuum ranging, simply put, from thought processes to practical action.

**Demographic Considerations**

The participants from Factor 1 were primarily female ($n = 5; 83\%$), white ($n = 5; 83\%$), and licensed professional counselors ($n = 5; 83\%$), with an average of over 10 years of experience as counselor education faculty members and an average of 10 semesters of experience as master’s-level internship supervisors within the university setting. Compared to Factor 2, these participants had, on average, more years of experience as counselor education faculty members. The participants from Factor 2 had an average of eight years of experience as faculty members and approximately 11 semesters’ experience supervising internship students. They also primarily identified as white ($n = 4; 80\%$) and female ($n = 5; 100\%$). Sixty percent ($n = 3$) identified as licensed professional counselors. Some of these demographic differences between the two Factors appeared to provide some context for the participants’ responses.

For example, the emphasis by participants from Factor 2 on CIT ability to work with clients of differing cultural backgrounds and engage in more practical action in understanding a minimally acceptable level of CC may be explained by the counseling field’s increasing emphasis on multicultural competency and social justice advocacy over time (Hays, 2020). With fewer years of experience than the participants from Factor 1, participants from Factor 2 may have, on average, more recently completed their doctoral training. This more recent training may have included more of a practitioner mindset given the Factor’s action-orientation, as well as
more of a social justice and multiculturalism focus, as the counseling field has developed its social justice identity over time. For example, Hays (2020) attributed an increased attention to matters of multiculturalism on client well-being over the last half century in part to the development of multicultural competencies (e.g., Sue et al., 1992) and, more recently, the expansion of the counselor’s identity to now include “that of social advocate” (p. 332). Therefore, the greater significance participants from Factor 2 placed on items surrounding multicultural competence may be explained by their doctoral training, which, if having occurred more recently, may have comparatively included more emphasis on issues related to social justice and multiculturalism pertinent to the counseling relationship.

**Implications**

In seeking to understand counselor educators’ perspectives of a CIT with a minimally acceptable level of CC, the results of this study demonstrated two primary emphases: (1) CITs’ cognitive processes (“conceptual integration ability;” Factor 1) and (2) more practical, action-oriented behaviors (“ability to apply integrated knowledge;” Factor 2). As a whole, participants demonstrated a general value for CIT self-awareness, consideration of clients’ multicultural backgrounds, cultural sensitivity, and thinking processes which reflect acceptance of ambiguity and acknowledgment of the counselor as an advocate. The findings provide a basis for more specific assessment of CIT CC at the end of internship, and inform training efforts to enhance CIT CC. With these findings in mind, I will describe practical assessment and training implications for counselor educators and supervisors as well as research implications pertinent to the findings of this study.
Counselor Educators

Understanding of counselor educators’ perspectives on a minimally acceptable level of CC for CITs at the end of internship provides insight on how assessment may occur informally (i.e., outside use of a formal assessment) and informs the creation of possible empirically based training methods. In this section, I will explore assessment and training implications for counselor educators relevant to the emphases of Factor 1 and Factor 2.

Assessment of CITs’ CC

Based on Factor 1, counselor educators may determine areas in which require expanded deliberation by CITs through assessment of their self-reflections, such as the CIT’s ability to consider the client’s point of view, metacognitive abilities, and ability to integrate different pieces of information. By way of discussion or written assignment, counselor educators may consider the depth and integration of CITs’ self-reflective thoughts, noting CITs’ perspectives on how they may or may not be influencing the counseling relationship. For instance, in a multicultural counseling course, a counselor educator may ask students to consider a counseling scenario from multiple points of view, considering the potential impacts of a client’s cultural identities and their own on the counseling relationship. Considering Factor 2, counselor educators may also ask CITs to apply their considerations by creating a plan of action which would necessitate contemplation of culture, ethics, and various other types of information.

Additionally, given Factor 1’s emphasis on integration and Factor 2’s focus on practical application, counselor educators may also informally assess for both areas through other self-reflective group discussion and writing activities. Activities such as Wilkinson and Dewell’s “Call-and-Response Assignment” (p. 61) may provide inspiration for such prompts and questions. Counselor educators may consider where CITs are developmentally when determining
these means of assessment. For instance, considering a continuum spanning integration ability (Factor 1) to practical work with clients (Factor 2), a counselor educator working with CITs in an ethics course may focus their CC assessment on integration abilities (e.g., metacognition, self-awareness). For instance, after presenting CITs with a case vignette which poses an ethical dilemma, a counselor educator may ask CITs to reflect both individually and in groups about topics like their own feelings and biases about the situation, how the client may feel about and interpret the situation, the potential influences of the client’s cultural identities, and other information they may want to know about the client.

Based on Factor 2, counselor educators may consider the CIT’s multicultural competence when assessing for CC. This may occur through specific class assignments and activities, like written case conceptualizations. Counselor educators may make intentional efforts to require integration of multiculturally pertinent information in written and verbal case conceptualizations in any counseling course. In a family systems course, a counselor educator may ask that in their written case conceptualizations based on a case vignette, CITs describe the client’s multicultural background and how this background may influence the counseling relationship and their diagnosis. Moreover, counselor educators may ask CITs questions about potential social justice-related concerns for a family they are working with, and how the CIT may work to advocate on behalf of this family and its members. Responses which require integration of the CIT’s awareness of self and multicultural competence may prove beneficial in assessment.

**Enhancement of CITs’ CC**

The extant counseling and counselor education literature (e.g., Castillo, 2018; Branson & Branson, 2020; Choate & Granello, 2006; Wilkinson et al., 2019) has highlighted the importance
of counselor educators’ focus on CC and provided models and specific training methods pertinent to enhancing the construct (e.g., Choate & Granello, 2006; Kindsvatter & Desmond, 2013; Wilkinson & Dewell, 2020). With this information and calls for continued exploration of CC enhancement methods (e.g., Castillo, 2018; Wilkinson & Dewell, 2019; Welfare & Borders, 2010a) in mind, counselor educators may utilize the findings of this study to guide their efforts to enhance the CC of the CITs they work with.

For example, counselor educators may attend to both how CITs integrate the knowledge they have about a client (e.g., conceptualization skills, self-awareness, and other awareness) and how they practically apply that integrated knowledge (e.g., rapport building, application of ethical codes) in various courses. For instance, counselor educators may consider more practical skills and abilities such as advocacy-response in a multicultural counseling course. To do so, they may first lay a foundation for this work by attending to CITs’ thought processes, which may include self-reflection practices and efforts to increase differentiation (i.e., identifying numerous related constructs). Using a case vignette, a counselor educator may ask CITs to list the different cultural identities a client may have and reflect upon their own experiences with and perspectives on these different identities. Similarly, CITs may reflect upon their own experience as part of a certain racial background through a written prompt, and then verbally reflect with other CITs in a small group about what it may be like to be a part of a minoritized racial group in the United States, keeping in mind the variety and ambiguity of individualized experience. Counselor educators may also consider integrating readings, videos, and other materials from authors of diverse backgrounds to facilitate CIT reflection about the experiences of individuals different from themselves.
Likewise, the results of this study suggest the value of various concepts related to multicultural competence; namely, the CIT’s ability to provide ethical and beneficial counseling services to individuals different from oneself, taking various perspectives into consideration. Thus, counselor educators may work to integrate multiculturalism and social justice issues into their efforts to enhance CIT CC, as researchers have called for increased exploration of how to bridge the knowledge-to-practice gap concerning social justice issues (e.g., Gantt et al., 2021). Thus, in their efforts to enhance CIT multicultural competence pertinent to CC, counselor educators may include activities, reflections, and discussions regarding the person of the counselor (attending to CIT self-awareness and metacognition), diverse perspectives, counselor self-care, and other items highlighted by Factors 1 and 2. These efforts may comprise a didactic, theory-based teaching component and practice-based work which engages CITs’ integration abilities highlighted by Factor 1, and practical skills exemplified in their work clients (Factor 2). For example, in an ethics course, counselor educators may attend to CITs’ abilities to identify their own biases, consider client multicultural factors and how they may influence the counseling relationship, and explain multiple perspectives in conceptualizing an ethical dilemma. Building upon these efforts, counselor educators may then engage CITs in more practical application of these considerations (Factor 2), which may occur through CITs’ creation of a plan of action. Such a plan could attend to application of ethical codes, opportunities for consultation, and counseling techniques which may be used to address the dilemma in session.

**Supervisors**

Given their direct access to CITs’ clinical work through opportunities for self-report, observation of recordings, live supervision, and other supervision techniques, there are multiple ways supervisors may assess for CITs’ CC. For example, findings point to various characteristics
and abilities supervisors may be able to specifically support counselors in pre- and post-graduation, such as self-awareness, considering multiple perspectives, applying ethical codes, and integration of information, among others. Supervisors may utilize methods such as audio/video recordings, live supervision, and written supervisee reflections to assess for these characteristics and abilities. For example, Factor 2 highlighted the participants’ perspective that CITs at the end of internship with a minimally acceptable level of CC engage in self-care and exhibit self-awareness. Supervisors may assess for such practical efforts through conversation (i.e., CIT self-report), reading case conceptualizations and progress notes, verbal client conceptualizations, and watching session recordings. In reviewing CITs’ progress notes and case conceptualizations, supervisors may assess for self-awareness and self-care by way of requiring CIT consideration of these factors.

Furthermore, the findings from this study may be used to build more standardized assessments of CIT readiness to graduate both within and across counseling programs at various developmental levels (e.g., practicum, internship, doctoral, residency). Intentional assessment of CC in these ways may reveal gaps in skills and counselor characteristics for CITs, thus informing training methods for supervisors. Moreover, when considering the CC of practicum and internship CITs, supervisors may consider self-awareness and multicultural competence as a basis in case presentations and client conceptualization assignments. Considering the Multicultural and Social Justice Counseling Competencies’ (MSJCCs; Ratts et al., 2016) emphasis on counselor self-awareness, supervisors specifically ask CITs reflect upon their own privileges, biases, social group statuses, and cultural background. Supervisors may also prompt CITs to consider their attitudes and beliefs concerning the client’s worldview. Considering the primary emphasis of each factor, supervisors may attempt to assess for both integration and
ability to apply integrated knowledge in developmentally appropriate ways, in this case for CITs at the end of internship. Given that the only current assessment of CC for counselors is the Counselor Cognitions Questionnaire (CCQ; Welfare & Borders, 2007), a valid and reliable assessment of CC specifically for CITs nearing the end of their training program may be helpful for supervisors. Such an assessment may build upon the integration and differentiation focus of the CCQ (reflected by Factor 1) to also include the application of integrated knowledge described by participants from Factor 2.

