

University of Missouri, St. Louis

IRL @ UMSL

---

Dissertations

UMSL Graduate Works

---

11-1-2021

## Clinical Case Conceptualization Skill Development and Counseling Pedagogy: A Constructivist Grounded Theory Study

Andrea Cox

University of Missouri-St. Louis, [coxandr@umsl.edu](mailto:coxandr@umsl.edu)

Follow this and additional works at: <https://irl.umsl.edu/dissertation>



Part of the [Counselor Education Commons](#)

---

### Recommended Citation

Cox, Andrea, "Clinical Case Conceptualization Skill Development and Counseling Pedagogy: A Constructivist Grounded Theory Study" (2021). *Dissertations*. 1142.

<https://irl.umsl.edu/dissertation/1142>

This Dissertation is brought to you for free and open access by the UMSL Graduate Works at IRL @ UMSL. It has been accepted for inclusion in Dissertations by an authorized administrator of IRL @ UMSL. For more information, please contact [marvinh@umsl.edu](mailto:marvinh@umsl.edu).

**Clinical Case Conceptualization Skill Development and Counseling  
Pedagogy: A Constructivist Grounded Theory Study**

Andrea R. Cox

M.Ed., Community Counseling, University of Missouri-St. Louis, 2014  
B.A. Psychology, University of Nevada Las Vegas, 2011

A Dissertation Submitted to The Graduate School at the  
University of Missouri-St. Louis in partial fulfillment of the requirements for the degree  
Doctor of Philosophy in Education with an emphasis in Counseling

May  
2022

Advisory Committee

R. Rocco Cottone, Ph.D.  
Chairperson

Susan Kashubeck-West, Ph.D.

Emily Oliveira, Ph.D.

Phillip Waalkes, Ph.D.

Copyright, Andrea R. Cox, 2022

## Abstract

Clinical case conceptualization has been identified as an invaluable and indispensable skill within the literature of the mental health professions and by the Council for Counseling and Related Educational Programs (CACREP, the counseling profession's professional accreditation body). Despite its known importance, there is a dearth of literature focused on understanding the experiences students have related to counselor education pedagogy and the development of clinical case conceptualization skills. This project utilized a constructivist grounded theory (CGT) qualitative research design and analysis to explore the clinical case conceptualization learning experiences had by Counselors-In-Training (CITs) enrolled in CACREP aligned or CACREP accredited master-level counselor education programs. A total of 13 semi-structured interviews (with 9 participants) were conducted to learn more about the CITs learning experiences. The findings of this study yielded three categories of learning experiences (i.e., academic experience, clinical clarity, and confidence), a host of subcategories, and the theory of pedagogical intentionality. Findings, limitations, and implications for counselor educators as well as the counseling profession, and areas for continued research, are presented and discussed.

Keywords: counselor educators, counselor educator pedagogy, clinical case Conceptualization, clinical case formulation, constructivist grounded theory, CACREP.

# **Clinical Case Conceptualization Skill Development and Counseling Pedagogy: A Constructivist Grounded Theory Study**

## **Chapter I: Introduction**

On average, approximately one in five American's struggle with mental health needs (National Institute for Mental Health, 2017). For decades, many disciplines (e.g., social work, psychiatry, psychology, and counseling) have worked to support the needs of individuals grappling with managing their mental health concerns. The discipline of counseling, for example, has from its inception been thought of as "an interdisciplinary, multifaceted, holistic process of (1) the promotion of healthy life-styles, (2) identification of individual stressors and personal levels of functioning, and (3) preservation or restoration of mental health" (Seiler & Messina, 1979, p. 6). Although one of the youngest of the mental health disciplines (Cottone, 2012), the counseling profession continues to grow and has a projected growth rate of approximately 23% by 2026 which is significantly faster than many other careers (Bureau of Labor Statistics, 2018). Based on the projected growth of the profession and the continued mental health needs, the counseling profession is likely to be well situated to continue supporting the needs of those seeking services from mental health professionals.

The growth of the counseling profession will be facilitated and supported by the academic programs that counselors-in-training attend. Graduate level counseling programs are designed to support the developmental needs of its students as they work to understand the needs of the clients they will serve. During their graduate program, counseling students learn the tenets of the mental health profession. As a discipline, the focus of mental health counselors has been to use the scientific process to bolster and

revive clients' mental health (Pistole, 2001). As a means for doing this, counselors engage in a mental health assessment of their clients in which they develop a clinical case conceptualization (sometimes called clinical case formulation or hypothesis formulation) of the client's functioning and presenting concerns. For the purpose of this dissertation, clinical case conceptualization will be defined as "the process of developing hypotheses about client difficulties, including historical events, antecedent events, and other factors contributing to the maintenance of presenting problems" (Reitman et al., 2008, p. 4). The development of a sound clinical case conceptualization often lends itself to an effective treatment plan and treatment outcomes.

Recent research suggests that there are many common factors associated with the overall outcomes found in clinical mental health treatment (Beutler, 2000; Joyce et al., 2006). One such factor is related to the technical competency of the therapist (Cottone, 2012). For the purpose of this dissertation, technical competency will be used to refer to the clinical skills or competencies necessary for clinical case conceptualization. Although an important skill, little is known about the technical competencies necessary for successful development of clinical case conceptualization skills. While there is a dearth of literature related to the strategies needed for the development of clinical case conceptualization skills, pedagogical research would suggest that the skills necessary for clinical case conceptualization include: the ability to identify and to organize information, conceptual understanding based on previously obtained knowledge, and the ability and opportunity to develop mastery of tasks (Ambrose et al., 2010).

## **Developing Clinical Case Conceptualization Skills**

There are two ways in which neophyte counselors develop clinical case conceptualization skills. One is via learning through coursework and course assignments and the other is via participation in the supervision process. As a part of their professional training, counseling students who are enrolled in counseling programs that are accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP) typically participate in a course(s) that requires them to practice engaging in case conceptualization skills. In addition to their coursework experience, post-graduate counselors are required to participate in post-graduate supervision for licensure. During their supervision, novel counselors generally learn to conceptualize client cases based on the theoretical framework being utilized to support the client's needs (Hess, 1986; Ingram, 2006; Sturmey, 2009).

For counseling students, the transition from understanding counseling content on an academic level to clinical and practical application of counseling skills is a significant developmental milestone (Ingram, 2006). Although important, counseling students experience barriers in meeting this milestone due to lack of confidence and lack of experience using clinical skills (Tran & Henriksen, 2016). Similar to the development of other skills, clinical case conceptualization is a skill that requires intentional organization of information, conceptual understanding of the client's case based on prior knowledge, and the development of skill mastery (Ambrose et al., 2010).

While minimal research has explored the impact of psychotherapy training (Ronnestad & Ladany, 2006) or the more narrow topic of psychotherapy case conceptualization (Barrio Minton et al., 2018; Kendjelic & Eells, 2007), counselor skill

development and its associated tasks have been the focus of CACREP for nearly fifty years. In both the 2009 and 2016 updates of the CACREP standards, the accrediting body included expectations associated with providing classroom-based educational skill development opportunities for students that were specifically related to the development of clinical case conceptualization skills (e.g., “etiology, nomenclature, treatment, referral, and prevention of mental and emotional disorders” and “diagnostic process, including differential diagnosis and the use of current diagnostic classification systems, including the *Diagnostic and Statistical Manual of Mental Disorders [DSM]* and the *International Classification of Diseases [ICD]*”); CACREP, 2015, p. 24). In many ways, CACREP’s inclusion of this criteria solidifies the importance of teaching case conceptualization skills to counselors-in-training. It also reflects the value the field holds for helping students understand how to practically make sense of a client’s presenting concern(s) in a manner that displays thoughtful consideration and intentional reflection. As the field continues to progress, CACREP’s goal of excellence associated with training new clinicians will likely continue to be reflected in their curricula requirements.

### **Insufficient Clinical Case Conceptualization Skill Development**

Interestingly, while CACREP and the disciplines associated with mental health as a whole seem to have a value for helping novice clinicians understand the importance of clinical case conceptualization, literature across the mental health disciplines do not seem to reflect research that exemplifies a growing understanding of strategies or approaches for teaching this invaluable skill from a pedagogical perspective. Additionally, although conceptualization skill development is often included as a component of courses aligned with CACREP standards, it has been identified as a difficult skill to teach (Sperry, 2005),

and some researchers have expressed concerns about the case conceptualization skills of beginning clinicians (Ingram, 2006; Kendjelic & Eells, 2007). Concerns associated with case conceptualization skill level have been reported among beginning mental health professionals practicing psychiatry (Fleming & Patterson, 1993; Misch, 2000; Perry, Cooper, & Michaels, 1987; Ross et al., 1990; Sperry et al., 1992; Toews, 1993), psychology (Binder, 1993), and counseling (Holloway & Wolleat, 1980; Loganbill & Stoltenberg, 1983). Concern has also been expressed about the case conceptualization skill level of senior level psychiatrists (Perry et al., 1987). Researchers have also noted that clinicians (e.g., psychiatric residents, social workers, and a psychiatric nurse) struggle to communicate the hypothesized causes, precipitants, and maintaining factors when providing a case conceptualization (Eells et al., 1998). Additionally, the current literature indicates concern related to the clinical writing ability of clinical social workers (Soto, 2018) and other mental health clinicians (e.g., clinical psychologist, counseling psychologist, psychiatric nurses, a psychiatrist, counselor, psychotherapist; Kuyken et al., 2005). Moreover, in a poll of 57 psychiatric training directors from Canada, the United States, the United Kingdom, and the Republic of Ireland, 60% of the participants reported inadequate emphasis on case conceptualization training (Ben-Arron & McCormick, 1980). Similarly, in a study by Fleming and Patterson (1993), 69% of seniors participating in their psychiatric residency reported they did not receive case formulation guidelines, during their training program.

Furthermore, concerns related to lack of clinical case conceptualization skills are paramount as they may be related to burnout rates. According to Swider and Zimmerman (2014), deficits in one's perceived ability to do one's job with efficacy has been linked to



burnout. Burnout is defined as feelings of work-related inefficacy and hopelessness (Stamm, 2009). Experiences of burnout have been identified as a by-product of work-related stress associated with depersonalization, emotional exhaustion, and decreased self-efficacy in one's work abilities (Maslach & Zimbardo, 1982). It has also been identified as a possible disruption in the therapeutic alliance (Soto, 2018) and has been associated with prolonged post-discharge recovery rates in medical patients (Halbesleben & Rathert, 2008).

### **Focusing on Counselor Education Pedagogy**

Despite these findings, in recent years, presumably with the help of CACREP's influence, the field of counseling has seen an increase in the number of research articles focusing on student learning, skill acquisition, and pedagogical challenges. However, even with an increase in the number of articles on the topic, the research reflecting general teaching and learning principles and pedagogical practices is minimal (Barrio Minton et al., 2018). Nevertheless, multiple studies (Nelson & Neufeldt, 1998; Barrio Minton et al., 2014; Barrio Minton et al., 2018) have highlighted the continued need for increased research promoting the exploration of counseling pedagogy. It will also be important for the field to invest resources in considering the strategies by which it trains developing academicians to implement counseling pedagogy as evidenced by Waalkes et al. (2018) findings which suggest that early career counselor educators who graduated from CACREP-accredited doctoral programs, reported feeling under-prepared to engage in the pedagogical skills necessary for a career in academia.

Although much is known about strategies for developing clinical case conceptualization skills based on a theoretical orientation and via the supervision

experience (Ingram, 2006), little is empirically known about appropriate, efficient, pedagogical approaches to developing clinical case conceptualization skills in students, during their coursework experience(s).

### **Theoretical Framework**

Clinical case conceptualization is an invaluable skill required by all clinicians working in the mental health field (John & Segal, 2015). Given its impact on treatment and client outcomes, attention to strategies associated with the pedagogy of teaching case conceptualization is extremely important. Pedagogy is intended to reflect the “interactions between teachers, students, and the learning environment and learning tasks” (Murphy, 2008, p. 35). In thinking about pedagogy, there are multiple frameworks (e.g., teacher-centered, learner-centered, and learning centered) to consider. Each of these frameworks espouses their own unique underpinning by which it conceptualizes personal learning. For the purpose of this study, the researcher has chosen to explore this through the lens of the learner-centered pedagogy.

The learner-centered pedagogical approach is a framework that utilizes learning theories which suggests learners should be actively engaged in the learning process. In a learner-centered environment, the learner (student) uses prior knowledge and novel experiences to extend or develop new knowledge, and the instructor facilitates this process by creating and structuring appropriate learning conditions. Since the process of case conceptualization requires both the solidifying of knowledge as well as the need to engage in cognitive flexibility via prior knowledge, exploring this topic through a learner-centered lens seems appropriate.

In addition to exploring pedagogy through a learner-centered framework, this study will also consider case conceptualization through the theoretical framework of the organic-medical paradigm of counseling and psychotherapy (Cottone, 2012, 2017). According to Cottone (2017), counseling and psychotherapy paradigms provide an organizational framework by which to understand the clinical work of psychotherapist and counselors. They also provide information about the focus and context of mental health treatment.

Historically, the organic-medical paradigm emerged as the initial treatment framework for mental health concerns. In its infancy, physicians working within this paradigm began to connect maladaptive behavior (once viewed as demonic) to biological/organic antecedents, thus resulting in the earliest scientific explanation of severe emotional disturbance (Cottone, 2012). Within the organic-medical paradigm, the process associated with identifying a mental health concern is consistent with the scientific process and the medical model in which the physician is presented with the client's presenting problem, gathers information about the client's concern (including examination), makes hypotheses about the origin of the concern, tests hypotheses, and analyses what is known in light of the hypotheses and draws a conclusion about the factors which are maintaining the client's presenting problem.

The process then leads to diagnosis of mental disorders according to some classification scheme, typically the Diagnostic and Statistical Manual (DSM) of the American Psychiatric Association (2013) or the International Classification of Disease (ICD) of the World Health Organization (2019). With the sophistication of medical research and findings, subsequent support for organic hypotheses related to a number of

mental health concerns have continued to flourish. Psychiatric Case Management is recognized as an approach to counseling practiced by mental health counselors, and case conceptualization, accordingly, leads to DSM or ICD diagnoses. To what degree this approach is being taught in counselor education programs is unclear.

Additionally, there is another type of case conceptualization that does not lead to a diagnosed mental disorder. In this case, the clinician assesses the client without the intent of diagnosing a mental disorder. The clinician assesses the client's problem according to a process likely defined by a theory of counseling and psychotherapy, or by a general philosophy of treatment. The outcome is a plan of action for addressing the client's problem. The theoretical framework undergirding this approach to clinical case conceptualization is more clinician-specific and linked to the theoretical and philosophical offerings of the clinician's counselor education program.

### **Statement of the Problem**

The primary problem of this study entitled "Clinical Case Conceptualization Skill Development and Counseling Pedagogy" is the lack of adequate exploration of clinical case conceptualization skill development as it relates to counseling pedagogy. The primary purpose of this study was to explore the clinical case conceptualization learning experiences of master's-level Counselors-In-Training (CITs) enrolled in CACREP aligned or CACREP accredited counselor education programs.

## **Significance of the Study**

Clinical mental health counselors are uniquely positioned to support the clinical needs of the mental health population they will serve. As a part of their clinical training counseling students learn essential skills related to clinical case conceptualization (CACREP, 2009, 2015; John & Segal, 2015). Despite its noted importance, currently, there is no research which explores the relationship between clinical case conceptualization skill development and the student-classroom experience as it relates to counseling pedagogy. Given this notable gap in the literature, this dissertation aimed to contribute to the current literature on counselor education pedagogy in three significant ways. Findings from this dissertation help to highlight student perceptions of clinical case conceptualization and its utility, give prominence to potential areas for pedagogical attention and growth, and draw connections between how pedagogical approaches link to student learning and feelings of efficacy. Given that a full exploration of counseling pedagogy would exceed the scope of this project, this dissertation hoped to meaningfully contribute to the literature of counselor education and supervision by adding to the field's knowledge associated with counseling pedagogy and developing clinical case conceptualization skills in counselors.

## **Research**

This study provides information about skill acquisition as well as classroom experiences of current counseling students related to their case conceptualization skill development. Multiple research questions have been identified to explore this phenomena including:

1. How do students experience learning and applying clinical case conceptualization skills?
2. What function do students believe clinical case conceptualization plays in the clinical process?
3. How does clinical case conceptualization skill development affect CITs confidence in using the skill?

### **Delimitations and Assumptions of the Study**

This dissertation took place from March 2021 to July 2021 and explored the experiences that individuals have had related to developing clinical case conceptualization skills. Specifically, this dissertation explored each participant's learning experience, the instructional methods utilized during their training process, and the feelings they had surrounding case conceptualization skill development.

CITs who self-identify as participants of a CACREP accredited (i.e., an institution that has successfully completed and passed the external multi-stage review process to validate their adherence to the CACREP Standards; CACREP.org) or a CACREP aligned (i.e., an institution with CACREP aligned curricula but who have not completed the external multi-stage review process to validate their adherence to the CACREP Standards; CACREP.org) program were the target population for this dissertation study. Selection of CACREP affiliated participants is based on the growing acceptance of CACREP accredited programs for licensure and certification (i.e., currently, in many states, CACREP accredited degrees are accepted without question and beginning in 2022, eligibility for certification with the National Board of Certified Counselors [NBCC] will require students to have a CACREP accredited degree). Given the continued acceptance

of CACREP accredited programs, it is likely that these participants will appropriately reflect future populations of counselors.

### **Organization of the Document**

This document will be organized into five chapters: Introduction, Literature Review, Methods, Results, and Discussion. Chapter II presents a review of the literature related to the construct of case conceptualization as well as the development of clinical case conceptualization skills and strategies used by counselor educators to support skill development in this area. Chapter II also includes relevant literature related to the best pedagogical practices associated with generalized cognitive skill development. Chapter III provides an overview of the research design and methodology, sample selection, information about the interview guide, and data collection and analysis procedures to be used in this study. Chapter IV includes an analysis of the data as well as a narrative description of the study's findings. Lastly, Chapter V provides an interpretation of the results, limitations of the study, implications for the training of future counselors, and recommendations for future research. Following Chapter V, references and appendices are presented.

## Chapter II: Literature Review

The field of counseling has an expressed interest in training future counselors to support the diverse needs of the populations we serve. The process of supporting clients occurs during the six phases of mental health treatment (Sangganjanavanich, 2015). One of the foundational components of mental health treatment is clinical case conceptualization. It has been identified by diverse practitioners and researchers as a core skill within the field of psychotherapy (Division of Clinical Psychology, 2001; Eells, 2007, MacKinnon & Yudofsky, 1991; Scheiber et al., 2003; Toews, 1993). Due to the complex nature of many clinical cases, CITs are better able to support their clients when they are able to successfully and intuitively understand their client's case. Within the field of counseling, CITs are initially encouraged to engage in clinical case conceptualization, during their practicum and field experience coursework. Courses on clinical case conceptualization, much like other counseling courses, are primarily taught using a tripartite model (Binder, 1993; Dewald, 1987; Ekstein & Wallerstein, 1972; Hyman, 1990; Moldawaky, 1980).

The tripartite model utilizes a didactic curriculum, followed by clinical supervision of actual client cases during the student's practica and internship experience(s). Didactic training is an educational approach that aligns with teacher-centered pedagogy. While didactic training is popular within the field of counseling, there is some research within education pedagogy to suggest that utilizing student-centered experiential teaching strategies facilitates stronger cognitive skills and might help students more readily generalize their academic skills to practical application (Barnes et al., 1994; Davis et al., 2008; National Research Council, 2000; Prevou, & Colorado,



2003). Although this is true of the literature associated with education pedagogy, little is known and minimal research has explored the relationship between the development of clinical case conceptualization skills and practical application of said skills within the field of counseling. This gap in the research is likely to be filled by gaining a deeper understanding of the technical competencies associated with developing strong clinical case conceptualization skills. Understanding the technical competencies of clinical case conceptualization is likely to help the field of counseling to appropriately identify the most useful pedagogical approach(es) for supporting this developmental need within our student population.

### **Developing Counselor Competency via Standardized Educational Expectations**

The professional competence of counseling and related practitioners has been the focus of CACREP for nearly fifty years (CACREP, 2019). As an organization, CACREP has focused on developing preparations standards for counselor educators, encouraging excellence in the development of counseling programs, and providing accreditation of professional counseling preparation programs. Counseling and related programs accredited by CACREP are those in which the “content and quality of the program has been evaluated and meets standards set by the profession” (CACREP, 2019).

Additionally, according to the 2019 CACREP vital statistics report, there are 767 CACREP-accredited counseling programs across 349 institutions within the United States (CACREP, 2018). These programs within their institutions have committed to excellence within the field of counseling and to the quality of education provided to the CITs that are served by their program.

In 2015, the 2016 CACREP Standards were released as an update to the 2009 CACREP Standards. Similar to its predecessors, the 2016 CACREP Standards purposefully created expectations that would promote strong professional counselor identity. The standards were also designed to develop graduates who would demonstrate skills and knowledge in the areas of professional counseling and counseling disposition (CACREP, 2015). In order to ensure this level of excellence within the profession, CACREP Standards focus specifically on setting educational expectations for educators working in counselor education and supervision.

The educational expectations revolving around standards for building counselor competencies have been identified as CACREPs Core Standards. These standards are associated with the learning environment, professional counseling identity, professional practice, evaluation of counseling programs, entry level clinical specialization skill development, and doctoral standards for counselor education and supervision. Expectations set by CACREP provide a template by which counselor education programs are able to structure their coursework such that they build competency in the most important components of a counselor's role. One of these many roles is associated with the counselor's ability to successfully identify a client's presenting concern, make hypotheses about the origin of the concern, identify a clinical diagnosis and treatment intervention(s), communicate the diagnosis and treatment protocol, and begin providing supportive services to the client. This process is often associated with clinical case conceptualization and is identified as the second stage of clinical mental health treatment (Sangganjanavanich, 2015).

## **Case Conceptualization and the Stages of Clinical Mental Health Treatment**

In order to better understand the need for the technical competency associated with clinical case conceptualization, it is important to have a clear understanding of the process of treatment that clinicians utilize to help their clients live more effective lives. According to Sangganjanavanich (2015) there are six common stages that provide a framework for working with clients within a professional counseling relationship. The stages happen sequentially and build upon one another. They include the relationship, assessment, treatment planning, intervention, evaluation, and termination. The first two stages allow the counseling professional to develop the therapeutic relationship and obtain an initial understanding of the client's presenting concern. This allows the treatment provider to use their clinical judgement in identifying a diagnosis, as appropriate. The third, fourth, and fifth stages allow the clinician to identify, work on, and evaluate treatment goals designed to support the client's needs. The final stage allows the counselor to share, both with the client and in a written document, the client's progress in treatment and goals met. Each of these stages, is informed by the clinician's theoretical orientation and allows the clinician to work collaboratively with the client to move the client toward continued therapeutic change and overall positive well-being.

### **Stage 1: Relationship**

The development of the therapeutic relationship is seen as central to the process of therapy and has been defined as a common factor (Frank & Frank, 1991; Lambert, 1992) infused in every therapy approach and is commonly correlated with successful treatment outcomes. The therapeutic relationship develops during the process of establishing the therapeutic alliance. The therapeutic alliance (sometimes called the

working alliance) is a collaborative relationship in which the counselor and the client work together to develop agreed upon therapeutic goals and tasks for successful treatment outcomes (Teyber, 2006). It also reflects the establishment of trust, acceptance, and competency. This frequently leads to an experience in which the clinician begins to develop a conceptual understanding of the client, and the client begins to trust the clinician and feel comfortable sharing information about their lived experiences.

### **Stage 2: Assessment**

According to Sangganjanavanich (2015), similar to the development of the therapeutic relationship, the process of engaging in clinical assessment focuses on helping the client to feel “heard” and understood. At its core, the purpose of clinical assessment is to evaluate the factors contributing to the client’s presenting concern(s) (Corey & Corey, 2007). Special attention is paid to factors that are relevant to the client’s overall functional disturbances. These may include disturbances in the client’s interpersonal relationships, social functioning, medical health, and familial relationships. When clients experience concerns in these and other areas, they often identify levels of dissatisfaction that caused functional and social difficulties. These difficulties are explored in an effort to help the counseling professional develop a conceptual understanding of the client’s case. Techniques used during the assessment stage of treatment include: informal conversations, behavioral observations, and the use of empirically validated assessments or instruments. The process of engaging in a thorough clinical assessment lends itself to the development of a sound clinical case conceptualization (Sangganjanavanich, 2015).

Clinical case conceptualization can be seen as the final component of the assessment stage. It is a process by which the clinician works to understand, synthesize, and conceptualize the information the client has presented in an effort to obtain a clear clinical picture of the client's current functioning. In addition to the information the client provides, the clinical conceptualization is also informed by the clinician's theoretical orientation (John & Segal, 2015; e.g., Behavior Therapy, Psychoanalysis etc.) The clinician's theoretical orientation helps to shape how the clinician understands and perceives the client's difficulties. For example, during the assessment stage, a behavioral therapist will likely conceptualize the client's presenting concerns to be associated with behaviors that are negatively impacting the client's functioning.

The process of engaging in assessment allows the clinician to collaboratively develop an understanding of the client's functional difficulties (Kuyken et al., 2008; Persons, 2012; Wright et al., 2006) and synthesize the information shared in order to begin considering potential diagnoses that fit the client's concerns, as appropriate. In some settings (e.g., hospitals and mental health clinics), after completing the assessment stage, professional counselors are required to provide a diagnosis that helps to explain the client's functional difficulties. As members of the mental health profession, clinicians in the United States of America use the Diagnostic and Statistical Manual of Mental Disorders fifth edition (DSM 5) to identify a diagnosis (or diagnoses) that reflect the client's presenting concern(s). The DSM 5 is an evidence-informed system of nosology that allows clinicians to determine whether or not a set of symptoms is reflective of a particular diagnosis (American Psychiatric Association, 2013). The DSM 5 helps clinicians to organize clinical symptoms into groupings that represent a clinical

diagnostic picture. From there, clinicians are able to determine, based on relevant research and literature, the most appropriate prognosis and treatment. In this way, the case conceptualization functions as the process that links the client's presenting concern with the treatment intervention (Sperry, 2005).

### **Stage 3: Treatment planning**

Stages three through six of the mental health treatment process reflect the development of goals and skills designed to facilitate successful therapeutic movement toward living a healthy and fulfilling life. After rapport has been established and the client's case has been appropriately conceptualized, treatment moves into stage three where the clinician works collaboratively with the client to identify therapeutic goals (sometimes called treatment goals or a treatment plan) to be addressed via the treatment intervention. Collaboration at this stage of treatment is crucial as the client will be expected to engage in the behaviors and activities outlined in the plan. The treatment plan should be informed by the clinician's case conceptualization of the client's concerns and thus personalized to reflect the uniqueness of the client's presenting concerns while providing an instillation of hope. Additionally, treatment goals should be realistic, attainable, and amenable to change, as appropriate. Rooted in the clinician's clinical conceptualization of the client's presenting concern, the treatment plan functions as a road map that guides the clinical treatment (Aston, 2009), thus, allowing the client to move away from functional disturbances toward a more positive mental health and well-being.

#### **Stage 4: Intervention**

Just as the clinical conceptualization guides the treatment plan, the treatment plan is supported by the interventions utilized, thus making this the fourth stage of treatment. Interventions are informed by theoretical orientations or models (e.g., Rogerian, Cognitive-Behavioral) which represent the overarching philosophy the clinician uses to understand the client's functioning. Therapeutic interventions are used to support the client in meeting their identified treatment goals and to help clients develop insight and/or to take action toward living life in a more effective way. Efficacious therapeutic interventions that include insight and action, generally help clients to facilitate therapeutic change both in and out of treatment sessions (Corey & Corey, 2007). Therefore, identifying the most appropriate intervention ought to be closely related to the clinician's conceptualization of the client's case. In many ways, the therapeutic intervention reflects the clinician's navigation of the road map that is presented via the treatment plan and birthed through the process of clinical case conceptualization.

#### **Stage 5: Evaluation**

After the administration of the therapeutic intervention(s), the counseling professional begins stage five which is the evaluation of the therapeutic process and its treatment outcomes. The objective of this stage is to determine whether the therapeutic intervention(s) are appropriately helping the client to meet their identified treatment goals. The evaluation process is an on-going assessment to determine the degree to which the client is meeting the identified treatment goals.

This process is both formative and summative (Dougherty, 2008). Formative evaluation occurs throughout the process of treatment and focuses on evaluating the client's progress toward meeting their therapeutic goals and reflects an assessment of the counseling process. When data from the formative evaluation yields positive progress toward treatment goals, it is likely that the clinician's clinical case formulation, treatment goals, and interventions were appropriately aligned with the client's presenting concern (John & Segal, 2006). When this is not the case, it may be necessary for the clinician to re-evaluate decisions made, during previous stages of treatment (Turkat, 1987; Wolpe & Turkat, 1985). Times when this may be appropriate might include: learning new substantive information about the client, realizing that the identified theoretical intervention is not properly suited for the client, learning that a treatment intervention extends beyond the client's skill-set or ability, and/or the development of new treatment goals. The necessity for re-evaluation of previous stages as a result of delayed therapeutic movement suggest that clinical case conceptualization should be an on-going process (John & Segal, 2015; Perry et al., 1987; Wolpe & Turkat, 1985) throughout the client's treatment. Appropriate re-evaluation of the clinical case conceptualization throughout treatment is likely to help clinicians avoid moving too far into the therapeutic process before realizing the misalignment of their conceptualization, treatment goals, and/or treatment interventions. This process of treatment progress monitoring typically results in an increase of positive treatment outcomes (Lambert et al., 2005; Persons, 2012; Persons, 2016).

Once the evaluation of the therapeutic process yields favorable results, the clinician is likely to begin engaging in the summative evaluation. The summative



evaluation is utilized to determine whether therapeutic goals have been fully met and reflects an assessment of treatment outcomes. Similar to the strategies used in the assessment stage, clinicians often use multiple techniques for evaluating the treatment process and treatment outcomes. This allows the clinician to have a well-rounded understanding of the impact that the therapeutic intervention(s) has had on the client's functioning.

### **Stage 6: Termination**

Successful treatment termination ideally occurs once the client has satisfactorily met the therapeutic treatment goals. Termination generally reflects an alignment of the clinician's conceptualization of the client and the client's presenting concern. Based on the clinician's formative and summative evaluation, the clinician works to help the client positively view their progress in treatment and, as appropriate, begins preparing the client for the end of the therapeutic relationship. Progress is generally reflected by the client's ability to exhibit proficiency in meeting their treatment goals in-session as well as their ability to generalize their therapeutic skills outside of treatment sessions. The process of termination should include input from the client and the clinician should make every effort to support the expressed needs of the client in the most professional and ethical way.

In total, these six stages strive to support the needs of clients served by individuals who have been trained as mental health professionals. While all of the stages within the process of mental health treatment are important, development of sound clinical case conceptualization skills amongst mental health professionals is one of the single most important tasks of those working within our field (Betan & Binder, 2010;

John & Segal, 2015; Sperry, 2010). Given the extreme importance of this task, it seems imperative that the counselor education community be aware of and intentional about how students are prepared to engage in the tasks associated with developing strong clinical case conceptualization skills.

### **Case Conceptualization, Case Formulation, and Hypothesis Formulation**

The process associated with developing an understanding of a client's presenting concern is most often referred to in the literature as clinical case conceptualization (Shulman, 2018). Clinical case conceptualization is a theory-informed process of condensing and synthesizing information shared by clients in ways that reflect the clinician's understanding of the client's presenting concern(s). Typically, this process is associated with a scientist-practitioner model (Meier, 1999) that charges the clinician with applying components of the scientific model with the practical application of being a mental health practitioner. Generally speaking, this process requires the mental health clinician to gather information about the client, develop hypotheses about the client's functioning and the factors maintaining the client's presenting concerns, test the hypotheses, and develop and implement a plan to support the needs of the client.

Literature related to this process is generally referred to as case conceptualization or case formulation (John & Segal, 2015; Shulman, 2018). Although this author has provided the definition of case conceptualization that will be utilized for the purpose of this dissertation (see introduction), it is of note that the process of developing an understanding of a client's presenting concern has been identified using multiple terms including case conceptualization, case formulation, and clinical hypothesis formulation. Regardless of the term used to define this process, the primary purpose of engaging in

this process is to create a framework for understanding the client's concerns (Flitcroft et al., 2007) and to develop a clinically-sound treatment plan (Shulman, 2018).

Although used synonymously and described similarly, multiple authors have offered definitions for these terms. For example, Kelly (1955) described formulation as having two stages: structuration and construction. Kelly (1995) indicated:

The therapist has to keep making a rough classification or *structuration* of what he observes, assigning each item tentatively to a pigeonhole for possible future reference. More precise *construction* must be limited to such materials as he chooses to have the client elaborate in greater detail. As therapy progresses and the therapist acquires a better overview of the case, he may be able more and more to substitute *construction* for *structuration* of material arising during the course of the day-by-day sessions (p. 1005).

Godoy and Haynes (2011) describe case formulation as “an individualized integration of multiple judgements about a patient's problems and goals, the causal variables that most strongly influence them, and additional variables that can affect the focus, strategies, and results of treatment with a patient (p. 1). Persons and Tompkins (2017) describe formulation as “... a hypothesis about the cause of the patient's disorders and problems...” (p. 3).