Based upon supervisors’ assessments of CITs’ CC, supervisors may also make efforts to enhance CC. Firstly, enhancement of CITs’ integration abilities could be supported through supervised opportunity for written client conceptualizations which integrate the CIT’s awareness of self and the counseling relationship in their attempt to conceptualize and treatment plan a case. Building upon these conceptual abilities, supervisors may also seek to enhance CIT CC by providing concrete support and education surrounding practical application of integrated knowledge (Factor 2). These practical pieces may include consultation with other professionals, counselor self-care, roleplays, and application of ethical codes, among others. As an example, based upon the CIT’s developmental needs, a supervisor may request a CIT to develop a self-care plan directly related to a client. The supervisor may ask the CIT what topics from their work with this client cause distress for them, are more difficult to talk about, and relate to their own life. The self-care plan assignment may be presented in a way to require CIT reflection on a specific case and their broader cultural, socio-political context to increase self-awareness and ability to apply such insight to their work with clients. Video or audiotapes could also be used to enhance CIT CC through use of Interpersonal Process Recall (IPR; Kagan et al., 1969), as
supervisors attend to the CIT’s internal reactions and subsequent reactions in a session. IPR may be used as a basis for enhancing CIT CC.

Finally, these supervisory efforts to enhance CITs’ CC may occur in an integrated fashion with concepts surrounding multicultural and social justice competency. For instance, in a triadic or group supervision setting, CITs may engage in a discussion on the importance and actual practice of consultation in light of a case presentation, paralleling the multicultural complexities and experiences of both the client and counselor. Likewise, building upon existing models of supervision which consider CC (e.g., Borders, 1989; Granello & Underfer-Babalis, 2004; Ober et al., 2009), supervisors may develop specific training protocols for master’s and doctoral-level students which connect thought (Factor 1) and action (Factor 2) to support enhanced CC.

Future Research

Regarding future research, the findings of the present study point toward a need for greater understanding of CC. Thus, replication of this study with a larger, more diverse sample may be helpful in furthering understanding of how counselor educators perceive minimally acceptable CC for graduating CITs from master’s programs. This study could also be replicated to better understand a minimally acceptable level of CC for CITs and counselors at different developmental levels (e.g., beginning a master’s program, in residency, completing a doctoral program). The findings also revealed a need for continued exploration of how CC may be assessed in developmentally appropriate ways. Building upon this study and future work, researchers may seek to create reliable and empirically validated assessments of CC for counselors at different developmental levels. To accomplish this end, researchers may utilize this study and subsequent studies of counselors at different developmental levels, described above, to create a basis for creation of such assessments. For example, the findings of this study could be
used as a foundation for an assessment of CIT CC at the end of internship in which a counselor educator or supervisor provides a Likert-scale rating for a CIT on their proficiency in a number of abilities identified by this study, such as self-awareness, ability to view situations from multiple perspectives, and ability to integrate various pieces of information about a client. Such an assessment could be conducted at the beginning of internship as a baseline to inform training focus throughout the semester. Through construct validation studies, the statements from the Q sample of this study may be validated for use in such assessments.

Researchers may also utilize the findings of the present study to create and explore the potential efficacy of CC-centered training methods. For instance, researchers may utilize the findings to inform creation of course curriculum which spans the continuum from ways of conceptualization, represented by Factor 1, to practical action, represented by Factor 2. Researchers may consider the consensus statements and most significant distinguishing statements from each factor to inform potential means of CC enhancement. For example, based on Factor 1, researchers may create a curriculum specifically focused on CITs’ cognitive abilities (e.g., metacognition, integration, self-awareness) with the goals of increased CC and increased comfort, self-efficacy, and ability to effectively work with clients from diverse backgrounds, especially those different from oneself, and examine the potential efficacy of those curriculums.

**Limitations**

There are various limitations to the current study that should be taken into consideration in utilizing the findings. First, generalizability of the current findings is limited to the sample involved in the study. A potential limitation of the sample was lack of diversity, as most participants identified as white and female. For future studies, researchers may consider pointed efforts to recruit a sample of participants representative of more diverse gender, racial, and other
backgrounds (e.g., sexual orientation). Researchers may also consider gathering other professional information such as participants’ supervision training and experiences (e.g., supervision of counseling residents). For example, participants with more experience as counselor educators and supervisors may have led to similar or different results.

Second, there are limitations specific to Q method utilized in this study. Participants were arguably limited by the predetermined statements in how they may describe the phenomena being studied and Q method’s reliance on subjectivity for both the researcher and the participants (Cross, 2005). I tried to address the first limitation by utilizing post-Q-sort questions through which participants were able to provide more information on their thought processes regarding how they made decisions, as well as other important thoughts and beliefs they have regarding the Q-sort processes. Since Q method is grounded in the study of subjectivity, participants were asked to sort each item in the Q grid, where is a limited number of uncertain responses (Cross, 2005). However, there is always a chance that the participants may provide responses that they believed the researcher was looking for, rather than what they truly believed – social desirability. I sought to mitigate the possibility of such responses through ensuring confidentiality of participant information and not prompting participants to provide certain statements or rank statements in a particular fashion. Finally, as the data was created and analyzed, researcher’s bias may have been included in the processes. Despite integrating certain strategies (e.g., external auditor) to mitigate the potential influences, biases such as a value for consideration of multicultural factors and the belief that cognitively complex CITs are able to work with clients of diverse backgrounds may have influenced the research process.
Conclusion

Through a Q method exploration, I sought to understand counselor educators’ perspectives on a CIT at the end of their master’s-level internship with a minimally acceptable level of CC. These perspectives include specific attributes, characteristics, skills, and behaviors, and I also sought to understand how these perspectives may be related to multicultural competency. Participants valued self-awareness and an ability to work with those different from oneself, and the two factors which emerged from the data analysis process described a continuum spanning from CITs’ conceptual integration ability to their ability to apply integrated knowledge. These findings reflected the extant literature concerning CC/cognitive development and contribute further insight on how counselor educators may assess for CC, thereby informing assessment and training processes for the development of cognitively complex CITs prepared to work with diverse populations.
CHAPTER VI

Manuscript
Abstract

Using Q method, we explored counselor educators’ perspectives of a minimally acceptable level of cognitive complexity (CC) in master’s level CITs at the end of internship, yielding two factors, titled: (1) Trainee’s Conceptual Integration Ability and (2) Trainee’s Ability to Apply Integrated Knowledge. Implications for counselor educators, supervisors, and future research pertinent to assessment of and enhancement of CC are discussed.
Complex Thought for Complex Work: Preparing Cognitively Complex Counselors for Work in Diverse Settings

Stemming from various theories of development (e.g., Kohlberg, 1987; Perry, 1970/1981; Piaget, 1932), cognitive complexity (CC) has become an increasingly focused and valued topic in the counseling and counselor education literature, though the body of research on the topic remains small (Castillo, 2018). Granello (2010, p. 92) defined CC as “…the ability to absorb, integrate, and make use of multiple perspectives” and suggested that higher levels of CC in counselors have been associated with various benefits pertinent to the complex work of counseling. Given the need for counselors who can convey empathy, act as social justice advocates, and consider the intersectionality of innumerable client factors, Castillo (2018) implored counselor educators to embrace and seek to increase CC in counselors in training (CITs) through teaching and supervision practices. However, CC is challenging to assess (Castillo, 2018) and researchers have called for further exploration of CIT CC and its development (e.g., Castillo, 2018; Duys & Hedstrom, 2000; Granello, 2010; Kindsvatter & Desmond, 2013; Little et al., 2005; McAuliffe & Lovell, 2006; Welfare & Borders, 2010a).

Since counseling includes gray areas where the counselor must be able to approach from multiple perspectives (McAuliffe & Lovell, 2006) as they work with clients from diverse backgrounds, an integral aspect of training is increasing counselor CC (e.g., Castillo, 2018; Granello, 2010; Kindsvatter & Desmond, 2013). Researchers have explored the relationship between CC and important counselor characteristics and skills and found that counselors with higher levels of CC formed more complex client conceptualizations (Ladany et al., 2001; Ridley et al., 2011) and had more accurate understandings of clients (Blocher, 1983). As suggested by
Castillo (2018), CC can be understood as the counselor’s ability to integrate, synthesize, and make sense of the complex, often ambiguous information presented by clients.

Various other benefits to higher levels of CC have been identified in the counseling and counselor education literature, including higher levels of and more consistent empathy (Blaas & Heck, 1978; McAuliffe & Lovell, 2006), greater flexibility in thought and use of skill (Borders, 1989; McAuliffe & Lovell, 2006), higher tolerance of ambiguity (Granello, 2010; McAuliffe & Lovell, 2006), and the abilities to effectively utilize counseling skills and integrate disparate client information for the sake of conceptualization (Branson & Branson; 2020; Castillo, 2018; Welfare & Borders, 2010b). Counselor education researchers have also suggested training and supervision models purposed to address and increase CIT CC (e.g., Granello & Underfer-Babalis, 2004; Ober et al., 2009; Little et al., 2005). The field of counseling has progressively moved towards an increased focus on multicultural competence (Ratts et al., 2016), and researchers have explored the relationship between CC and related issues of multicultural competence, suggesting a positive association (Ober et al., 2009; Wendler & Nilsson, 2009).

The literature also includes apt suggestions for increasing CC in CITs. Empirical studies (e.g., Duys & Hedstrom, 2000; Fong et al., 1997; Little et al., 2005) as well as conceptual articles (e.g., Branson & Branson, 2020; Choate & Granello, 2006; Kindsvatter & Desmond, 2013; Wilkinson et al., 2019) have emphasized the role of counselor educators in this process, noting andragogical practices and particular activities most likely to support the enhancement of CC in CITs. Specific andragogical processes and emphases include utilizing counseling faculty advisors to attend to students’ developmental needs (Choate & Granello, 2006), opportunities for complex problem-solving (Kindsvatter & Desmond, 2013), and specific writing assignments, such as Wilkinson and Dewell’s (2020) “Call-and-Response Assignment” (p. 61) used to
promote the consideration of meaning and considering experiences and ideas from other perspectives. It has also been suggested that the process of supervision inherently promotes the development of CC (Granello & Underfer-Babalis, 2004). Thus, it is logical to conclude that understanding of what in particular counselor educators are actually considering, such as CITs’ actions, ways of thinking, and knowledge, may reveal gaps in assessment, education, and supervision, informing changes in teaching and supervision practices.