Similar to the definitions of case formulation, multiple authors have provided descriptions of case conceptualization. Mayfield et al. (1999) indicate that conceptualization refers to a process in which the counselor will “take in a vast array of client data... and organize this information into a model of the client” (p 504). Sperry (2005) suggests case conceptualization “consists of three

components: a diagnostic formulation, a clinical formulation, and a treatment formulation... A diagnostic formulation is a descriptive statement about the nature and severity of the individual's psychological presentation.... A clinical formulation, on the other hand, is more explanatory and longitudinal in nature and attempts to offer a rationale for the development and maintenance of symptoms and dysfunctional life patterns.... And a treatment formulation follows from a diagnostic and clinical formulation and serves as an explicit blueprint governing treatment interventions" (p. 72). Lee and Tracey (2008) describe case conceptualization as "the ability to synthesize a large amount of complex and ambiguous information ... into an overall understanding of the client's level of functioning and producing viable treatment strategies" (p. 507).

In recent years, some authors have directly acknowledged the interchangeable nature of these definitions. Informed by Sperry's (2005) description of case conceptualization, John and Segal (2015) stated:

Case conceptualization (sometimes called case formulation) refers to the clinician's collective understanding of the client's presenting problems as viewed through a particular theoretical orientation; as defined by the biological, psychological, and social context of the client; and as supported by a body of research and practice that links a set of co-occurring symptoms to a diagnosis and, ultimately, a treatment plan (p. 1).

In addition to being described as formulation and conceptualization, this process has also been called clinical hypothesis formation. According to Morran,

et al. (1994), “a clinical hypothesis represents a synthesis of client data and provides the counselor with a tentative conceptual model of the client’s concerns... [and serves as a guide] to subsequent counselor therapeutic interventions” (p. 655).

Interestingly, unlike previous authors, Shulman (2018) identified the terms case conceptualization and case formulation as related but separate. Shulman (2018) defined case conceptualization “as the explanation for a client’s presenting problems” and case formulation as “the process by which a case conceptualization is developed or formed” (p. 1).

### **Psychiatric Case Management**

While the process of understanding a client’s presenting concern is often referred to as clinical case conceptualization, psychiatric case management has been identified as a type of therapy within the organic-medical paradigm of counseling and psychotherapy (Cottone, 2012, 2017). According to Cottone (2012, 2017), psychiatric case management is “a counseling approach that defines and describes the activities of nonmedical personnel involved in cases treated by psychiatry” (Cottone, 2017, p 13). Although the discipline of psychiatry has its origin in biological psychiatry (Trimble & George, 2010), Cottone (2012, 2017) suggest that the transition from biological psychiatry to community psychiatry (McQuiston et al., 2013) has facilitated the increased acceptance of nonmedical mental health practitioners (e.g., social workers, psychologist, and counselors) as qualified participants in the process of psychiatric case management.

Given the varying roles and settings in which these qualified practitioners may work, the utilization of psychiatric case management as a type of therapy appears to have

also permeated other counseling and psychotherapy paradigms. For example, use of psychiatric case management techniques may be utilized by clinical social workers who ascribe to the psychological paradigm (e.g., cognitive behavior therapist). Nevertheless, the rationale for including a discussion of psychiatric case management in this paper is intended to recognize the origin of the psychiatric case management theory as being rooted in the organic-medical model but more so to highlight the ways in which processes associated with psychiatric case management techniques align with clinical case conceptualization practices.

According to Cottone (2012, 2017), during the process of psychiatric case management, the nonmedical mental health treatment provider may work collaboratively with a psychiatrist or independently to develop a clinical diagnosis for a client seeking mental health services. In an effort to garner sufficient information about the client, the practitioner will conduct a diagnostic interview and a mental status exam. The diagnostic interview consists of an exploration of the client's medical and psychiatric history, family history, symptom history, educational, vocational, and social history, and military experience, as well as their history of substance use and other substantive historical content. The mental status exam objectively explores the client's general behavior, neuroadaptive functioning and daily activities, flow and content of thought, affect and mood, memory, concentration, and abstract thinking ability. It also assesses the client's social judgment, insight, and whether or not they are oriented to person, place, time, and situation.

After completion of the diagnostic interview and mental status exam, the practitioner must evaluate all of the information presented and formulate an impression of

the nature of the client's presenting concern. For practitioners required to seek medical insurance reimbursement as well as those whose philosophy align with the use of the DSM or ICD, the differential diagnostic information found within the DSM or ICD is used to aid in the formulation process. In addition to the criteria provided in the DSM and ICD, practitioners utilize their theoretical orientation to support the rationale for the diagnosis and to identify applicable treatment goals and outcomes.

While use of the DSM or ICD is commonly use amongst practitioners across varying paradigms, it is of note that a number of counseling practitioners disavow the use of the DSM or ICD as a classification system. This is largely related to the "wellness model" (Remley & Herlihy, 2020, p. 28) to which many within the counseling profession ascribe. Practitioners who align with the "wellness model" (e.g., adventure therapist) suggest use of the "medical model" (Remley & Herlihy, 2020, p. 28) for mental health concerns is contraindicated. Therefore, said practitioners utilize the philosophical and theoretical rationale underpinning their clinical approach to identify the presenting concern and inform treatment goals and objectives. Whether using the DSM or ICD or referring to one's philosophical or theoretical orientation, the practitioner's ability to identify the client's presenting concern and maintaining problem is directly related to the differential treatment provided to the client.

### **The Process of Understanding Client Concerns**

Whether identified as case conceptualization, case formulation, clinical hypothesis formulation, or psychiatric case management, literature associated with the process of developing an understanding of the presenting concerns exhibited by mental health clients has been the focus of research within our field for many years (Lazare,

1976). Often this focus is theory-informed, however there are some core tenants associated with the process of formulating or conceptualizing a client's case (Kendjelic & Eells, 2007).

### **Common Tenets Associated with Understanding a Client's Case**

Although the process of formulating or conceptualizing a client's case has historically been filtered through a theory-informed lens, "theoretical understanding is necessary but by itself is insufficient" (Wolpe & Turkat, 1985, p 5). In recent years, researchers (Kendjelic & Eells, 2007) explored a generic (non-theory specific) approach to understanding this process. In 2007, Kendjelic and Eells produced an article in which they reviewed the relevant literature and identified four "generic" or broad categories associated with case formulation. The purpose of their study was both to identify and test these categories in an effort to develop a generic approach to case formulation. These categories are shared by virtually all models involved in formulation as well as all schools of psychotherapy that ascribe to the process of formulation as a treatment component. The categories include: symptoms and problems, precipitating stressors, predisposing events and conditions, and an inferred explanatory mechanism accounting for the previous three components.

The symptoms/problems component is intended to reflect the information needed to generate a list of symptoms or problems that will allow the clinician to identify a diagnosis. This information includes sociocultural details, financial information, and problems caused by the client that distress others. Information associated with this tenet may be gathered via observations made by the clinician, during the assessment phase of treatment (Horowitz & Eells, 1997). During the process of generating the symptoms list,



the clinician should be mindful of both covert and overt problems leading to the client's distress (Henry, 1997). Additionally, as the clinician compiles the list of the client's presenting symptoms, they should be intentional about including maladaptive coping strategies the client may be utilizing to manage their presenting concerns (Persons & Tompkins, 2007).

Precipitating stressors are events leading up to the onset of the client's current presenting symptom(s) or problem(s), or events that contribute to increased symptom severity. Additionally, experiences from the client's past that increase the client's vulnerability to precipitating stressors are seen as predisposing events or predisposing conditions. Predisposing events and predisposing conditions often increase the likelihood of greater symptom development. Predisposing events and conditions may include developmental processes such as learning history, attachment style, psychosocial stages, and interpersonal schemas, which may each be interpreted differently based on the clinician's theoretical orientation. For example, a client with a history of disorganized attachment (a predisposing event/condition), due to parental disruption during early childhood, may be negatively impacted by a break-up with their significant other later in life (a precipitating stressor). This event may result in the client experiencing increased difficulty regulating their emotions and diminished ability to self-soothe following the separation. Although distress following separation is normative, the degree of functional disruption would be assessed by the clinician through their theoretical orientation and a determination of the client's functioning would be included in the clinician's conceptualization.

After carefully considering the previous tenets, the clinician begins attempting to identify the inferred mechanism associated with the client's case. The inferred mechanism takes into consideration the previously mentioned tenets and attempts to provide an explanation for their relationships. In this way, the inferred mechanism reflects the clinician's hypothesis or explanation of the client's current presenting difficulties. Based on the clinician's theoretical orientation, the inferred mechanism may be expressed as a core or central conflict, a biological predisposition(s), a set of dysfunctional thoughts or beliefs, contingencies of reinforcement, problematic interpersonal relationship patterns, or systemic problems within family members. Identifying the inferred mechanism, ideally, aids in organizing and guiding treatment and treatment intervention selection.

Kenjelic and Eells (2007) believed these four generic components may be used to help clinicians generate a sufficiently comprehensive representation of their client which will, by virtue of the inferred mechanism, provide an explanation of the underlying causes associated with the client's presenting concern. According to these authors, these four generic components, especially the inferred mechanism may be considered a measure of formulation or conceptualization quality. Based on their belief in the utility of these four generic components, Kenjelic and Eells (2007) conducted a study in which they provided a 2-hour training on case conceptualization and the four generic components of case formulation to clinicians from a university-base psychiatric training facility. They then encouraged the participants to practice the skills they learned and quizzed them on the knowledge they gained. In addition to the participants in the training group, the study also had a no-training participant group which functioned as the study's

control group. As hypothesized, the participants in the training group produced higher quality and more comprehensive case formulations and included more details from each of the four tenets listed above. Participants in this group also produced formulations with more inferential categories. The findings of this study, ultimately suggest that each of these tenets helps the clinician to develop and articulate a comprehensive view of the client's functioning and concerns.

### **The Utility of Case Conceptualization**

Case conceptualization is a process that helps the clinician organize the information they have obtained about a client (Eells, 2010). This is a process by which clinicians are able to explore client data such that they are able to increase their understanding of a client case (Filtcroft et al., 2007; Kuyken et al., 2008) through the process of hypothesizing about the client's presenting concern(s) (Kendjelic & Eells, 2007; Shulman, 2018). Case conceptualization informs the clinician's clinical decision-making process (Shulman, 2008) and lends itself to the development of treatment related goals (Aston, 2009, Levenson & Strupp, 1997) and the selection of therapeutic interventions (Kuyken et al., 2008; Levenson & Strupp, 1997, Shulman, 2018).

Although preliminary, there is some evidence to suggest that treatment guided by case conceptualization results in improved clinical interpretive accuracy (Crits-Christoph et al., 1988), positive treatment outcomes (Silberschatz et al., 1986), generalization of skills learned during treatment (Jacobson et al., 1989), and enhanced treatment of complex cases (Malatesta, 1990; Persons, 1992) and cases of depression with comorbid disorders (Persons et al., 1995). Additionally, case conceptualization has been described as the "heart of evidence-based practice" (Bieling & Kuyken, 2003, p. 53) and can assist

clinicians in understanding when to deviate from a standardized treatment protocol (Malatesta, 1995a, 1996b). It can also be used to help clinicians advocate for their client(s) when working with medical insurance companies (Eells, 2013). Case conceptualization has also been utilized as an essential component for understanding treatment compliance, the therapeutic relationship (Eells, 2013) and treatment completion (Shulman, 2008). Although case conceptualization appears to have many benefits, the empirical evidence to support these claims is limited (Shulman, 2018).

### **Limitations of Case Conceptualization**

While case conceptualization has been seen by mental health professionals as an extremely important skill, it also has multiple limitations. These limitations are associated with the variability (Westmeyer, 2003; Wilson, 1996) and the fallibility of clinicians (Shulman, 2018) as well as the client's perceptions of hearing a clinician's professional conceptualization (Chadwich et al., 2003; Evans & Parry, 1996; Pain et al., 2008; Redhead et al., 2015). Additional limitations are associated with the lack of relevant literature exploring the evaluation of case conceptualization training (Kendrijelic & Eells, 2007). Finally, the most prominent limitation of case conceptualization is its lack of valid and reliable empirical research (Mumma, 2011; Flinn et al., 2015; Shulman, 2018).

#### ***Clinician variability and fallibility***

Clinician variability may be associated with the types of questions the clinician asks during the assessment phase of treatment (Shulman, 2018; Wolpe & Turkat, 1985), the importance that the clinician places on the information shared (Dawes, Faust, & Meehl, 1989; Flitcroft et al., 2007), the clinician's personal biases (Garb, 2005; Wilson, 1996; Wilson, 1997), and their personal experiences and beliefs. Additionally, two

clinicians both assessing the same client might generate different case conceptualizations based on their beliefs about the assumed mechanism linking the client symptoms and problems with their past history (Collins & Messer, 1991).

Generally, case conceptualizations are developed by a single clinician (Westmeyer, 2003) in which a client shares information about their presenting concern as they see fit which may result in incomplete (Hill & Gelso, 2000; Westmeyer, 2003) or delayed disclosures. Receiving partial or inaccurate information from the client can result in clinician fallibility. Other issues impacting fallibility are related to the clinician's training and experience (Kuyken et al., 2005). Regardless of the rationale for the incorrect conceptualization, if a clinician inappropriately conceptualizes a case, the resulting treatment is likely to be ineffective (Shulman, 2018; Westmeyer, 2003) and potentially dangerous thus functioning as a limitation of the case conceptualization process.

### ***Client perceptions of case conceptualization***

An additional limitation of case conceptualization is related to the perceptions that clients have of conceptualization as a component of treatment. Multiple qualitative studies have explored the client's perspectives associated with hearing a clinician share their professional conceptualization of the client's presenting concern. Research has revealed positive, negative, and neutral client reactions related to hearing their clinician's professional conceptualization of their presenting concern (Chadwich et al., 2003; Evans & Parry, 1996; Pain et al., 2008; Redhead et al., 2015). The positive attributes associated with the sharing of the clinician's case conceptualization include: instillation of hope within the client (Pain et al., 2008), the client's increased understanding of the presenting

concern (Redhead et al., 2015), the client feeling understood and accepted (Redhead et al., 2015), the client experiencing this process as emotionally powerful (Evans & Parry, 1996) and experiencing an emotional shift (Redhead et al., 2015), the client's anticipation of clinical improvement (Pain et al., 2008), and the client being able to engage in the change process (Redhead et al., 2015). Conversely, the negative attributes associated with the sharing of the clinician's case conceptualization include: lack of collaboration on the conceptualization (Redhead et al., 2015), incorrect conceptualizations (Redhead et al., 2015), difficulty understanding or processing the conceptualization (Pain et al., 2008), increased worry (Pain et al., 2008), and conceptualizations that challenge the client's self-identity (Redhead et al., 2015). In addition to the positive and negative attributes of this experience, some participants found the sharing of the clinician's professional conceptualization to be neutral or having no benefit (Pain et al., 2008).

### ***Evaluation of Case Conceptualization Training***

Although many researchers have identified the significance of clinical case conceptualization, minimal literature has focused on the evaluation of case conceptualization skill training (Barrio Minton et al., 2018; Kendjelic & Eells, 2007). After reviewing the literature, there appeared only to be three studies that evaluated the process of case conceptualization training. Based on the literature, it appears studies have explored this topic in the following ways: the use of computers to teach case conceptualization (Caspar et al., 2004), the use of simulation to increase case conceptualization skills (Osborn et al., 2004), and a non-empirical paper exploring the use of commercial films for developing case conceptualization skills (Misch, 2000). Despite the apparent importance of this topic, additional studies evaluating case

conceptualization do not appear to be available within mental health research and may represent a gap in the literature.

***Reliability and validity associated with case conceptualization***

Presumably the most important limitation associated with case conceptualization is its lack of empirical evidence. As a field, we strive to explore the reliability and validity of constructs associated with our profession in an effort to decrease harmful practices. As indicated in the section *entitled Case Conceptualization, Case Formulation, and Hypothesis Formulation*, several definitions have been provided to describe the process of conceptualizing a client's case, however, many of the papers associated with these definitions are position papers boasting minimal empirical evidence (Shulman, 2018). Despite its importance and our reliance on it as a foundational component of client treatment, the benefits of case conceptualization have yet to be thoroughly empirically explored (Mumma, 2011; Shulman, 2018).

Of the few studies directly exploring case conceptualization, multiple barriers to reliability and validity have been presented (Shulman, 2018). Barriers to the reliability of case conceptualization have been found in the methodology associated with the process of case conceptualization. Methodological and conceptual concerns related to studying case conceptualization have in some studies indicated inconsistencies in interrater reliability (Bieling & Kuyken, 2003; Flinn et al., 2015), however other studies of a similar nature have produced encouraging results (Barber & Crits-Christoph, 1993; Tarrier & Calam, 2002), and training has been identified as a potential means for improving the results associated with increased interrater reliability (Shulman, 2018). Concerns related to the validity of case conceptualization have been related to

situational/contextual factors (e.g., therapist ability, the effectiveness of intervention techniques, common factors of therapy; Mumma, 2011) and poor clinical writing skills (Kuyken et al., 2005). Despite the reliability and validity barriers associated with studying case conceptualization, suggestions for increasing both reliability and validity include: engaging in a systematic assessment of the conceptualization process (Meier, 1999), treatment progress monitoring (Shulman, 2018), and increased training in conceptualization skill development (Kendjelic & Eells, 2007; Kuyken et al., 2005; Persons & Bertagnolli, 1999). Given the difficulty with identifying sound psychometric properties associated with case conceptualization, it has been important for clinicians to be able to rely on their clinical judgement when engaging in the process of clinical case conceptualization (Kendjelic & Eells, 2007). The process of developing sound clinical judgement generally coincides with the experience of developing clinical case conceptualization skills.

### **Conceptualization Skill Development**

Although there is minimal evidentiary support for case conceptualization, in recent years, case conceptualization has been identified as a core competency of psychotherapy (Division of Clinical Psychology, 2001; Eells, 2007, MacKinnon & Yudofsky, 1991; Scheiber et al., 2003; Sperry, 2011; Toews, 1993). Yet, the technical competencies associated specifically with case conceptualization skills are largely unknown (Shulman, 2018) and consequently undertaught and underlearned (Fleming & Patterson, 1993; Perry et al., 1987). Some researchers (Holloway and Neufeldt, 1995) have argued that skills related to case conceptualization and treatment planning are difficult to attain and are acquired slowly. Historically, skill development related to case



conceptualization has been filtered through student coursework experiences, theory-informed supervision (Ingram, 2006; John & Segal, 2015), and theory-specific training protocols or manuals (Kendjelic & Eells, 2007). Additionally, through the process of supervision, the complexity of client cases is often thoroughly explored allowing for continued conceptualization skill development.

### **Coursework and Training**

Once students complete the pre-requisite courses necessary to indicate adequate knowledge for beginning practitioners, they begin participating in courses designed to hone their cognitive knowledge through practical application. Many courses have been designed to teach clinical case conceptualization skills (Osborn et al., 2004) yet the efficacy of these courses is unknown (Shulman, 2018). The lack of known efficacy in this area is largely due to the scarcity of empirical studies exploring the connection between case conceptualization skill development and counseling pedagogy, and the field's propensity to explore case conceptualization through the lens of a theoretical-orientation and the supervision process. Nevertheless, a review of the literature did reveal one study that explored a trans-theoretical, non-supervision related approach to training clinicians in case conceptualization (Kendjelic & Eells, 2007). In this study, volunteer participants engaged in a 2-hour training in which they were taught skills to increase the quality of their case conceptualization ability. Findings of this study suggest participation in training increased the case conceptualization quality of the participants in the intervention group when compared to the study's control group (Kendjelic & Eells, 2007).

## **Clinical supervision**

While participating in coursework related to the practical application of clinical skills, CITs who are enrolled in a CACREP accredited program are required to engage in individual and group supervision experiences (CACREP, 2015). During their coursework experience, CITs generally participate in at least one hour of weekly one-on-one individual supervision to review specific clinical cases. Students participating in CACREP –accredited or aligned programs are also required to attend a 90-minute weekly group supervision class staffed by a university employee. This experience allows students to consult with one another and their course instructor about presenting client concerns. After completion of coursework, graduation from their degree program, and receiving a passing score on the licensure examination, CITs are generally provisionally licensed (sometimes called PLPC) by their respective state and required to complete additional supervised counseling experiences in order to be identified as a fully licensed counselor. During this process, PLPCs must participate in weekly individual or group supervision which counts toward their licensure counseling hours. Whether at the CIT or the PLPC level, supervision serves as a gatekeeping process intended to be a mechanism that protects the general population, clients, and agencies from “impaired, unethical, or incompetent counselors” (Bhat, 2005, p 399; Borders, et al., 2014).

As it pertains to clinical case conceptualization, clinical supervision serves as a bridge connecting the didactic coursework associated with case conceptualization with the practical application of the same skill (Murphy, 2017). In supervision, students are trained to refine their clinical skills. Much of the focus related to skill development is generally associated with the CITs ability to think about their client’s cases from a

theoretical framework (Ingram, 2006). The process of thinking theoretically about one's case is closely tied to one's ability to conceptualize their client's case. Based on this rationale, most of what CITs and PLPCs learn about how to conceptualize their client's cases will be viewed through the lens of the supervisee and the supervisor's theoretical framework. The use of theory-informed conceptualization often aids in helping CITs understand how a specific identified theoretical orientation or intervention(s) might be best utilized, during treatment sessions. In many ways, supervision functions as a process designed to help supervisees internalize the skills learned, during supervision, with the intention of prolonged self-supervision in the future (Bernard & Goodyear, 2014).

### **The Use of Theory-specific Training Protocols and Manuals in Conceptualization Skill Development**

The link between theory and theory-informed intervention has been identified as significant, yet difficult for trainees to maintain (White & Russell, 1995). Due to the often complex nature of people's presenting problems, theory-specific and theoretically integrated clinical principles are used to help developing clinicians increase their competencies in the area of case conceptualization (Eells, 2007; Ingram, 2006; Kendjelic & Eells, 2007; Shurmeay, 2009). Models and manuals for conceptualizing client cases have been developed in alignment with theoretical perspectives including: behavioral (Nezu et al., 1997; Malatesia, 1990; Wolpe & Turkat, 1985), cognitive (Persons, 1993; Freeman et al., 1990), interpersonal (Teyber, 1992), family/couples (Jacobson et al., 1989; Textor, 1989), and psychodynamic (Horowitz, 1987, 1994; Luborsky, 1997; Schacht & Henry, 1994; Perry, 1994; Curtis et al., 1994). While there are a number of psychotherapy training manuals representing the above listed perspectives (Freeman et

al., 1990; Scott et al., 1989) that include components related to case conceptualization (Persons, 1992; Strupp & Binder, 1984), minimal studies appear to evaluate the efficacy of a manual designed specifically for conceptualization skill development (Kendjelic & Eells, 2007). For this reason, manuals should be used as a guide (Henry et al., 1993; Strupp & Anderson, 1997) but not a definitive formula for therapy. One reason manuals are not suited as a formula for treatment is likely due to the complexity of client cases.

### **Case Complexity**

Over the years, the concerns that clients present with, during treatment, have become increasingly more complex and difficult (Grant, 2006). Case conceptualization is a cognitively taxing skill (Shulman, 2018) that can be used to help clinicians balance the demands of complex cases with the necessity of identifying salient information. Due to the nature of complex cases, the difficulty associated with this type of case presentation increases the difficulty of the case conceptualization process (Dawes et al., 1989). Additionally, comorbidity and symptom severity are significant factors impacting the complexity of client cases (Kessler et al., 2005), and both can increase the difficulty of deciding which symptoms or disorder to prioritize when identifying treatment related decisions (Persons, 2012; Persons, 2013; Rogers et al., 2005; Tufekcioglu & Muran, 2015). Furthermore, the need for cultural awareness also frequently increases the complexity of client cases and requires a different conceptualization skillset (Lee & Tracey, 2008). Nevertheless, case conceptualization has been found to be helpful in enhancing the treatment of complex and difficult cases (Malatesta, 1990; Person, 1992), and there is preliminary evidence to suggest that treatment guided by case conceptualization is correlated with increased accuracy of the clinician's interpretation of

the client's presenting concern (Crits-Christoph et al., 1988). Additionally, developing expertise in a specific area is likely to also increase one's case conceptualization skills (Eells et al., 2005). Complex cases often require clinicians to possess skills necessary for higher order thinking in order to successfully complete the case conceptualization process (Persons, 2012).

### **Case Conceptualization and Counselor Education Pedagogy**

In recent years, the discipline of counseling has begun to thoughtfully engage in research that explores the strategies and practices associated with the pedagogical approaches utilized within the field of counselor education (Barrio Minton et al., 2018). Pedagogy is intended to refer to the "interactions between teachers, students, and the learning environment and learning tasks" (Murphy, 2008, p. 35). The field's recent interest in pedagogy is a significant shift from previous years. Toward the end of the 20<sup>th</sup> century, the term pedagogy was rarely found within counselor education discourse (Nelson & Neufeldt, 1998). Additionally, during the first decade of the 21<sup>st</sup> century, only 15% of the (230) research articles found within journals of the American Counseling Association and its divisions had a clear grounding in learning theory or pedagogical research (Barrio Minton et al., 2014). By the end of December 2015, counseling research articles published within the journals of the American Counseling Association and its divisions that were clearly grounded in theories of teaching and learning had increased by nearly half (Barrio Minton et al., 2018). Although there was an increase in pedagogical focus, the majority of the articles related to pedagogy focused on teaching strategies for multicultural and group therapy courses (Barrio Minton et al., 2018). Minimal research

was found in these journals regarding pedagogical approaches to teaching clinical case conceptualization (Barrio Minton et al., 2018).

Consistent with previous trends, in a review of the journals of the American Counseling Association and its divisions written between January 2016 to June 2019, only one article appeared to discuss the pedagogy of teaching clinical case conceptualization skills to CITs. The above referenced article, by Hinkle and Dean (2017), explored a non-empirical evidence-informed approach for utilizing creativity to teach case conceptualization. These authors proposed use of a role-play, an experiential learning technique, as an option for helping students to understand the interconnectedness of the domains (e.g., presenting problem(s), history, access to resources etc.) associated with the client's case. Although there is a dearth of literature related to clinical case conceptualization and pedagogy, the importance of this skill (Division of Clinical Psychology, 2001; Eells, 2007, MacKinnon & Yudofsky, 1991; Scheiber et al., 2003; Sperry, 2011; Toews, 1993) and the need for continued development (Kuyken et al., 2005; Persons & Bertagnolli, 1999) indicate a need for the field of counselor education to become intentionally aware of pedagogical best practices necessary to support student development in this area. One strategy for approaching this task might include an exploration of best practices for skill development found within the literature associated with pedagogy.

### **The Influence of the Psychology of Learning on Education Pedagogy**

The inclusion of the psychological processes associated with learning is paramount in understanding strategies for supporting the process of learning and teaching (Alexander & Knight, 1993; Alexander et al., 1996; Binder, 1993). Given our field's

focus on developing successful pedagogical approaches to counselor education, increasing our understanding of how students learn is likely to be a beneficial step in enhancing our pedagogical content knowledge (Lee, 1986). Pedagogical content knowledge is a combination of content and teaching knowledge that supports educators in pairing their mastery of course material with strategies for teaching the course content. The strategy identified for a given course or classroom situation is sometimes called a pedagogical approach. For years, the psychology of learning has informed pedagogical approaches to both teaching and learning, and psychology has been used to help educators understand how to best support the needs of students (James, 1899; McKeachie, 2003; Ambrose et al., 2010). Models of teaching and learning that have been informed by psychology include: teacher-centered, learner-centered, and learning centered. Each of these models champions their own unique underpinning by which it conceptualizes personal learning.

### **Psychologically Informed Pedagogical Frameworks**

The teacher-centered pedagogical approach situates the instructor as the center of the learning process and utilizes methods such as rote memorization and whole-class learning (O'Sullivan, 2006). The learner-centered pedagogical approach is a framework that utilizes learning theories which suggests learners should be actively engaged in the learning process (Westbrook, et. al., 2013). In a learner-centered environment, the learner (student) uses prior knowledge and novel experiences to extend or develop new knowledge, and the instructor facilitates this process by creating and structuring appropriate learning conditions. Finally, the learning centered pedagogical approach is a model that acknowledges the usefulness of both teacher-centered and learner-centered

pedagogy. In this model, the instructor considers local context (i.e., the number of students in the class, the physical environment, and available resources) and is flexible and careful to adapt their pedagogy to the academic environment.

### **The Learner-Centered Framework**

For many years, the teacher-centered framework was the primary pedagogical approach utilized within most academic settings. However, in recent years, the field of education has begun to shift its focus from a teacher-centered approach to a learner-centered approach (McKeachie, 2003). The premises of the learner-centered approach can be summarized to reflect the belief that learners have distinctive perspectives that influence their learning; learners have unique differences that contribute to their learning; learning is a constructive process; optimal learning occurs in the context of positive interpersonal relationships; and learning is a fundamentally natural process (Lambert & McCombs, 1998). Although this phenomenon seems novel, the idea of engaging in a learner-centered approach was initially introduced by William James in his 1899 book entitled *Talks to Teachers on Psychology: And to Students on Some of Life's Ideals* (Ambrose et. al., 2010). The book focused on bridging the gap between psychology and education such that it encouraged readers to begin to think about ways in which an understanding of the “mind” might help provide practical strategies to be used by classroom teachers. Given the trend within the field of education and the applicability of the learner-centered approach for counselor education, the tenets of the learner-centered framework will be further explored in the paragraphs below.

In 1993, the American Psychological Association (APA) and the Mid-Continent Regional Education Laboratory (McREL) drafted the twelve psychological principles of



the learner-centered model (McREL, & APA Presidential Task Force on Psychology in Education, 1993). The learner-centered model is a research-informed approach that provides a platform for systemic decision making within the field of education. The learner-centered model is defined as:

The perspective that couples a focus on individual learners (their heredity, experiences, perspectives, backgrounds, talents, interests, capacities, and needs) with a focus on learning (the best available knowledge about learning and how it occurs and about teaching practices that are more effective in promoting the highest level of motivation, learning and achievement for all learners). This focus, then, informs and drives educational decision making. (McCombs & Whisler, 1997, p. 9)

In 1995-1996, the learner-centered model was revised to include two additional principles (APA, 1995). The fourteen principles, which function as a “living” document grounded in research, apply to the learner and the process of learning. The principles focus on internal psychological factors as well as factors that are under the learner’s control rather than physiological factors or conditioned habits (Lambert & McCombs, 1998). The principles, do however, attempt to take into consideration contextual factors and external environmental components which interact with the internal factors.

The fourteen principles are intended to be understood as an organized set rather than viewed in isolation and are applicable to all learners. These principles have been combined into four categories. The categories include: (a) cognitive and metacognitive factors; (b) motivational and affective factors; (c) developmental and social factors; and (d) individual differences factors (Lambert & McCombs, 1998).

### ***Cognition and Metacognitive Factors***

The cognitive and metacognitive category focuses on summarizing the constructive nature of the processes associated with learning and derives from the research on cognition. It also focuses on the value associated with supporting learners as they become more aware of both their own thinking and the learning process (Lambert & McCombs, 1998). The principles associated with cognition and metacognitive factors are:

1. *Nature of the learning process.* The learning of complex subject matter is most effective when it is an intentional process of constructing meaning from information and experiences (American Psychological Association Board of Educational Affairs, 1997).
2. *Goals of the learning process.* The successful learner, over time and with support and instructional guidance, can create meaningful, coherent representations of knowledge (American Psychological Association Board of Educational Affairs, 1997).
3. *Construction of knowledge.* The successful learner can link new information with existing knowledge in meaningful ways (American Psychological Association Board of Educational Affairs, 1997).
4. *Strategic thinking.* The successful learner can create and use a repertoire of thinking and reasoning strategies to achieve complex learning goals. (American Psychological Association Board of Educational Affairs, 1997).

5. *Thinking about thinking.* Higher order strategies for selecting and monitoring mental operations facilitate creative and critical thinking. (American Psychological Association Board of Educational Affairs, 1997).
6. *Context of learning.* Learning is influenced by environmental factors, including culture, technology, and instructional practices. (American Psychological Association Board of Educational Affairs, 1997).

### ***Motivation and Affect***

The motivation and affect category focuses on summarizing the influence of motivation and emotions on learning (Lambert & McCombs, 1998). This principle suggest that learning is largely a function of the degree to which the learner is invested in the learning process. In this case, the learner's need or desire to learn is activated thus influencing the thoughts and behaviors the learner chooses to engage in (Pintrich et al., 1993). The principles associated with motivation and affect are:

7. *Motivational and emotional influences on learning.* What and how much is learned is influenced by the learner's motivation. Motivation to learn, in turn, is influenced by the individual's emotional states, beliefs, interest and goals, habits in thinking (American Psychological Association Board of Educational Affairs, 1997).
8. *Intrinsic motivation to learn.* The learner's creativity, higher order thinking, and natural curiosity all contribute to motivation to learn. Intrinsic motivation is stimulated by tasks the learner perceived to be of

optimal novelty and difficulty, relevant to personal interests, and providing for personal choice and control. (American Psychological Association Board of Educational Affairs, 1997).

9. *Effects of motivation on effort.* Acquisition of complex knowledge and skills requires extended learner effort and guided practice. Without learners' motivation to learn, the willingness to exert this effort is unlikely without coercion. (American Psychological Association Board of Educational Affairs, 1997).

### ***Developmental and Social Factors***

The developmental and social category focuses on summarizing the establishment of the social context necessary for facilitating meaningful learning through the development of positive learning environments and relationships. It also focuses on understanding important differences in the intellectual, social, emotional, and physical development of learners (Lambert & McCombs, 1998). It suggests that learning is based on the learner's own development. It also implies that learning is shared amongst individuals and suggests advocating for social interaction to enhance learning. The principles associated with developmental and social factors are:

10. *Developmental influences on learning.* As individuals develop, there are different opportunities and constraints for learning. Learning is most effective when differential development within and across physical, intellectual, emotional, and social domains is taken into account (American Psychological Association Board of Educational Affairs, 1997).

11. *Social influences on learning.* Learning is influenced by social interactions, interpersonal relations, and communication with others. (American Psychological Association Board of Educational Affairs, 1997).

### ***Individual Differences***

The individual differences category focuses on summarizing the common principles which describe all learners. It also reminds us of the unique individual differences which shape the underpinning of effective assessment and standards for every learner (Lambert & McCombs, 1998). This category includes factors related to biological, inherited, experiential, and environmental contexts that shape the learner and the things they learn. The principles associated with individual differences are:

12. *Individual differences in learning.* Learners have different strategies, approaches, and capabilities for learning that are a function of prior experience and heredity. (American Psychological Association Board of Educational Affairs, 1997).
13. *Learning and diversity.* Learning is most effective when differences in learners' linguistic, cultural, and social backgrounds are taken into account. (American Psychological Association Board of Educational Affairs, 1997).
14. *Standards and assessment.* Setting appropriately high and challenging standards and assessing the learner as well as learning progress – including diagnostic, process, and outcome assessment—are integral parts

of the learning process. (American Psychological Association Board of Educational Affairs, 1997).

The learner-centered model focuses on developing an understanding of the cognitive processes necessary for learning while taking into account the interpersonal experiences that are associated with learning as well as developmental differences and other types of differences among learners. Overall, the learner-centered model's propensity to focus on the learner as a holistic being allows for attention to the learner's personal history as well as their biological make-up and the learning environment. It provides opportunities for the learner to develop an understanding of new material, engage in hands-on exposure to the new material, and generalize the new material to novel situations. Since the process of case conceptualization requires both the solidifying of knowledge as well as the need to engage in cognitive flexibility via prior knowledge, exploring the topic of case conceptualization through a learner-centered lens seems appropriate. In many ways, this model appropriately reflects the type of learning model that will likely be beneficial for students within counselor education programs.

### **Learner-Center Teaching and Adult Learners**

Learner-centered teaching approaches have been the recommendation of prominent adult learning theorist, for at least 50 years (Edward, 2013). Learner-centered approaches lend themselves to collaborative learning environments. According to Conti (1978), the collaborative teaching-learning method of instruction is defined as an instructional method "in which authority for curriculum formulation is shared by the learner and the practitioner" (p. 11). Conversely, the non-collaborative teaching-learning method of instruction is described as teacher-centered in which the instructor is the

authority and provider of knowledge (Conti, 1985a). Collaborative teaching-learning approaches have been identified in adult education literature as a commonly used and highly efficient (Wilson, 1994) learning modality for teaching adult learners. Given the breadth of literature supporting the use of learning-centered and teaching-learning modalities found within education pedagogy and more specifically, adult learning pedagogy, it is likely that an exploration of the utilization of these teaching practices will benefit the field of counselor education as we endeavor to engage in theory-informed teaching practices.

### **Research-based Principles of Meaningful Learning**

Given the profound amount of research-based literature associated with the influence of psychological knowledge and the science of learning on education, it is beyond the scope of this paper to review and explore each contribution offered to the field. Nevertheless, the following discussion will include the seminal works of researchers related to this topic. Based on the psychological principles associated with education, the field has developed an increased understanding of how learning works and thus has been able to identify specific principles necessary for effective teaching. The essential research-based dimensions of meaningful learning which have been systematically investigated within psychology and other disciplines for decades are related to one's knowledge base (Alexander et al., 1991; Alexander & Murphy, 1998), strategic processes or executive control (Alexander & Murphy, 1998; Brown, 1975; Ennis, 1985, 1987, 1989; Flavell, 1977; Nickerson, 1989), motivation and affect (Alexander & Murphy, 1998; Pintrich et al., 1993), developmental and individual differences (Alexander & Murphy, 1998; Case, 1985, 1993; Dillon & Schmeck, 1983:

Reynolds & Willson, 1985), and the situation or context in which the learner is placed (Alexander, 1990; Alexander & Murphy, 1998; Lave, 1988; Resnick et al., 1991; Rogoff, 1990). Each of these principles has greatly added to our understanding of both the learner and the learning process and significantly influences research-based approaches to pedagogical and teaching strategies. While these principles are delineated individually, from a developmental and holistic perspective, it is important to understand that in a practical setting, these principles are likely co-occurring inseparably.

### **Knowledge Base**

Knowledge base (Alexander & Murphy, 1998) is related to one's existing knowledge which includes prior knowledge (Vygotsky 1978; National Research Council, 2000) and the ability to organize and make sense of old and new information (Eylon & Reif, 1984). Understanding how students utilize prior knowledge and their ability to organize knowledge is likely to benefit instructors teaching at the collegiate level (Ambrose et al., 2010). A student's ability to access their prior knowledge has been identified as a skill that will either help or hinder the learning process (Ambrose et al., 2010). The idea of prior knowledge suggest that students have beliefs, knowledge, attitudes, and experiences that pre-date their experience in a given course. This prior knowledge informs how they filter and interpret what they learn. When robust and accurate prior knowledge is activated at appropriate times, it creates a stronger platform on which to build new knowledge (Ambrose et al., 2010). Conversely, an interference in new knowledge may occur when prior knowledge is insufficient, incorrect or activated inappropriately.



In addition to the need for a strong foundation of prior knowledge in a given context, one must also be able to appropriately organize both old and new information as it is gained or retrieved. The ability to organize knowledge has been identified as an important skill impacting how students learn and generalize their knowledge (Ambrose et al., 2010). The process of making connections between pieces of information or knowledge is a naturally occurring phenomenon. These connections form knowledge structures. When the knowledge structures are meaningfully and accurately organized, the process of applying and retrieving knowledge effectively and efficiently is increased (Ambrose et al., 2010). However, inaccurate or random connections will likely result in difficult retrieval and application of knowledge (Ambrose et al., 2010). As it relates to counseling, the ability to access prior knowledge related to mental health concerns both from personal experience(s) and those gain in an academic setting as well as the ability to organize information in a meaningful way is likely to support the developmental needs of counseling students who are learning to engage in case conceptualization.

### **Strategic Processing and Executive Control**

Strategic processing and executive control is related to one's ability to be reflective about and regulate their thoughts and behaviors (Alexander & Murphy, 1998). The ability to engage in this skill is essential to both learning and development. The process of reflecting on one's own thoughts is called metacognition (Flavell, 1976). When a student is intentional about how they think about learning and the behaviors related to the learning process, they are likely beginning to engage in the experience of becoming a self-directed learner. Self-directed learners learn to monitor and adjust their

approach to learning by utilizing metacognition to attend to and control their learning (Ambrose et al., 2010).

The self-directed learner works to evaluate their personal strengths and weaknesses, assess individual academic tasks, apply and monitor various learning strategies, and reflect on the appropriateness of their current approach to learning (Ambrose et al., 2010). While this process is helpful in supporting student development, this is not a naturally occurring process, however once this skill is taught and appropriately applied student's increase their intellectual habits and improve their performance and effectiveness (Ambrose, et al., 2010). Supporting the skills associated with becoming a self-directed learner is likely to be a skill that is beneficial for instructors teaching at the collegiate level (Ambrose, et al., 2010). Helping counseling students to develop this skill will greatly increase their ability to be intentional about the ways in which they reflect on client cases thus increasing their case conceptualization ability.

### **Motivation and Affect**

Motivation and affect refer to ways in which the individual's desires and emotions influence the learning process (Alexander & Murphy, 1998). Motivation is believed to be a process in which a person's desires and needs are activated and in turn direct their thoughts and behaviors (Pintrich et al., 1993). Affect, on the other hand, is a construct related to a person's emotions or feelings (Ames & Ames, 1985). Similar to motivation, affect is also said to influence one's thoughts and behaviors (Ames & Ames, 1985).

Motivation and affect influence student success (Alexander & Murphy, 1998; Ambrose et al., 2010) specifically as it relates to intrinsic motivation, personal

involvement, and commitment (Ames & Ames, 1985, 1989; Corno & Rohkemper, 1985; Dweck & Leggett, 1988; Gottfried, 1985, 1990). Having an affirming educational environment also has a positive impact on academic performance (Ames, 1992; Newman & Schwager, 1992; Pintrich et al., 1993). Although motivation positively influences student learning, it is important to note that motivation is situational, meaning no one situation is motivational to all students (Csikszentmihalyi, 1990; Schiefele & Csikszentmihalyi, 1994; Schiefele & Csikszentmihalyi, 1995). Furthermore, some content is more interesting to certain students than it is to others, thus increasing the student's motivation to learn the content (Alexander et al., 1994b; Phillips & Zimmerman, 1990; Renninger, 1992). Additionally, the student's personal goals and interest are likely to influence their motivation toward learning or attending to a specific type of educational content (Dewey, 1913). With this in mind, it is likely to be helpful for counselor educators to help students clearly make the connection between the development of strong case conceptualization skills and future personal, professional, and career goals.

### **Development and Individual Differences**

Development and individual differences refers to the premise that each learner is unique and progresses through stages of development at their own pace (Galton, 1908; Jensen, 1989; Plomin & Daniels, 1987; Plomin & DeFries, 1985). Progression through the stages is influenced by both inherited and environmental/experiential factors (Alexander & Murphy, 1998). Development and individual differences is connected to the process of human growth. The process of human growth is one in which we find both commonalities across individuals as well as unique variation within individuals

(Alexander & Murphy, 1998). Understanding the similarities and differences among and across the developmental stages of individuals with shared characteristics is important for educators (Alexander & Murphy, 1998).

Although educators cannot control the developmental process, they have a strong influence on classroom and course climate (Ambrose et al., 2010). For college students, similar to students at other stages of development, their level of development interacts with the emotional, social, and intellectual components of their educational experiences and affects their learning (Ambrose et al., 2010). Understanding the impact that each of these components has on the student's ability to receive and retain new information is likely to help educators develop strategies for creating increasingly productive educational environments (Ambrose et al., 2010). As counselor educators, we can shape the learning experience(s) associated with developing case conceptualization skills in such a way that it strengthens student learning and fosters the expansion of developmentally appropriate conceptualization skills while they are in the "coursework" stage of their professional development.

### **Situation or Context**

Learning is an enterprise that is both individually and socially constructed (Alexander, & Murphy, 1998). While there is a plethora of research to suggest learning is an innate process, over the past several decades, the field of education has also begun to acknowledge the impact that social influence has on learning (Brown & Palincsar, 1989; Pea, 1988, 1989; Resnick et al., 1991; Rogoff, 1990). Based on this shift, the field has become inundated with literature that suggest learning is markedly and continuously shaped by the social context in which it occurs (Alexander, 1990; Lave, 1988, Resnick et

al., 1991; Rogoff, 1990). The idea that knowledge is socially constructed is situated within the realm of the social constructivist philosophy. The social constructivist approach suggests that learning happens within the context of relationships. In this way, all learning is seen as relational. Children learn from their parents and parents from their children etc. Given the vast number of social context in which individuals engage, it seems clear there are many ways in which various social influences work to inform and shape the knowledge that learners possess.

Learners gain and develop new skills in a plethora of situations, contexts, and environments. In addition to learning new skills, within a given context, students should be afforded opportunities to practice integrating the skills they have learned such that they develop mastery of the skill(s) and will know when and how to apply the skill(s) (Ambrose et al., 2010) across various situations and contexts. Additionally, students must receive opportunities to engage in goal-directed practice and should receive targeted feedback about their ability to successfully engage in the specific skill in question (Ambrose et al., 2010). As counselor educators, we can create opportunities for students to engage in learning environments that foster the development of collaboratively constructed knowledge related to clinical case conceptualization. We can also provide experiences where students are able to practice developing conceptualizations and provide targeted feedback on their skills as well as the strategies they used to identify a particular conceptualization.

A student's knowledge base, their propensity for strategic processing or executive control, their motivation and affect toward learning, their personal development, and the educational situation and context all play a major part in the student's acquisition of

meaningful learning. Each of the dimensions listed above represents skills that can be taught or enhanced via the student's educational experience. Since learning is both an innate individual experience and a social experience, it stands to reason that some of the dimensions listed above will happen intrinsically within the learner while others are gained through the student's social interactions. Recognizing this makes a strong argument for supporting the development of each of these dimensions within CITs. Furthermore, when thinking about clinical case conceptualization skill development, a CIT's innate ability to identify and organize (which is related to their knowledge base) relevant clinical information as well as their propensity for mastery (which is related to the situation or context) of clinical skills is likely to represent the technical competencies associated with clinical case conceptualization skill development. Having these technical competencies will likely create a solid foundation for the continued development of sound clinical case conceptualization skills as well as increased feelings of perceived competence in their clinical abilities.

### **Counselor Self-Efficacy**

When counselors have higher levels of cognitive complexity, increased need for cognition, and proper pedagogical training, it stands to reason that they will also report greater levels of perceived confidence in their clinical effectiveness. Perceived confidence is a component of one's self-efficacy. Self-efficacy (Bandura, 1977, 1986, 1997) is defined as the belief one has in their capacity to execute the behaviors needed for the production of specific performance fulfillment. The concept of self-efficacy is rooted in Self-Efficacy Theory (SET). SET was birthed from the research of Bandura (1977, 1986). Bandura noticed a mechanism of belief that individuals have in their own ability

to exert influence over the events in their life. He proposed that one's perception of self-efficacy was influential in identifying which coping behaviors and the amount of effort an individual would use to manage challenges and stress as well as their pursuit of goals. SET has had significant influence on research, education, and clinical practice and has been used to assess counselor self-efficacy (Lent et al., 2003).

Counselor self-efficacy has been defined as the counselor's belief in the ability to perform counseling-related tasks and behaviors or to negotiate various clinical situations (Larson & Daniels, 1998). Counselor self-efficacy has become a thriving research domain focusing on counselor trainee's perceived abilities in specific (e.g., career counseling; O'Brien et al., 1997) and general (Larson et al., 1992) types of counseling. Additionally, counselor self-efficacy has been positively correlated with indexes of counselor performance and development level (Larson & Daniels, 1998). Subsequently, clinicians with more counseling experience tend to report higher counselor self-efficacy, and higher counselor self-efficacy is positively correlated with satisfaction and negatively correlated with anxiety related to the requirements associated with the counseling role (Larson & Daniels, 1998). In addition to understanding the counseling self-efficacy of practicing clinicians, it is also important to understand the counseling self-efficacy of CITs as it is likely to impact aspects of the trainee's functioning (e.g., their cognitive, affective, and behavioral responses; Larson, 1998) and facets of their career development (e.g., their interest and goals related to counseling; Heppner et al., 1996).

### **Conclusion**

For many years CACREP has served as the accrediting body charged with functioning as the gatekeeper for the educational experiences of CITs. As a part of their

training, CITs learn strategies for supporting their clients through the clinical mental health treatment process. This process has historically included engaging clients in a clinical assessment which lends itself to the development of a clinical case conceptualization. Over the years, clinical case conceptualization has been defined many ways. However, consistent across most definitions includes the process of learning about the client's concern, making and testing hypotheses about the origin and maintaining factors associated with the concern(s) and utilizing this information to develop a plan of action for treatment. There are several core tenets associated with developing a sound clinical case conceptualization which include identifying: symptoms and problems, precipitating stressors, predisposing events and conditions, and an inferred explanatory mechanism accounting for the previous three components. The development of clinical case conceptualization skills is generally established through coursework and theory-informed clinical supervision.

As a discipline, counseling has recently become more interested in understanding the pedagogical strategies associated with counselor education, however, little is known about best practices for pedagogy related to clinical case conceptualization skill development. Increasing our understanding of education pedagogy and research-based principles of learning through the lens of cognitive psychology is likely to be an effective strategy for developing sound pedagogy in this area. Our increased understanding in this area is likely to help minimize the gap in the research and increase the field's understanding of the technical competencies and pedagogical practices associated with developing strong clinical case conceptualization skills in developing CITs. Additionally,



the sound development of these skills is likely to result in increased counselor self-efficacy and decreased rates of clinician burnout and overall job dissatisfaction.

### **Chapter III: Methodology**

Counseling as a discipline and the CACREP accrediting body have identified clinical case conceptualization as an important skill for developing clinicians (John & Segal, 2015; CACREP, 2009, 2015). Despite its importance, little is known about the ways in which students experience the pedagogical practices associated with sound clinical case conceptualization skill development. As a doctoral student in pursuit of a degree in counselor education and supervision, I am interested in understanding how students experience learning to engage in clinical case conceptualization.

This study utilized a constructivist grounded theory (CGT; Charmaz, 2014) research design in an effort to illuminate the clinical case conceptualization skill development of CITs. In an effort to advance the field's understanding of the developmental experiences that CITs have related to clinical case conceptualization, this study was guided by the following research questions:

1. How do students experience learning and applying clinical case conceptualization skills?
2. What function do students believe clinical case conceptualization plays in the clinical process?
3. How does clinical case conceptualization skill development affect CITs confidence in using the skill?

Using the CGT research design and analytical techniques (Charmaz, 2014), this study followed a systematic set of procedures to collect and analyze data. In this chapter, the constructivist paradigmatic framework will be described as a comprehensive guide to explain the rationale for the research methodology. The chapter also includes a

description of the research design, participant selection, data collection and analysis, strategies for establishing a trustworthy and rigorous qualitative study, and limitations of qualitative research and of the CGT approach.

### **Research Paradigm**

As researchers practicing within the social sciences, it is important to understand the ontological and epistemological assumptions that inform our methodological choices (Slawewski, 2018). Identifying these assumptions can help the researcher to situate their research study within the framework of a specific research paradigm. Paradigms provide scientist with processes for arriving at solutions to scientific problems by means of scientific methods (Kuhn, 1970). They also reflect the identified rules of conduct within the field of science and the likeness of shared manners related to perceiving and analyzing reality (Slawewski, 2018). It is of note, however, that although research paradigms reflect the rules associated with a given framework, there are multiple classifications of social science paradigms (Slawewski, 2018). Having multiple interpretations of what constitutes a paradigm, shared language and terminology across paradigms as well as the overlap across paradigms can make identifying a paradigm difficult (Hays & Singh, 2012). Nevertheless, social scientists are encouraged to explore their personal beliefs as they often inform ontological and epistemological assumptions regarding methodological direction and have significant practical and empirical implications (Denzin & Lincoln, 2005).

As a qualitative researcher, reflexivity is an important part of the research process. For me, the process of reflexivity began with an exploration of my personal beliefs and an assessment of how said beliefs reflect my research orientation. Based on my personal

experiences, I have come to believe that the ways in which people “see” or “view” things is largely based on their experience of the “thing” under study. Additionally, I have found that how individuals come to “label” or describe what they know is primarily informed by the shared language used by those around them. I believe that as a member of the larger society my assumptions and values are both informed by and inform the world around me. With that said, often my experiences associated with “viewing” and “labeling” things are reflected by both my voice and with words and phrases that exemplify those in my immediate sphere. Given my personal beliefs regarding ontology, epistemology, axiology, and rhetoric, I will be exploring the research questions associated with this study from the paradigm that Guba and Lincoln (2005) identify as the Constructivism Paradigm. Exploration of my research questions through this lens naturally align with the CGT methodology which focuses on a collaborative construction of the study’s problem.

### **The Constructivism Paradigm**

Constructivists believe the pursuit of scientific truth must be informed by the multiple contextual perspectives and the many subjective voices endeavoring to understand and identify the “truth” (Slawecki, 2018). In essence, within the constructivism paradigm, the idea of a “universal truth” cannot exist. Instead the process of knowing is subjective (Slawecki, 2018). Thus, within a research context, the epistemological approach to knowledge development is co-constructed between the researcher and the participant (Hays & Singh, 2012). Furthermore, constructivists ascribe to subjective beliefs about reality and accept the concept of relativism which suggests that there are many locally constructed and reconstructed realities (Slawecki, 2018).

From an ontological standpoint, researchers who ascribe to the constructivism paradigm believe that multiple realities of a phenomenon exist, and they strive to gain an understanding of how their participants conceptualize the phenomenon under investigation (Hays & Singh, 2012).

Additionally, according to Hays and Singh (2012) in addition to the ontological and epistemological philosophies of science, qualitative researchers are also interested in the axiological and rhetorical philosophies of science. In reference to qualitative research, the philosophy of axiology is associated with the researcher's values and assumptions and their influence on a given study's research questions and design. Axiology also strives to consider the participants values and the research setting (Ponterotto, 2005). From an axiological stand point, qualitative researchers are encouraged to reflect on the role their values play in the research process. Researchers who ascribe to the constructivism paradigm place an emphasis on the values of the researcher, the participants, and the research setting (Hays & Singh, 2012). When thinking about the scientific philosophy of rhetoric within the qualitative realm, this philosophy is intended to describe the various formats in which data may be presented. Presentations of data may be reflected in the researcher's use of voice (i.e., first person, second person etc.) to describe the researcher and participants, the researcher's use of terminology associated with data collection and analysis, and the researcher's representation of the study's findings (i.e., description of categories or numbers). Representations of data, within the constructivist paradigm, largely reflect the voices of its participants and thoroughly describe the role of the researcher and the setting as they relate to the research problem. Each of these philosophies of science described above align with the CGT methodology.

## **The Interpretive Paradigm and Constructivist Grounded Theory Methodology**

Although my personal believe system aligns with Guba and Lincoln's (2005) description of the Constructivism Paradigm, it is important to note that Guba and Lincoln's (2005) classification is but one of the many classification systems used to categorize paradigms found within the social sciences (Slawewski, 2018). Charmaz (2006), the theorist most noted for developing the constructivist grounded theory methodological approach, for example, identified Burrell and Morgan's (1985) Interpretive Paradigm as the framework under which to situate the CGT methodology. Consequently, Charmaz (2014) indicated multiple perspectives, including social constructionism and symbolic interactionism, have been identified as perspectives aligned with the Interpretive Paradigm. Charmaz (2006) identified the CGT's ontology as relativist and its epistemology as subjective. Furthermore, according to Burrell and Morgan's (1985) classification, subjectivity is related to idealism in that it focuses on the individual's experience in the creation of social reality.

As a researcher, in order to fully understand the reality of the research participant, the researcher strives to get as close as possible to the subject under study in an effort to capture and provide a description of how people create their unique world while remaining free and the primary creators of reality (Slawewski, 2018). From an ontological standpoint, researchers focus on acceptance of the relative nature of the natural world and seek to provide as complete of a description of their analysis of the phenomenon as possible. Given Charmaz's (2006) ontological and epistemological assumptions the Interpretive Paradigm described by Burrell and Morgan (1985) is a natural fit.

According to Slawewski (2018), the interpretive paradigm is oriented toward increasing an understanding of reality as it is perceived by its participants (known as social actors). In this paradigm, explanations of one's beliefs, experiences, and consciousness are constantly being constructed and reconstructed as the social world is continually changing and emerging via the social processes created by social actors. Researchers who ascribe to this paradigm seek to understand reality through a process of attempting to understand how social actors construct their world on a daily basis. The paradigms described above help to shape and inform this dissertation's research design.

### **Research Design**

The process of asking simple questions which yield complex answers has been historically linked to qualitative research (Chenail, 2012). Furthermore, the inductive nature of the qualitative process often facilitates profound insight about the meaning making, interpretation, and understanding that participants have of a given phenomenon (Merriam & Tisdell, 2016). Research studies which are designed to answer questions related to "how" or "why" a participant experiences a particular phenomenon in a given way are commonly seen as fodder for qualitative investigators. Generally speaking, qualitative investigators strive to sort data into categories or themes which reflect the investigator's analysis of a given phenomenon (Merriam & Tisdale, 2016). However, some qualitative investigators endeavor to extend the field's knowledge beyond analytic categories and instead seek to develop theories which explicate abstract concepts (Charmaz, 2014). Qualitative investigators who focus on conducting research with the intention of theory construction generally align themselves with the grounded theory methodology (GTM; Charmaz, 2014; Glaser & Strauss, 1967; Merriam & Tisdale, 2016).

Over the years, the ontological and epistemological assumptions informing GTM have shifted based on the diverse research paradigms to which researchers ascribe (Belgrave & Seide, 2019). Subsequently, multiple approaches to GTM have been developed (Belgrave & Seide, 2019). Although there are multiple approaches to GTM, given my beliefs about the philosophies of science, I have identified the Constructivist Grounded Theory methodology (CGT) as the GTM to inform this study. Since the purpose was to explore the learning experiences of this study's participants, I strived to understand their perspectives on the realities associated with learning clinical case conceptualization and worked to co-construct and analyze an understanding of the meaning they ascribe to their experience. Given this study's purpose, CGT seems to be an applicable GTM. This is especially true since, CGT methodologists acknowledge multiple realities, believe data is mutually constructed and reconstructed within the researcher participant dyad, and view their analyses as constructions of the subjective reality (Belgrave & Seide, 2019; Charmaz, 2006; Charmaz & Belgrave, 2012). Additionally, the CGT approach seeks to explore and understand the social processes which are not adequately explained by existing theory(ies). In thinking about the acquisition of knowledge from a learner-centered pedagogical approach, it is clear that learning case conceptualization is a social process by which an instructor supports students in using their prior knowledge and new experiences to construct new knowledge. Given the absence of a theory designed to explain this process, utilization of a CGT approach seemed applicable for this study. Overall, based on the purpose of this study, the social process by which case conceptualization knowledge is acquired, and the lack of information and a relevant theory explaining this phenomenon CGT seemed to be an



applicable GTM for the current study. Furthermore, use of a CGT approach created an opportunity to learn more about the experiences students have related to the process of learning clinical case conceptualization, thus resulting a substantive theory and adding to the fields knowledge in this area.

### **Procedures**

Prior to data collection, the procedure listed below was reviewed and approved by the University of Missouri—St. Louis’ Institutional Review Board. I recruited individuals who self-identified as students participating in a clinical mental health counseling or dual clinical mental health counseling track of a CACREP aligned or CACREP accredited program.

### **Sampling**

Given the qualitative nature of this study, nonprobability sampling was used. More specifically, I used purposeful sampling to amass “information-rich” (Patton, 2015, p. 238) cases. Purposeful sampling is a process of identifying participants who exemplify what is typical, average, and normal within the study’s desired population (Patton, 2015). In alignment with this study’s constructivist grounded theory approach, the initial sampling was purposeful in that participants were selected based on their ability to meet the study’s inclusion criteria (Charmaz, 2014). The next type of sampling I employed was snowball sampling. Snowball sampling is a process of asking early key participants to refer you to other participants (Merriam & Tisdale, 2016). Additionally, as is common when utilizing a constructivist grounded theory approach, once categories began to emerge in my data I also utilized theoretical sampling. Theoretical sampling is a process

of gathering focused data to elaborate on pertinent information about categories and their properties and to refine categories within the emerging theory (Charmaz, 2014).

### *Initial Sampling*

During the initial sampling phase in an effort to reach maximum variation (i.e., the degree to which findings may vary across the study's participants or sites in an effort to increase transferability), I contacted via telephone, social media, electronic mail communication (email), or face-to-face, 17 graduate faculty members representing 15 CACREP accredited (i.e., institutions which had completed and passed the external multi-stage review process; CACREP.org) or aligned (i.e., institutions with CACREP aligned curricula but who had not completed and passed the external multi-stage review process; CACREP.org) programs with whom I have establish rapport and informed them of my study. The two faculty members who did not respond were sent two follow-up emails. The 15 programs represented 11 states and one online university across four (of the five) Association of Counselor Educators and Supervision (ACES) regions. I asked them to share information about my study and the recruitment information (Appendix F) with potential participants at their institution.

In an effort to achieve increased transferability, I attempted to recruit participants from multiple CACREP accredited or aligned programs. It is of note that this population was identified because CACREP-accredited programs have a long history (at least 10 years) of requiring coursework in clinical case conceptualization (CACREP, 2009, 2015). Additionally, CACREP was selected because it represents the premiere accreditation body within the field of counseling and counselor education and supervision boasting 767 CACREP-accredited counseling programs across 349 institutions within the United

States (CACREP, 2018). I attempted to garner a sample that reflected numerous institutions in order to have the study contribute information reflecting a wide range of experiences held by participants.

Additionally, as a member of the counseling community, I also utilized my social network on Facebook to identify and contact via social media and email communication to potential participants who are master-level students of CACREP accredited or aligned programs (see Appendix G).

### ***Snowball Sampling***

In addition to the initial recruitment effort, I also used snowball sampling. To achieve snowball sampling, after locating a few eligible key participants, I asked the participants to refer other eligible peers and acquaintances to my study. This process created a snowball effect and facilitated the accumulation of “information rich” cases (Patton, 2015).

### ***Theoretical Sampling***

During the process of theoretical sampling, I explored the data, my memos, and diagrams to determine potential categories and theoretical ideas that required further exploration. The purpose of this exploration was to fill in gaps in my understanding of the potential categories and theoretical ideas. According to Charmaz (2014), in order to explore the missing information, it was important for me to return to the empirical world to further explore the gaps with participants. The process of theoretical sampling consisted of identifying initial participants who met the studies inclusion criteria such that the information they would provide would allow for greater understanding of the phenomenon in question. Given the simultaneous nature of data collection and analysis

associated with the CGT methodology, I was able to analyze the information shared by the first participant and use it to inform and make adjustments to the interview questions. This process of simultaneous data collection and analysis allowed me to adapt and add interview questions, as appropriate following significant interviews, thus allowing me to focus on interview questions that helped to illuminate the emergence of theoretically relevant categories. For example, informed by the emerging theoretical data, after completing the first two interviews, the following questions were added to the interview guide “in your opinion, is it more important to understand a client’s presenting concern based on a theory or based on the diagnostic criteria of a specific DSM 5 diagnosis?”. This question was followed by “thank you for sharing, in your opinion, what makes \_\_\_\_\_ a more important rationale for understanding a client’s presenting concern than \_\_\_\_\_?”.

Theoretical sampling also allowed me to determine which participants to invite for additional interviews. For example, during their first interview, in response to the question “what do you think is most important for helping you understand a client's presenting concern, theory or the DSM criteria?” AE shared “it’s not just black and white so I’m gonna say theory” (AE1 51)”. The insight that AE shared yielded the following memo “theory plays a role in the case conceptualization process, but what role exactly? How does theory fit? Is there space for theory and diagnosis? What might that look like?”. Based on AE’s statement and my memo, AE was identified as a key participant who might have additional thoughts about their experience associated with using theory to understand client cases. Additionally, participants were invited for second interviews based on the information they shared in their first interview and the likelihood that they

would be able to provide information that added additional depth to the emerging theory. For example, during the first interview when asked “what do you think is most important for helping you understand a client's presenting concern, theory or the DSM criteria?”

Josie stated

I think to understand the client’s presenting concerns I would use the DSM but...

I would use/I hold theory to be more important than the DSM... theory I think can capture a lot more than the DSM. The DSM is extremely specific which is nice but (it’s) not everything. Sometimes their (the client’s) presenting concerns it doesn’t quite match up to a tee or maybe the age is wrong, maybe the DSM gives a certain age and they’re right on the cut off... but they meet all the ... same concerns that the DSM (criteria lists) than... yeah theory is more important.

(Josie1 42-48)

The memos that accompanied Josie’s response included: “matching symptoms to the DSM, the DSM provides practical/behavioral/observable manifestations of the client’s presenting concerns, using theory to understand the clinical picture, and theory provides a philosophical understanding of the client’s presenting concerns”. At their core, these memos served to reflect emerging data related to the clinical clarity category (category #2). As this dissertation’s theory began to emerge from the data, I believed there was more to be learned about the perceptions students hold regarding the relationship between theory and the DSM and the role each plays in the clinical case conceptualization process. All things being considered, Josie was also identified as a key participant and was invited to participate in a second interview. During their second interview, Josie went on to expound on this idea and shed additional information on my curiosity related

to the interplay between theory and use of the DSM as a part of the clinical case conceptualization process. When asked “in your opinion, how are theory and the DSM criteria similar or dissimilar?”. Josie stated “I guess depending on which theory you are viewing from you would either be thinking about their thoughts or their past or their birth order... so just depending on the theory you use there could be a lot of different ways (to look at it)” (Josie2 57-58). As a follow-up question Josie was asked “which of those two or both or neither are you using to understand the client...?”. In response to this Josie stated “I would definitely say theory and the DSM” (Josie2 78). Josie went on to say “(you use)... theory and the DSM for a while, then you diagnose them and then it’s more like okay theory and how we’re going to help with that diagnosis (Josie2 82). This information shared here, by Josie, is directly related to the emergence of the core components of the clinical clarity category (category#2).