Moreover, the process of cognitive development includes both changes in CIT ways of thinking as described by developmental models of supervision (Borders, 1989; Stoltenberg & McNeil, 2010) and development of counseling skills (Fong et al., 1997). Borders (1989) suggested that CITs develop cognitively as their awareness of self, awareness of others, and counseling skills improve. Borders also described beginning practicum CITs as having more limited self-awareness and as being more dualistic in their thinking. As CITs progress through the practicum and internship experience, they typically become more self-aware, empathic, complete in their client conceptualizations, and less dependent on experts (e.g., Borders, 1981; Castillo, 2018; Granello, 2010; Welfare & Borders, 2010a). These findings suggest the importance of exploring differences and expectations of CIT CC at different developmental levels; for this study, this is a minimally acceptable level of CC for CITs at the end of internship.

In the current study, we followed Perry’s (1970/1981) theory of cognitive development to explore participants’ subjective perspectives of the characteristics of a CIT at the end of internship with a minimally acceptable level of CC. This theory has been utilized by counselor education researchers to examine CC (e.g., Granello, 2002/2010a; McAuliffe & Lovell, 2006) and provided a basis for understanding development as movement towards thinking which is more relativistic, or cognizant of varying experiences and beliefs amongst people, and accepting
of the idea that there are not always “right” answers (Perry, 1970/1981). We conceptualized the final stage of Perry’s (1970/1981) theory, commitment, as aligning with high CC. Perry describes individuals within this final stage as committed to a certain belief system or set of values, having chosen these beliefs for themselves, not solely based on the instruction of authority figures; however, individuals in this stage of cognitive development are also accepting of others’ perspectives, experiences, and beliefs, reflecting the aforementioned stage of relativism.

**Purpose of the Study**

To date, researchers have not explored counselor educators’ perspectives of minimally acceptable competence in the area of CC at different developmental levels (i.e., practicum, internship, etc.), or what role multicultural competence does or does not play within that minimally acceptable level. Information in this area of minimal competence would serve to fulfill researchers’ calls for further exploration of CC and CIT development (e.g., Castillo, 2018; Granello, 2010; McAuliffe & Lovell, 2006; Welfare & Borders, 2010a) and, more specifically, contribute to a foundational understanding of what comprises this minimally acceptable level of CC for a graduating CIT (Kemer et al., 2017), informing teaching, supervision, and gatekeeping practices. Therefore, we utilized Q method to examine counselor educators’ perspectives regarding the characteristics of a CIT at the end of internship with a minimally acceptable level of CC required to enter the field, including their perspectives of multicultural competence pertinent to this question. We sought to answer these research questions: (1) What are counselor educators’ perspectives on the characteristics of a CIT at the end of internship with a minimally acceptable level of CC? and (2) How do these characteristics of a CIT with a minimally acceptable level of CC reflect multicultural competency?
Methods

We utilized Q method, an exploratory sequential mixed methods approach (McKeown & Thomas, 2013), which employs the strengths of quantitative and qualitative methods and allows for rigorous exploration of subjectivity (Stickl et al., 2018). Q method is unique in that it allows for operationalization of subjective viewpoints through the sorting process (McKeown & Thomas, 2013; Stickl et al., 2018). We followed five steps of Q method: (1) gathering the P set, (2) forming the Q sample [data collection part one], (3) conducting a pilot test, (4) the Q sort [data collection part two], and (5) data analysis (Stickl et al., 2018), and utilized Qualtrics and QMethod Software (Lutfallah & Buchanan, 2019) for data collection and analysis.

Step 1: The P Set

The P set is the sample of participants (Watts & Stenner, 2012). We determined a specific criterion to ensure that the participants have the necessary knowledge and experience working with internship students to speak for the level of CC at the end of internship experience for their readiness to complete the program (Watts & Stenner, 2005): (1) holding a PhD degree from a CACREP-accredited counseling or counselor education program; (2) had completed at least two semesters of a supervised supervision experience during their doctoral studies; (3) currently being employed as a counselor educator in a counseling program in the United States; and (4) has provided individual, triadic, or group supervision for internship-level counselors in training for at least three semesters in the last three years as a counselor education faculty member at their current and/or previous institution. Using purposeful and convenience sampling methods, we aimed to recruit approximately 20 participants for this study (McKeown & Thomas, 2013). As noted by McKeown and Thomas (2013), other Q method studies have utilized samples smaller than what is suggested by Watts and Stenner (2005) due to the specificity of their target
population (e.g., Baltrinic et al., 2020; Innes et al., 2018). We recruited participants by sending emails to the CESNET Listserv, through social media posts, and by contacting CACREP-accredited clinical mental health counseling program chairs and/or directors for the study announcement. We sought to further enhance the diversity of the sample in terms of their demographic backgrounds by utilizing “snowball sampling,” by which we directly asked individuals to provide the email addresses of other individuals who may qualify to participate (Patton, 2015). Participants were asked to complete a demographic questionnaire using Qualtrics software, purposed in part to determine whether they meet the following participation criteria.

Seventeen participants completed part one of data collection, while 12 participants completed the study in its entirety (i.e., parts one and two of data collection). Of the 17 participants, 70.5% (n = 12) identified as female, 23.5% (n = 4) identified as male, and 6% (n = 1) identified as “other.” Regarding ethnicity, the majority of participants (64%; n = 11) identified as white, while 23.5% (n = 4) identified as Black or African American, 6% (n = 1) identified Eastern European, and 6% (n = 1) identified as Hispanic or Latinx. The majority of participants reported they have a master’s degree in clinical mental health counseling and identified as licensed professional counselors (64%; n = 11). Moreover, 88% (n = 15) of participants held PhD degrees in counselor education and supervision, while the remaining participants (12%; n = 2) held PhD degrees in counseling. Most participants (88%; n = 15) are also currently employed by a CACREP-accredited counseling program. Concerning their years of experience as counselor education faculty members, 41% (n = 7) had 1-5 years of experience, 41% (n = 7) had 6-10 years of experience, and 18% (n = 3) had 11 or more years of experience. Finally, 35% (n = 6) of participants reported they supervised 1-5 semesters of master’s-level internship as a counselor.
education faculty member, while 35% (n = 6) had supervised 6-10, 12% (n = 2) had supervised 11-15, and 18% (n = 3) had supervised 16 or more semesters.

**Step 2: The Q Sample**

The Q sample is a representative group of statements gathered from the larger body of information on a topic (Stickl et al., 2018) and comprises the statements that participants sorted (i.e., ranked) according to their perceived significance pertinent to a minimally acceptable level of CC for a CIT at the end of internship using the Q grid (see Figure 1). Creation of the Q sample occurred by four means: (1) thematic analysis of the extant counseling and counselor education literature, (2) participants’ generation of statements, (3) an expert panel through a pilot test, and (4) an auditor.

We conducted a thematic analysis of the extant literature, yielding 16 statements which describe CC pertinent to the work of the counselor (Braun & Clarke, 2006). The first author developed three themes pertinent to the topic of CC from the extant literature in an unstructured manner, as there are currently no theories related to counselor educators’ conceptualizations of CC in the extant literature. A “ready-made” concourse was developed, utilizing already existing sources including 20 peer-reviewed scholarly journal articles published between 1967 and 2020 (McKeown & Thomas, 1988). Three broad, initial themes were developed, represented by 16 statements representing cognitively complex counselors as: (1) consistently and accurately utilizing various basic counseling skills like empathy and reflection; (2) conceptualizing clients thoroughly and from different perspectives; and (3) being less dualistic and more relativistic in their thinking, aware of the myriad of complex beliefs and experiences held by individuals and groups. In an attempt to reduce researcher bias and ambiguity, the first author critically reviewed the themes and corresponding statements, combining, eliminating, and altering the themes and
statements throughout the process (Brown, 1993; Watts & Stenner, 2012). The second author acted as an auditor and reviewed the themes and corresponding statements and provided feedback to further scrutinize the material and make revisions.

**Data Collection: Part 1**

Due to the dearth of literature on counselor educators’ perspectives of minimally acceptable CC in CITs, participants’ views are represented in the Q sample. Immediately following completion of the demographic questionnaire via Qualtrics, we offered participants a prompt and an open-ended question (i.e., Cognitive complexity is defined by Granello (2010) as “…the ability to absorb, integrate, and make use of multiple perspectives” (p. 92). In your opinion, what characterizes a counselor in training at the end of their internship with a minimally acceptable level of cognitive complexity? In the form of phrases and/or short sentences, please list as many characteristics, attributes, skills, behaviors, etc. as possible that come to your mind.)

Participants (n = 17) provided 74 statements in total. After a one-month recruitment period, we reviewed the statements provided by participants by editing and synthesizing the literature-based and participant-created statements to create the final Q sample.

**Step 3: Pilot Test**

Next, we conducted a pilot test of the current Q sample to further refine the Q sample (Stickl et al., 2018) using QMethod Software (Lutfallah & Buchanan, 2019). As suggested by Watts and Stenner (2012), the pilot test was conducted utilizing four subject matter experts (i.e., tenured counselor educators) who met nearly all the same criteria as the study participants. Specifically, each subject matter expert met each of these requirements: hold a doctoral degree in counselor education and supervision, are currently employed as a counselor educator with tenure, have a substantial record of empirical research focused on multicultural and social justice
advocacy, and/or have completed two semesters of a supervised supervision experience during their doctoral studies. Members of the expert panel provided feedback on whether anything appeared to be missing from the statements to describe CC and whether they understood the statements and/or the sorting task. They suggested two additional statements be added to the Q sample. After reviewing and synthesizing the 92 statements in total from the literature, participants, and expert panel, the updated Q sample included a final 45 items. We sent this Q sample to the auditor who had not yet been involved in the Q sample creation process. The auditor was a tenured associate professor with a doctorate in Educational Technology and Mathematics Education, and an expert in educational technology and has authored/co-authored over 100 publications on the topic. The auditor reviewed a document listed all 92 statements alongside the updated Q sample to determine if final list of statements were representative of the data. The auditor stated that nothing appeared to be missing from the Q sample, approving the final Q sample with 45 items.

**Step 4: The Q Sort (Data Collection: Part 2)**

We asked 17 participants from the first part of data collection to complete a Q sort and answer a post-Q sort questionnaire about the sorting process through QMethod Software (Lutfallah & Buchanan, 2019) and Qualtrics, respectively. Participants completed the following steps: (1) watch an approximately four-minute instructional video on the Q sort procedures; (2) pre-sort each statement according to their significance to aid in the ranking process; (3) complete the Q sort; and (4) answer a post-Q sort questionnaire. We again provided the participants the definition of CC and asked them to sort (i.e., drag and drop) each statement into the grid according to how significant they believed the statement was in defining a minimally acceptable level of cognitive complexity for a counselor in training at the end of internship. The grid ranged
from least significant (left) to most significant (right). The distribution of the grid (-5, through 0, to +5) was determined according to the guidelines suggested by Watts and Stenner (2012) and, originally, Stephenson (1936). Stephenson suggested the importance of utilizing a prearranged frequency distribution, as it increases standardization of the Q sort task, and mirrors a normal bell curve, as more statements are grouped towards the middle of the distribution, rather than the peripheries. Participants then answered questions about their selection processes (Brown, 1993) using Qualtrics. Each participant who completed the study in full was compensated with a $10 Amazon gift card.

**Step 5: Data Analysis**

We completed three steps of data analysis (Brown, 1993; Stickl et al., 2018) through QMethod Software (Lutfallah & Buchanan, 2019): (1) Q sort correlations; (2) principal component analysis (PCA) with varimax factor rotation, and (3) interpretation of the extracted factors. After first calculating the correlation between participants’ Q sorts displayed through a correlation matrix (Table 1; Brown, 1993), we ran multiple analyses using QMethod Software (Lutfallah & Buchanan, 2019) to determine which means of analysis yielded the most conceptually meaningful report, deciding on the use of PCA with varimax factor rotation. We began the factor analysis process by first taking significant participant factor loadings into account at the .05 level (Stickl et al., 2018; Watts & Stenner, 2012). We also took context and the theoretical importance of factors into account in this process (McKeown & Thomas, 2013).

When using PCA, the number of initial extracted factors is automatically selected by the QMethod Software (Lutfallah & Buchanan, 2019), which in this case was eight. We then applied the Kaiser-Guttman Criterion to the data, retention of factors with eigenvalues greater than 1.00 (Lutfallah & Buchanan, 2019; McKeown & Thomas, 2013), yielding the first five factors
meeting this criterion. We also applied Humphrey’s Rule to the data, suggesting “a factor is significant if the cross-product of its two highest loadings (ignoring the sign) exceeds twice the standard error” (Brown, 1980, p. 223). The standard error for this study was .29, making $2(SEr) = 0.58$. None of the cross products from the eight factors exceeded 0.58. However, according to Brown (1980), less strict use of Humphrey’s Rule may be applied, meaning cross products which exceed just $1(SEr)$ or .29 significant. Utilizing the less stringent application of Humphrey’s Rule, we observed four of the eight factors (Factors 1, 2, 3, and 4) meeting this criterion.

Considering the statistical strengths of the factors and their relationships, we decided to rotate two factors at the .05 level using varimax factor rotation, allowing for greater ease in distinguishing participants’ viewpoints (Webler et al., 2009). Varimax factor rotation is an often suggested means of rotation for PCA (Lutfallah & Buchanan, 2019). The two extracted factors accounted for 36% of the explained variance, as displayed in Table 1 below, meeting the expectations (Watts & Stenner, 2012). Of the 12 participants, six loaded onto the first factor and five onto the second factor. Only one participant loaded onto neither factor.

*Insert Table*

Finally, we conducted the factor interpretation (Stickl et al., 2018) by examining the distinguishing statements for each factor along with the consensus statements provided. The distinguishing statements were those differentiating “…one factor’s view from another at a statistically significant level” (Ramlo, 2008, p. 180), and the consensus statements were statements of agreement or those which all participants utilized similarly in describing a CIT with a minimally acceptable level of cognitive complexity (Rahma et al., 2020). We also sought to make sense of these findings using participant responses to the demographic questionnaire and post-Q sort questions (Stickl et al., 2018).
Results

Factor 1: Trainee’s Conceptual Integration Ability

Six participants (1, 2, 3, 9, 10, and 11) loaded onto Factor 1, *Trainee’s Conceptual Integration Ability*. The focus of Factor 1 appears as the CIT’s ability to identify, understand, and integrate (i.e., conceptualize) various types of information from different sources. The top three distinguishing statements include: “Integrates feedback from multiple sources, recognizing what is useful” (Statement 23); “Demonstrates metacognition, or the ability to think about their own thoughts” (Statement 18); and “Can identify and explain multiple perspectives” (Statement 25). Additionally, the CIT’s ability to conceptualize information from multiple sources is also highlighted by Statement 7: “Conceptualizes clients thoroughly and from multiple angles.”

Factor 1 highlights the CIT’s ability to conceptualize, or process and integrate, different types of information from different sources. For example, while Statement 23 broadly highlights the ability to “[integrate] feedback from multiple sources,” Statement 18 more specifically highlights the CIT’s own thoughts (“metacognition”). Additionally, Statement 24 emphasizes clients’ “cultural backgrounds, beliefs, and values,” and Statement 35 notes the integration of information from a “biopsychosocial” perspective. The fourth distinguishing statement (Statement 7), emphasizes the value participants have for the CIT’s ability to conceptualize clients utilizing different information: “Conceptualizes clients thoroughly from multiple angles.”

Regarding the demographic characteristics of the six participants who loaded onto Factor 1 (1, 2, 3, 9, 10, & 11), 83% (n = 5) identified as female, 83% (n = 5) identified as white, and 83% (n = 5) are licensed professional counselors. The participants had an average of 10.83 years of experience as a counselor education and supervision faculty, along with an average of 10 semesters of experience as internship supervisors. The three participants who loaded most highly
in this factor (Participants 1, 2, and 3) had an average of nearly 13 years of experience as counselor education and supervision faculty members. Both Participants 1 and 2 are licensed counselors, while Participant 3 reported 32 years of experience as a faculty member and having supervised a master’s-level counseling internship course for 25 semesters. In their responses to the post-Q sort questionnaire, the six participants provided qualitative insight into their selection processes in completing the Q sort. Participant 1 described how the items they ranked as “…least significant were single word answers like ‘humble’ and ‘thoughtful.’” The participant also reported that although they value those characteristics as general dispositional qualities a counselor should possess, the more significant items pertinent to minimally acceptable CC reflected “…a process of being able to take on multiple perspectives and see from outside one’s own perspective.” Participant 9 expressed similar decision-making processes in their ranking of “general characteristics of competent counselors (e.g., thoughtful…)” as less significant.

Regarding consensus statements, Statement 10 (“Takes various multicultural factors into consideration when creating treatment plans for clients”) was viewed as significant for all participants. Another statement of agreement is Statement 26 (“Aware of their own biases, values, and privileges). Participants valued the CIT’s ability to “[identify] many different relevant multicultural influences or factors for each client to inform conceptualization” (Statement 8). Two statements (“Formulates appropriate goals” [39] and “Meets clients where they are at” [45]) were considered neutral, neither significant nor insignificant, for the participants from Factor 1. Finally, some statements were viewed as less significant by the participants, including “Humble” (Statement 36) and Statement 21 (“Identifies differential diagnoses”).
**Factor 2: Trainee’s Ability to Apply Integrated Knowledge**

Five participants (4, 5, 6, 7, and 8) loaded onto Factor 2, *Trainee’s Ability to Apply Integrated Knowledge*. Participants viewed the CIT’s ability to practically apply their integrated knowledge as significant in defining a minimally acceptable level of CC. The two statements participants viewed as most significant include Statement 10 (“Takes various multicultural factors into consideration when creating treatment plans for clients”) and Statement 24 (“Able to work with clients of differing cultural backgrounds, beliefs, and values from their own”), which emphasize application of knowledge, in this case multicultural and value-related knowledge. Other highly ranked distinguishing statements include: “Demonstrates self-care” (Statement 34), “Interprets and applies codes of ethics in their work” (Statement 27), “Consults with other professionals” (Statement 32), and “Uses counseling techniques (e.g., role play) well as needed” (Statement 4). Neutral statements, or those which the five participants deemed neither significant nor insignificant, included “Comfortable with ambiguity” (Statement 16), “Understands the client’s worldview” (Statement 42), and “Demonstrates desire for and commitment to continual professional development” (Statement 28). Less significant items included “Can identify and explain multiple perspectives” (Statement 25), “Able to conceptualize cases through a variety of theoretical lenses” (Statement 40), and “Acts as a leader” (Statement 37).

For Factor 2, 80% (*n* = 4) of participants identified as white, 100% (*n* = 5) identified as female, and 60% (*n* = 3) identified as licensed professional counselors. The participants had an average eight years of experience as counselor education and supervision faculty members and an average of nearly 11 semesters of experience supervising a master’s-level internship course. Compared to Factor 1, the participants in this factor had, on average, fewer years of experience as counselor education faculty members. The two participants who loaded highest in this factor
(Participants 4 and 5) were both female and respectively identified as white and Black/African American. Participant 4 was a licensed counselor with 17 years of faculty experience and nine semesters of internship supervision experience, while Participant 5 had three years of faculty experience and three semesters of internship supervision experience. The demographic information of Participant 12, the only participant who did not load onto either factor, should also be noted. Participant 12 had the least amount of experience as a faculty member of all the participants. They had four semesters of experience supervising master’s-level internship. Finally, Participant 12 was the only Black/African American identifying male in this study, and they were a licensed professional counselor.

Of the five participants who loaded onto Factor 2, Participants 4 and 6 respectively described the Q sort activity as “hard” and “difficult,” as they viewed many of the statements as similar and descriptive of important counselor characteristics in general. Both participants also highlighted their consideration of CITs’ developmental level as second semester internship students. Participant 6 stated that “…applying multiple theoretical perspectives at this level is not as significant as they are not skilled enough at this time.” Participant 8 described how they selected more significant items based on “…the adage, ‘counselor know thyself,’” as “…the other items will come with time and experience.”