Another example informing how key participants were identified is related to one of the study’s initial round of participants who was a school counseling-licensure track student. Since this student’s primary focus with regard to practical application of counseling techniques was aligned with the school counseling framework (which does not generally include a significant amount of time focused on clinical case conceptualization) this student was not invited to participate in an additional interview. Furthermore, although all participants initially identified as students participating in a counseling-licensure track program it is of note that two of the nine students were school counseling-licensure track students. The relevance of this point as it relates to this study is that often per the program’s or state’s certification requirements, students in a school counseling-licensure track program have less practical clinical experience as they are not

required to complete their field experience placements within clinical mental health practice sites but instead are allowed to complete their field experience hours within a school setting. Through the process of data analysis, it was noted that the two students who self-identified as students in a school counseling-licensure track program, during the interview portion, shared information that was not directly germane to the developing theory that emerged from the data found within this dissertation. Therefore, consistent with the constructivist grounded theory approach, these two participants were not invited to participate in a second round of interviews. Nevertheless, of the nine initial interviewees, seven were invited to participate in a second round of interviews and four of the seven who were invited for second round interviews successfully completed their second interview bringing the number of total interviews to 13.

With consideration for theoretical sampling in mind, after each interview, I returned to the empirical world to explore additional categories or theoretical ideas with key participants. This led to the emergence of rich, thick descriptions of the categories and theoretical ideas which eventually resulted in theoretical saturation. Theoretical saturation reflects the point at which additional data collection fails to produce new categories. This process reflects the iterative nature of the constant comparison approach utilized within the constructivist grounded theory methodology.

### **Recruitment**

The recruitment information (Appendix F & G) that was disseminated regarding this study included: an email providing information including the University of Missouri St. Louis' IRB approval, an explanation of the study, the time obligation and compensation, the study's design and interview platform (i.e., Zoom Video

Conferencing), the study's informed consent document (Appendix E) which will include information regarding the risk and benefits of the study, video recording procedures, all efforts to maintain participant anonymity, opportunities to participate in follow-up interviews, and information about the participant's right to choose not to answer any questions and the right to discontinue participation at any time during the study. The email also included a hyperlink to the Qualtrics survey software where the participants were able to access the study's informed consent form (Appendix E), screening questionnaire (Appendix A), and demographic questionnaire (Appendix B).

Individuals interested in participating in this study were asked to click on the hyperlink which took them to the study's survey. The first page of the survey reflected the informed consent form. Participants were invited to read the consent form and click "continue" to consent to participation. By advancing to the screening and demographic questionnaire, it was assumed that the participant consented to participation in the study. After completing the screening questions and demographic questions, participants were asked to provide their email address for future communication.

Upon receiving the participants' survey, I reviewed the participants' answers on the screening criteria to ensure they have answered affirmatively to the following inclusion criteria:

- Are you at least 18 years old?
- Do you identify as a master's-level counseling student (e.g., Counselor-in-Training [CIT]) enrolled in a CACREP accredited or CACREP aligned counseling program?



- Have you completed at least one course in psychopathology and diagnosis (e.g., a course where you learned to use the Diagnostic and Statistical Manual of Mental Disorders [DSM] or the International Classification of Disease [ICD])?
- Have you completed at least one practicum experience course?

Using the skip-logic function in Qualtrics, participants who did not meet the requirements for inclusion in this study, were routed to the end of the survey, thanked for their willingness to participate in the study, and informed that they did not meet the inclusion criteria for the study. If the participant answered indicating they met the inclusion criteria, the skip logic feature in Qualtrics routed them to the study's demographic survey questionnaire (Appendix B). Upon receiving data for participants who met criteria and completed the demographic questionnaire, the participant was emailed inviting them to engage in the study. The email provided the participant with an opportunity to identify their preferred meeting date and time. Once a date and time was selected the participant was sent a Zoom Video Conferencing meeting link. The video conference was password protected and each participant received a new conference link to ensure the meeting location was secure.

Once the participant confirmed their desire to participate in the study, I downloaded their survey responses, including their demographic information. I created a spreadsheet in which I linked the participant's survey responses to an anonymous ID (e.g., 001). In an effort to maintain the participant's anonymity, this spreadsheet did not contain any identifiable information linking the participant to the anonymous ID. Once given an anonymous ID, I linked the participant's anonymous ID with their identified meeting date. During the initial interview, as a part of the discussion regarding

anonymity, the participant was invited to provide a pseudonym of their choosing. In a second spreadsheet, I maintained the participants contact information to ensure successful future communication with the participant. All documentation (e.g., video recording files and memos) were identified using the participant's anonymous ID and pseudonym and were stored in a password protected file on my password protected computer. Shortly after the completion of the study, I erased the spreadsheet containing the participants contact information.

### **Participants**

The participants in this study ( $n = 9$ ) were a diverse group (i.e., six cisgender White women, one cisgender Black woman, two cisgender White males) of volunteer master's-level CITs who self-identified as students on a clinical mental health track in a CACREP accredited or CACREP aligned program from two institutions in an urban city within the Mid-West. Of the participants, six individuals attended a CACREP aligned program that received CACREP accreditation, during the course of this study (after all interviews were completed), and three participants attended a CACREP accredited program which had been accredited for more than 10 years. Of the nine total participants seven (i.e., 6 from the CACREP aligned program and 1 from the CACREP accredited program) were invited to participate in a second interview. Four of the seven students (i.e., all from the CACREP aligned program) completed a second interview bringing the total number of interviews completed to 13.

According to Charmaz (2014), in constructivist grounded theory approaches the researcher utilizes theoretical saturation to inform the number of interviews needed for a given study. Theoretical saturation reflects the point at which the process of theoretical

sampling no longer produces new categories. Charmaz (2014) notes that some qualitative researchers (Guest et al., 2006) have indicated that 12 interviews will generally suffice for most qualitative research studies. However, Charmaz (2014) notes that given the iterative nature of the CGT approach as well as CGT strategies such as constant comparison, theoretical sampling, and theoretical saturation it may be necessary to increase the number of interviews to achieve the goal of developing a theory. As a researcher utilizing the CGT approach, I strived to engage in a sufficient number of interviews to reach theoretical saturation. During the interview process, following each interview, I engaged in the process of data analysis which consisted of constant comparison and theoretical sampling. This process allowed me to identify specific interview questions and participants as the study progressed. As I interviewed participants and found that no new information emerged from the data I believed theoretical saturation had been reached. For example, in the final interview the participant explained that their experience of learning case conceptualization was richer when they had opportunities to engage in experiential case conceptualization of fictitious client cases. The information shared by this study's final participant aligned with information previously shared by other participants, thus functioning as theoretical saturation related to the importance participants placed on learning clinical case conceptualization via experiential learning activities.

### **Data Collection**

According to Merriam and Tisdell (2016), the process of qualitative data collection may include conducting interviews, engaging in participant observation, and/or mining data from artifacts and documents. For the purpose of this study, data collection

consisted primarily of individual interviews. Consistent with CGT methodology (Charmaz, 2014), participants were invited to engage in an initial interview, and key participants were invited to return for subsequent follow-up interviews.

According to Charmaz (2014), CGT methodologists benefit from utilizing an interviewing strategy known as intensive interviewing. Utilization of the intensive interviewing approach allows CGT investigators to balance the need for gaining an in-depth understanding of specific concepts via focused questioning while still exploring potentially new information via open-ended questions. In many ways, this combination of focused attention and open-ended questions mirrors the analysis process used by grounded theorists. Since interviews were the primary data collection source in this study, special attention was given to the interview experience including logistical interviewing procedures and the domains (Karp, 2009) that informed the interview guide.

### **Interview Procedure**

Eligible participants were invited to join me for at least one individual interview. Given the current, COVID-19 pandemic and the risk associated with community transmission, all participant interviews were conducted via the Zoom Video Conferencing platform. In order to participate in the interview, the interviewee received a web link which routed them to the Zoom Video Conferencing website. Once at the site they were asked to enter the private meeting passcode to gain access to the meeting. Each participant was afforded a separate meeting ID code and password to ensure the privacy of each meeting. Additionally, I was intentional about interviewing the participants from a location (e.g., a private office space) that afforded the privacy necessary for maintaining the participants' anonymity.

I began each interview with a brief introduction of the study and a review of the informed consent document including the risks and benefits of participation and the participant's right to elect not to answer any question(s) as well as their right to discontinue participation in the study at any time. I also informed the participants that engaging in this study afforded them the opportunity to earn a \$5 gift card for each Zoom Video Conference interview and each post-analysis member check they completed (with a maximum of \$30 being available per participant). Participants were notified that the gift cards served as remuneration for their service and that they would be sent after all interviews and post-analysis member checks were completed. An explanation of the rationale for video recording during the interview and information regarding participant anonymity was also discussed. In an effort to maintain the participant's anonymity, the participants were invited to offer a pseudonym by which to be identified for the remainder of the study.

Once the participant indicated an understanding of the information provided and a willingness to participate, I began recording and initiated the interview. At the completion of the interview, the participants were thanked for their participation and asked to invite their peers to participate in the study. Participants referred to me via the snowball sampling approach were asked by their peers to email me indicating their interest in the study. These new potential participants were provided with recruitment information and asked to follow the steps for indicating consent to participate described in the recruitment section.

After each initial interview, I engaged in the transcription process, and a completed transcription was offered to each participant as a means to increase the

trustworthiness of the collected raw data. Participants were given one week to offer adjustments to the transcription. This served as a pre-analysis member check. One week after the transcription was sent, I began analyzing and coding the data. After the first two interviews were transcribed and coded, consistent with the CGT analysis process, I engaged in the process of constant comparison in the hopes of illuminating preliminary categories and theoretical ideas to be further explored.

If key information (e.g., information which helped to illuminate the emerging theoretical categories) was shared by a participant, the participant was contacted and invited to engage in a follow-up interview. In this study, seven of the nine initial participants were invited to participate in a second interview and four of the seven who were invited completed a second interview. The second interview focused on developing the categories and theoretical ideas and/or deepening my understanding of the information shared by the participant. At the completion of the follow-up interview, the participant was asked to indicate whether they prefer to engage in further conversations related to the research topic via the Zoom Video Conferencing platform or via email. Following this conversation, the participant's preferred platform was used for continued exploration of the research topic, as appropriate. The analytic process of constant comparison was continued as additional participants were introduced to the study and the data from new and continuing participants were explored to inform the emergence of categories and theoretical ideas.

All video recordings and subsequent documents (e.g., transcription documents, member checks etc.) were stored in a password protected file on my password protected computer to help ensure participant confidentiality.

### ***Intensive Interviewing***

Charmaz (2014) suggested that intensive interviewing is an approach to qualitative interviewing that is commonly used by grounded theorist. The focus of this approach is situated in the researchers desire to understand the participant's experience, their portrayal of their experience, and any meaning or actions they attribute to the experience, at the time of the interview. Additionally, intensive interviewing is a technique that is generally video recorded, because the interviewer seeks to understand the participant's verbal language as well as their emotions, body language, and silence.

Unlike other interviewing approaches (e.g., informational interviewing; investigative interviewing), intensive interviewing does not assume that the researcher knows exactly which questions to ask to illicit a rich, thick description of the participant's experience, prior to engaging in a conversation with the participant. Instead, this approach affords the researcher the freedom to adjust the interview questions to meet the needs of the conversation as it is constructed within the relationship between the researcher and the participant. In this way, the intensive interviewing approach "combines flexibility and control" (p. 58), creates an open "interactional space for ideas and issues to arise" (p. 58), "allows possibilities for immediate follow-up on ... ideas and issues" (p. 59), and consists of the interviewers and interview participants' co-construction of the interview conversation (Charmaz, 2014).

Since constructivist grounded theorist work from the assumption that interpretations of experiences are constructed within interactions, the researcher uses data from participants to inform the questions that are asked during both initial and follow-up interviews. This makes the intensive interviewing process a flexible and emergent

technique in which the researcher strives to create a space for the participant to tell their story. Generally speaking, the initial interview will last between 45-60 minutes depending on the amount of information shared.

Additionally, the intensive interview process serves as a tool for advancing theoretical analysis (Charmaz, 2014). In an effort to concretize emerging theoretical ideas, constructivist grounded theorist use theoretical sampling to help with the process of creating theoretical saturation. In this process, key participants are asked to engage in follow-up interviews in which the researcher explores in more depth developing categories and theoretical ideas. Theoretical sampling continues until no new categories emerge from the data which would imply that theoretical saturation has been reached.

Participants who were invited to engage in follow-up interviews were contacted via email and provided with a new Zoom Video Conference link to participate in a meeting at a time of their choosing. During these interviews, the participants were invited to expound on previously broached (e.g., either explicitly stated or implied) concepts in an effort to fill in my understanding of the information shared. Follow-up interviews ranged from 15 minutes to 60 minutes depending on the information the participant was inclined to share. As previously mentioned, at the completion of the first follow-up interview, participants elected to participate in future interviews either via the Zoom Video Conferencing platform or email.

### ***The Interview Guide***

According to Charmaz (2014), constructivist grounded theorist use disciplinary perspectives, guiding interest, and sensitizing concepts to help them identify points of departure for the purpose of developing research ideas and the initial interview guide as



well as to guide the initial phase of data analysis. As a part of the data analysis process, constructivist grounded theorists allow the theoretical sampling technique to inform the questions that will be on the follow-up interview guide.

It is important to note that for both the initial and follow-up interviews the guide was simply intended to reflect which domains I intended to explore (Karp, 2009). Moreover, Charmaz (2014) suggested that questions asked during both the initial and follow-up interviews may be adjusted to meet the content and flow of the conversation. In the initial interview, adjustments to the questions were primarily informed by my interest to gain a deeper understanding of the participant's experience. Such questions included those which solicited more information about the participant's emotions or meaning making regarding the topic being discussed. Given the fluid nature of this interview process, although there are likely to be multiple questions asked, it is not uncommon to ask as few as one question directly from the interview guide (Charmaz, 2014).

During the follow-up interview, the questions asked may reflect an effort to gain a deeper understanding of the participant's statement or to explore potential theoretical interests or categories. In an effort to mitigate the risk of criticism associated with an attempt to collect data solely for the purpose of advancing my theoretical ideas (Dey, 1999; Fendt & Sachs, 2008; Lofland & Lofland, 1984), I was careful to strive to simultaneously achieve a balance between focusing on questions that allowed me to answer my research questions and questions that foster the pursuit of new topics introduced by the participant (Charmaz, 2014).

Overall, the interview guide was intended to be a flexible and revisable tool which

was intended to provide me with both initial questions and probing questions that could be asked, during the interview. With this in mind, the initial interview guide questions included:

1. Based on your understanding, what is the purpose of clinical case conceptualization?

Possible probing questions:

- a. What role does clinical case conceptualization play in diagnosing a client and treatment planning?
  - b. What role does theory play in diagnosing a client and treatment planning?
2. How did you learn to engage in clinical case conceptualization?

Possible probing questions:

- a. What helped you to learn how to do this skill?
  - b. Could you tell me about your thoughts and feelings when you were learning how to engage in clinical case conceptualization?
  - c. Tell me about your class experiences related to learning to engage in and apply the process of clinical case conceptualization.
3. What was it like for you to complete your first clinical case conceptualization?

Possible probing questions:

- a. If you recall, what were you thinking then?
- b. How did you go about completing the task?
- c. Who if anyone helped you to complete the task?
  - i. How did they help you?

- d. Can you describe the most important lesson you learned from engaging in your first clinical case conceptualization?
4. Based on how you learned to engage in clinical case conceptualization, how confident do you feel in your current ability to effectively use clinical case conceptualization as a skill to understand a client's presenting problem?
5. Is there something else about your experience or feelings related to learning and applying case conceptualization that you would like me to know?
6. Is there anything you would like to ask me?

Each of these questions was routed in either my guiding interest or a sensitizing concept(s). Question one is informed by my interest in understanding what students believe to be the function of clinical case conceptualization. Consistent with the CGT approach, this question also reflects my intention to relinquish any preconceptions that I may have about what is meant by clinical case conceptualization in favor of gaining an understanding of the meaning participants have of this concept (Charmaz, 2014). The second and third questions are associated with the sensitizing content related to the learning process and the learning environments (Ambrose et al., 2010). Question four is situated in the research and reflects sensitizing content related to concerns in clinical case conceptualization skill levels (Ingram, 2006; Kendjelic & Eells, 2007) and the relationship between feelings of work-related ineffectiveness and burnout (Stamm, 2009). Finally, questions five and six provide the participant an opportunity to share any additional related information that may not have already been addressed and to ask me questions about the study.

## **Data Analysis**

The process of transcribing the participant's interview is the investigator's initial opportunity to explore the raw data. Consistent with the interpretivist paradigm under which Charmaz (2014) identifies the CGT approach and the lens of the Constructivist paradigm through which I perceive the CGT approach, it was important to acknowledge my subjective role and my experience(s) as a co-constructor within the research relationship. Understanding and acknowledging my role helped to inform my exploration of the coding process and was reflected in the memos and diagrams I kept throughout the life of the research project.

Further, as I reflected on and analyzed the data, I used theoretical sampling to inform theory development. Although these stages are described here as if they occur in a linear manner, it is important to remember that per the grounded theory approach (Charmaz, 2014; Glaser & Struss, 1967) these processes reflect an iterative process in which I was consistently vacillating between collecting and analyzing data. The iterative nature of this process can be seen through the interplay of constant comparison. Through the process of constant comparison, I was able to identify the point at which categories became saturated. This is known as theoretical saturation and yields the development of theory construction.

## **Providing Reliable and Valid Data**

### **Transcription**

As a qualitative researcher, the first step in familiarizing oneself with the data is to become immersed in the data. This initially occurs during the process of transcription (Merriam & Tisdale, 2016). The Zoom video conferencing platform provided a

transcription document for each interview which served as a foundation for each transcription. I then individually cleaned up each of the provided Zoom transcription documents through a process of re-listening to the interview and editing the transcript for accuracy.

Given the importance placed on non-verbal such as body language, facial expressions, and silence in the CGT approach, during the transcription process, I watched the video recording of the participant's interview and transcribe the interaction verbatim. The transcription document included all verbal and non-verbal interactions between myself and the participant. After the transcription was deemed accurate, I numbered the lines of the transcription in an effort to ease the process of organizing the data. Once the transcription was completed and numbered, I began the process of coding the data (Charmaz, 2014).

### **Coding**

According to Charmaz (2014), coding reflects the initial analytic journey toward understanding and making meaning of the data. In grounded theory, coding requires that the investigator stop and ask analytic questions of the data in an effort to further the investigator's understanding and direct the investigator's attention for the purpose of subsequent data gathering and theory construction. Charmaz (2014) suggests that coding within GTM consists of at least two phases: initial coding and focused coding.

During the initial coding phase, the researcher studies fragments of data closely in order to ascertain their analytic importance. After exploring the initial codes for increased understanding, the investigator identifies codes that reflect presumed significant analytic importance. Then, the researcher evaluates the initial codes to identify codes that appear

to be of particular significance. In this way, the investigator focuses on codes that help them glean a deeper understanding of the data and re-code that data to reflect their increased understanding.

Identification of focused codes may reflect initial codes which repeatedly appear in the data or it may be a single code that seems to have theoretical potential. As codes are gathered together to focus on a particular component of the data, the emergence of categories and theory begin to arise. Informed by the process of theoretical sampling, the investigator returns to the empirical world to gather additional information regarding the presumed significance of the focused code then compares the new data to the focused code. Through this iterative process of collecting and analyzing data, the investigator allows the emerging data to lead to theory construction.

### ***Initial Coding***

During the initial phase of coding, the investigator is called upon to interact with the raw data in an effort to identify significant units of data (Lincoln & Guba, 1985). While identifying the units of data, the investigator is tasked with coding the data. According to Merriam and Tisdell (2016), the process of coding the data consists of engaging in a conversation of sorts with the data. As a component of the CGT analytic process, the initial phase of coding has been defined by Charmaz (2014) as a process which involves “naming each word, line, or segment of data” (p. 113) in an effort to reflect perceived theoretical significance. CGT methodologist generally use the practice of line-by-line coding to achieve this goal.

Line-by-line coding consists of numbering each line of data in the transcription then naming each line of significant written data (Charmaz, 2014). Through the process

of line-by-line coding, the investigator is able to explicate compelling parts of the data and analyze what is happening in the data, what the data are composed of, and the actions and meanings associated with the data. This process allows the investigator to illuminate the implicit actions, views, and processes found within the data. (Charmaz, 2014).

Throughout the process of line-by-line coding I engaged in both independent and triangulation analysis of the data. The triangulation analysis process consisted of data analysis conducted by myself and two trained peer-analysts. The peer analyst were individuals who were appropriately connected to the field of counseling and each had experience with qualitative research and learning case conceptualization. Peer analyst 1 is a doctoral student in a CACREP accredited counselor education and supervision program with coursework and related experience engaging in the line-by-line coding process. Peer analyst 2 is a master's level counseling student in a CACREP aligned clinical mental health program. Both peer-analysts have training and subsequent experience in clinical case conceptualization. In order to prepare the peer analyst and assess their level of competence related to line-by-line coding, I reviewed the line-by-line coding process and functioned as the lead analysts on this project.

Following a review of the line-by-line coding process, upon completing the first interview, while being careful to remain open to the data, peer-analyst 1 and I independently read and coded the first interview transcription using line-by-line coding while peer analyst 2 observed the process. After completing the second interview peer analyst 1 and I again independently coded the second interview using the line-by-line coding process (which was observed again by peer analyst 2). After coding both documents, the peer analysts and I met to engage in the initial process of constant

comparison. During the process, the second peer analyst served to help peer analyst 1 and I to identify times in which our researcher positionality and preconceptions might have been overshadowing the data shared by participants. Through this process, research analyst 1 and I worked to compare our codes and were able to identify and label more than 250 meaning units across the two interview transcriptions.

In addition to the process of initial line-by-line coding, I also engaged in the practice of writing memos. Memo writing is the analytic strategy which involves the investigator tracking their thoughts and jotting down comments, notes, observations, and queries regarding data coding and the process of data analysis (Charmaz, 2014). It is of note that since initial coding and memo writing are the beginning of the analysis process, the investigator is encouraged to be as expansive as they would like, and they should be open to anything that might emerge from the data.

Informed by the coding process and my memos, the initial codes were labelled using either “in-vivo” (Charmaz, 2014, p. 134) codes, literature informed codes, or investigator generated codes. “In-vivo” codes (Charmaz, 2014, p. 134) reflect exact words or phrases used by participants, codes that reflect language from phenomenon relevant literature, or codes generated by the investigator (Charmaz, 2014). It is important to note that while Charmaz (2014) acknowledges that the investigator might “generate” the wording used in the code, due to the investigator’s connection to the empirical worlds and the often mutually agreed upon nature of language, it is likely that the code used by the investigator will be informed by the world around them as well as the investigator’s views and values. Whether using “in-vivo” codes, literature informed codes, or investigator created codes, the process of remaining open to the data will illuminate the



possibilities within the text and facilitate the process of connecting the collected data to emerging theoretical ideas (Charmaz, 2014; Strauss & Corbin, 1998). Furthermore, carefully attending to codes allows the investigator to intentionally identify generalizable theoretical statements which transcend a given time and place and to develop the contextual analysis of actions and events. Both the ability to generalize theoretical statements and develop contextual analysis are seen as major priorities within GTM and help to inform the second phase of the CGT coding process known as focused coding.

An example of this can be seen in the initial code and memo I made during the data analysis and memo writing process completed following this study's first participant interview. During the initial coding phase, I was able to use information from this study's first interview to inform the focus coding process. In the first interview SH shared the following information when asked about their experience of learning to conceptualize a client's case using in-class experiential activities

that really helped um because you were able to go over their background and learn and then you were able to apply what you've learned from their background to coming up with a diagnosis and then use a diagnosis to form a treatment plan (SH1 80)

The initial code assigned to this segment of data was "applying what you know to inform the diagnosis and treatment planning". Additionally, the memo related to this code helped me to begin thinking theoretically about this participant's statement which helped to inform the focus coding process. The memo associated with this participant's comment read "this is foundational to the process of clinical case conceptualization. Interestingly, this statement also works if you substitute the word diagnosis for

theory”. Here you can see that I am beginning to wrestle with the relationship between the role of theory and the role of diagnosis within the case conceptualization process. Subsequent interview questions and coding, including focused coding, were situated around this thought/memo which eventually resulted in the emergence of this study’s grounded theory.

### ***Focused Coding***

Focused coding is the selective phase of coding which uses the most significant or frequently occurring initial codes to “sort, synthesize, integrate, and organize large amounts of data” (Charmaz, 2014, p. 113). Thus, a noteworthy objective of focused coding is to ascertain the acceptability and conceptual strength of the initial codes. The process of identifying focused codes requires the investigator to make decisions regarding which initial codes fully and incisively make analytic sense of emerging categories. Therefore, focused coding expedites the analytic process and advances theoretical direction.

Focused coding is usually a straightforward process of selecting and investigating codes of interest with the purpose of understanding what the initial codes mean in relationship to the data and exploring comparisons within and between the initial codes. Investigators use their perspective and analytic skill to remain involved in the process of identifying significant codes that may emerge into categories and potentially yield theory. In many ways, focused codes are birthed from the meaning units identified, during the initial coding phase.

In this study, from the 250 initial meaning units, 29 focused codes were identified. In order to identify the focused codes, the research analysts and I met to explore, group,

sort and organize the meaning units into groups reflecting similar content. The sorting process was completed using a Microsoft Word document which allowed me to align and re-align meaning units to various proposed focused codes throughout the coding process. These groups were then raised to the level of codes and thus became our identified focused codes. During this interactive process, I was careful to check my preconceptions about the data to ensure I was not unduly forcing my preconceptions onto the data. One way I identified whether or not my preconceptions were being forced on the data was through memo writing (Charmaz, 2014). Another process for managing my preconceptions was via the use of peer analysts who help to ensure my researcher positionality was not inappropriately influencing the coding process (Merriam & Tisdell, 2016).

Consistent with the GTM approach, I used the 29 focused codes, identified during the focused coding process, to code the next several interview transcripts (i.e., interviews three and four). Interview data that did not show similarities to the 29 focused codes were labelled with a meaning unit consistent with the line-by-line coding process. As new meaning units were identified, I label them and created a memo(s) exploring the significance of the new meaning unit. Using the process of constant comparison, I was able to compare any new meaning units with the 29 focused codes to assess the degree of similarity or dissimilarity presenting between the focused codes and the newly identified meaning units. After completing and coding the fourth interview, I again met with the research analysts. I shared information about the new meaning units and their similarity or dissimilarity to the 29 focused codes. From this discussion, seven new focused codes were added to the list of codes; this brought the total number of focused codes to 36. In

the spirit of constant comparison and theoretical sampling, this meeting also included a discussion of possible additional research questions. Ten questions were added to the semi-structured interview guide with the hope of gathering additional data to inform the emerging theory. The following question reflects an example of the type of questions asked to support the development of the emerging theory “tell me about the specific skills or strategies you were taught, during your DSM class, that have helped you to easily match the client’s symptoms with specific DSM criteria”.

As I conducted and coded interviews five through eight, I continued to engage in the process of constant comparison. Throughout this process, I used the 36 focused codes to label the interview transcripts. Similar to the above listed process, as new meaning units presented, I identified them and created memos about their significance. I then, again, met with the research analysts and we reviewed the focused codes, compared the new meaning units, and determined their theoretical significance. From this meeting, seven new focused codes were identified. This resulted in a total of 43 focused codes. Although these seven new focused codes were added and some categories seemed to be solidifying, there still appeared to be a gap in the study’s findings.

Consistent with the CGT approach, I used constant comparison to identify areas of data which required additional exploration. After meeting with the peer analysts, eight new semi-structured interview questions were identified and intended to be utilized with the study’s participants as second round interview questions. These questions were designed to garner additional information related to codes that lacked rich, thick descriptions and to further support theoretically relevant data. Sample second-round interview questions include: “what informs your clinical judgment?” and “in your

opinion, how does the clinical picture inform the clinical case conceptualization process?”. In thinking about the question “in your opinion, how does the clinical picture inform the clinical case conceptualization process?”, the research analysts and I reflected on the memo connected to AM1’s interview to help us see the need for additional information related to expounding on the idea of “the clinical picture” and its relationship to the “case conceptualization process”. In AM1’s interview, they stated “seeing the whole picture can help see like the symptoms that they’re talking about” (AM1 15-16). This segment of data was coded as “seeing the whole clinical picture” which prompted me to be curious about how the clinical picture informs the case conceptualization process. The memo reflecting my curiosity stated “possible question- how does seeing the clinical picture inform the case conceptualization process.” Adding this question allowed me to learn more about the connection participants made between the process of gaining clarity about the client’s clinical picture and the clinical case conceptualization process.

As alluded to above, during the process of focused coding, I wrote memos to help me understand and remember noteworthy connections that I perceived amongst significant segments of data. In this way, focused codes delineated data that could be connected and elaborated upon in memos. Taking into account my preconceptions and understanding of the emerging categories and theoretical ideas within the data allowed me to decide which data to further explore in the pursuit of theory construction.

As I move through the process of focused coding, I found the data sent me back to the empirical world. In alignment with the GTM approach, I used theoretical sampling to identify participants who shared information yielding data that showed the promise of

theoretical significance. I contacted said participants and invited them to participate in a follow up interview. This resulted in an additional interview with four of this study's eight participants. Utilizing this approach resulted in an iterative process of collecting and exploring the data until theoretical saturation was reached and categories and a theory had been identified.

### ***Preconceptions***

Throughout the process of identifying both initial and focused codes, I was intentional about maintaining awareness of my preconceptions. Charmaz (2014) identified focused coding as an important step in the emergence of theoretically sound categories and the development of a theory grounded in the data. An identified premise of focus coding is related to the investigator's ability to identify theoretically relevant data and to allow the theoretical sampling process to guide future processes (e.g., adjusting the interview guide; determining key participants) related to data collection and analysis. In doing so, however, Charmaz (2014) denoted that it is equally important for the researcher to be aware of preconceptions that they have regarding the phenomenon under investigation.

According to Charmaz (2014), preconceptions are preconceived ideas that the investigator holds regarding the phenomenon being studied. These preconceived ideas are informed by the investigator's subjective experience of the world in which they live. Charmaz (2014) believes "subjectivity is inseparable from [one's] social existence." Therefore, unlike other GTMs working from the objectivist paradigm (Glaser & Strauss, 1967), the CGT approach does not ask or expect investigators to bracket their subjective experiences in favor of identifying a universal truth. Instead, CGT methodologists are

encouraged to be aware of their preconceptions as they strive to subjectively co-construct theory that is rooted in and reflects the phenomenon being explored, during the coding process.

### ***Axial Coding***

In thinking about the coding process, although Charmaz (2014) indicates that generally at least two phases of coding occur within GTM, they also acknowledge that other phases of coding have been endorsed across the plethora of GTM (Strauss and Corbin, 1990, 1998; Strauss, 1987). The most commonly endorsed additional phase of coding is called axial coding (Charmaz, 2014). Although Charmaz (2014) does not explicitly indicate that axial coding is a normative part of the CGT methodology, it is important to understand that axial coding is the complex process of reassembling fragmented data around the “axis” of the category. In this process, the categories are connected to subcategories by means of their properties and dimensions (Strauss and Corbin, 1990, 1998; Strauss, 1987). Charmaz (2014) identifies the need to keep coding simple and thus does not suggest the use of axial coding but acknowledges that CGT methodologists may choose to use axial coding if they prefer. Charmaz (2014) does, however, encourage the practice of memo-writing throughout the analysis process.

### **Memo-Writing**

According to Charmaz (2014), memo-writing is the practice of writing extended informal analytic notes about the data collection and analysis process. CGT memo writing, unlike other forms of qualitative memo writing, should be spontaneous rather than mechanical and will require tolerance of ambiguity as the codes from the data emerge to reflect theoretical ideas. Memo writing begins with writing about codes and

data then moves upward toward theoretical categories and continues through the duration of the research process.

Memo-writing aided in the emergence of codes and categories and helped to illuminate telling codes (Charmaz, 2005). As codes emerged from participant interviews, I linked the code to the original interview via the pseudonym of the participant, the date of the interview, and the line number to assist with organizing the memos. The process of memo-writing served to take a part and analyze telling codes in an effort to crystallize meaning and actions from within the data. Throughout the research process, I maintained a “memo bank” (Charmaz, 2014, p.165) of all of my memos in order to track my memo writing process and to allow for cross-filing of memos as categories emerged. I tracked the constant comparison technique via memo-writing as well. This allowed my memos to form my core analysis and helped to demarcate how I arrived at particular types of analyses.

As informal analytic notes, my memos reflect a free flowing of thoughts, ideas, and reflections that I have about the data, the participants, the phenomenon of learning, and anything else related to this study. Additionally, my memos reflect my positionality as a researcher and my developing awareness of my values, culture, and biases especially as they relate to all components of the study. Since I am a member of the counseling community, a graduate-level counseling professor, and have familiarity with the literature related to both clinical case conceptualization and pedagogical approaches, my status as an “insider” influenced both the standpoint and starting point of the analytic process as well as my memo writing. Awareness of my positionality reflects the subjectivity that Charmaz (2000a) brought to the grounded theory approach.



Exploration of my memos allowed me to compare data and explore ideas. My written memos also provided direction regarding the types of subsequent data that needed to be gathered. Memos reflecting the need for additional exploration of a particular category or theoretical idea informed the process of theoretical sampling. Consequently, as I continued to interact with my memos, my analysis gained depth in a manner that allowed codes to emerge into conceptual categories. Thus, making memo writing a central part of the analytic process and the construction of theoretical content that developed through theoretical sampling.

### **Theoretical Sampling**

Through the process of coding and memo writing, I was able to identify theoretically significant data points which allowed me to successfully engage in the processes associated with theoretical sampling. Theoretical sampling is the systematic, specific, strategic process by which to seek and collect pertinent data in an effort to refine and elaborate categories found within the emerging data (Charmaz, 2014; Glaser & Strauss, 1967). Theoretical sampling allowed me to discuss data-informed emerging categories with new participants and to re-engage four previous participants in the second round of interviews in an effort to delineate and develop theory-specific categories. The nature of the theoretical sampling process led to asking more focused and direct questions than previously asked questions. Furthermore, by returning to the empirical world and remaining open to the data, I was able to explore the data with the quest of answering a common grounded theory question “what is happening here” (Charmaz, 2014, p. 113). This process also helped to illuminate the range of variation among the categories.

As I engaged with the data, I had increased opportunities to become aware of implicit meanings, rules, and actions found within the data. Consistent with the CGT approach, rather than bracketing my assumptions about the data, I intentionally made explicit my subjective experience of the co-constructed emerging categories and theoretical ideas (Charmaz, 2014). During this process, I added memos to reflect my subjective experiences. Through this exploration, I sought to collect data that would saturate the categories with new information with the intention of sorting or diagramming the categories and exploring their relationship to the emerging theory. I engaged in the theoretical sampling process in an iterative manner which consisted of constantly collecting new data and comparing it to emerging categories and theoretical ideas. This process of constant comparison, using the theoretical sampling approach, allowed me to ensure that my categories were full and robust and would help me delineate the relationships between categories.

### **Constant Comparison**

Constant comparison is an inductive approach to data analysis (Glaser & Strauss, 1967). It supports the process of comparing potential findings from each interview with subsequent findings in a manner that facilitates the development of new findings (Merriam & Muhamad, 2013). Using this method, after I completed the coding process for the first two interviews, I compared the findings in an effort to illuminate the continuation of previously identified codes and the emergence of categories. From the initial two interviews, a set of focused codes emerged from the data (Charmaz, 2014). The focused codes informed the theoretical sampling process in that they helped me to identify gaps or missing information in the data which prompted me to predict where and

how I would be able to find additional data to speak to the gaps. Noticing these gaps in the data, I used the theoretical sampling process to return to the empirical world in an effort to gather additional data.

Informed by the process of theoretical sampling and constant comparison, focused codes and any new initial codes (e.g., reflecting data not previously coded as focused codes) were compared with the data provided in each additional interview. After each new interview, I would again compare the data, codes, and memos from previous interviews with the data from the new interview. After the fourth interview, I met with the peer analysts to discuss the new initial codes that emerged from interviews three and four. During this meeting, 36 focused codes (i.e., the 29 focused codes identified after the first two interviews and 7 focused codes identified in interviews three and four) were identified as well as the inclusion of multiple additional semi-structured interview questions designed to add depth to gaps in the data. Interviews five through eight were completed using the interview protocol with the additional questions and were coded using the 36 focused codes. Continuing the process of constant comparison, after the eighth interview, I reviewed the data, identified 7 additional focused codes (bringing the total number of focused codes to 43). I also identified additional semi-structured interview questions for a second round of interviews. I then used theoretical sampling to identify participants to engage in a second round of interviews. The second-round interviews consisted of additional focused questions designed to further add depth to gaps in the study's findings. The process of conducting second round interviews was continued through the 12th interview at which point it was determined that theoretical saturation had been reached (Charmaz, 2014; Merriam & Muhamad, 2013).

Throughout the process of theoretical sampling and constant comparison, informed by theoretical saturation, I was able to identify similarities amongst the 43 focused codes. Once saturation was reached, I reviewed the findings to assess which focused codes had emerged from the data to reflect theoretically salient categories. Upon reaching theoretical saturation, the 43 focused codes were reviewed to assess their relationship to this study's overarching research questions and their theoretical significance. From the list of 43 focused codes, 10 codes were identified as neither related to the research questions nor theoretically salient. This analytic process reduced the number of focused codes to 33 (see appendix H). Upon reviewing the 33 focused codes, using a Microsoft Word document, it was determined that these codes could be re-sorted and grouped to reflect three overarching concepts. Thus, these 33 focused codes were grouped together and raised to the level of categories. These three categories (i.e., academic experience, clinical clarity, and confidence; see appendix H) are both relevant to this study's research questions and the construction of this study's grounded theory.

### **Theoretical Saturation**

Across GTM and amongst qualitative investigators, the definition and goal of saturation has varied. Many qualitative researchers take saturation to reflect the point at which consistent patterns have been identified and no new themes emerge from the data (Charmaz, 2014; Merriam & Tisdale, 2016). However, GTM would suggest that the requirements of theory construction necessitate that saturation go beyond simply the absence of new data (Charmaz, 2014; Glaser & Strauss, 1967). Instead, these theorists would suggest that saturation should reflect the point at which no new category-specific properties emerge from the data. In this case, the difference is that unlike other types of

qualitative researchers, investigators who ascribe to GTM are focused on identifying patterns that not only highlight consistency in the data but that also showcase the variation found within the properties of a given category. This process of engaging in theoretical sampling until no new category-specific properties emerge has come to be known as theoretical saturation (Charmaz, 2014).

In this study, I used Charmaz's (2014) definition of theoretical saturation to determine the saturation of each category. For example, in thinking about the categories which emerged in this study (e.g., The Academic Experience, Clinical Clarity, and Confidence; see Chapter IV), The Academic Experience category had two distinct properties which emerged and were constant across both first and second round interviews. During the initial interviews, participants were asked questions related to their academic experiences associated with learning clinical case conceptualization (e.g., how do students experience learning and applying case conceptualization skills). Across the first nine interviews, each participant described a learning environment which could be described as aligning with either a didactic approach ("you know really focusing on making it a practical usage of the DSM verses just an overview"; Jay1 353) or an experiential approach ("we would...have little diagnostic groups set up in class and then go over them as a whole class..."; AM1 93). These two pedagogical approaches function as the category-specific properties which emerged from the data. During the second round of interviews, additional questions (e.g., describe the usefulness or lack thereof of in-class assignments involving working in groups to learn clinical case conceptualization) were asked to help illuminate and expound on these properties as well as to create opportunities for additional pedagogical approaches to be explored. Content shared in the

second round of interviews served to further add to the richness of information found within this category. For example, during their second interview, Sugar Lips stated “you can make me read the textbook and it’s not going to stick” (Sugar Lips2 57).

Additionally, SH indicated “I think the best way is to go through a case conceptualization together as a group” (SH2 44). Upon completion of the analysis of the second round of interviews, it was determined that no additional properties emerged within The Academic Experience category, thus suggesting that the category had reached theoretical saturation.

Although the definition of saturation has been debated within the field of qualitative research, the common thread is that researchers strive to continue exploring the data until their idea of saturation has been reached. With that in mind, as an investigator engaging in the CGT approach, as I strived to reach saturation, as indicated above, I endeavored to follow Charmaz’s (2014) advice related to being open to what is happening in the empirical world and being willing to allow myself to grapple with it. Engaging with the data in this way resulted in robust categories and theory development.

### **Building Theory**

The abductive process of theory construction is one of the major distinctions separating the grounded theory methodological approach from other qualitative approaches (Charmaz, 2014; Merriam & Tisdale, 2016). However, Charmaz (2014) notes that the intention and delimitations of theory construction have been fervently debated within and amongst grounded theorists as well as the social sciences at large. The debate surrounding this topic amongst grounded theorists are primarily related to the absence of a definitive definition of what constitutes a theory and the epistemological differences between the positivist and constructivist orientations (Charmaz, 2014).

Generally speaking, theorist ascribing to the positivist orientation approach theory construction from an empiricism perspective and are primarily focused on identifying causes, seeking explanations, and making predictions, and emphasize generality and universality (Charmaz, 2014; Hays & Singh, 2012; Slawewski, 2018). Additionally, researchers from this orientation strive for objectivity by keeping their personal values out of their research (Charmaz, 2014; Hays & Singh, 2012; Slawewski, 2018), and they do not account for cultural contexts or emotions when explaining the economic behaviors of individuals (Charmaz, 2014). According to Charmaz (2014), neglecting to intentionally recognize values, emotions, and cultural context may result in theories that only provide narrow explanations, simplistic models of action, and quantifiable variables.

Charmaz (2014) contends that an exploration of the subjective experiences of both participants and researchers will add depth to the construction of theory that spans beyond models of action into abstract understanding of action and meaning. Therefore, researchers ascribing to the interpretivist orientation “allow for indeterminacy rather than seeking causality and aim to theorize patterns and connections” (Charmaz, 2014, p. 230). In this way, interpretivist researchers are able to make general statements about specifics while situating the specifics within the context of their construction.

Given my orientation toward the constructivism paradigm, I strived to align myself with the interpretive perspective. Throughout the process of data analysis, I was intentional about being aware of my values and their potential impact on data analysis. I also considered the cultural context in which the participant and their experiences were situated. Furthermore, I attended to the emotional content provided by the participants in an effort to glean the implicit meaning of the content shared. Additionally, throughout

both the data collection and data analysis processes, I endeavored to ensure that my efforts reflected the standards of rigor and trustworthy methodological practices that have come to be embraced by qualitative researchers.

### **Providing Reliable and Valid Data**

Qualitative research is generally used to explore topics in areas of applied practice (e.g. education, counseling, social work, administration, health, business etc.; Merriam & Tisdell, 2016). In order for qualitative research to add effectively to the body of knowledge associated with these and other fields, qualitative investigators must be intentional about rigorously conducting research that is collected ethically and proves to be valid and reliable. Reliability in research is related to the consistency found within a given measure. When an instrument is seen as reliable it has proven that the measure has consistently produced similar results (i.e. across multiple attempts as with test-retest reliability or across multiple raters as with inter-rater reliability etc.). Validity, on the other hand, deals with the degree to which an instrument measures what it purports to measure. An instrument is said to be valid when it has proven that it measures the construct that it intended to measure.

Historically, the terms validity and reliability are generally thought of in association with quantitative research, but they are important in qualitative research as well. Although most researchers would agree that research studies should yield findings which are valid and reliable, within the field of qualitative research, the terms used to describe reliability and validity have yet to be consistently defined (Denzin & Lincoln, 2011; Lichtman, 2013; Merriam & Tisdell, 2016). Additionally, it has been suggested that since the assumptions and worldviews underlying qualitative research differ from



that of quantitative research, it may be necessary to use terms that reflect the researcher's efforts associated with being trustworthy and with engaging in a rigorous process of data collection and analysis (Lincoln & Guba, 1985; Merriam & Tisdell, 2016). With this in mind, for the purpose of this study, I used the terms trustworthiness and rigor, respectively, to refer to the aforementioned validity and reliability.

### **Trustworthiness and Rigor**

#### **Credibility**

In research, the assumptions associated with producing findings from a study that are seen as trustworthy are commonly derived from the study's research design (Merriam & Tisdell, 2016). When thinking about quantitative research, the investigator is highly focused on testing hypotheses and applying standards to the study's design which have been informed and accepted within the scientific community. Thus, the process of ensuring trustworthiness or validity is housed in the process of hypothesis testing and scientific application. Since qualitative research finds at its core a differing set of assumptions about research design, it seems unwise to anchor the trustworthiness of a qualitative study to the same expectations for assessing validity as would be expected of quantitative research. In qualitative research, the philosophical premise is associated with assumptions about reality and exploring the worldview of the study's participants. From this perspective, studies are designed to gain an understanding of the participants' lived experience rather than to test pre-constructed hypotheses. With this in mind, many writers have suggested in order to truly assess the validity of a qualitative study, the philosophy undergirding qualitative research must be considered (Cho & Trent, 2006; Denzin & Lincoln, 2011; Herr & Anderson, 2015; Lincoln & Guba, 1985; Merriam & Tisdell,

2016; Patton, 2015; Richardson & St. Pierre, 2005). It is also noted by many writers that this consideration should be reflected in utilizing philosophically sound language to describe the process of assessing validity within qualitative studies (Lincoln & Guba, 1985; Merriam & Tisdell, 2016).

### **Consistency**

In qualitative research consistency is intended to reflect reliability. While quantitative researchers strived to assess reliability by determining the degree to which an assessment or an instrument can consistently reproduce similar data, in qualitative research the assumption that a participant will repeat or retell their story verbatim on multiple occasions seems unlikely (Merriam & Tisdell, 2016). Therefore, it seems counterintuitive to hold findings of qualitative research to the same assumptions found in quantitative research. With this in mind, qualitative investigators have argued that the concept of reliability in qualitative research should be centered around the degree to which the findings are consistent with the collected data (Merriam & Tisdell, 2016).

There are many ways in which qualitative investigators strive to showcase credibility and consistency within their work. Although quantitative and qualitative research studies have differing philosophical underpinnings, both types of research value and endeavor to produce findings that can be trusted as valid and reliable. Similar to efforts made to establish validity within a quantitative research study, there are several strategies that qualitative researchers use to demonstrate trustworthiness and rigor. Within a qualitative study, the investigator will likely focus on developing the credibility of the data. Credibility is likened to internal validity which focuses on the congruence between the study's findings and reality. In this way, the investigator will attend to

whether or not the findings are credible as they relate to the data presented (Lincoln & Guba, 1985). When thinking about rigor, the qualitative researcher is focused on ensuring the processes of data collection, data analysis, and data interpretation reflect consistency across the data and the findings of the study. The current study plans to exhibit credibility and consistency through adequate engagement in the data collection process, triangulation, member checks, acknowledgement of reflexivity, peer review, and the completion of an audit trail (Merriam & Tisdell, 2016).

### **Prolonged Engagement in Data Collection**

At its onset, it is difficult to determine how many people will need to be interviewed or how long a phenomenon will need to be observed before the investigator has a thorough understanding of the phenomenon (Merriam & Tisdell, 2016). This is especially true when utilizing the CGT approach. The CGT approach suggests investigators are to continue collecting data until theoretical saturation has been reached (Charmaz, 2014). Based on the use of constant comparison and theoretical sampling, in order to achieve theoretical saturation, reaching theoretical saturation informed the likelihood that adequate time had been spent, during the data collection phase.

### **Triangulation**

Triangulation, generally speaking, is a process in which the data are explored through some variation of using multiple data collection methods, multiple sources of data, multiple investigators, multiple theories (Denzin, 1978), or via “triangulation analysis” (Patton, 2015, p. 665). The multiple data collection strategy consists of collecting various types of qualitative data using different types of qualitative research designs (e.g., conducting an interview followed by an observation of the interviewee).

The process of collecting multiple sources of data may be established by comparing and cross-checking data observed in different places or at different times or interviewing people with different perspectives. Using the multiple investigator approach, several investigators are involved in the process of data collection and analysis. When a qualitative researcher uses the multiple theory strategy, they approach the data with multiple hypotheses in an effort to see how the data aligns with the theory or theories. Finally, when thinking about the “triangulation analysis” (Patton, 2015, p. 665) strategy, two or more people independently analyze the data then compare their findings.

In the current study, I utilized multiple sources of data triangulation (e.g., interviewing multiple people) and triangulation analysis to establish both credibility and consistency. For the process of triangulation analysis, I utilized two identified peer analysts who periodically aided in the data analysis and coding process. The identified peer analysts were individuals appropriately connected to the counseling profession who had experience learning the skills associated with clinical case conceptualization. Consistent with the constant comparison approach, after the first two interviews, myself and the identified peer analysts separately analyzed and coded the data. Then we met to discuss and debate identified codes. Approaching the data analysis process in this manner helped illuminate any preconceptions held about the phenomena and the data which reflect the phenomena. This was especially important as Charmaz (2014) noted that preconceptions are sometimes unknown until they are challenged. At the completion of our discussion, all initial codes and focused codes were identified. Using the identified focused codes, I adjusted the interview guide, as appropriate, and proceeded with the

theoretical sampling process. Additionally, I continued to apply the constant comparison approach to data analysis.

At the point at which the focused codes emerged, I coded at least one additional interview independently in order to ascertain the relevance of the emerging theoretical content. In the absence of new theoretical content, I then asked the identified peer analysts to analyze another interview, and we compared our categories. Additional categories and theoretical ideas identified, during this meeting, were adopted and theoretical sampling informed the interview guide and the process continued, as appropriate. In the spirit of theoretical sampling and constant comparison this process was repeated, as appropriate, until theoretical saturation was reached.

Once the theoretical ideas solidified (e.g., raw data can continuously be represented by the theoretical idea) and theoretical saturation appeared to be evident, I again sought the assistance of the identified peer analysts. I provided the identified peer analysts with a list of categories and asked them to review at least one of the final interview transcriptions to identify the degree to which they believe the raw data was represented by the overarching theoretical ideas put forth. Additionally, this study strived to ensure all research team members adhered to transcription rules and formatting standards (Appendix D). Pseudonyms were used, during the transcription process, to protect the identity of the participants. Additionally, any and all identifiable participant information was redacted.

When thinking about the credibility and consistency born of triangulation, it is easy to see how the process of data triangulation (e.g., interviewing multiple people) and triangulation analysis helped to determine the trustworthiness and consistency across the

data collection and analysis processes. By using triangulation, the investigator was able to assess the degree to which each participant or analyst is experiencing the phenomenon or data in a similar way.

### **Member Checks**

In addition to the process of triangulation, qualitative research also uses member checks to increase the credibility and consistency of the data's findings. Member checks are a process by which the investigator solicits feedback about the preliminary findings from some of the participants. By participating in member checks, the participant is able to help the investigator understand whether or not the meaning the investigator assigned to the units of data are consistent with the meaning the participant intended.

The current study engaged its participants in pre-analysis and post-analysis member checks as a way to increase the credibility of the study's findings. After each initial interview, participants were asked to review the transcription associated with their interview and provide edits to the raw data, as appropriate. Of the nine participants who completed the initial interviews five participants returned an edited transcription from their initial interview. This served as the pre-analysis member check. One week after the raw data was sent to the participant, I began analyzing the data and identifying codes, as appropriate. As previously noted, key participants were invited to engage in at least one follow-up interview and then welcomed to elect to participate in either additional follow-up interviews or member checks. All member checks that occurred with participants whose raw data was previously analyzed were construed as post-analysis member checks. Participants electing to engage in post-analysis member checks following their interviews were emailed regarding subsequent opportunities for participation.

Additionally, each participant was emailed an invitation outlining an opportunity to participate in the final member check. The email contained a link to a Qualtrics survey. Prior to beginning the survey, participants were reminded of the purpose of the study and of their rights as participants (e.g., the right to refuse to answer any question and to discontinue participation at any time). Proceeding to the link and completing the survey was seen as consent to participate in the post-analysis member check. Items on the survey reflected information about the categories that emerged from the qualitative data. The survey invited the participant to use a Likert-type scale (i.e., strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, strongly disagree) to identify the degree to which they believed their lived experience was represented by the item. For example, data analysis from the qualitative data suggested the study's participants believed theory is an important factor in understanding a client's presenting concern and that the function of a case conceptualization is to develop a clear clinical picture of the client case. In order to assess the credibility and consistency of these qualitative findings, participants were asked "when conceptualizing a client's case, I believe the client's presenting concerns should be viewed through a theoretical lens (e.g., Rogerian, CBT etc.)". Another item on the member check survey was "I believe one function of the case conceptualization process is to develop a clear understanding (e.g., clinical picture) of the client's presenting concerns and personal background". For each item, participants were also invited to provide a narrative response related to their level of agreement with each item (e.g., "please feel free to share any additional thoughts that you have about the question above"). Narrative information gathered through Qualtrics served as additional qualitative data. Approaching data analysis in this manner helped to elucidate

preconceptions that I may have forced onto the data. Obtaining feedback from participants served to challenge my preconceptions which is sometimes the only way for preconceptions to be made apparent (Charmaz, 2014).

Four of the nine participants in this study completed the final member check survey. Responses from the participants aligned with the findings of the qualitative data analysis. This was reflected in the survey responses which indicated agreement with the categories found within the qualitative study. For example, all four participants who completed the final member check survey indicated they either “somewhat agree(d)” or “strongly agree(d)” that theory plays an important role in the case conceptualization process and that one of the key functions of case conceptualization is to gain a deeper understanding of the clinical picture. Based on the consistency of the responses provided during both the qualitative interviews and final member check, the data from the qualitative analysis and interpretation appears to be trustworthy and consistent. It is, however, of note that no additional narrative information was shared by the survey respondents. The findings from both the qualitative interview and the quantitative member check also help to solidify theoretical saturation. It is important to note that as I explored the data during the triangulation and member check processes, I was careful to be intentionally aware of the ways in which my personal experiences may have been impacting my understanding of the information shared by the study’s participants and the ways in which my experiences and preconceptions might have influenced the data analysis process.



## **Reflexivity**

Reflexivity, sometimes called the researcher's position, is intended to highlight the ways in which the investigator affects and is affected by the research process. In order to increase the credibility and consistency of the research findings, it was important for me to explore and share ways in which my personal dispositions, biases, and assumptions are situated in relation to the current study. I am the primary investigator on this project, and I identify as an African-American female. I also identify as a graduate of a CACREP accredited master's-level program, a Licensed Professional Counselor, a doctoral candidate in a CACREP accredited doctoral-level program, and an Assistant Professor of Counselor Education in a CACREP accredited program.

As a counselor educator, my pedagogical approach is aligned with constructivist and social constructivist philosophies which suggest learning happens within the context of relationships and that students function both as learners and keepers of knowledge. As an educator, I enjoy creating opportunities for students to share their knowledge with one another through the language they use, the hands-on experiences they engage in, and the process of assimilating and accommodating new information. As is expected within the CGT analysis process, my training and experience likely afforded me an intimate level of subjective "insider" familiarity with the concepts of clinical case conceptualization and pedagogy.

Although it was impossible to separate my subjective experience from the data collection and analysis process (Charmaz, 2014), it was important for me to recognize ways in which my experience informs my preconceptions. Attending to my preconceptions helped to ensure that the categories and theoretical ideas truly emerged

from the data and were co-constructed by the participants and I, rather than develop by me based on my preconceptions.

Consistent with the CGT methodological approach, as a CGT investigator, I strived to be fully engaged with the participants and concepts as I collected and analyzed the data, and I worked to understand the data shared by the participants within the context of their social culture (Charmaz, 2014; Crotty, 1998). Additionally, informed by the constructivism paradigm, I was also intentionally reflexive about the ways in which my paradigmatic orientation influenced the research process (Charmaz, 1990). In alignment with both the interpretivist paradigm in which Charmaz (2014) situated CGT and the constructivism paradigm, I endeavored to remember that what the participants and I are capable of knowing is relative and is directly influenced by our subjectively co-constructed reality. For example, when thinking about the process of case conceptualization, many participants indicated their process included understanding the client's case in order to have a clearer clinical picture and working to match the information shared about the client's clinical picture to specific DSM criteria. From a reflexive perspective, I worked to co-construct an understanding of the participants' experiences by understanding my own processes used for conceptualizing clients while working to allow the participants' description of their experience to lead me toward a deeper understanding of this phenomenon. In other words, I recognized that my process of conceptualizing client cases was very similar to the process shared by this study's participants. In thinking about both my experience of conceptualizing clients and reflecting on the case conceptualization process shared by this study's participants, I realized that although many of the participants were looking to conceptualize client cases

with the purpose of providing a diagnosis, each participant was using their theoretical orientation to inform how they understood the client's presenting concerns. Upon thinking reflexively about this process, I began to realize that I too use my theoretical orientation to help me understand and make sense of the client's presenting concern. This level of reflexivity helped to inform the theory building process that eventually led to the emergence of this study's grounded theory.

In an effort to ensure reflexivity, throughout this process, I was also purposefully aware of my preconceived ideas which are influenced by my personal values and perspective so as to not force my preconceptions onto the data (Charmaz, 2014). Instead, I recognized my preconceptions while exploring the possibilities that emerged from the data with openness (Charmaz, 2014). Remaining open to the possibilities helped me to be curious about the participants lived experience which inevitably helped me to develop the type of rapport that facilitated increased access to each participant's perspective(s) (Charmaz, 2005). This in turn aided me in identifying categories and a theory that adequately reflected the implicit and explicit meaning that participants place on their experience of learning to engage in clinical case conceptualization. Engaging in the process of reflexivity allowed me to increase the trustworthiness of the data collection, analysis, and interpretation processes. It also shed light on ways in which I strived to be consistent in my exploration of the phenomenon while holding constant my own experiences.

### **Peer review**

When associated with the process of establishing credibility and consistency in a qualitative study, the term peer review, sometimes referred to as peer examination, is

intended to reflect a process by which a knowledgeable “peer” reviews the study and provides feedback to the investigator (Merriam & Tisdell, 2016). Since this study functions as a requirement for my dissertation project, the role of peer reviewer(s) is naturally built into the process by which my dissertation committee members review and provide me with feedback (Merriam & Tisdell, 2016). As members of the dissertation committee, committee members function as gatekeepers to ensure I conducted, collected, and analyzed the current study in a manner that reflects standards commonly exhibited within the field of research. Additionally, the identified peer analysts who participated in the triangulation analysis process also functioned as peer reviewers in this study. As it relates to the process of utilizing peer reviewers, consistency was reflected in the degree to which the reviewers found overlap in their understanding of the experiences described by the study’s participants. Moreover, the utilization of peer reviewers was yet another way to become aware of potential preconceptions that I may have held related to this study’s topic. Efforts made to minimize my preconceptions in favor of allowing the categories and theoretical ideas to emerge from the data as co-constructed concepts likely positively influenced the credibility and consistency of this study.

### **Audit Trail**

In addition to the strategies provided above, qualitative investigators are also likely to maintain an audit trail while conducting their research to help showcase the trustworthiness and rigor associated with the data collection, analysis, and interpretation processes. According to Merriam and Tisdale (2016), the audit trail is a journal or records memo that the investigator keeps which provides a detailed description of how data were collected and how categories emerged, as well as the decision process associated with the

procedures related to data collection and analysis. Investigators utilizing the CGT approach employ memo writing (Charmaz, 2014) as a way to keep an audit trail of their experience. An audit trail strives to explain for future researchers how the investigator(s) arrived at the results documented in the findings of the study (Lincoln & Guba, 1985). According to Richards (2015), the objective of an audit trail is to convincingly show the process associated with how the investigator arrived at their findings. Consistent with the CGT approach, I engaged in memo-writing in an effort to elucidate the credibility and consistency with which I approached both data collection and analysis. With this in mind, my memo writing reflected a running record of my interactions with the data, during the analysis and interpretation phase.

For the purpose of this dissertation, I engaged in prolonged data collection, triangulation, member checks, reflexivity, peer reviews, and an audit trail to help highlight the credibility and consistency found within the data collection, analysis, and interpretations phases of this study's findings. Based on the current literature and knowledge associated with qualitative research, each of these strategies likely positively influenced the transferability of this study.

### **Transferability**

Similar to the ways in which credibility is likened to internal validity, transferability is parallel to external validity. External validity is the degree to which findings of a study can be applicable to other studies or situations. Given the intent of quantitative research, this type of validity seems sensible. However, since the intention of qualitative research is not to generalize the findings of a study to the individuals of a

given population, but is instead to understand the lived experience of the participants, this type of validity loses its purpose.

Nevertheless, qualitative investigators believe that the findings of their research should be able to be explored by other researchers to determine to what degree the findings might be applicable to an identified population of interest. According to Merriam and Tisdell (2016) this concept is called reader or user generalizability. In thinking about generalizability in this way, the ownership is on the new investigator, rather than the investigator of the original study, to determine the degree to which the findings of a given study are applicable for subsequent studies.

Although qualitative investigators are not normally focused on producing findings that will be generalizable to all of the individuals in a given population, they do strive to ensure their findings are transferable to other studies. This is done through efforts to ensure their study produces rich, thick descriptions (Merriam & Tisdale, 2016). A rich, thick description refers to a highly detailed and descriptive presentation of multiple aspects of the study. These aspects can include the setting, the participants, and most importantly the findings of the study. Providing future researchers with a rich, thick description allows the researcher to explore the steps and processes taken by the investigator which will likely help the new investigator determine whether or not the findings of the study are applicable to their intended study. In this study, I provided rich, thick descriptions of the data in the hope that the study's findings will be applicably transferable to future studies.

## **Limitations**

Although researchers adamantly strive to minimize methodological barriers, all research studies have methodological limitations. When thinking about the limitations of a study's methodology, it is important to understand the paradigm to which the methodology is anchored. Understanding the overarching framework that houses the methodology will help to mitigate situations upon which assumptions of a given framework are required to meet the expectations of a competing framework. With this in mind, given my study's identified paradigm, below I explore relevant and common limitations of qualitative research studies based on the assumptions associated with the social constructivist and interpretive paradigms.

Within the qualitative research tradition, there are a plethora of data collections strategies used to collect information. These include interviews, observations, and explorations of artifacts (Merriam & Tisdale, 2016). Each strategy is viewed through a particular paradigmatic framework (e.g., objectivist vs interpretivist) and used for the purpose of analyzing the data provided in an effort to gain a deeper understanding about the phenomenon in question. From an interpretivist perspective, investigators hold a subjective view of nature and the theory of cognition and strive to understand reality in the ways in which it is perceived by the participants (Slawecki, 2018). The focus of the researcher is on understanding how the participants construct and reconstruct their reality (Slawecki, 2018).

Through the qualitative process of endeavoring to gain an in-depth understanding of a given phenomenon, investigators strive to group repetitive patterns together in order to give voice to the meaning of the phenomenon. In doing so, qualitative investigators use

language to share their findings and often provide a detailed account of the data collection and analysis process. The process of using language to share their findings and experience with other researchers is an effort made by qualitative researchers to fortify the rigor and trustworthiness of their study's methodology. However, despite their efforts, according to Atieno (2009), the limitations of qualitative research are related to the use of language and the inability to generalize research findings. These limitations have been defined below as ambiguity in human language, linguistic repetition, and generalizability of research findings. Below I explore how the methodology is weakened by each of these limitations as well as how various strategies will be embedded into the process of data collection and data analysis of this study in an effort to remediate the impact of each limitation.

### **Ambiguity in Human Language**

In an effort to gain a deeper understanding of the perceived realities of the participants in this study, interviews were used as the primary data collection tool. Individual interviews were conducted in which the participant and I conversed about the participant's learning experience(s). Given the degree to which the use of language functioned as a primary source by which to collect and analyze data, it was important to acknowledge that the inherent ambiguity of the human language functioned as a limitation of this study (Atieno, 2009). The ambiguity in language may be seen in the use of a word or phrase described by a participant or in the language I used to code data provided by a participant. Recognizing this limitation, I attempted to minimize it by encouraging and allowing participants to engage in the construction and reconstruction of theoretical content (i.e., codes and categories) associated with this study.



This was done via both member checks and during follow-up interviews. In an effort to ensure their raw data reflected their intended construction of language, participants were invited to provide feedback regarding the accuracy of the raw data after transcription, prior to the initiation of the analytic process. Additionally, throughout the analytic process, via follow-up interviews I provided opportunities for participants to provide additional feedback regarding the codes and categories I use to describe the raw data. In this way, participants were empowered to join with me in co-constructing theoretical content related to their lived experiences.

### **Linguistic Repetition**

One of the primary goals of qualitative research is to provide a descriptive, detailed account of the phenomena being investigated (Atieno, 2009; Charmaz, 2014; Merriam & Tisdale, 2016). Although this is a central tenet of the qualitative methodology, Atieno (2009) points out that often within qualitative research effort is not sufficiently made to ascribe a frequency to the linguistic features found within the data. An absence of intentional effort in this area may result in undue attention being ascribed to a given portion of the data.

Utilizing the CGT methodology entailed exploring the data in an effort to identify theoretically relevant categories. In order to successfully engage in the CGT approach, I remained open to the process of exploring both frequently occurring linguistic patterns as well as those which occur less frequently but appear to have significant theoretical relevance. This was done throughout the coding process using the find feature within the Word application of Microsoft. Approaching analysis in this manner allowed me to quantify the linguistic repetition found within the data.

Furthermore, exploration of categories and theoretical ideas, regardless of the frequency with which they occur, created an opportunity upon which less frequently occurring data have the potential to receive analytic attention that was comparable to data which occurs repeatedly. Additionally, the process of engaging in member checks and follow-up interviews also helped to ensure that the identified meaning that I assigned to various codes or categories appropriately reflected concepts that participants deem significant. Approaching data analysis in this manner helped to facilitate an analytic process in which all words, phrases, and statements had an equal chance of adding to the field's understanding of the reality experienced by this study's participants.