Concerning statements of agreement for the participants from Factor 2, Statement 10 (“Takes various multicultural factors into consideration when creating treatment plans for clients”) was viewed as significant for all participants, being placed + 5. Another statement of agreement is Statement 26 (“Aware of their own biases, values, and privileges), which was placed at + 3 for Factor 2. Participants from Factor 2 also valued the CIT’s abilities to “[show] cultural sensitivity” (Statement 9; + 3) and “act as an advocate” (Statement 29; + 2). Finally,
“Shows cultural sensitivity and knowledge through respectful approaches” (Statement 9) was also placed at + 3. Two statements (“Formulates appropriate goals” [39] and “Meets clients where they are at” [45]) were considered neutral, neither significant nor insignificant, for the participants. Finally, some statements were viewed as less significant by the participants. For example, “Humble,” Statement 36, was placed at – 4. Additionally, Statement 21 (“Identifies differential diagnoses”) was also considered less significant, being placed at – 3.

**Discussion**

We determined two factors which described participants’ views on a minimally acceptable level of CC for CITs at the end of their master’s-level internship: (1) *Trainee’s Conceptual Integration Ability*, and (2) *Trainee’s Ability to Apply Integrated Knowledge*.

**Factor 1: Trainee’s Conceptual Integration Ability**

The views of the six participants who loaded onto Factor 1 centered upon CIT thinking processes. Participants valued the CIT’s ability to identify different pieces of client information from different sources and make sense of that information through integration, or client conceptualization. According to participants, this ability was evidenced by capabilities such as considering information from various sources, explaining different points of view, engaging in metacognition, and thorough case conceptualization. This focus on cognitive processes and ability to identify and integrate various types of client information aligns with findings on the cognitive development of CITs describing client awareness and self-awareness as integral (e.g., Castillo, 2018; Granello, 2010). For example, Borders (1989) described a process of cognitive development marked by greater CIT awareness of others and awareness of self, and improved counseling skills. The emphases from Factor 1 also reflected the concept of integration described by Welfare and Borders (2010a), as CITs attempt to make sense of the information they have
gathered from various sources. Participants’ consideration of integration and self-awareness, or metacognition, as significant in defining a minimally acceptable level of CC aligns with Perry’s (1970/1981) theory of cognitive development and the findings of McAuliffe and Lovell (2006). Perry suggested that as students develop, they move away from more dualistic thinking and towards thinking which reflects an acceptance of others’ worldviews, paradoxes, individual thought, and ambiguity. As Perry suggested that more flexible and relativistic thinkers are more accepting of ideas which differ from their own and able to identify and make sense of various pieces of information, so did the participants representative of Factor 1. These findings revealed that counselor educators’ view of minimally acceptable CC was representative of the more complex and relativistic ways of thinking valued in the extant counselor education literature.

Additionally, rather than emphasizing the more practical action CIT takes, as in Factor 2, participants from Factor 1 deemed trainee thought processes as most significant in describing a CIT with minimally acceptable CC. This may signify a perspective that CIT integration ability may lead to and signify the CIT’s current and/or future ability to perform other important counseling skills and abilities, like appropriate treatment planning. This was evidenced by more practical items, such as “Skilled in assessment,” being considered neutral. Correspondingly, researchers’ findings on associations between greater CC and less stereotypical client conceptualizations (Chung & Bemak, 2002; Ware & Harvey, 1967) and greater multicultural awareness (Cannon, 2002; Granello, 2002) may explain the participants’ valuing of how CITs identify and integrate different information, rather than what the trainee does, when defining a minimally acceptable level of CC. This idea is further evidenced by a statement from one participant who described the more significant items as reflecting “… being able to take on multiple perspectives.” Finally, the themes of Factor 1 were in line with the literature’s
suggestions concerning the enhancement of CC. Participants’ emphasis on the trainee’s integration abilities, inclusive of comfort with ambiguity, an ability to consider multiple perspectives, and consideration of the client’s worldview as separate from one’s own echoes both Perry’s (1970/1981) theory of cognitive development, reflected in much of the counseling literature (e.g., Duys & Hedstrom, 2000; Granello, 2002; McAuliffe & Lovell, 2006), and suggestions from the literature pertinent to enhancing CC.

**Factor 2: Trainee’s Ability to Apply Integrated Knowledge**

For the five participants who comprise Factor 2, *Trainee’s Ability to Apply Integrated Knowledge*, a minimally acceptable level of CC for master’s-level CITs at the end of internship moves beyond the trainee’s conceptualization to include the trainee’s more practical work with clients, when compared to Factor 1. Participants perceived the CIT’s ability to “work with clients of different cultural backgrounds, beliefs, and values from their own” as significant. Participants also valued trainee abilities surrounding self-care, application of the codes of ethics, appropriate use of counseling techniques, and consultation. Neutral items centered more so around cognitive processes, like “Comfortable with ambiguity” and “Understands the client’s worldview.” Altogether, Factor 2 describes various client characteristics and actions surrounding the “how-to” of providing multiculturally competent counseling to clients of diverse backgrounds.

Given the literature’s consensus on increasing cognitive development as marked by greater self-awareness and less dualistic thinking (e.g., Granello, 2010; McAuliffe & Lovell, 2006; Perry, 1970/1981), it is unsurprising that counselor educators would value behaviors require greater acceptance of ambiguity, self-awareness, and relativistic thinking. Additionally, Ratts’ et al. (2016) explanation of multicultural competence emphasizes the complexity of this issue, as well as the counseling relationship. Participants’ valuing of actions and behaviors
pertinent to defining minimally acceptable CC reflected these developmental domains and may be explained by an increased focus on multiculturalism and social justice over time (Hays, 2020).

Additionally, participants viewed the trainee’s ability to work with diverse clients including those different from oneself as significant. Participants also viewed various behaviors related to counselor self-awareness as significant, including actions like self-care, consultation, and emotional awareness. Additionally, participants view of compassion as more significant perhaps reflects the need for CITs to build a strong rapport with clients, including those of differing backgrounds. These results aligned with the findings of Wendler and Nilsson (2009), which described more cognitively complex CITs as exhibiting higher “…awareness and acceptance of both similarities and differences among people” (p. 28).

Participants’ valuing of CIT engagement in self-care supports the literature surrounding greater CC/cognitive development and self-awareness (e.g., Borders, 1989; Castillo, 2018; Perry, 1970/1981). This may be explained by the perspective that work with diverse clients with a variety of needs requires not only counselor self-awareness which yields self-care but reflects consistency and genuineness from the counselor through modeling, as the counselor provides therapy and acts as an advocate on behalf of the client. Participants may have considered the potential for counselor burnout, possibly leading to negative impacts on counselor wellness (e.g., Limberg et al., 2021), when working with clients of varying backgrounds and experiences. In line with the suggestions of Ratts et al. (2016), these participants may have valued self-care in light of issues related to “…stereotypes, discrimination, power, privilege, and oppression…,” and in consideration of the broader socio-economic and political landscape (p. 7). Participants may have deemed counselor self-care as a more significant aspect of minimally acceptable CC given their view that CITs at the end of internship should be aware of how discrimination, current
events, and broader instances of systemic oppression may influences themselves and clients. With this knowledge, CITs may thereby respond with appropriate self-care efforts to benefit themselves both personally and professionally.

Concerning the consensus statements, participants from both factors perceived the trainee’s ability to “[take] various multicultural factors into consideration” when treatment planning as significant, along with CIT self-awareness and display of cultural sensitivity. These statements reflected a general perspective that self-awareness and multicultural competence were important attributes for a minimally acceptable level of CC. Statements perceived as less significant included constructs like humility and an ability to identify differential diagnoses. Participants across factors also viewed similar statements as neutral, such as “Formulates appropriate goals.” This may suggest that participants valued conceptualization processes (Factor 1) and practical actions (Factor 2) directly related to those ways of thinking.

Compared across factors, the consensus statements mirror the above interpretation of the distinguishing statements. CIT ability to act as an advocate was similarly valued by participants from each factor, though valued more so by participants from Factor 2; this reflects application of integrated knowledge and may be explained by value for CIT knowledge and awareness of the need for advocacy, resulting in such work. However, in comparing the consensus statements between factors, the similarities seemed to outweigh the nuanced differences. It appeared that overall, all participants had similar perspectives of CC for CITs, though there were differences in the participants’ perceptions of a CIT at the end of internship with a minimally acceptable level of CC. The foci of the two factors may be understood as a continuum, with the emphasis of Factor 2 (practical action) necessitating the skills and characteristics emphasized by Factor 1 (e.g., thorough integration ability). Findings in this study may reveal a consensus amongst
counselor educators concerning their understanding of CC; more specifically, that graduating CITs with a minimally acceptable level of CC could demonstrate the self-awareness necessary to provide culturally sensitive and multiculturally competent counseling services.

The emphases of Factor 2 may be explained by an increasing emphasis on multicultural competency and social justice advocacy over time (Hays, 2020). With fewer years of experience than participants from Factor 1, participants from Factor 2 may have, on average, more recently completed their doctoral training, which may have included more of a practitioner mindset given the Factor’s action-orientation, and more of a social justice and multiculturalism focus. Hays (2020) attributed an increased attention to matters of multiculturalism on client well-being over the last half century in part to the development of multicultural competencies (e.g., Sue et al., 1992) and the expansion of the counselor’s identity to include social advocate.

**Implications for Counselor Educators and Supervisors**

The findings provide a basis for more specific assessment of CIT CC at the end of internship and inform training efforts to enhance CIT CC. Understanding of counselor educators’ perspectives on a minimally acceptable level of CC for CITs at the end of internship provides insight on how assessment may occur informally (i.e., outside use of a formal assessment) and informs the creation of possible empirically based training methods. For example, based on Factor 1, counselor educators may determine areas in which require expanded deliberation by CITs through assessment of their self-reflections, such as the CIT’s ability to consider the client’s point of view, metacognitive abilities, and ability to integrate different pieces of information. By way of discussion or written assignment, counselor educators may consider the depth and integration of CITs’ self-reflective thoughts, noting CITs’ perspectives on how they may or may not be influencing the counseling relationship. For instance, in a multicultural
counseling course, a counselor educator may ask students to consider a counseling scenario from multiple points of view, considering the potential impacts of a client’s cultural identities and their own on the counseling relationship. Moreover, considering Factor 2, counselor educators may also ask CITs to apply their considerations by creating a plan of action which would necessitate contemplation of culture, ethics, and various other types of information.