### **Generalizability of Findings**

As a research tradition focused on understanding the meaning and action informing the world around us, qualitative investigators strive to gain in-depth knowledge about a specific phenomenon. While some qualitative investigators (e.g., those who ascribe to the objectivist orientation) hope to gather qualitative data that can be seen as representative of a larger population (Charmaz, 2009), investigators oriented toward the interpretivist approach do not set this as a goal of research. Instead, the qualitative nature of the interpretive orientation, particularly the CGT approach, is less focused on having their analytic findings reflect accurate rendering of previously determined academic truths and is more focused on exploring the relative nature of truth as it is defined by the study's participants (Charmaz, 2014).

Understanding the philosophical underpinning of the interpretive orientation to qualitative research easily refutes the most commonly identified limitation of qualitative research. This limitation suggests the most significant disadvantage of the qualitative

approach is its limited ability to generalize its findings to the larger population (Atieno, 2009). Since this study utilized the CGT approach, which ascribes to the interpretivist orientation, rather than striving for data that reflects a mirrored image of the larger population, I endeavored to exemplify the tenets of the interpretivist orientation associated with the CGT approach. In doing so, I collected thick, rich data in an effort to facilitate an analytic process which fostered theory development.

### *Maximum Variation*

Although the focus of the CGT approach is not to collect data that will generalize to the population at large, qualitative investigators may choose to design their study such that they are able to achieve maximum variation. Maximum variation reflects the degree to which findings from a study vary across the study's participants or sites (Merriam & Tisdell, 2016). An investigator who intentionally uses maximum variation focuses on selecting diverse participants and sites in order to increase the differences found across varying sites and/or participants. In this study, I endeavored to garner both maximum variation and provided rich, thick descriptions of the data in the hope of increasing credibility and consistency thus positively impacting the study's generalizability. In order to obtain maximum variation, I contacted 17 faculty members representing 15 CACREP accredited or aligned programs across 11 states and four ACES regions. Despite my efforts, the participants in this study represent 2 CACREP accredited institutions in located in one state within one of the ACES regions (i.e., North Central ACES). My inability to achieve maximum variation in this study serves as a potential limitation of this study, and it is possible the findings of this study may have yielded different results had participants represented other states or ACES regions.

In addition to the limitations identified by Atieno (2009), due to the length of time required for both data collection and analysis, qualitative research has commonly been identified as time consuming. Given the CGT's use of theoretical sampling with the intention of achieving theoretical saturation, the time expectation associated with the utilization of CGT may be considered a limitation. This was especially true since this study functioned as a degree requirement and was subjected to time limitation and investigator resources. Time constraints were related to the length of time in each academic semester. Additionally, as a student researcher, my resources were limited so it is possible that barriers to providing continued compensation for participant engagement may have limited data collection. Nevertheless, with the time and resources available to me, I endeavored to conduct rigorous and trustworthy qualitative research that added to the field's understanding of the clinical case conceptualization skill development experiences of master-level counseling students.

### **Conclusion**

The current study was designed to explore the experiences and feelings held by CITs related to their clinical case conceptualization skill development. The nature of the research questions aligned themselves to a qualitative research design. Through the research process, multiple categories and theoretical ideas related to the experiences held by the participants emerged. The categories and theoretical ideas that emerge from the data yielded findings that appropriately reflect the experiences held by the study's participants. As a qualitative investigator, I was intentional about the processes associated with conducting a study that exhibited both a trustworthy and rigorous data collection and analysis process.

## Chapter IV: Findings

In this chapter, I present the findings of the constructivist grounded theory data analysis used to guide this study. The purpose of this study was to explore the clinical case conceptualization learning experiences had by master-level Counselors-In-Training (CITs) who are enrolled in CACREP aligned or CACREP accredited counselor education programs. This study explored the following research questions:

1. How do students experience learning and applying clinical case conceptualization skills?
2. What function do students believe clinical case conceptualization plays in the clinical process?
3. How does clinical case conceptualization skill development affect CITs confidence in using the skill?

It is of note that although I initially intended to explore the three research questions listed above, consistent with the constructivist grounded theory approach, through the process of constant comparison, theoretical sampling, and theoretical sorting, interview questions were adjusted and added to further explore the emerging theory. Through the process of exploring additional interview questions, the relevance of an additional research question became clear. Resulting from this process is the following additional research question:

4. What process do CITs use to engage in clinical case conceptualization?

In response to the above listed research questions, three categories emerged from the data (Figure 1). These categories include: the academic experience, clinical clarity, and confidence. The first category, “The Academic Experience,” outlines the collegiate classroom learning experiences described by the study’s participants. The second

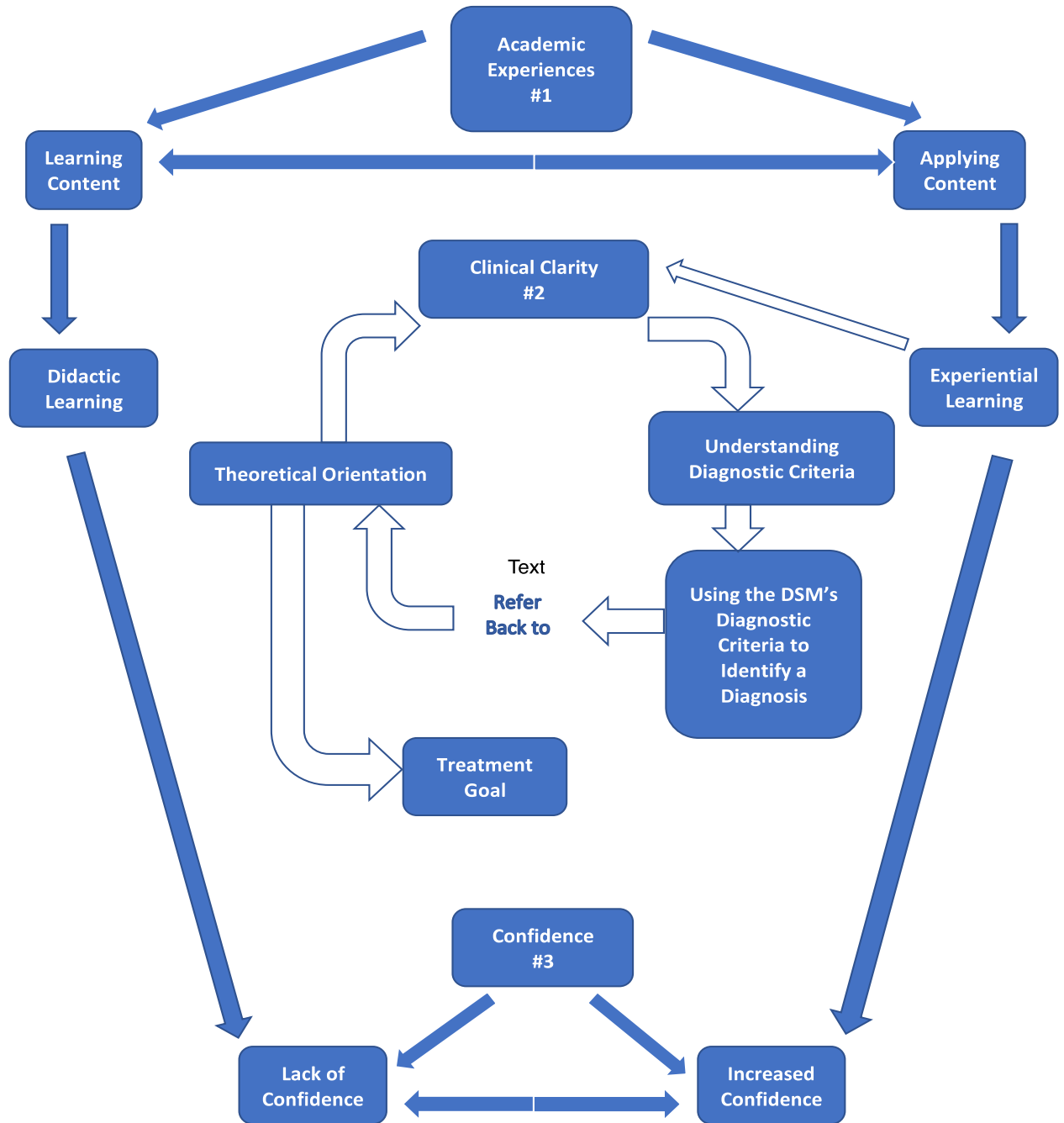
category, “Clinical Clarity,” reflects the primary function of clinical case conceptualization. Additionally, through the process of constant comparison, theoretical sampling, and theoretical sorting, “Clinical Clarity” emerged as this study’s core category (Merriam & Tisdell, 2016) as it links the other categories together and reflects the emergence of a theory. The third category, “Confidence,” highlights the factors that influence feelings of professional confidence as it relates to clinical case conceptualization skill development.

Represented at the top of Figure 1 is the Academic Experiences category which is divided into two subcategories: learning content and applied content. Learning and applied content are related to didactic learning and experiential learning, respectively. Centrally located on the diagram is this study’s core category: Clinical Clarity. Clinical Clarity is comprised of the following subcategories: theoretical orientation, understanding diagnostic criteria, using the DSM’s diagnostic criteria to identify a diagnosis, and treatment goals. At the bottom of the diagram, the relationship between Academic Experience and Clinical Clarity are linked to Confidence. The Confidence category is represented by two subcategories: lack of confidence and increased confidence. These important aspects of the findings represented in Figure 1 will become clearer through the narrative that follows.

**Figure 1**

The Theory of Learning Clinical Case Conceptualization in Counseling: A Preliminary

Theory of Pedagogical Intentionality



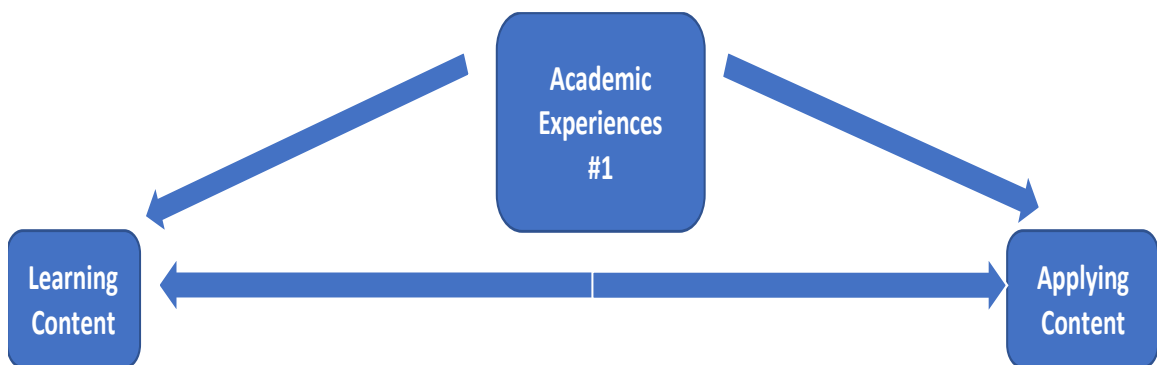
## Category 1: Academic Experience

The academic experience category addresses the first research question: How do students experience learning and applying clinical case conceptualization skills? In order to gain a deeper understanding of the participant's experience, the following questions were asked during the semi-structured interview: Please describe a typical class meeting for the class where you learned to use the DSM/ In your DSM class what was a typical meeting like? How did you learn to engage in clinical case conceptualization? and Tell me about your class experiences related to learning to engage in and apply the process of clinical case conceptualization.

The data that emerged reflects information the participants shared about their academic experience related to learning, developing, and applying clinical case conceptualization skills. The academic experience category is comprised of two subcategories (Figure 2): learning content and applying content. In many ways, the learning content and applying content subcategories reflect the properties of the academic experience held by this study's participants.

**Figure 2**

The Academic Experience Category





### *The Academic Experience Subcategories: Learning Content and Applying Content*

As reflected in Figure 2, the properties of the academic experience category are represented on a continuum as learning content and applying content. This continuum bookends the range of experiences identified by this study's participants. In this study, the learning content property is enacted through didactic instructional strategies (e.g., lecture/PowerPoint, large group discussions etc.), and the applying content property reflects the use of an experiential approach (e.g., case studies, field experience etc.). Having these subcategories represented on a continuum nicely illustrates the experiences participants highlighted, during their interviews. This is particularly true since many participants, when reflecting on their experience of learning to engage in clinical case conceptualization, indicated their learning experience either: 1) consisted of both didactic and experiential learning opportunities within the context of one course or 2) consisted of participating in multiple courses where either didactic or experiential learning opportunities were presented. Thus, the academic experiences held by this study's participants could easily be depicted as ranging from didactic (only) learning opportunities to experiential (only) learning opportunities with a few participants reporting experiencing a blend of didactic and experiential learning opportunities within one or across multiple courses.

**Learning Content.** The learning content category reflects the first component of the above listed research question and intends to illuminate the experiences participants had related to learning to engage in clinical case conceptualization. Participants reported their course instructors generally used didactic learning techniques (e.g., assigned readings, PowerPoints, lectures) where they focused on memorizing diagnostic criteria.

Abby describes the use of PowerPoints and lecture in their psychopathology class as they described their experience in class reviewing “a PowerPoint and the teacher... (would give) examples of what this (the diagnosis) would look like...” (Abby1 75-77). This is also captured by Ash who stated we “just talk(ed) about it, like just looking at different... diagnoses (Ash1 233). Additionally, HHJ reported “we really learned just the disorders and their symptomology, so it wasn't like we learned how to diagnose” (HHJ1 118). Here HHJ seems to be eluding to the difference between what Bloom’s Taxonomy would identify as the difference between the “remember” and “apply” components of the taxonomy (Pickard, 2007). This is further explained by HHJ who goes on to say “I wouldn't call it, you know now that I look back on it, the class wasn't really focused on diagnosis, it was more focused on the DSM ... and on the disorders” (HHJ1 120-121). Additionally, during Jay’s interview, they indicated their learning experience was primarily an overview of the DSM rather than an in-depth exploration of the DSM. Jay stated in their class they would have preferred to have “you know really focus(ed) on making it a practical usage of the DSM verses just here’s an overview” (Jay1 353). The examples highlighted above reflect the utilization of the didactic teaching tradition.

**Didactic Learning.** Generally speaking, didactic teaching consists of environments in which instructors control and disseminate knowledge to students. Teaching strategies within the didactic tradition consist of but are not limited to assigned readings, lectures, use of PowerPoints, and whole class discussions etc. When describing their opinion regarding the value of courses which offered only didactic learning experiences, Ash reported “just listening (was) not helpful” (Ash1 204-206), and Sugar Lips stated “you can make me read the textbook and it’s not going to stick” (Sugar Lips2

57). It is also important to note that in this type of learning environment, knowledge is typically garnered through rote memorization which reflects the “remember” level of Bloom’s Taxonomy. At this level, the student’s learning experience is consistent with the experience described by Abby “we definitely practiced a lot (of) memorizing the... criteria” (Abby1 72). Additionally, within this pedagogical approach, aside from formative or summative assessments, learners spend minimal time practically applying what they have learned. This point is articulated by SH who stated:

We basically just talked about (the diagnoses), what that looks like, the criteria and (the instructor) explained in depth like the certain criteria points like ABC and D and what that looks like and then (as a quiz at the end of class) (the instructor) gave us a case and out of the four we may have talked about (in class) (the instructor) would give us a case and we had to pick which case or which yeah which diagnosis, ... it (was) out of the four (SH1 197-198).

Although SH’s account of their class experience showcases the instructors attempt to encourage students to apply their knowledge, this type of formative assessment probably more closely aligns with the “understand” component of Bloom’s Taxonomy as it seems to strive toward assessing whether or not students recognized the relationship between diagnostic criteria and the name of a diagnoses. While this is certainly a viable approach to assessing knowledge, Bloom’s Taxonomy would suggest that in order to move students along the academic continuum our goal should be to help them rise to a level at which they can apply, analyze, evaluate, and create content (Pickard, 2007).

**Applying Content.** The applying content category reflects the second component of the above listed research question. It aims to highlight the experiences participants had

related to applying the clinical case conceptualization skills learned throughout their coursework experiences. Some participants indicated their course instructors used experiential learning techniques (e.g., case vignettes, cooperative learning activities) to help facilitate their learning. This is articulated by Josie who stated “I think it's huge to actually practice it... hands on (using) a case (vignette). That is where I learned the most in the class for sure” (Josie1 220-222). Josie went on to highlight the value of working collaboratively with their peers when stating “...just hearing my classmates' questions too (that) would help... I might not even have that question..., but then that helps me in learning how to do it better” (Josie1 162-163). Additionally, Ash stated

The more it can be modeled and used in a class, probably the more beneficial and the more apt we're going to be to use it in our practice... if we're not seeing it and actively using it in class you're probably not going to use it in our practices either (Ash1 231).

Sugar Lips also highlighted the importance of being able to apply their knowledge with in their classroom learning environment when they stated “I found it very helpful to listen, to have time to be able to make my own guesses um or hypothesis, they're not guesses hypothesis” (SugarLips1 123-125). AE further solidified the importance of courses that create opportunities for students to apply content when they stated “I learned by doing” (AE1 35) which clearly displays the significance of the experiential teaching tradition.

**Experiential Learning.** Experiential learning predominately consists of environments where student learning is garnered through the process of “doing” and reflecting on learning activities (Kolb, 1984). Teaching strategies within the experiential tradition consist of but are not limited to case-based learning activities (e.g., case

vignettes), problem-based learning activities, and guided discovery activities etc. In this type of learning environment, knowledge is typically acquired through practical hands-on learning activities. When describing a guided discovery activity, Ash described the process of learning case conceptualization as less threatening when describing “the group work... we had to do them (case vignettes) in groups so when you can collaborate and kind of bounce ideas off of each other you’re not as vulnerable (as you are) when it’s just you doing it by yourself” (Ash1 181-182). This point was also highlighted by Josie who reported “the most helpful thing would be doing it (case conceptualization practice) in class and breaking it down in class...” (Josie1 158-159). Additionally, Abby stated the experiential learning approach was different from the didactic approach in that:

It was less like read... the DSM: memorize it all and... more showing us kind of examples and... discussing it and, like a hands-on like class activity way, which was really helpful for me as a learner (Abby1 81-83).

Within this pedagogical approach, in addition to summative assessments, learners spend a great deal of time applying their knowledge to various practical situations likely to be encountered within their discipline. Assessing students as they strive to apply their understanding of learned content can serve as a formative assessment of the student’s knowledge development and likely serves to compliment other types of formative assessment strategies. Participants in this study indicated their engagement in experiential learning activities helped them to have increasingly astute clinical clarity (Category #2) when working with clients and increase confidence (subcategory of Category #3) related to their clinical case conceptualization skills. This is reflected in SH’s statement in which they reported:

constantly just doing it... like just um practicing... different cases and things like that um I think that really helps versus just sitting down opening a book and reading it, but actually having a case and applying what you know it helps you to be more familiar with learning the DSM 5 and, like the different criteria and things to look for that points to certain um diagnosis. Constantly... going over um different case(s) or case conceptualization(s) (helps) to get you more familiar with the information (SH1 28-30)

SH went on to say:

familiarizing myself and just from previous experience with it (via case conceptualization practice activities), I feel that (it was doable) and just based off of even in class where we were left on our own, and I did decent... it gave me the confidence like okay... I do know what I'm doing a little bit (SH1 139-140)

The data provided above serves to highlight the importance that this study's participants placed on having academic experiences that facilitated the skills necessary for gaining increased clinical clarity.

## **Category 2: Clinical Clarity**

The clinical clarity category addresses the second and fourth research questions: What function do students believe clinical case conceptualization plays in the clinical process? And what process do CITs use to engage in clinical case conceptualization? During the first round of interviews, the semi-structured interview question linked to research question number two was: Based on your understanding, what is the purpose of clinical case conceptualization? During the second interview, the semi-structured interview questions linked to research question number four were: What informs your

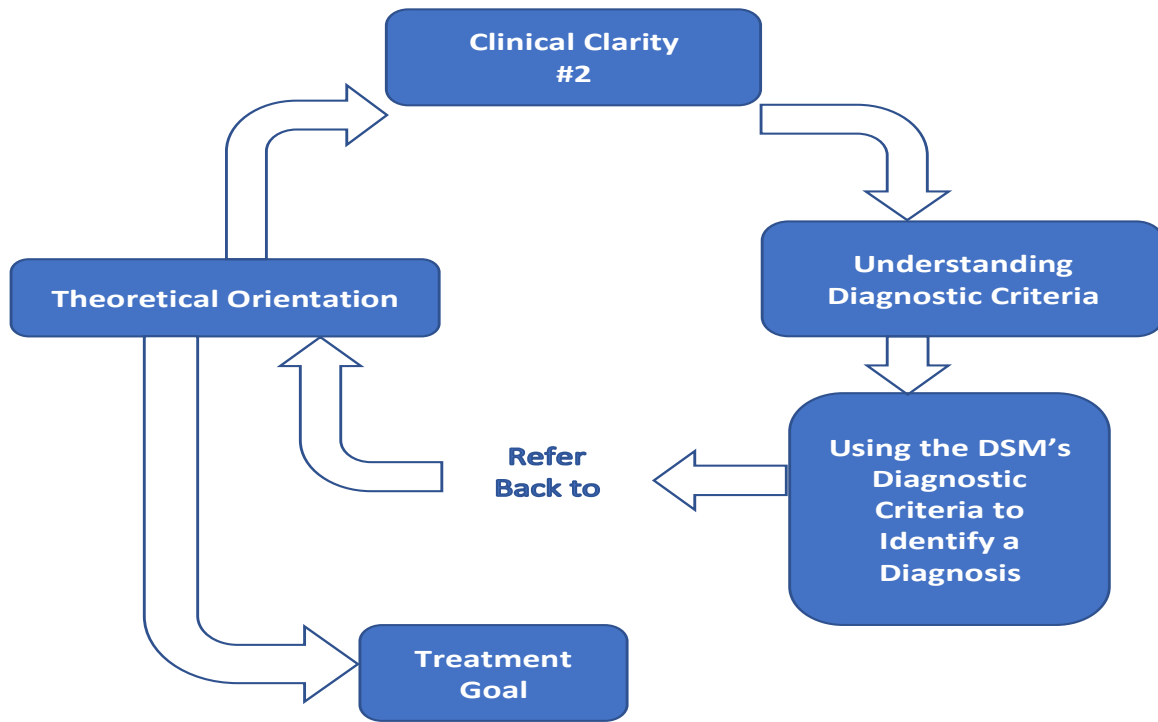
clinical judgement? In your opinion, how does the clinical picture inform the clinical case conceptualization process.

Participants in this study identified clinical clarity as the primary function of clinical case conceptualization. Therefore, subsumed in this category are data which emerged to reflect the participants' understanding regarding the function of case conceptualization within clinical mental health practice. As I explored the function of case conceptualization with the participants, I found they also frequently spoke about how they engaged in the process of clinical case conceptualization. The process of clinical case conceptualization engaged in by CITs is represented in a cyclical nature. The data that informs this category is represented in Figure 3. Participants indicated their theoretical orientation informs their understanding of the client's case which influences how they understand the relationship between the client's presenting concern and their clinical diagnosis. These pieces of the process worked together to inform and support the development of treatment goals.

As I continued to explore the data, clinical clarity also appeared to function as a link between many of the pieces of datum found within categories one and three (see Figure 1). Identifying this connection necessitated the process of raising category two to this study's core category (Merriam & Tisdell, 2016), due to its ability to facilitate the linkage of the three categories and foster the development of a grounded theory. In concert with its link to the academic experience category (Category #1) and the confidence category (Category #3), the clinical clarity category is composed of four subcategories (Figure 3): theoretical orientation, understanding diagnostic criteria, using the DSM's diagnostic criteria to identify a diagnosis, and treatment goal development.

**Figure 3**

The Clinical Clarity Category



***The Clinical Clarity Subcategories: Theoretical Orientation and the DSM Criteria***

Figure 3 represents the association between the clinical clarity category and its subcategories. The figure depicts clinical clarity as a central concept anchoring the cyclical connection between theoretical orientation, understanding diagnostic criteria, and using the DSM diagnostic criteria to identify a diagnosis which then cycles back to theoretical orientation. Additionally, also flowing from the theoretical orientation subcategory is the subcategory identified as treatment goal development.

**Theoretical Orientation.** The American Psychological Association’s (APA) Dictionary of Psychology (2020) identifies the term theoretical orientation as “an organized set of assumptions or preferences for given theories that provides a counselor or clinician with a conceptual framework for understanding a client’s needs and for



formulating a rationale for specific interventions”. For the purpose of this dissertation, the APA’s definition will be used to define the theoretical orientation category. According to this study’s participants, their theoretical orientation informs how they understand, interpret, and conceptualize their client’s presenting concern. As SH stated “theory, is kind of just explaining why people behave or think the way that they do” (SH2 21). Reportedly, understanding the client’s presenting concern through their theoretical lens helped to inform the participants’ clinical clarity. Jay highlighted this point by stating “(it) plays a part in...figuring out like what the problem (is). You know (is) the problem internal or is the problem with them like (in their) relationship... with someone else” (Jay1 296-297). Similar to Jay, AE indicated the importance of “knowing what the theories are (because) different ones are going to help different clients (AE1 22-23). Further expanding upon this point, data from the member check in survey (which was utilized to showcase the credibility and consistency of this study) suggested that 100% of respondents either “somewhat agree(d)” or “strongly agree(d)” that “the client’s presenting concern should be viewed through a theoretical lens”. Despite the importance of theory in the case conceptualization process it is important to note that many participants indicated the difficulty associated with practical application of theory. This point was described by AE who stated “you know you learn all about the theory, but sometimes putting (it) into practice is a little bit difficult (AE1 19). In reviewing the data, it seems fair to say that multiple participants indicated their theoretical orientation informed their clinical clarity thus helping them to better understand the DSM’s diagnostic criteria.

**Understanding Diagnostic Criteria.** The understanding diagnostic criteria subcategory emphasizes the ways in which participants experienced understanding the criteria found within the DSM. Participants in this study indicated increased clinical clarity helped them to better understand the relationship between the client's presenting concern and the diagnostic criteria listed in the DSM. In thinking about the relationship between theory informed clinical clarity and the process of understanding the DSM criteria Sugar Lips stated "your theory is always at the heart of diagnosis" (Sugar Lips1 20). Additionally, Mr. S. described theory as a "...building block" (Mr. S.1 39) and stated it's "...kind of a basis or foundation that you can build (your diagnostic understanding) on" (Mr. S. 42).

Additionally, in many ways, participants reported the use of theory informs the process of diagnosing in that it requires one to be able to map philosophical principles onto tangible/observable anchors (e.g., criteria). In other words, one's theoretical understanding of the world informs what "sad" might look like as well as how "sadness" develops and is perpetuated or maintained. For example, Josie stated:

I guess depending on which theory you are viewing from you would either be thinking about their thoughts or their or their past or their birth order or you know just there's all sorts of different ways so (it) just depend(s) on which theory you use. There could be a lot of different ways (of understanding the client's presenting concern) (Josie2 57-59)

This was also highlighted by AE who stated "theory it's not tangible, you know you can't see it you just have to... you just kind of have to put it into work and get the kind of

philosophical idea behind it” (AE2 45-47). Additionally, AE explained that while diagnostic criteria are important theory is “more broad” (AE1 50). Furthermore, Abby indicated that while:

diagnosis... obviously plays a part. ...Knowing (what) their diagnosis and ... like the characteristics or the criteria is, that doesn't always, like explain each person and what we should do with them. You know, like yeah they... have certain symptoms but there's still more to it than just a diagnosis (Abby1 63-66).

Collectively, this portion of the data suggests that one's understanding of the diagnostic criteria is informed by more than the actual criteria and suggest that in order to identify a diagnosis, individuals inevitably (and sometimes unbeknownst to them) rely on their theoretical orientation to help them understand each of the diagnostic anchors (e.g., criteria).

**Using the DSM's Diagnostic Criteria to Identify a Diagnosis.** The subcategory identified as using the DSM's diagnostic criteria to identify a diagnosis highlights experiences of connecting a client's presenting concern(s) to diagnostic criteria and thus an identified diagnosis. Participants described this as a process of matching the client's presenting concern to diagnostic criteria, checking to ensure the correct number of criteria have been met, and assigning a diagnosis. Abby described this process as

Listening to like the main things the things that were most important in their story and using our knowledge about the DSM to kind of pinpoint the area, you know, like what the main area is to look in and then obviously go into the DSM (AM1 115-117).

Additionally, when referring to the process of matching the client's presenting concerns to the DSM's diagnostic criteria, SH stated:

I just learned what to look for... I can't really explain it... I learned just by looking for signs I guess of like certain diagnoses and like what those diagnoses look like and then looking for... certain signs in a particular client (SH1 19).

SH when on to say they look "at the signs and then refer back to the DSM 5 of like what I've seen and (go) over like the criteria" (SH1 20). Additional examples of this category can be seen in HH's statement in which they articulate a DSM diagnosis should be given "based on the (diagnostic) criteria" (HHJ1 39). Sugar Lips also stated "the DSM 5 is your guideline or how you... develop which diagnosis best fits with your client's presenting symptoms" (Sugar Lips2 29).

**Treatment Goal Development.** For practitioners who ascribe to the process of giving a diagnosis, after a diagnosis has been identified treatment goals are developed. Therefore, the treatment goal subcategory to some degree represents the culmination of the above listed clinical clarity subcategories in that treatment goals develop as a result and upon completion of the other subcategories. The treatment goal development subcategory reflects the creation of treatment goals that align with the client's presenting concern and have as their core objective the mitigation of clinically relevant symptomology. This study's participants indicated the development of treatment goals hinges on the degree to which one gains clinical clarity regarding the client's presenting concern. This point is elaborated on by SH who reported developing clinical clarity:

"gave me (an) opportunity to look at the different diagnoses and how they're different and how they're similar to um create an outcome because I learned in

class that you don't want to misdiagnose anyone with something and so um it that is really important to learn about, to dig deep into those learning issues, because you don't want to misdiagnose anyone” (SH1 100-101).

Participants reported misdiagnosing a client could be related to a lack of clarity resulting from a misunderstanding of the client’s presenting concern(s) and could lead to developing treatment goals that do not adequately address the client’s presenting concern(s). Abby goes on to state that such a misalignment could result in harm to the client as reflected in the following statement:

I... (know a person who) was diagnosed with depression, when (they) started college, but really ...(the person found) out like when (they) finished college, like (their) senior year (they were) diagnosed with ADHD (and) that (the person) went to a very easy high school, and so (they) didn't struggle with it, then as much because ...it was easy (to) just flow through it. But once things got a little more intense (they) couldn't focus on everything, and (they) just had trouble, and so, when (they weren't) doing as well as (they) used to (they) kind of ... lost it. (The person) got really super depressed, but it was really because (they weren't) excelling in school like (they had) always done, and so, once (they) figured that out... (the person) stopped thinking (they were) stupid, which was wonderful. (The person) stopped you know hating on (them self), for all that, and was able to understand so much and it took away that negativity that (they were) feeling towards (them self) because, like (they thought they) couldn't handle college and it just made (them) depressed and it was terrible. (The person wondered) how (they could)... do anything in (their) life if (they couldn't) even handle college

and now, in Grad school (the person is) 10,000 times better because (they) know it's ADHD and (they) have a grasp on it... So I think it's super important because... (the person) was diagnosed by like a doctor just um (a) primary care (physician) and they never looked at anything specific, never sent (the person) to a counselor... (they) just fed (the person) meds and so um I think it's super important because I, I mean (the person) was wrongly diagnosed, I mean it was a symptom like (they were) depressed, but it was a symptom of the fact that (the person) didn't know what was going on and (they) couldn't control everything (at school)... (Abby1 151-164)

In an effort to avoid this type of misalignment, multiple participants reported the belief that clinical case conceptualization should be an “ongoing process” (HHJ1 62). Generally speaking, participants reported the belief that case conceptualization “start(s) with one (session) but ... just with the first session, it would be hard to capture an entire case conceptualization. So yes, (case conceptualization is) definitely a process” (Josie1 54-55). Supporting this idea AM indicated the belief that treating clinical case conceptualization as ongoing allows clinicians to “keep listening and and never like decide this is for sure it because you never fully know you're not in their head they might be leaving something out that they don't even realize is important” (Abby1 141-142).

The process of learning to conceptualize client cases in a manner that allows students to practice the skill creates opportunities for students to practice the skills associated with each of the clinical clarity categories. As outlined by the above listed data, opportunities to engage in experiential learning activities and increased clinical clarity work together to inform feelings of confidence in developing clinicians.

### Category 3: Confidence

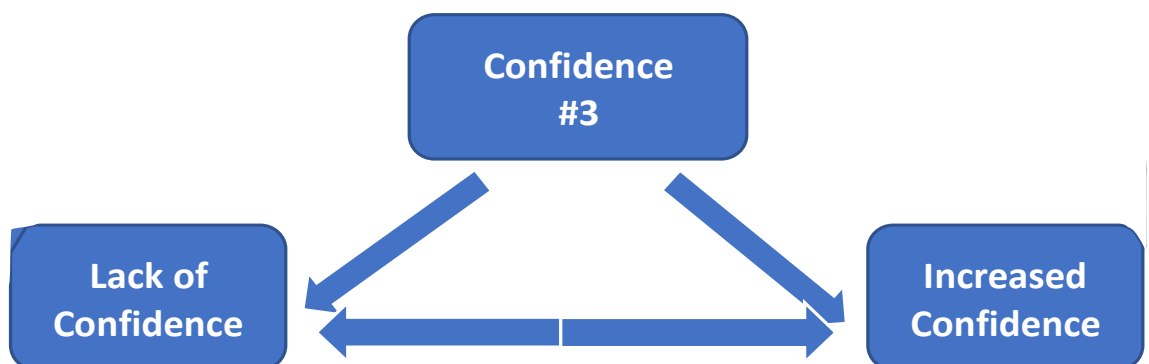
The confidence category addresses the third research question: How does clinical case conceptualization skill development affect CITs confidence in using the skill?

During the semi-structured interview, to garner information about their level of confidence, participants were asked questions such as: “based on how you learned to engage in clinical case conceptualization, how confident do you feel in your current ability to effectively use clinical case conceptualization as a skill to understand a client’s presenting problem?”.

The data that emerged reflects information the participants shared about their feelings of confidence based on their understanding of the expectations that will be required of them as it relates to their ability to apply their clinical case conceptualization skills within a clinical mental health outpatient setting. The confidence category consists of two subcategories (Figure 4): lack of confidence and increased confidence. Similar to the subcategories of the academic experience category, lack of confidence and increased confidence, reflect the properties of the confidence category.

**Figure 4**

The Confidence Category



### *The Confidence Subcategories: Lack of Confidence and Increased Confidence*

The subcategories of confidence, lack of confidence and increased confidence, are represented on a continuum in Figure 4 and function as the properties of the confidence category. On this continuum, lack of confidence is depicted on the far end of the continuum moving toward increased confidence. Additionally, as reflected in Figure 1, per the data, feelings of confidence, or lack thereof, were influenced by the student's academic experience. In the case of this study's participants, lack of confidence seemed to be associated with didactic learning experiences whereas experiential learning was linked to increased confidence.

**Lack of Confidence.** The lack of confidence subcategory falls under the umbrella of the confidence category (Category #3) and is linked to the academic experience (Category #1) by way of the didactic learning component of the learning content subcategory (see Figure 1). The lack of confidence subcategory reflects the feelings participants shared related to both their learning experience and their confidence engaging in clinical case conceptualization activities for class assignments with future clients. When participants reflected on their didactic learning experiences they consistently indicated feeling a lack of confidence related to their ability to conceptualize client cases. Jay identified their confidence level as "like a two or a three..." and stated "...it would take me forever" (Jay1 431). Another participant stated if they had only learned clinical case conceptualization via didactic techniques they would "not (be) very confident. I think I'd just be winging it" (Abby1 314-315). Josie also indicated "my confidence would be so much lower... it would be like, probably at a two..." (Josie1 219).



It is of note that in addition to feeling a lack of confidence, participants in this study also reported feeling underprepared to complete case conceptualization assignments following didactic style training. This point was highlighted by Ash when describing the disconnect between learning content in a didactic format and the expectations of a course assignment:

We had to diagnose somebody. We had to come up with a student and make a diagnosis, I really didn't even understand the book, yet. So I was trying to recall someone that I had had in a classroom years ago and then trying to figure out (how to) diagnose. It was hard, because I didn't I didn't understand the breakdown of the book I didn't really understand how to use the book. Like I definitely Google searched a lot like how to do this because... it wasn't touched on (Ash1 235-237).

This point was also echoed by Jay who reported "... I don't think that our program really does a great job of teaching it...". Jay went on to say "it was really not an effective class" (Jay1 154). Jay further elaborates on their frustration with the structure of the class by stating "... I think that's where it gets frustrating... I feel like everything is very flat and surfacey, because we don't have a deeper frame of reference" (Jay1 225-226).

Consistent with the findings from the semi-structured interview, 100% of participants who completed the member check survey and endorsed learning clinical case conceptualization via primarily didactic techniques reported they "somewhat agree" that they would have learned the skill better if given experiential opportunities to practice the skill.

**Increased Confidence.** The increased confidence subcategory is also nestled under the confidence category (Category #3) and is linked to the academic experience (Category #1) by way of the experiential learning component of the applying content subcategory (see Figure 1). Similar to the lack of confidence subcategory, the increased confidence subcategory also represents the feelings participants disclosed related to both their learning experience and their confidence engaging in clinical case conceptualization activities for class assignments or with future clients. However, contrary to the findings associated with didactic learning experiences, when participants reflected on classes which included experiential learning opportunities, they reported feeling increased confidence related to their ability to successfully complete clinical case conceptualization activities for class assignments or with future clients.

In this case, all participants rated themselves at a six or higher. For example, both AM and AE reported their confidence levels at an “eight or nine” (AM1 30; AE1 225-226). Furthermore, Josie reported their experience in class allowed them to be able to apply what they learned to a clinical case conceptualization assignment. They reported after reflecting on the skills they learned in class they were able to apply the skills and “at that point, it kind of felt like, okay, I can do this... yeah. And it got easy.” (Josie1 126-128). Similarly, when reflecting on their experiential course opportunities and asked about their level of confidence related to completing a case conceptualization in the future, SH reported:

The tools that I've learned in my classes... help(ed) me break down the ... case so using the hypotheses, the hunch(es), those learning issues, and then going back over it, and going to the DSM 5 and looking for certain behavior patterns ...to

kind of help come to an outcome. Um I think I'm confident enough to do that now (SH1 135-139).

Additionally, AE indicated “I think that (in-class case conceptualization practice) really helps because it really takes the big broad ideas of building this whole case and kind of say(s) it's not that hard” (AE1 121). Similarly, Sugar Lips stated “I felt more comfortable and we had talk about each you know each step where it's more manageable. I knew that I was looking for something in this realm not in the whole book (Sugar Lips1 180-181). Furthermore, during the final member check, all of the participants who completed the member check survey indicated they either “somewhat agree(d)” or “strongly agree(d)” that participating in experiential learning opportunities positively impacted their confidence related to their clinical case conceptualization skill development. This information served to increase the credibility and consistency of the data gather during the qualitative interviews as well as the data analysis and interpretation processes.

In many ways, the confidence category is influenced by the type of academic experience (Category #1) the participant has as well as the participant's ability to effectively develop clinical clarity (Category #2) regarding their client's case. Additionally, when considered holistically, the three categories outlined in this dissertation serve as anchors to reflect the perceived academic experiences, the function and process of developing a clinical case conceptualization, and the confidence associated with developing clinical case conceptualization skills. In thinking about the connections between this dissertation's categories, it is clear that the experiences held by this study's participants highlight the relationship between the three categories. Given

these connections, the above listed categories which emerged from the data work to represent the emergence of the theory associated with this dissertation.

### **The Emergence of Theory**

A central component of grounded theory methodology is situated in the quest for the emergence of theory from the data. Theories seek to explain the relationship between large amounts of data. According to Merriam and Tisdell (2016), a study should only be identified as a “grounded theory study” if the emerging data results in a substantive theory. A substantive theory reflects “everyday-world situations” (Merriam & Tisdell, 2016, p. 31) and addresses the process (of change) associated with the phenomenon of study. Substantive theories provide practical specificity related to the real-world situation being explored. For the purpose of this dissertation, the situation being explored is related to the fourth research question: What process do CITs use to engage in clinical case conceptualization. The findings of this study suggest that developing clinical clarity is central to the process of clinical case conceptualization, thus making clinical clarity this study’s core category.

### ***Clinical Clarity as a Core Category***

One of the many identifying characteristics of a grounded theory study is that the substantive theory has an identified core category (Merriam & Tisdell, 2016). According to Merriam and Tisdell (2016), a core category is one which reflects the main conceptual element connecting all of the other categories and properties. In this way, the core category is seen as “central... (and) related to as many other categories and their properties as possible... (it) must appear frequently in the data... and must develop the theory” (Strauss, 1987, p. 36).

In the current study, clinical clarity (Category #2) is central to the other two categories, academic experience (Category #1) and confidence (Category #3) and the respective properties associated with each category. Throughout the process of data analysis, the Theory of Learning Clinical Case Conceptualization in Counseling: A Preliminary Theory of Pedagogical Intentionality emerged. This theory is intended to reflect the identification and selection of theory-informed academic instructional techniques which: 1) align with the learning content 2) intentionally provide opportunities for application of learned content in an effort to facilitates skill development, and 3) produce instructional outcomes that support the development of confident learners. Within this dissertation study, this theory reflects the relationship between pedagogy, clinical case conceptualization skill development, and confidence. By utilizing the constructivist grounded theory methodological techniques (e.g., the use of constant comparison, theoretical sampling, and analytic reflection on the codes and memos associated with the data), I was able to engage in theoretical sorting which helped to highlight the connections between the categories.

As I explored the data, the first relationship I noticed reflected the connection between the participant's academic experience (Category #1) and their reported feelings of confidence (Category #3). When asked to report their level of confidence (i.e., on a scale of 0-10 with zero representing the absence of confidence and 10 representing the most confident they've ever felt) many participants reported that after completing a course in which the process of learning clinical case conceptualization only consisted of didactic learning experiences their confidence was very low. However, when asked to evaluate their level of confidence following a course that included experiential learning

opportunities, all participants who reported being taught using an experiential methodology, reported an increase in their level of confidence. Given the consistency of this connection across the datum, the association between academic experience and confidence seemed to be solidified within the emergence of this grounded theory.

In thinking about this connection, I began to wonder if there were any additional factors that might be influencing the participant's feelings of confidence. In an effort to better understand the participant's experiences, consistent with the constructivist grounded theory methodology, I returned to the data and reflected on the codes and my memos. In doing so, I found participants frequently associated their level of confidence with the importance of identifying an accurate clinical diagnosis. Furthermore, participants were also very aware of the ways in which incorrectly diagnosing a client could lead to significant deficits in clinical functioning and negative client outcomes. After reviewing the data, it quickly became clear that multiple participant's statements suggested that the development of clinical clarity regarding a client's presenting concern was paramount in the process of clinical case conceptualization and treatment. The findings highlighted above served to solidify the importance of the clinical clarity category (Category #2) within this grounded theory.

Through the practice of reflecting on this data, I began to wonder how the participants engaged in the process of gaining clinical clarity. Following the constructivist grounded theory methodological traditions, my curiosity led me back to the data, the codes, and my memos. Through this exploration, I developed new interview questions designed to help increase my understanding of the processes used by this study's participants. Using theoretical sampling, specific participants were invited to

complete a follow-up interview. During the interviews, questions centered around the use of theory and the DSM's criteria to develop clinical clarity. Data that emerged from the second round of interviews serves to highlight the process of clinical case conceptualization enacted by this dissertation's participants.

From this data, I learned that participants believe their theoretical orientation (subcategory of Category #2) shapes how they make sense of their client's presenting concerns. It influences their line of questioning and their understanding of the precipitating factors that perpetuate the presenting concern. Understanding the clients presenting concern through their theoretical lens, reportedly, helped this study's participants to develop clinical clarity regarding the information shared by the client. As clarity begins to take shape around the client's presenting concerns, participants who ascribe to the use of the DSM, reported they then sought out the DSM to begin matching the client's presenting concerns (as they understood them) to relevant criteria found within the DSM.

Many participants expressed the sentiment that having theoretically informed clinical clarity helped them to understand the diagnostic criteria (subcategory of Category #2). Additionally, multiple participants reported, during this process, they were intentional about exploring both differential diagnoses and comorbidities. Reportedly, the result of this process helped participants to use the DSM's diagnostic criteria to identify a diagnosis (subcategory of Category #2). After identifying a diagnosis, participants reported they return back to their theoretical orientation (subcategory of Category #2) to help shape their treatment goal development (subcategory of Category #2).

Additionally, support for these findings was reinforced by the data which emerged from the second/follow-up interviews. The findings from the second interviews aligned with the sentiment alluded to by participants in the first interviews. To further illuminate the consistency of these findings, it is of note that 100% of member check survey respondents reported data that was consistent with the findings from the first and second interviews.

The theory of pedagogical intentionality (i.e., the use of theory-informed instructional techniques that align learning and applied content with instructional outcomes) serves to represent the relationship between pedagogy, skill development, and confidence. As a substantive theory, the theory of pedagogical intentionality reflects “everyday-world situations” (Merriam & Tisdell, 2016, p. 31) encountered by clinical mental health practitioners. It also illuminates the process of change which occurs as CITs move from seeking knowledge (related to developing clinical case conceptualization skills) to applying said knowledge. An additional process highlighted by this theory reflects the change associated with moving from developing clinical clarity to identifying a diagnosis and creating a treatment plan. Ultimately, the theory of pedagogical intentionality provides practical specificity for a real-world situations commonly encountered within the counseling discipline.

### **Conclusion**

The current study was designed to explore the clinical case conceptualization learning experiences had by master-level Counselors-In-Training (CITs) enrolled in CACREP aligned or CACREP accredited counselor education programs. Findings from this study represent the use of a constructivist grounded theory methodology and data



analysis approach in which three categories (i.e., academic experience, clinical clarity, and confidence) emerged from the data. The findings suggest CITs utilize information and skills garnered during their academic experiences (Category #1) to help them understand their clients. Additionally, their academic experiences and their theoretical orientation inform their ability to gain in-depth clinical clarity (Category #2) regarding client cases. Furthermore, experiential learning (Subcategory of Category #1) and the clinical clarity with which they understand their clients, reportedly, helped the participants to experience increased confidence (Subcategory of Category #3) in their clinical case conceptualization skills.

## **Chapter V: Discussion**

This dissertation study sought to explore the clinical case conceptualization learning experiences had by master-level Counselors-In-Training (CITs) enrolled in CACREP aligned or CACREP accredited counselor education programs. Within the context of this dissertation, clinical case conceptualization was defined as “the process of developing hypotheses about client difficulties, including historical events, antecedent events, and other factors contributing to the maintenance of presenting problems” (Reitman et al., 2008, p. 4). In order to gain a deeper understanding of the experiences held by students, I conducted 13 semi-structured interviews with nine students from two Midwest Universities, during the spring semester of 2021. Seven participants were women (i.e., six cisgender White women; one cisgender Black woman), and two were men (i.e., both cisgender White men). Three participants were graduate students in a CACREP accredited program with a history of more than 10 years as a CACREP accredited program. Six participants were graduate students from a CACREP aligned program that completed and passed their CACREP accreditation site visit, during the spring semester of 2021 (i.e., this institution was granted accreditation shortly after I completed my interviews). Five of the six participants from the CACREP aligned program were my former students. All participants were engaged in an educational program-track aligned with the professional counseling licensure requirements for their specific state.

In this chapter, I revisit my research questions and related findings and explore implications for pedagogical practices associated with teaching clinical case conceptualization in master-level CACREP aligned or CACREP accredited counselor

education programs. I will also evaluate the limitations of the current study and provide suggestions for future research.

### **Research Questions and Findings**

The following four research questions guided my study:

1. How do students experience learning and applying clinical case conceptualization skills?
2. What function do students believe clinical case conceptualization plays in the clinical process?
3. How does clinical case conceptualization skill development affect CITs confidence in using the skill?
4. What process do CITs use to engage in clinical case conceptualization?

Flowing from these research questions three categories and multiple subcategories emerged. The categories include: academic experience (subcategories: learning content and applying content); clinical clarity (subcategories: theoretical orientation, understanding diagnostic criteria, using the DSM diagnostic criteria to identify a diagnosis, and treatment goal development); and confidence (subcategories: lack of confidence and increased confidence).

### **Findings**

Literature related to the three categories associated with this dissertation is relatively scant with the majority of the literature affiliated with counselor perceive confidence (a component of counselor self-efficacy). As noted by Barrio Minton et al., (2014, 2018) minimal research within counselor education has focused on developing a deeper understanding of counseling pedagogy or clinical case conceptualization. It is of

note that although there is a plethora of literature related to counselor perceived confidence, it is important to note that no studies appeared to directly address feelings of confidence related to clinical case conceptualization skill development. All things considered, the lack of research in these areas serves as a gap in the current counseling literature.

This dissertation study adds to the current literature in that it provides insight regarding the ways in which the experiences of this study's student participants align with experiential teaching and learning principles. Based on the findings of this study's participants it appears as if these students believe the function of clinical case conceptualization is to develop a level of clinical clarity about their client that allows for increased understanding about the client as a whole and more specifically the client's presenting concern. Furthermore, the ways in which students linked their increased confidence to their experiential learning opportunities helps to shed light on this study's participants' thoughts about the relationship between academic experiences and the development of confidence in their clinical case conceptualization skills. Additionally, as a constructivist grounded theory study, from this dissertation, a theory emerged that helps to describe how the students in this study experience the process of engaging in clinical case conceptualization. Subsequently, the emergence of this dissertation's findings offer implications for pedagogical practices associated with teaching clinical case conceptualization in CACREP accredited and aligned programs.

## **Academic Experience**

The academic experience category highlights the experiences held by this study's participants related to learning clinical case conceptualization via the process of didactic or experiential learning. The findings of this study serve to add to the gap in the literature (Barrio Minton et al., 2014, 2018; Nelson & Neufeldt, 1998) in that this dissertation's findings provide empirical data-informed insight into the preferred teaching-learning approached of the study's participants as well as support for the need to increase the pedagogical intentionality of counselor educators as they design curricula related to the development of clinical case conceptualization skills.

### ***Didactic and Experiential Learning***

Participants in this study described experiencing two pedagogical approaches while learning clinical case conceptualization. Using terms from the current literature, for the purpose of this dissertation, these two pedagogical approaches have been identified as didactic learning and experiential learning. Didactic learning has been described as an educational approach that aligns with teacher-centered pedagogy which uses lecture/PowerPoint, large group discussions etc. Conversely, experiential learning has reflects a student-centered educational approach which uses case studies, field experience, problem based learning etc. The findings of this dissertation suggest students associated deeper more meaningful learning experiences when the learning environment encompassed experiential teaching techniques which are commonly associated with the learner-centered pedagogical approach.

Although there is a dearth of literature regarding pedagogy and general teaching and learning principles within the counseling research (Barrio Minton et al., 2014, 2018;

Nelson & Neufeldt, 1998), there is a plethora of literature found within the disciplines of psychology and education that align with the findings of this dissertation. Additionally, in recent years, the field of counseling has turned its attention toward a more intentional focus on pedagogy. As it relates to the current literature within the field of psychology, given this dissertation's participants' preference for experiential learning opportunities, it is clear that this dissertation's findings serve to further validate the work of the American Psychological Association (APA) and the Mid-Continent Regional Education Laboratory (1993) whose work focused on drafting the psychological principles of the learner-centered model. Furthermore, as it relates to the field of education, the findings of this dissertation also align with the work of Edwards (2013) and Wilson (1994), prominent adult learning theorist, who have for years recommended learner-centered approaches as best practice for adult learners. As it relates to the field of counseling, in 2016 the Association of Counselor Education and Supervision (ACES) commissioned a Teaching Initiative Taskforce designed to identify best practices for teaching within the field of counselor education. One of the findings from the ACES Taskforce suggested the counselor education field would likely benefit from determining the strengths and limitations of pedagogical models and increasing our understanding of how instructors and students use the models as it relates to their perceived degree of effectiveness (ACES, 2016). The findings of this dissertation serve to provide insight in response to the call to research initiated by the ACES Taskforce in that this dissertation's master-level student participants described their experience of both didactic and experiential learning approaches and highlighted the significance of experiential models. It is also of note that

the ACES Taskforce focused heavily on the significance of intentionally structuring how we prepare doctoral-level/future counselor educators and current counselor educators.

### ***CACREP***

Although this study did not focus on the learning experiences of developing counselor educators (i.e., doctoral-level counseling students), it is likely that doctoral students in counselor education programs would benefit from opportunities to practice implementing experiential teaching-learning techniques during their academic training (ACES, 2016) as well as during their doctoral internship experiences. As it relates to the core area of teaching doctoral professional identity, in addition to the work of the ACES Taskforce, CACREP, the premier accrediting body for counseling and related educational programs, has centered five of its nine teaching standards related to supporting the needs of doctoral-level adult learners in counseling programs around the development of pedagogy (see 2016 CACREP Standard 6.B.3.b.), a focus on adult development and learning (see 2016 CACREP Standard 6.B.3.c.), the significance of “instructional and curriculum design, development, and evaluation...” (p. 39; see 2016 CACREP Standard 6.B.3.d.), effective online teaching methods (see 2016 CACREP Standard 6.B.3.e.), and the “assessment of learning” (p. 39; see 2016 CACREP Standard 6.B.3.g.). Given CACREP’s focus on these areas as meaningful for counselor educator identity development, it is clear that CACREP understands the necessity of supporting future counselor educators (i.e., doctoral students) as they develop the skills necessary for a career in academia. This is of particular significance given the findings of Waalkes et al., (2018) who found that early career counselor educators (i.e., 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> year, tenure-track, core faculty members of CACREP accredited counseling programs) who graduated

from CACREP-accredited doctoral programs, reported feeling under-prepared to engage in the pedagogical skills necessary for a career in academia.

The findings presented by Waalkes et al., (2018) seem to illuminate a discrepancy between the standards that CACREP holds for developing counselor educators and actual teaching skill development in doctoral-level counseling students. Based on the findings of this dissertation, the findings from the Waalkes et al., (2018) study, and the findings of the ACES Taskforce (2016), it may be helpful for CACREP to offer more concretized criteria related to the development of counseling pedagogy and related teaching skills in emerging counselor educators. Furthermore, given the significance of clinical case conceptualization within the counseling process (Betan & Binder, 2010; John & Segal, 2015; Sperry, 2010) and the literature highlighting the difficulty associated with teaching clinical case conceptualization as a skill (Sperry, 2005), it is likely especially important to ensure that counselor educators have both the skillset and the confidence necessary for teaching clinical case conceptualization as well as the many other important skills needed to provide efficient and effective clinical services. Given the findings of this study, it is likely that doctoral-level students and early counselor educators will benefit from learning to utilize experiential approaches, guided by the Theory of Learning Clinical Case Conceptualization in Counseling: A Preliminary Theory of Pedagogical Intentionality, to teach clinical case conceptualization skills.

***The Theory of Learning Clinical Case Conceptualization in Counseling: A Preliminary Theory of Pedagogical Intentionality***

It is well known that learning to engage in clinical case conceptualization is an important skill in the field of counseling. Within the theory of learning clinical case



conceptualization in counseling: A preliminary theory of pedagogical intentionality, the academic experiences category is connected to the clinical clarity category by way of the experiential learning component (see Figure 1). In this dissertation, participants reported an appreciation for engaging in hands-on activities/practice through experiential teaching-learning techniques. Participants reported said techniques helped them develop increased clinical clarity regarding the “client’s” (i.e., a factitious client described in a vignette) presenting concern.

The relationship between utilizing an experiential teaching approach and clarity surrounding use of the skill being taught has been noted in the educational literature (Schreck, 2020). Therefore, this dissertation’s finding both helps to validate the educational literature and expands the counselor education literature by connecting experiential learning to the skills associated with understanding how to develop increased clinical clarity about one’s client. Additionally, the emergence of the theory of learning clinical case conceptualization in counseling: A preliminary theory of pedagogical intentionality as an empirical, data-informed theory also supports the findings of the ACES Taskforce (2016) which suggest counselor educators should utilize pedagogical practices grounded in theory.

### **Clinical Clarity**

Within this dissertation, as a category, clinical clarity reflects both the perceived function of clinical case conceptualization and the ways in which it connects the academic experience and confidence categories. Based on the current literature, the technical competencies related to case conceptualization skills are largely unknown (Shulman, 2018), undertaught, and underlearned (Fleming & Patterson, 1993; Perry,

Cooper, & Michels, 1987). Furthermore, as noted by Barrio Minton et al., (2014, 2018) the current counselor education literature lacks empirical studies exploring pedagogy and clinical case conceptualization which may provide insight as to why little is known about the competencies associated with clinical case conceptualization. Additionally, no research was found within the counseling literature to represent the value this study's participants held for the process of increasing their clinical clarity through the clinical case conceptualization process as a part of their coursework experience.

Given the absence of information on this topic, within the counselor education literature, all of this dissertation's findings related to clinical clarity as the function of clinical case conceptualization serve as a novel addition to the counseling literature. This is particularly true since the emergence of the clinical clarity category and its subcategories add to the counseling discipline's knowledge regarding how students experience the process of developing a clinical case conceptualization. The findings from this study suggest students use their theoretical knowledge base (Alexander & Murphy, 1998; Vygotsky 1978; National Research Council, 2000) as well as their ability to organize and make sense of old and new information (Eylon & Reif, 1984) in order to increase their understanding of the client's presenting concern(s) and develop treatment goals.

One interesting component of this category is that although students reported understanding the importance of using a theory to conceptualize a client's presenting concern, many participants reported difficulty identifying their personal theoretical orientation. This is particularly interesting since most people organically have a "view of the world," its problems, and how they came to be that would easily align with a

psychotherapy theory. For example, some providers tend to view people's problems as primarily a matter of faulty thinking (e.g., Cognitive Theory) or as a function of a series of events leading to a particular consequence (e.g., Behaviorism). Another noteworthy feature of this category is the importance that this dissertation's participants placed on the significance of ruling out differential diagnoses, exploring comorbidities, and treating case conceptualization as an on-going process. This is particularly important to remember as clients are often complex, sometimes provide delayed disclosures, and frequently present with layers of precipitating and maintaining factors impacting their functioning. Perceiving clinical case conceptualization as an on-going process allows practitioners to consistently reevaluate the client's functioning in the presence of waxing and waning symptomology. Given the intricacies of this process, as supported by the findings of this dissertation study, it is of particular importance for students to have opportunities to practice developing their clinical case conceptualization skills, during their coursework experience.

### ***CACREP***

As an accrediting body for counseling and related educational programs, CACREP has for more than a decade identified clinical case conceptualization as a skill worthy of intentional focus and training for students enrolled in the clinical mental health counseling (CMHC) specialty area (CACREP, 2009, 2016). This is reflected in CACREP Standard 5.C.1.c. (2015) which highlights the foundational importance of helping students learn about "...documentation formats of biopsychosocial case conceptualization" (p. 24). This is also articulated as it relates to the contextual dimensions of clinical mental health counseling in that CACREP Standard 5.C.2.d.

(2015) which communicates the significance of supporting CMHC students as they learn to identify the “etiology, nomenclature, treatment, referral, and prevention of mental and emotional disorders” (p. 24) within their identified treatment population. In alignment with the dimensions of clinical mental health counseling, CACREP Standard 5.C.2.d. (2015) denotes the importance of helping CMHC students develop a “diagnostic process, including differential diagnosis and the use of current diagnostic classification systems, including the *Diagnostic and Statistical Manual of Mental Disorders [DSM]* and the *International Classification of Diseases [ICD]*” (p. 24).

As a part of their clinical training, most CMHC students in a CACREP aligned or accredited programs complete a course in psychopathology and diagnosis where they learn to utilize the DSM or ICD to identify symptomology associated with various mental health concerns. Additionally, students in these programs are required to complete field experience/professional practice courses which frequently provide opportunities for students to test their clinical case conceptualization and diagnostic skills on clients from the surrounding community. Given the findings of this dissertation, it is possible that by using experiential teaching strategies, counselor educators can also support clinical case conceptualization skill development within the context of the students’ pre-field experience coursework. Throughout the process of conducting this research, I found students consistently linked their clinical case conceptualization confidence to experiential learning opportunities in both non-field experience and field experience related courses. While field experience related courses have a higher propensity for experiential learning activities, given the findings of this study it is incumbent upon the counselor education profession to intentionally think about and plan for experiential

learning opportunities and activities which facilitate contextual and practical growth, during non-field experience courses.

***The Theory of Learning Clinical Case Conceptualization in Counseling: A***

***Preliminary Theory of Pedagogical Intentionality***

The findings of this dissertation provide insight into how students in this study understood the relationship between their academic experiences in both field and non-field experience courses and their increased feelings of confidence. Furthermore, according to the theory of learning clinical case conceptualization in counseling: A preliminary theory of pedagogical intentionality, it's important to note that clinical clarity functions as the core category connecting the other two categories (e.g., academic experiences & increased confidence). Clinical clarity is situated directly between the academic experiences category and the increase confidence category and is connected by way of either didactic learning or experiential learning (see Figure 1). Per this dissertation's participants, in this theory, experiential learning opportunities particularly in non-field experience courses helped students develop clinical clarity. Clinical clarity is informed by the student's theoretical orientation and shapes their understanding of the DSM as well as diagnosis selection and the identification of treatment plan goals. Given the absence of other relevant literature within the field of counselor education, the relationship that emerged from this data adds to the field's knowledge in that it provides insight as to how this dissertation's participants perceived the process of clinical case conceptualization. Additionally, the findings of this dissertation also highlight how academic experiences and clinical clarity are connected to increased clinical case conceptualization confidence.

## **Increased Confidence**

The confidence category emerged to reflect the level of confidence participants attributed to their perceived ability to engage in future clinical case conceptualization (course-related or client specific) activities. It is of note that within the counseling literature, perceived confidence is captured through the exploration of counselor self-efficacy (Lent et al., 2003). Although there does not appear to be any research focused primarily on the perceived confidence of CITs related to their case conceptualization skill development, the counseling profession does have a history of exploring counselor self-efficacy on a broader scope (Lent et al., 2003). In fact, research focused on counselor self-efficacy has begun to thrive as it relates to evaluating counselor trainee's perceived abilities in specific (e.g., multicultural competence; Matthews et al., 2018, career counseling; O'Brien et al., 1997) and general (Larson et al., 1992) counseling practices. Nevertheless, in the absence of counseling literature related to the exploration of clinical case conceptualization learning experiences had by master-level CITs enrolled in CACREP aligned or CACREP accredited counselor education programs, this dissertation's findings greatly add to the research scope within the field of counseling.

Interestingly, although levels of confidence related to perceived clinical case conceptualization skills have not been the focus of research within the counseling field, it is of note that the Counselor Activity Self-Efficacy Scale (CASES; Lent et al., 2003) does include one item designed to assess counselor self-efficacy related to case conceptualization skills. The item is rated on a Likert-type scale and assesses the respondent's level of confidence related to "build(ing) a clear conceptualization of your client and his or her counseling issues" (Lent et al., 2003, p. 102). Additionally, the

inclusion of this item as a part of the CASES assessment along with the research supporting the importance of developing competence as a strategy for avoiding burnout (Swider et al., 2014) suggests the importance of this dissertation's finding. This finding is of particular significance for counselor educators as the profession has a vested interest in engaging in evidence-informed pedagogical decisions, during course construction, that will increase clinician sustainability within the counseling profession.

As it relates to the current literature on counselor confidence, the findings of this dissertation extend the current literature in that it provides insight regarding how this dissertation's participants developed confidence related to clinical case conceptualization skill development. Although this dissertation provides findings espousing a relationship between experiential academic strategies within classroom settings and increased feelings of clinical case conceptualization confidence, it does not focus on the evaluation of clinical case conceptualization skill acquisition. Therefore, while the findings related to the relationship between academic experiences and increased confidence are significant and add to the field's knowledge regarding this matter, it is important to remember that confidence does not equate skill development. This point is likely further magnified by the fact that the 2016 CACREP Standards do not mention the development of clinical confidence. This makes sense given that the focus of CACREP is skill development rather than confidence development. Although there is a clear distinction in the utility of the development of skill versus confidence, I think it is important to note that when people feel confident and competent they experience less burnout (Swider et al., 2014) which presumably creates increased opportunity to practice case conceptualization as a skill and thus increase said skill.

Although not directly related to skill development, in thinking about the theory of learning clinical case conceptualization in counseling: a preliminary theory of pedagogical intentionality as it relates to the confidence category, it is significant to note the relationship between experiential learning and increase confidence. The data that emerged in this study suggested that when students had opportunities to learn in a manner that allowed them to engage in hands-on experiential learning activities they reported both enjoying the class more (than coursework taught using didactic techniques) and they reported increased confidence in the skill being learned (i.e., clinical case conceptualization). In this way, confidence functioned as an outcome variable of sorts in that successful experiential learning resulted in feelings of increased confidence, as reported by the dissertation's participants.

### **The Theory of Learning Clinical Case Conceptualization in Counseling:**

#### **A Preliminary Theory of Pedagogical Intentionality**

Through the practice of data analysis, a theory of learning clinical case conceptualization emerged. The theory of learning clinical case conceptualization in counseling: A preliminary theory of pedagogical intentionality represents a substantive theory which addresses "everyday-world situations" (Merriam & Tisdell, 2016, p. 31) addressed by clinical mental health practitioners. This theory reflects the relationship between the participants' academic experience, the development of clinical case conceptualization skills, and feelings of confidence. It also highlights the process of change which occurs as CITs move from remembering clinical case conceptualization skills to applying said skills (Pickard, 2007). This theory also reflects the change associated with moving from developing clinical clarity to identifying a diagnosis and



desired treatment outcomes. Therefore, developing an increased understanding of this theory is likely to support counselor educators as they work to prepare students for the practical requirements of real-world situations commonly faced within the counseling discipline.