Similarly, in an effort to enhance CIT CC, counselor educators may attend to both how CITs integrate the knowledge they have about a client (e.g., conceptualization skills, self-awareness, and other awareness) and how they practically apply that integrated knowledge (e.g., rapport building, application of ethical codes) in various courses. For instance, counselor educators may consider more practical skills and abilities such as advocacy-response in a multicultural counseling course. To do so, they may first lay a foundation for this work by attending to CITs’ thought processes, which may include self-reflection practices and efforts to increase differentiation (i.e., identifying numerous related constructs). For example, using a case vignette, a counselor educator may ask CITs to list the different cultural identities a client may have, and reflect upon their own experiences with and perspectives on these different identities. For example, CITs may reflect upon their own experience as part of a certain racial background through a written prompt, and then verbally reflect with other CITs in a small group about what it may be like to be a part of a minoritized racial group in the United States, keeping in mind the variety and ambiguity of individualized experience. Counselor educators may also consider integrating readings, videos, and other materials from authors of diverse backgrounds to facilitate CIT reflection about the experiences of individuals different from themselves.

For supervisors, findings point to characteristics and abilities supervisors may be able to support counselors in pre- and post-graduation, such as self-awareness, considering multiple
perspectives and applying ethical codes, among others. Supervisors may utilize methods such as audio/video recordings, live supervision, and written supervisee reflections to assess for these characteristics and abilities. For example, Factor 2 highlighted the participants’ perspective that CITs at the end of internship with a minimally acceptable level of CC engage in self-care and exhibit self-awareness. Supervisors may assess for such practical efforts through conversation (i.e., CIT self-report), reading case conceptualizations and progress notes, verbal client conceptualizations, and watching session recordings. In reviewing CITs’ progress notes and case conceptualizations, supervisors may assess for self-awareness and self-care by way of requiring CIT consideration of these factors. Building upon these assessments, supervisors may then seek to enhance CITs’ CC through supervised opportunity for written client conceptualizations which integrate the CIT’s awareness of self and the counseling relationship in their attempt to conceptualize and treatment plan a case, and by providing concrete support and education surrounding practical application of integrated knowledge (Factor 2).

These practical pieces may include consultation, counselor self-care, roleplays, and application of ethical codes, among others. As an example, based upon the CIT’s developmental needs, a supervisor may request a CIT to develop a self-care plan directly related to a client. The supervisor may ask the CIT what topics from their work with this client cause distress for them, are more difficult to talk about, and relate to their own life. The self-care plan assignment may be presented in a way to require CIT reflection on a specific case and their broader cultural, socio-political context to increase self-awareness and ability to apply such insight to their work with clients. Video or audiotapes could also be used to enhance CIT CC through use of Interpersonal Process Recall (IPR; Bernard, 1989), as supervisors attend to the CIT’s internal reactions and subsequent reactions in a session. IPR may be used as a basis for enhancing CIT CC.
For both counselor educators and supervisors, efforts to enhance CC may occur in an integrated fashion with concepts surrounding multicultural and social justice competency, as researchers have called for increased exploration of how to bridge the knowledge-to-practice gap concerning social justice issues (Gantt et al., 2021). Counselor educators may include activities, reflections, and discussions regarding the person of the counselor (e.g., CIT self-awareness and metacognition), diverse perspectives, counselor self-care, and other items highlighted by Factors 1 and 2. These efforts may comprise a didactic, theory-based teaching component and practice-based work which engages CITs’ integration abilities highlighted by Factor 1, and practical skills exemplified in their work clients (Factor 2). In an ethics course, they may attend to CITs’ abilities to identify their own biases, consider client multicultural factors and how they may influence the counseling relationship, and explain multiple perspectives in conceptualizing an ethical dilemma. Building upon these efforts, counselor educators may then engage CITs in more practical application of these considerations (Factor 2), which may occur through CITs’ creation of a plan of action. Such a plan could attend to application of ethical codes, opportunities for consultation, and counseling techniques which may be used to address the dilemma in session.

Regarding the efforts of supervisors, in a triadic or group supervision setting, CITs may engage in a discussion on the importance and actual practice of consultation in light of a case presentation, paralleling the multicultural complexities and experiences of both the client and counselor. Likewise, building upon existing models of supervision which consider CC (e.g., Borders, 1989; Granello & Underfer-Babalis, 2004; Ober et al., 2009), supervisors may develop specific training protocols for master’s and doctoral-level students which connect thought (Factor 1) and action (Factor 2) to support enhanced CC.
Future Research

This study should be replicated with a larger, more diverse sample. This study could also be replicated to better understand a minimally acceptable level of CC for CITs and counselors at different developmental levels (e.g., beginning a master’s program, in residency). Researchers may seek to create reliable and empirically validated assessments of CC for counselors at different developmental levels. Through construct validation studies, the statements from the Q sample may be validated for assessment use for this end. Researchers may also utilize the findings of the present study to create and explore the potential efficacy of CC-centered training methods. For instance, researchers may utilize the findings to inform creation of course curriculum which spans the continuum from ways of conceptualization, represented by Factor 1, to practical action, represented by Factor 2.

Limitations

Generalizability of the current findings is limited to the sample involved in the study. A potential limitation of the sample was lack of diversity. There are also limitations specific to Q method. Participants were arguably limited by the predetermined statements in how they may describe the phenomena being studied and Q method’s reliance on subjectivity (Cross, 2005). There is always a chance that the participants may provide responses that they believed the researcher was looking for, rather than what they truly believed – social desirability. We sought to mitigate this possibility through ensuring confidentiality and not prompting participants to provide certain statements or rank statements in a particular fashion. Finally, as the data was created and analyzed, researcher’s bias may have been included in the processes. Despite integrating strategies (e.g., external auditor) to mitigate potential influences, biases such as a
value for consideration of multicultural factors and the belief that cognitively complex CITs are able to work with clients of diverse backgrounds may have influenced the research process.
References


https://doi.org/10.1037/h0021873

https://doi.org/10.1002/jcad.12327

https://doi.org/10.1002/j.1556-6676.1989.tb02605.x

https://doi.org/10.1037/h0088589


http://dx.doi.org/10.1136/bmjopen-2018-023303


https://doi.org/10.1051/e3sconf/202020001003


https://doi.org/10.1002/jmcd.12035


https://doi.org/10.1177/0011000010378440


APPENDICES

Appendix A

Invitation to Participate

Dear Program Chair,

I am writing to inform you of my dissertation study and request that you please share this information with faculty who may meet the participation requirements. *Participants who complete the study in its entirety will receive a $10 Amazon gift card via email.*

The purpose of this study is to better understand what counselor educators perceive as a minimally acceptable level of cognitive complexity for counselors in training at the end of their master’s level internship.

Participation criteria include:

- Holding a PhD degree from a CACREP-accredited counseling or counselor education program
- Had completed at least two semesters of a supervised supervision experience during their doctoral studies
- Currently being employed as a counselor educator in a counseling program in the United States
- Has provided individual, triadic, or group supervision for internship-level counselors in training for at least three semesters in the last three years as a counselor education faculty member at their current and/or previous institution

Participation will be completely remote and occur at two different time points, requiring 20-35 minutes of the participants’ time in total. For the first data collection point, participants will be asked to complete a demographic questionnaire and answer one open-ended question, taking approximately 10-15 minutes of their time. At the second data collection point, participants will be asked to complete a sorting activity and answer two open-ended questions, taking approximately 10-20 minutes. The second data collection procedure will be completed approximately 4 weeks after the first data collection point – approximately late November 2021. There is minimal risk associated with participation in this study and benefits include $10 Amazon gift card compensation upon completion of the study in its entirety.

I am conducting this dissertation study under the supervision of my chair, Dr. Gulsah Kemer, and this study is funded by a research grant from the Southern Association for Counselor Education and Supervision. Any questions pertaining to this study can be sent to me at agant002@odu.edu. Thank you for your time and consideration.

Sincerely,

Alex Gantt
Old Dominion University
Appendix B

Informed Consent

INFORMED CONSENT DOCUMENT
OLD DOMINION UNIVERSITY

PROJECT TITLE: MINIMALLY ACCEPTABLE COGNITIVE COMPLEXITY: A Q METHOD EXPLORATION OF COUNSELOR EDUCATORS’ PERSPECTIVES

INTRODUCTION
The purposes of this form are to give you information that may affect your decision whether to say YES or NO to participation in this research, and to record the consent of those who say YES. This research project in its entirety will be completed remotely.

RESEARCHERS
Gulsah Kemer, PhD (PI)
Department of Counseling and Human Services
Old Dominion University

Alex Gantt, MA, NCC
Department of Counseling and Human Services
Old Dominion University

DESCRIPTION OF RESEARCH STUDY
Several studies have been conducted looking into the subject of cognitive complexity in counselors and counselors in training. None of them have explained counselor educators’ perspectives of minimal competency surrounding cognitive complexity for counselors in training at the end of their internship experience.

If you decide to participate, then you will join a study involving research of what characteristics, behaviors, and ways of thinking comprise a counselor in training at the end of internship with a minimally acceptable level of cognitive complexity. Participation will occur at two different points in time. For the first data collection point, participants will be asked to complete a demographic questionnaire, ensuring they qualify to participate, and answer one open-ended question, taking approximately 10-15 minutes in total. At the second data collection point, occurring approximately late November 2021, participants will be asked to complete a sorting activity and answer two open-ended questions, taking approximately 10-20 minutes in total. The second data collection procedure will be completed approximately 4 weeks after the first data collection point.

EXCLUSIONARY CRITERIA
To participate, individuals must meet the following criteria: (1) holding a PhD degree from a CACREP-accredited counseling or counselor education program; (2) had completed at least two semesters of a supervised supervision experience during their doctoral studies; (3) currently
being employed as a counselor educator in a counseling program in the United States; and (4) has provided individual, triadic, or group supervision for internship-level counselors in training for at least three semesters in the last three years as a counselor education faculty member at their current and/or previous institution.

RISKS AND BENEFITS
RISKS: If you decide to participate in this study, then you may face a risk of minimal feelings of distress. The researcher tried to reduce these risks by removing any identifying information. And, as with any research, there is some possibility that you may be subject to risks that have not yet been identified.

BENEFITS
The main benefit to you for participating in this study is reflecting on your experiences as a counselor educator and contributing to the counselor education literature. You may also benefit by financial compensation.

COSTS AND PAYMENTS
The researchers want your decision about participating in this study to be absolutely voluntary. Yet they recognize that your participation may pose some time commitment. To help defray your costs, you will receive a $10 Amazon gift card via email to help with incidental expenses of participation.

NEW INFORMATION
If the researchers find new information during this study that would reasonably change your decision about participating, then they will give it to you.

CONFIDENTIALITY
The researchers will take reasonable steps to keep private information, such as your answers to the demographic questionnaire, confidential. The researcher will remove identifiers from all identifiable private information collected. All study data will be kept in a password-locked computer in a password-locked file accessible only by the researchers. The results of this study may be used in reports, presentations, and publications; but the researcher will not identify you. Of course, your records may be subpoenaed by court order or inspected by government bodies with oversight authority.

WITHDRAWAL PRIVILEGE
It is OK for you to say NO. Even if you say YES now, you are free to say NO later, and walk away or withdraw from the study at any time. Your decision will not affect your relationship with Old Dominion University, or otherwise cause a loss of benefits to which you might otherwise be entitled. The researchers reserve the right to withdraw your participation in this study, at any time, if they observe potential problems with your continued participation.

COMPENSATION FOR ILLNESS AND INJURY
If you say YES, then your consent in this document does not waive any of your legal rights. However, in the event of harm arising from this study, neither Old Dominion University nor the
researchers are able to give you any money, insurance coverage, free medical care, or any other compensation for such injury. In the event that you suffer injury as a result of participation in any research project, you may contact Alex Gantt at ***-***-****, John Baaki, DCEPS IRB Chair, at 757-683-5491 at Old Dominion University, or the Old Dominion University Office of Research at 757-683-3460 who will be glad to review the matter with you.

VOLUNTARY CONSENT
By signing this form, you are saying several things. You are saying that you have read this form or have had it read to you, that you are satisfied that you understand this form, the research study, and its risks and benefits. The researchers should have answered any questions you may have had about the research. If you have any questions later on, then the researchers should be able to answer them:

Alex Gantt

If at any time you feel pressured to participate, or if you have any questions about your rights or this form, then you should call Adam Rubenstein, the current IRB chair, at 757 683 3802, or the Old Dominion University Office of Research, at 757-683-3686.
Appendix C

Demographic Questionnaire

Instructions: Select and/or fill in the blanks for each question and appropriate responses.

1. What is your gender?
   a. Female
   b. Male
   c. Nonbinary
   d. Prefer to self-describe: ________

2. What is your ethnic background? (Select all that apply)
   a. Black or African American
   b. Asian/Pacific Islander
   c. White
   d. Hispanic or Latinx
   e. Native American
   f. Other (please specify): ________

3. Please specify your master’s degree: ________

4. What are your professional credentials? (Select all that apply)
   a. NCC
   b. LPC
   c. Approved Clinical Supervisor (NBCC credential)
   d. Other (please specify): ________

5. Do you have a PhD?
   a. Yes
   b. No

6. Is your PhD in Counseling or Counselor Education and Supervision?
   a. Yes
   b. No

7. What is your PhD degree in? ________

8. Are you currently employed as a counselor education faculty member for a counseling program in the United States?
   a. Yes
   b. No

9. Is the counseling program you are currently employed accredited by CACREP?
   a. Yes
   b. No

10. How many years have you served as a counselor education faculty member? ________

11. Did you complete a supervised supervision experience during your doctoral studies?
    a. Yes
    b. No

12. Did you complete at least 2 semesters of a supervised supervision experience as part of your doctoral work?
    a. Yes
    b. No
13. Have you provided individual, triadic, or group supervision for internship-level counselors in training for at least 3 semesters in the last three years as a counselor education faculty member?
   a. Yes
   b. No

14. How many semesters of master’s-level internship have you supervised as a counselor education faculty member? __________

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Data collection for this study is taking place at two different points. The second point of data collection will occur in late November 2021. So that we may contact you regarding the second round of data collection and provide compensation upon your completion of the study in its entirety, please provide your first name, phone number, and email address.

   What is your first name? __________

   What is your phone number? __________

   What is your email address? __________
Cognitive complexity is defined by Granello (2010) as “…the ability to absorb, integrate, and make use of multiple perspectives” (p. 92). In your opinion, what characterizes a counselor in training at the end of their internship with a minimally acceptable level of cognitive complexity? In the form of phrases and/or short sentences, please list as many characteristics, attributes, skills, behaviors, etc. as possible:

1. 
2. 
3. 
4. 
   …. 
APPENDIX E

Statements from Participants and an Expert Panel

Statements from participants (74)

1. Empathy from cognitive, behavioral, and affective perspectives
2. Cultural sensitivity
3. Cross-theoretical acceptance
4. Sense of self as perceived by differing clients
5. Thoughtfulness
6. High intellectual ability
7. Flexibility across treatment modalities
8. Able to conceptualize issues and develop treatment plans
9. Ability to identify more than one way of considering the clients issues.
10. Ability to consider more than one way of approaching treatment.
11. Flexible,
12. Utilizes theory,
13. Meets clients where they are at
14. Understands the stages of change
15. Consults with other professionals
16. Understands treatment planning
17. Ethical in their practice
18. Provides culturally affirming counseling
19. Skilled
20. Open
21. Aware
22. Seasoned
23. Active advocate
24. Cultural competency
25. Empathy
26. Genuineness
27. Active listening skills
28. Applicable counseling techniques
29. Prepared for a variety of counseling concerns
30. Critical thinker
31. Advocate
32. Challenges
33. Humble
34. Seeks more experiences
35. Appreciative
36. Aware
37. Human intelligence
38. Mathematical ability
39. Observation
40. Good thinking skills
41. Compassion
42. Kindness
43. Knowledge is the lowest level of acceptance
44. Have a holistic viewpoint
45. They should be able to meet the client where the client is
46. Understanding the client’s worldview
47. They should be respectful and knowledgeable of things such as multicultural competency, and other appropriate aspects
48. Obviously basic counseling skills are essential, but the picture is bigger than that
49. Ethical
50. Their understanding of continual professional development and self-care is important
51. They should also be aware of their own worldview, including their own privileges
52. Reasoning
53. Getting comfortable being uncomfortable
54. Open-minded
55. Multiculturally competent
56. Able to see multiple sides of an issue
57. Able to explain multiple perspectives to students or clients
58. Able to function "in the gray area"
59. Recognizing their own biases and values
60. Able to conceptualize cases through a variety of theoretical lenses
61. Able to accept and integrate feedback from multiple sources
62. Able to work with clients of differing cultural backgrounds, beliefs, values from their own
63. Able to accept and integrate conflicting or discrepant feedback from multiple sources
64. Able to filter what is useful and not useful feedback from sources and integrate what is useful
65. Able to translate feedback into actual changes in clinical work
66. Able to conceptualize clients from a biopsychosocial perspective
67. Case conceptualization
68. Differential diagnosis
69. Treatment planning
70. A good understanding of cultural factors which influence clinical presentation
71. The counselor should be able to gather information from clients (assess)
72. Organize that information into a culturally relevant case conceptualization
73. Use that information to formulate appropriate goals/objectives/interventions for treatment
74. Know when it is time to terminate therapy

Statements from the expert panel (pilot test; 2)

1. Acts as a leader
2. Engages in interprofessional collaboration
APPENDIX F

Final Q Sample

1. Empathic from cognitive, behavioral, and affective perspectives
2. Compassionate
3. Uses basic skills (e.g., reflection) often and well
4. Uses counseling techniques (e.g., role play) well as needed
5. Aware of their own emotions
6. Provides consistently varied responses to clients
7. Conceptualizes clients thoroughly and from multiple angles
8. Identifies many different relevant multicultural influences or factors for each client to inform conceptualization
9. Shows cultural sensitivity and knowledge through respectful approaches
10. Takes various multicultural factors into consideration when creating treatment plans for clients
11. Identifies many different types of characteristics for each client they work with
12. Synthesizes the information they know about a client
13. Identifies connections between different types of client information
15. Demonstrates flexibility in their thought processes
16. Comfortable with ambiguity
17. Recognizes and avoids use of stereotypes in their thinking about clients
18. Demonstrates metacognition, or the ability to think about their own thoughts
19. Does not always believe there is a singular “right” answer
20. Skilled in assessment
21. Identifies differential diagnoses
22. Recognizes when to terminate therapy
23. Integrates feedback from multiple sources, recognizing what is useful
24. Able to work with clients of differing cultural backgrounds, beliefs, and values from their own
25. Can identify and explain multiple perspectives
26. Aware of their own biases, values, and privileges
27. Interprets and applies codes of ethics in their work
28. Demonstrates desire for and commitment to continual professional development
29. Acts as an advocate, recognizing and responding to barriers, obstacles, and oppression faced by clients
30. Open to work with a variety of different counseling concerns/presenting problems
31. Understands the stages of change (e.g., pre-contemplation, action)
32. Consults with other professionals
33. Engages in interprofessional collaboration
34. Demonstrates self-care
35. Conceptualizes clients from a biopsychosocial perspective
36. Humble
37. Acts as a leader
38. Utilizes theory
39. Formulates appropriate goals
40. Able to conceptualize cases through a variety of theoretical lenses
41. Works well under uncomfortable presentations from clients
42. Understands the client’s worldview
43. Challenges clients appropriately
44. Thoughtful
45. Meets clients where they are at
APPENDIX G

Post-Q Sort Questionnaire

1. Please describe the items you placed as “most important” and “least important” in defining a minimally acceptable level of cognitive complexity in a master’s-level counselor in training at the end of internship and explain your reasons for the differences of their significance.

2. Are there any other items you would like to comment on? If so, please provide the information below.
APPENDIX H

Data Collection Part II Email to Participants

Hi ________,

Thank you for participating in the first round of data collection for my dissertation study on minimally acceptable cognitive complexity. I appreciate your time!

For round two of data collection, you will be asked to complete a sorting task and answer two open-ended questions. Please follow the below instructions and feel free to reach out to me at agant002@odu.edu if you have any questions.

I am requesting that you please complete these tasks by Wednesday, January 05, 2022, at 5 pm EST.

***Your unique participation code: ____________

1.) Follow this link to complete the sorting activity: ________________

2.) Next, follow this link to answer 2 open-ended questions: ____________

***Upon completing both above steps, you will be emailed a $10 Amazon gift card for your complete participation.

Thank you again!

Best,

Alex Gantt
Old Dominion University
### APPENDIX I

#### Composite Q Sort: Factor 1

<table>
<thead>
<tr>
<th>Item</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open to work with a variety of different counseling consumers/presenting problems</td>
<td>5</td>
</tr>
<tr>
<td>Identifies client needs where they are at</td>
<td>5</td>
</tr>
<tr>
<td>Challenges clients appropriately</td>
<td>5</td>
</tr>
<tr>
<td>Recognizes and provides use of stereotypes in their thinking about clients</td>
<td>5</td>
</tr>
<tr>
<td>Demonstrates flexibility in their thought processes</td>
<td>5</td>
</tr>
<tr>
<td>Understands the client's worldview</td>
<td>5</td>
</tr>
<tr>
<td>Identifies differential diagnoses</td>
<td>5</td>
</tr>
<tr>
<td>Consults with other professionals</td>
<td>5</td>
</tr>
<tr>
<td>Identifies connections between different types of client information</td>
<td>5</td>
</tr>
<tr>
<td>Formulates appropriate goals</td>
<td>5</td>
</tr>
<tr>
<td>Acts as an advocate, recognizing and addressing behaviors, obstacles, and depression faced by clients</td>
<td>5</td>
</tr>
<tr>
<td>Recognizes clients from a biopsychosocial perspective</td>
<td>5</td>
</tr>
<tr>
<td>Able to work with clients of differing cultural backgrounds, beliefs, and values from their own culture</td>
<td>5</td>
</tr>
<tr>
<td>Takes various multicultural factors into consideration when crafting treatment plans for clients</td>
<td>5</td>
</tr>
<tr>
<td>Demonstrates humility</td>
<td>5</td>
</tr>
<tr>
<td>Compassionate</td>
<td>5</td>
</tr>
<tr>
<td>Provides consistent, varying responses to clients</td>
<td>5</td>
</tr>
<tr>
<td>Able to conceptualize cases thorough and from multiple angles</td>
<td>5</td>
</tr>
<tr>
<td>Aware of their own weaknesses, values, and prejudices</td>
<td>5</td>
</tr>
<tr>
<td>Can identify and explain multiple perspectives</td>
<td>5</td>
</tr>
<tr>
<td>Integrates feedback from multiple sources, recognizing what is useful</td>
<td>5</td>
</tr>
</tbody>
</table>

Least Significant | -5  | -4  | -3  | -2  | -1  | 0   | 1   | 2   | 3   | 4   | Most Significant
APPENDIX J

Composite Q Sort: Factor 2

<table>
<thead>
<tr>
<th>Endorsement</th>
<th>Description</th>
<th>Endorsement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Demonstrates desire for and commitment to continual professional development</td>
<td>4</td>
<td>One does not always believe there is a singular “right” answer</td>
</tr>
<tr>
<td>2</td>
<td>Utilizes theory</td>
<td>5</td>
<td>Recognizes when to terminate therapy</td>
</tr>
<tr>
<td>3</td>
<td>Formulates appropriate goals</td>
<td>6</td>
<td>Engages in interprofessional collaboration</td>
</tr>
<tr>
<td>4</td>
<td>Demonstrates metacognition, or the ability to think about their own thoughts</td>
<td>7</td>
<td>Integrates feedback from mistruths, recognizing what is useful</td>
</tr>
<tr>
<td>5</td>
<td>Able to conceptualize through a variety of theoretical lenses</td>
<td>8</td>
<td>Uses basic skills (e.g., reflection) often and well</td>
</tr>
<tr>
<td>6</td>
<td>Understands the stages of change (e.g., pre-contemplation, action)</td>
<td>9</td>
<td>Shown cultural sensitivity and knowledge through respectful approaches</td>
</tr>
<tr>
<td>7</td>
<td>Conceptualizes clients thoroughly from multiple angles</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Understands the client’s worldview</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Integrates feedback from mistruths, recognizing what is useful</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Use basic skills (e.g., reflection) often and well</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Shown cultural sensitivity and knowledge through respectful approaches</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>-hearted</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>skl</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humble</td>
<td>Can identify and explain multiple perspectives</td>
<td>Conceptualizes clients from a biopsychosocial perspective</td>
<td>Synthesizes the information they know about a client</td>
<td>Meets clients where they are at</td>
<td>Recognizes and avoids use of stereotypes in their thinking about clients</td>
</tr>
<tr>
<td>Thoughtful</td>
<td>Identifies differential diagnoses</td>
<td>Identifies many different types of characteristics for each client they work with</td>
<td>Works well under uncomfortable presentations from clients</td>
<td>Challenges clients appropriately</td>
<td>Compassionate</td>
</tr>
<tr>
<td>Acts as a leader</td>
<td>Skilled in assessment</td>
<td>Identifies multiple means of treatment for a client</td>
<td>Identifies connections between different types of client information</td>
<td>Demonstrates flexibility in their thought processes</td>
<td>Comfortable with ambiguity</td>
</tr>
</tbody>
</table>

Least Significant | Neutral | Most Significant
APPENDIX K
Post-Q Sort Questionnaire Responses

Participant Please describe the items you placed as “least significant” and “most significant” in defining a minimally acceptable level of cognitive complexity in a master’s-level counselor in training at the end of internship and explain your reasons for the differences of their significance.

1 I think the ones I ranked as least significant were single word answers like "humble" and "thoughtful". While these are important dispositional factors, I don't feel they really speak to cognitive complexity in a meaningful way, and they weren't very descriptive. The things I believe I ranked most significant were being able to conceptualize clients in holistic ways, from a biopsychosocial lens, and from various theoretical lenses. I believe cognitive complexity to be a process of being able to take on multiple perspectives and see from outside one's own perspective; I felt these items encompassed that flexibility and complexity. The other one I ranked as significant was being able to take and integrate feedback from multiple sources. It also spoke to the idea of being able to see things from multiple perspectives, but also being able to identify and choose what is valuable among multiple sources of feedback.

2 In terms of "least significant" items, I tended to cluster together items which reflected a greater level of clinical competence than I would deem "minimally acceptable," such as the ability to treatment plan with multiple different theoretical perspectives in mind. I'd like to say that I think *all* of the items are important for therapeutic growth in counselors, but I tried to cluster the "non-negotiables" (i.e., the ability to conceptualize clients from a biopsychosocial perspective, understanding that there are multiple ways of doing therapy, knowing how to set a goal for a client, etc.) towards the "most significant" side of the grid. Again, these

Are there any other items you would like to comment on? If so, please provide the information below.

I may not have gotten them exactly right in this recap, as I couldn't see which ones I had marked once I got to this survey!

I just want to say THANK YOU for addressing such an important topic in counselor education! This is an ambitious undertaking for a dissertation project, and I admire your willingness to do something a little 'out of the box' with your
are all important skills to develop, but some are more important for counselors-in-training to be able to do "right out of the gate," as they say.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>the process of counseling, by nature, is a cross-cultural experience to which the client contributes personal life events and the counselor professional knowledge, seeking to re-create the client's entering concern, worded as beyond the client's capacity to change, into a manage-able, understandable issue. so the capacity to think on multiple levels simultaneously and explain that thinking process are critical counseling skills by the end of internship. In addition, the counselor's capacity to reflect on their own process, in sessions, bodes well for the success of independent practice.</td>
</tr>
<tr>
<td>4</td>
<td>It was hard. Some of the categories were similar and could have been collapsed. I placed similar concepts or counseling abilities in both significant and non significant areas due to space allowances. I would suggest collapsing some categories.</td>
</tr>
<tr>
<td>5</td>
<td>I think the items placed as most significant are the ones which are very useful and important to an organization which can influence an organization negatively if it's found absent and the least significant are not very useful though important to an organization.</td>
</tr>
<tr>
<td>6</td>
<td>The most significant items pertained to Master's level ability and competence at the level of their experience. Things such as self care and meeting a client where they are at are very important; whereas things such as applying multiple theoretical perspectives at this level is not as significant as they are not skilled enough at this time to do that as easily as they can after a year or more of counseling practice. I thought this was a difficult (at times) exercise as all of the items are ultimately what we would like Master's level counselors to be able to do, but...</td>
</tr>
</tbody>
</table>
from a developmental perspective, it was easier to divide into the listed categories.

|   | I placed least important ones similar to things like “humble” and “leader” since those characteristics can be helpful or hurtful in counseling. Most important I feel are things related to culture and understanding various facets of their clients as well as ethics and to do no harm. | Interesting activity

|   | I selected items as most significant dealing with the adage, "counselor know thyself." It is my belief that the other items will come with time and experience. | I found the boxes and font to be extremely small and difficult to see to review for changes in the q-sort.

|   | The items I marked as less significant were those that were general characteristics of competent counselors (e.g., Thoughtful, Compassionate, etc.) - these are important, but don't necessarily contribute as significantly to cognitive complexity. The items I marked as most significant had to do more with multicultural competencies, belief that there is not one "right" answer when it comes to our work with clients, and the ability to see multiple perspectives. | Yes. Most of them lies on most significant.

|   | The most appropriate ones are those that help to relate with clients and enhance comfort ability. The clients should know their rights and treated well so that they come back to look for services. | As shared above, it felt very uncomfortable having to place any of the characteristics of not significant even at the end of internship level. Perhaps only the "act as a leader" was one I wouldn't expect of a new graduate.

|   | Even though the characteristics ended up in the least significant level, I do believe they are very significant. I had a difficult time placing any of the characteristics as not significant but had to do so in order to complete the activity. |
Least significant- A lot of the items placed in the least significant category were items that I could not fit in the most significant category. My least significant category was an overflow of items from the most significant category. I believe I had around 35 most significant selections and 12-15 least significant selections. I really had to reflect on my professional approach and how I met clients when they attend therapy.

This was my first Q-sort and I thoroughly enjoyed it. It caused me to really think critically about my responses.
VITA

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EDUCATION

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SELECT PUBLICATIONS