It is of note that although the emergence of this theory is rooted in the process of learning clinical case conceptualization, the theory itself appears to be a precursor to a theory of pedagogical intentionality. A theory of pedagogical intentionality implies the use of theory-informed instructional techniques that align learning and applied content with instructional outcomes by way of skill development. As a theory of pedagogical intentionality, the theory would serve to represent the relationship between pedagogy, skill development, and confidence. With regard to this dissertation's findings and the theory of learning clinical case conceptualization in counseling: A preliminary theory of pedagogical intentionality, the relationship between academic pedagogy (i.e., experiential learning) and increased confidence in one's clinical case conceptualization skill was developed when students had hands-on opportunities to practice the process of developing clinical clarity regarding their clients' presenting concerns. Ultimately, the emergence of the theory of learning clinical case conceptualization in counseling: A preliminary theory of pedagogical intentionality represents a substantive theory which creates a framework by which to link curricula and instruction to instructional outcomes. Whether explored using clinical case conceptualization, as is the case in the current dissertation, or used to gain a deeper understanding of other academic content, the theory of learning clinical case conceptualization in counseling: A preliminary theory of

pedagogical intentionality ultimately has implications for counselor educators, counseling practitioners, and the counseling profession.

### **Implications of Findings**

#### **Counselor Educator Training Programs for Master-Level Practitioners**

In this study, the participants identified as master-level CITs. The information they shared was based on their experience and has the potential to provide beneficial insight for counselor educators. Participants in this study reported positive experiences associated with learning clinical case conceptualization and high levels of confidence when experiential teaching techniques were utilized, during their classes. Conversely, the opposite is also true. When engaged using primarily didactic teaching strategies, students endorsed having negative learning experiences and low levels of confidence related to learning clinical case conceptualization. In an effort to increase positive feelings related to confidence in clinical case conceptualization skills, counselor educators will likely benefit from creating curricula that aligns with experiential learning techniques. Below are a few techniques that I have anecdotally found helpful as well as techniques that my students have identified (on their end of the semester course evaluations) as helpful or enjoyable.

#### ***Guided Discovery Activities***

Given the findings of this dissertation study and the findings in the literature, it is likely that students will benefit from opportunities to learn clinical case conceptualization using experiential teaching-learning activities. In my experience, I have facilitated this process by creating opportunities for students to actively participate in learning about the conceptualization and diagnostic process. When I have taught this skill in the past, this

process has consisted of utilizing guided discovery activities (i.e., an approach utilized within the Constructivist Pedagogical Framework) in which students worked collaboratively to explore various resources (e.g., the DSM-5, mental health websites, movies, music, social media etc.) in an effort to increase their understanding of mental health terms, the lived experiences of those suffering from mental health concerns, and related concepts. To facilitate this process, I would invite students to work in small groups in which they were given specific mental health related topics (e.g., depression) and asked to research information (e.g., populations impacted, sociocultural considerations, prognosis, treatment interventions etc.) about the topic in class. After researching their specific topic, groups were invited to share what they had learned with their classmates. As the groups shared, students (including those presenting) posed questions about the information found and missing content, as appropriate. This experiential process of guiding students through the process of learning, vetting, and applying knowledge proved to be fruitful in that it allowed students to seek knowledge that was of interest to them thus allowing them to better engage in the process of knowledge assimilation/accommodation, as applicable. In many ways, this process mirrors the activities that practicing clinicians should engage in when working with clients thus simulating a comparable conceptualization process for students, during their academic experience.

Additionally, although this study did not focus on the learning experiences of developing counselor educators (i.e., doctoral-level counseling students), it is likely that doctoral students in counselor education programs would benefit from opportunities to

practice implementing experiential teaching-learning techniques during their academic training (ACES, 2016) as well as during their doctoral internship experiences.

### ***Problem Based Learning Activities***

Counselor educators could utilize an experiential “case study” approach in which each week new details are added to the client’s case. When utilizing this approach in the past, I have created a baseline case study of a factitious “client”, then using a Problem Based Learning approach (i.e., an approach utilized within the Constructivist Pedagogical Framework) I have allowed students to identify the facts associated with the case. After identifying the facts, I encouraged students to hypothesize possible maintaining factors impacting the client’s presenting concern. Students were also challenged to consider additional information they would benefit from knowing regarding the client’s history and/or presenting concern as well as strategies for acquiring said information. Throughout the process of exploring the case and asking questions of their peers and me as their course instructor, my students and I worked collaboratively to identify the students’ thinking patterns related to conceptualizing the client’s presenting concern and linked them to various theoretical underpinnings. Based on each student’s organic predisposition toward a given theoretical orientation, I was frequently able to help students identify their organic theoretical orientation while supporting them in engaging in experiential case conceptualization activities during class. In my experience, this process supported both the development of theoretical awareness and advance the student’s clinical case conceptualization skills. Furthermore, after listening to the students’ discussion, I would then draft a vignette reflecting the “next week’s” treatment session in which the “client” shared “new” (factitious) information thus allowing students

to practice the on-going process of gaining new information and making differential diagnoses. I would repeat this process for multiple weeks until the students were able to confidently rule out diagnoses for which the client did not meet full criteria as well as identify symptom and diagnostic comorbidities associated with the factitious “client’s” presenting concern, thus allowing them to identify the most plausible diagnosis.

### ***Knowledge Development through Collaboration Activities***

As it relates to increasing student’s confidence in their clinical case conceptualization skills, similar to the findings of this study, I have found that students tend to express increased confidence when they have had multiple opportunities to practice clinical case conceptualization in class. To assess this, I typically invite students to share pre-post information regarding their level of confidence associated with engaging in clinical case conceptualization. After getting a sense of how students rate their confidence, I would lead the class in a collective discussion of the preferred learning styles of students in the class. Listening to the feedback from the students, I then created experiential learning opportunities that met the needs of the class population. As a part of this process, I encourage students to share their questions (related to the weekly topic) with me then I structured our course lecture/content based on the topics/questions students would like to further explore. Within my class setting, students have indicated they appreciated both being able to help shape the lecture/discussion each week and engaging in in-class case conceptualization activities.

Given the findings of this study and the emergence of the theory of learning clinical case conceptualization in counseling: A preliminary theory of pedagogical intentionality, it is likely that counselor educators who place increased attention and

intentionality on their pedagogical selection will have both master-level and doctoral-level students who report a stronger understanding of the case conceptualization process.

### **Counselor Educator Training Programs for Doctoral-level Practitioners**

In their research Waalkes et al. (2018) found early career counselor education and supervision educators reported feeling under-prepared to engage in the pedagogical skills required for a career in academia. Although functioning as a nascent theory, the theory of learning clinical case conceptualization in counseling: a preliminary theory of pedagogical intentionality serves to illuminate the field's understanding of the relationship between the classroom experience had by CITs and the development of confidence related to clinical case conceptualization. Understanding this and other relevant pedagogical factors is likely to help doctoral-level counselor education students and early career counselor educators feel increased confidence in their pedagogical knowledge and skills.

Similarly, the findings of this study and the emergence of the theory of learning clinical case conceptualization in counseling: a preliminary theory of pedagogical intentionality may help to inform the direction of future studies exploring pedagogical approaches. In many ways, although this theory's origin is related to the exploration of the case conceptualization construct, it is likely that as a model, this theory could be applied to constructs associated with a plethora of mental health related coursework. Increasing the field's understanding of the types of pedagogical approaches that best suit the counseling discipline and counseling students, both master-level and doctoral-level, is likely to benefit counseling programs and the counseling profession as a whole.

Additionally, although not directly related to the theory of learning clinical case conceptualization in counseling: a preliminary theory of pedagogical intentionality, per se, as we prepare doctoral-level counselor educators to enter academia and teach clinical case conceptualization, it will likely benefit the profession to consider our understanding of the counseling and psychotherapy paradigms we currently use as organizational frameworks (e.g., the organic-medical paradigm; the psychological paradigm; Cottone, 2012, 2017) to shape our understanding of the clinical work of psychotherapist and counselors. Historically, as a profession, we have experienced paradigm-specific (i.e., “theories [which] closely align with a paradigm’s propositions and tenets of practice; Cottone, 2012, p. 106) counseling and psychological frameworks as mutually exclusive (Cottone, 2012). However, during my discussions with this study’s participants, many students described their clinical case conceptualization process in a manner that could potentially be described as aligning with either the cross-paradigmatic (i.e., “contemporary [theories which] attempt to link paradigms”; Cottone, 2012, p. 107) or the trans-paradigmatic (i.e., theories which act as a “bridge between an established way of thinking and an emerging metatheoretical framework”; Cottone, 2012, p. 106) approach.

Despite the mutually exclusive historical context associated with the organic-medical paradigm and the psychological paradigm, participants in this study did not experience the use of paradigm-specific psychological theories (e.g., utilizing their understanding of Cognitive Theory to conceptualize a client’s case) and the paradigm-specific organic-medical theories (e.g., applying Psychiatric Case Management techniques to assign a DSM diagnosis) as mutually exclusive when engaging in clinical case conceptualization. Instead, as depicted in Figure 3, participants described a process

of cyclically and seamlessly (typically occurring without conscious/intentional awareness) vacillating between techniques specific to the psychological paradigm (e.g., applying theoretical understanding to their client's case and their understanding of the DSM criteria) and strategies associated with the organic-medical paradigm (e.g., identifying a DSM diagnosis) then looping back to the psychological paradigm (e.g., utilizing their theoretical understanding of the client's presenting concern and their DSM diagnosis to identify treatment goals). As a function of this process, the students in this study (without conscious awareness) appeared to be attempting to link strategies/techniques from the organic-medical paradigm and the psychological paradigm (i.e., this commonly occurs in cross-paradigmatic approaches). It is however of note that although this study's participants appear to utilize techniques from each of the above listed paradigms, the techniques are being used in a manner that reflects a reduction in purely paradigm-specific practices (i.e., a process commonly found in trans-paradigmatic approaches). In other words, although students describe use of the DSM to provide a diagnosis, they did not provide or suggest medication (which commonly occurs in the organic-medical paradigm) as this would be a clear violation of their scope of practice. Conversely, the use of the DSM as an aid to help them identify a diagnosis from a list of medically determined disorders, does not purely align with the psychological paradigm either. Therefore, although both approaches are being utilized they appear to be enacted in a manner that is less than "pure" and can be seen as more eclectic than integrative.

Additionally, counselor educators may need to more directly address the relationship of theory to diagnosis and how theory enters into the practice of psychiatric case management. Furthermore, how this dissertation's participants described their



experiences related to developing clinical clarity may need to be explicitly explained to students with regard to this dissertation's participants clear attempt to cross the paradigms with the purpose of meeting insurance billing needs and treatment specificity. It will also be important to explain degrees of theory specific alignment or lack thereof to students as well. For example, some counseling approaches don't align with the medical-insurance enterprise (e.g., Person Centered Therapy) whereas others do (e.g., Behavioral Therapy). Students need to be taught how certain approaches lend themselves to the organic-medical framework. As counselor educators, we have a responsibility to prepare students to work in the most rigorous and competitive settings which may involve strict practice of psychiatric case management.

Given the empirical support of this dissertation's findings, it will likely behoove counselor educators and researchers to engage in additional research exploring the case conceptualization process and its alignment or lack thereof with paradigm-specific techniques. Gaining a deeper understanding of how practitioners engage in the process of clinical case conceptualization and where the clinical case conceptualization process falls within the four types of paradigmatic thinking (e.g., paradigm-specific, trans-paradigm, cross-paradigm, and within-paradigm) as well as how the theory of learning clinical case conceptualization in counseling: a preliminary theory of pedagogical intentionality can inform teaching this content will likely benefit counselor educators tasked with teaching clinical case conceptualization, master-level practitioners, doctoral-level counselor education students, and the counseling profession as a whole.

## **Counseling Practitioners and the Counseling Profession**

Within the mental health field, case conceptualization has been identified as a core competency of psychotherapy (ACES, 2016; CACREP, 2009, 2015; Division of Clinical Psychology, 2001; Eells, 2007, MacKinnon & Yudofsky, 1991; Scheiber et al., 2003; Sperry, 2011; Toews, 1993). Additionally, CACREP and the counseling profession have placed a great deal of emphasis on ensuring students learn about clinical case conceptualization, during their coursework experience (CACREP, 2009, 2015). Given the importance of clinical case conceptualization as a skill (John & Segal, 2015), the findings shared by participants in this dissertation stand to offer a significant amount of insight into the experiences students have related to learning to engage in clinical case conceptualization. Therefore, placing increased focus on the strategies used to teach future CITs this skill will likely benefit counselor educators and counseling students. More importantly, intentionally focusing on pedagogical approaches that meet the needs of the counseling student body is sure to positively benefit counseling clients and treatment outcomes. Although the findings of the study will likely benefit counseling students, counselor educators, the counseling profession as a whole and the clients it serves, as with all research there are some limitations to this study.

### **Limitations**

The purpose of this dissertation study was to explore the clinical case conceptualization learning experiences had by master-level Counselors-In-Training (CITs) enrolled in CACREP aligned or CACREP accredited counselor education programs. To accomplish this study's purpose, I used theoretical sampling to interview master-level students who met the study's inclusion criteria. Despite efforts to minimize

the limitations associated with this study, as with all research, this study still has some limitations.

One limitation of this study is related to its participant sample and sample selection. Participants in this study are primarily represented by students who attended a CACREP aligned program (n=6) and reported at least one of the classes where they learned clinical case conceptualization was taught using techniques from the experiential teaching tradition. It is of note that each of the three students in the CACREP accredited program denied having class room engagement consistent with the experiential teaching approach, during their clinical case conceptualization training. It is also of note that 5 of the 6 students in the CACREP aligned program were former students of mine. Therefore, it is possible that upon replication of this study, the learning experiences had by students in varying programs may deviate from those found within this dissertation's participant sample. Additionally, participation in this study was voluntary and self-selected. It is possible that participants in this study chose to participate based on their studious nature and/or their pre-conceived notions associated with clinical case conceptualization. Each of these factors may have influenced the experiences held by students as they learned to engage in clinical case conceptualization and thus impacted this dissertation's findings.

A second limitation of this study is that the majority of the participants identified as cisgender White women. It is possible that individuals with other types of gender identities and racial backgrounds might have differing opinions about their experience learning to engage in clinical case conceptualization skill development.

Finally, as with all qualitative research, the researcher functions as the instrument, therefore, my experiences as a learner, a clinician, and a counselor educator likely helped

to shape my understanding of the data shared by this dissertation's participants.

Consistent with the constructivist grounded theory methodological approach, I engaged in researcher reflexivity which allowed me to be aware of my preconceptions (Charmaz, 2014). Furthermore, endeavors related to establishing trustworthiness and rigor were used to help illuminate my efforts toward conducting a research study that would meet the industry's meticulous standards for research excellence. Nevertheless, in alignment with the constructivist grounded theory tradition, my experience as a co-constructor helped inform theory construction (Charmaz, 2014).

Given the emergence of this substantive theory, the findings of this study greatly add to the extant literature regarding the clinical case conceptualization learning experiences of master-level CITs in CACREP aligned and CACREP accredited programs. However, in thinking about the limitations of this study, it is important to note that although replication is not the goal of qualitative research, it is possible that in the course of attempting to recreate a similar study, each of the limitations listed above has the capacity to alter the reader or user generalizability of similar research studies. To this end, future researchers are encouraged to explore the degree to which the findings of this study are applicable and transferable for studying constructs of interest in their future research.

### **Future Research**

As a natural progression, future research could explore the impact of experiential teaching techniques on additional types of counseling related course content. Utilizing the theory of learning clinical case conceptualization in counseling: a preliminary theory of pedagogical intentionality to explore additional course content would likely add to this

body of research. Furthermore, an analysis using a longitudinal approach that follows CITs into the world of work would also nicely add to this program of research and would likely add findings that align with the initiatives outlined by the ACES Taskforce (2016). In addition to adding to the counseling literature, each of these studies would likely also increase the body of literature found within psychology and education that focuses on the value of experiential teaching and learning practices (APA, 1993; Edward, 2013; Wilson, 1994). Additionally, although this study did not explore the “reflection” (Kolb, 1984) component of experiential teaching and learning, it may also be interesting to gain a deeper understanding of the student experience by having students complete journal/reflection assignments while learning clinical case conceptualization through experiential techniques. It is assumed that adding the reflection component to future studies will likely enhance the study as it is believed that the combination of experience and reflection lead to richer learning opportunities (Kolb, 1984; Loughran, 2002). In addition to the above listed future studies, it is possible that based on my personal experience utilizing experiential teaching strategies, an additional study could be the completion of an autoethnography. Autoethnography is a qualitative research approach in which one’s personal experience is explored and documented in an effort to understand the person’s cultural experience. In thinking about conducting an autoethnographical study, I would likely focus on my development of pedagogy in counselor education and the process of teaching clinical case conceptualization. Finally, many of the study’s participants reported value associated with having a step-by-step or systematic approach for gaining clinical clarity. While there was a great deal of focus placed on having a stepwise process of understanding and organizing the information shared by their clients,

only a handful of participants reported learning a specific step-by-step approach (e.g., 1<sup>st</sup> create a list of the information you know about the client, 2<sup>nd</sup> make hypotheses about the precipitating and maintaining factors etc.) designed to increase their clinical clarity. In the current study, this concept was coded as “step-by-step” process. However, although the data associated with this code was interesting and potentially promising there was not enough data to sufficiently link it to the current research. Nevertheless, a further exploration of potential systematic approaches to organizing client data might also nicely expand the field’s knowledge regarding the process of clinical case conceptualization and it would be in alignment with CACREP Standard (see CACREP Standard 5.C.2.d., 2015). Collectively, each of these potential areas of research will involve the process of helping counselor educators learn how best to serve their students who will in turn serve the larger community.

### **Conclusion**

The process of case conceptualization is represented in a variety of ways (e.g., case formulation, case hypothesis, and psychiatric case management) across the literature. Nevertheless, at its core is the process of gaining a deeper understanding of the client’s presenting concern with the intention of providing support that will help the client live a more effective life. Given the importance of case conceptualization, it is imperative that developing counselors (e.g., CITs) learn to use this skill effectively. Counselor educators play an important role in ensuring developing counselors learn and understand strategies for utilizing the case conceptualization process to understand their clients.

Despite the significant role of counselor educators in supporting CITs in learning this skill, there is a gap in current literature related to counselor education pedagogy and the process of teaching clinical case conceptualization. The primary purpose of this study was to explore the clinical case conceptualization learning experiences of master's-level CITs enrolled in CACREP aligned or CACREP accredited counselor education programs. In order to learn more about the experiences had by CITs, this study utilized a constructivist grounded theory approach for data collection and data analysis. The data that emerged from this study yielded the theory of learning clinical case conceptualization in counseling: a preliminary theory of pedagogical intentionality.

The theory of learning clinical case conceptualization in counseling: a preliminary theory of pedagogical intentionality is a substantive theory which creates a framework by which to link curricula and instruction to instructional outcomes which has implications for counselor educators, counseling practitioners, and the counseling profession as a whole. Based on the information shared by this study's participants, the findings of this study and subsequent studies are likely to increase our understanding of how students learn. Findings of such studies are likely to create opportunities for enhanced pedagogical content knowledge (Lee, 1986) within the field of counselor education and increase our understanding of the initiatives outlined by the ACES 2016 Teaching Initiative Taskforce's best practice indicators.

## References

- Alexander, P. A. (1990). The interplay between domain and general strategy knowledge: Exploring the influence of motivation and situation. In A. Pace (Ed.), *Beyond Prior Knowledge: Issues in Text Processing and Conceptual Change*. Norwood, NJ: Ablex.
- Alexander, P. A., & Knight, S. L. (1993). Dimensions of the interplay between learning and teaching. *Educational Forum*, 57, 232-245.
- Alexander, P. A., Kulikowich, J. M., & Schulze, S. K. (1994b). The influence of topic knowledge, domain knowledge, and interest on the comprehension of scientific exposition. *Learning and Individual Differences*, 6, 379-397.
- Alexander, P. A., & Murphy, P. K. (1998). The research base for APA's learner-centered psychological principles. In N. M. Lambert & B. L. McCombs (Eds.), *How Students Learn: Reforming Schools Through Learner-Centered Education* (pp. 25-60). Washington, DC: American Psychological Association.
- Alexander, P. A., Murphy, P. K., & Woods, B. S. (1997). Unearthing academic roots: Educators' perceptions of the interrelationship of philosophy, psychology, and education. *Educational Forum*, 61, 172-186.
- Alexander, P. A., Schallert, D. L., & Hare, V. C. (1991). Coming to terms: How researchers in learning and literacy talk about knowledge. *Review of Educational Research*, 61, 315-343.
- Ambrose, S. A., Bridges, M. W., DiPietro, M., Lovett, M. C., Norman, M. K. (2010). *How learning works: Seven principles for smart teaching*. San Francisco, CA: John Wiley & Sons, Inc.



- American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders* (5<sup>th</sup> ed.). Arlington, VA: American Psychiatric Association.
- American Psychological Association (2020). APA Dictionary of Psychology. American Psychological Association. <https://dictionary.apa.org/theoretical-orientation>
- American Psychological Association Board of Educational Affairs. (1997). *Learner-Centered Psychological Principles: A Framework for School Reform and Redesign* [Online]. Retrieved from:  
<https://www.apa.org/ed/governance/bea/learner-centered.pdf>
- American Psychological Association Presidential Task Force on Psychology in Education. (1993). *Learn-Centered Psychological Principles: Guidelines for School Redesign and Reform*. Washington, DC: American Psychological Association/Mid-Continent Regional Education Laboratory.
- Ames, C. (1992). Achievement goals and the classroom motivational climate. In D. H. Schunk & J. L. Meece (Eds.), *Student perceptions in the classroom* (pp. 327-348). Hillsdale, NJ: Erlbaum.
- Ames, C., & Ames, R. (Eds.). (1985). *Research on motivation in education: The classroom milieu* (Vol. 2). San Diego, CA: Academic Press.
- Ames, C., & Ames, R. (Eds.). (1989). *Research on motivation in education: The classroom milieu* (Vol. 3). San Diego, CA: Academic Press.
- Apps, J. W. (1989). Foundations for effective teaching. *New Direction for Adult and Continuing Education*, 43, 17-27.
- Aston, R. (2009). A literature review exploring the efficacy of case formulations in

clinical practice. What are the themes and pertinent issues? *The Cognitive Behaviour Therapist*, 2, 63-74. doi: 10.1017/S1754470X09000178.

Atieno, O. P. (2009). Analysis of the strengths and limitation of qualitative and quantitative research paradigms. *Problems of Education in the 21<sup>st</sup> Century*, 13, p 13-18.

Avis, J. M., & Sprenkle, D. H. (1990). Outcome research on family therapy training: A substantive and methodological review. *Journal of Marital and Family Therapy*, 16, 241-264.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (1997). *Self-Efficacy: The exercise of control*. New York, NY: W. H. Freeman.

Barber, J. P. & Crits-Christoph, P. (1993). Advances in measures of psychodynamic formulation. *Journal of Consulting and Clinical Psychology*, 61, 574-585.

Barnes, L. B., Christensen, C. R., & Hansen, A. J. (1994). *Teaching and case method: Text, cases, and reading*. Boston, MA: Harvard Business School Press.

Barrio Minton, C. A., Wachter Morris, C. Yaites, L. D. (2014). Pedagogy in counselor education: A 10-year content analysis of journals. *Counselor Education and Supervision*, 53, 162-177.

Barrio Minton, C. A., Wachter Morris, C. Bruner, S. L. (2018). Pedagogy in counselor education: 2011- 2015 update. *Counselor Education and Supervision*, 57, 227-

- Belgrave, L. L., & Seide, K. (2019). Grounded theory methodology: Principles and practice. In P. Liamputtong (Ed.). *Handbook of research methods in health social sciences* (pp. 299 – 316). Springer Nature. [http://doi.org/10.1007/978-981-10-5251-4\\_84](http://doi.org/10.1007/978-981-10-5251-4_84)
- Ben-Arron, M., & McCormick, W. O. (1980). The teaching of formulation: Facts and deficiencies. *Canadian Journal of Psychiatry*, 25, 163-166.
- Bernard, J. M., & Goodyear, R. K. (2014). *Fundamentals of clinical supervision* (5<sup>th</sup> edition). New York: Pearson.
- Betan, E. J. & Binder, J. L. (2010). Clinical expertise in psychotherapy: How expert therapist use theory in generating case conceptualization and interventions. *Journal of Contemporary Psychotherapy*, 40, 141-152.
- Beutler, L. E. (2000). David and Goliath: When empirical and clinical standards of practice meet. *American Psychologist*, 55, 997-1007. Doi 10.1037//0003-066X.55.9. 997
- Bhat, C. S. (2005). Enhancing counseling gatekeeping with performance appraisal protocols. *International Journal for the Advancement of Counselling*, 27, 399-411.
- Bieling, P. J., & Kuyken, W. (2003). Is cognitive case formulation science or science fiction. *Clinical Psychology: Science and Practice*, 10, 52-69.  
doi:10.1093/clipsy/10.1.52
- Binder, J. L. (1993). Is it time to improve psychotherapy training? *Clinical Psychology Review*, 13, 301-318.

- Borders, L. D., Glossoff, H. L., Welfare, L. E., Hays, D. G., Dekruyf, L., Fernanado, D. M., & Page, B. (2014). Best practices in clinical supervision: Evolution of a counseling specialty. *The Clinical Supervisor, 33*, 26-44.
- Brown, A. L. (1975). The development of memory: Knowing, knowing about knowing, and knowing how to know. In H. W. Reese (Ed.), *Advances in Child Development and Behavior* (Vol. 10, pp. 103-152). San Diego, CA: Academic Press.
- Brown, A. L., & Palincsar, A. S. (1989). Guided, cooperative learning and individual knowledge acquisition. In L. B. Resnick (Ed.), *Knowing, learning, and instruction: Essays in honor of Robert Glaser* (pp. 393-451). Hillsdale, NJ: Erlbaum.
- Bryant, F. B., & Yarnold, P. R. (1995). Principal components analysis and exploratory and confirmatory factor analysis. In L.G. Grimm & P. R. Yarold (Eds.), *Reading and understanding multivariate statistics* (pp. 99-136). Washington, DC: APA Books.
- Burrell, G., & Morgan, G. (1985). *Sociological Paradigms and Organizational Analysis: Elements of the Sociology of Corporate Life*. Routledge.
- Cacioppo, J. T., & Petty, R. E. (1982). The need for cognition. *Journal of Personality and Social Psychology, 42*, 116-131. Doi: 10.1037/0022-3514.42.1.116
- Case, R. (1985). *Intellectual Development: Birth to Adulthood*. San Diego, CA: Academic Press.
- Case, R. (1993). Theories of learning and theories of development. *Educational Psychologist, 28*, 219-233.
- Caspar, F., Berger, T., & Haulte, I., (2004). The right view of your patient: a computer-

assisted, individual module of psychotherapy training. *Psychotherapy: Theory, Research, Practice, Training*, 41, 125-135.

Chadwick, P., Williams, C., & Mackenzie, J. (2003). Impact of case formulation in cognitive behaviour therapy for psychosis. *Behaviour Research and Therapy*, 41, 671-680. doi: 10.1016/S0005-7967(02)00033-5

Charmaz, K. (2014). *Constructing grounded theory*. (2nd ed.). London Sage.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Sage.

Charmaz, K. (2005). *Constructing grounded theory*. (1st ed.). London Sage.

Charmaz, K. (2000a). Constructivist and objectivist grounded theory. In N. K. Denzin and Y. Lincoln (Eds.), *Handbook of qualitative research* (2<sup>nd</sup> ed., pp. 509-535). Sage.

Charmaz, K. (1990). Discovering chronic illness: Using grounded theory. *Social Science and Medicine*, 30, 1161-1172.

Charmaz, K., & Belgrave, L. (2012) Qualitative interviewing and grounded theory analysis. In J. F. Gubrium, J. A. Holstein, A. Marvasti, and K. M. Marvasti (Eds.), *Handbook of interview research* (2<sup>nd</sup> ed., pp. 347-365). Sage.

Chenail, R. J. (2012). Conducting qualitative data analysis: Reading line-by-line, but analyzing by meaningful qualitative units. *The Qualitative Report*, 17(1), 266-269

Cho, J., & Trent, A. (2006). Validity in qualitative research revised. *Qualitative Research*, 6(3), 319-340.

Clarke, V. & Braun, V. (2013). *Successful qualitative research: A practical guide for*

*beginners*. London: Sage.

Collins, W. D., & Messer, S. B. (1991). Extending the plan formulation method to an object relations perspective: Reliability Stability, and adaptability. *Psychological Assessment, 3*, 75-81.

Conaway, S. M. (2003). *Affecting student learning by the design of quality schoolwork* (Doctoral dissertation). Retrieved from <https://www.proquest.com/products-services/dissertations/>. (196523126)

Conti, G. J. (1978). Principals of Adult Learning Scale: An instrument for measuring teacher behavior related to the collaborative teaching-learning mode. (Unpublished doctoral dissertation). Northern Illinois University, IL.

Conti, G. J. (1979). Principles of Adult Learning Scale. Proceedings from *The Adult Education Research Conference*. Ann Arbor, MI.

Conti, G. J. (1982). The Principals of Adult Learning Scale. *Adult Literacy and Basic Education, 6*, 131-147.

Conti, G. J. (1983). Principles of Adult Learning Scale: Follow-up and factor analysis. Proceedings from *The 24<sup>th</sup> Annual Adult Education Research Conference*.

Conti, G. J. (1985a). Assessing teaching style in adult education: How and why. *Lifelong Learning, 8*(8), 7-11, 28.

Corey, M. S., & Corey, G. (2007). *Becoming a helper* (5<sup>th</sup>ed.). Pacific Grove, CA: Brooks and Cole.

Corno, L., & Rohrkemper, M. (1985). The intrinsic motivation to learn in classrooms. In C. Ames & R. Ames (Eds.), *Research on motivation in education: The classroom milieu* (Vol. 2, pp. 53-84) San Diego, CA: Academic Press.

- Cottone, R. R. (2012). *Paradigms of counseling and psychotherapy*. Ebook retrieved from: [www.smashwords.com/books/view/165398](http://www.smashwords.com/books/view/165398)
- Cottone, R. R. (2017). *Theories of Counseling and Psychotherapy: Individual and Relational Approaches*. New York, NY: Springer
- Council for the Accreditation of Counseling and Related Programs [CACREP]. (2009). *2009 CACREP standards*. Retrieved from: <https://www.cacrep.org/wp-content/uploads/2017/07/2009-Standards.pdf>
- Council for the Accreditation of Counseling and Related Programs [CACREP]. (2015). *2016 CACREP standards*. Retrieved from: <http://www.cacrep.org/forprograms/2016-cacrep-standards/>
- Council for the Accreditation of Counseling and Related Programs [CACREP]. (2018). *2019 CACREP vital statistics: Results from a national survey of accredited programs*. Retrieved from: [https://issuu.com/cacrep/docs/2017\\_cacrep\\_vital\\_statistics\\_report?embed\\_cta=read\\_more&embed\\_context=embed&embed\\_domain=www.cacrep.org&embed\\_id=7772143%252F62307493](https://issuu.com/cacrep/docs/2017_cacrep_vital_statistics_report?embed_cta=read_more&embed_context=embed&embed_domain=www.cacrep.org&embed_id=7772143%252F62307493)
- Council for the Accreditation of Counseling and Related Programs [CACREP]. (2019). *About CACREP*. Retrieved from <https://www.cacrep.org/about-cacrep/>
- Council for the Accreditation of Counseling and Related Programs [CACREP]. (nd.). *Student FAQs*. Retrieved from <https://www.cacrep.org>
- Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (3<sup>rd</sup>ed.). Upper Saddle River, NJ. Pearson Education, Inc.

- Crits-Christoph, P., Cooper, A., & Luborsky, L. (1988). The accuracy of therapist's interpretations and the outcome of dynamic psychotherapy. *Journal of Consulting and Clinical Psychology*, 56, 490–495.
- Crotty, M. J. (1998). *Foundations of social research: Meaning and perspective in the research process*. SAGE.
- Csikszentmihalyi, M. (1990). *Flow: The Psychology of Optimal Experience*. Cambridge, England: Cambridge University Press.
- Curtis, J. T., Silberschatz, G., Sampson, H. & Weiss, J. (1994). The plan formulation method. *Psychotherapy Research*, 4, 197-207.
- Davis, B., Sumara, D., & Luce-Kapler, R. (2008). *Engaging Minds*. New York, NY: Routledge.
- Dawes, R. M., Faust, D., & Meehl, P. E. (1989). Clinical versus actuarial judgment. *Science*, 243, 1668-1674. Doi:10.1126/science.2648573.
- de Holanda Coelho, G. L., Hanel, P. H. P., Wolf, L. J. (2018). The very efficient assessment of Need for Cognition: Developing a six-item version. *Assessment*, 1-16.
- Denzin, N. K. (1978). *The research act: A theoretical introduction to sociological methods* (2<sup>nd</sup> ed.). New York: McGraw-Hill.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2005). *The SAGE handbook of qualitative research* (3<sup>rd</sup> ed.). Sage
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2011). *The SAGE handbook of qualitative research* (4<sup>th</sup> ed.). Sage
- Denzin, N. K., & Lincoln, Y. S. (2013). *Collecting and interpreting qualitative materials*



(4<sup>th</sup> ed.). Thousand Oaks, CA: Sage.

Dinges, F. R. (1980). The degree of utilization of the collaborative teaching-learning mode by adult basic education teachers in Illinois (Doctoral dissertation).

Retrieved from Summon.

Dent, C. E., Benson, J. M., Fletcher, J. C., & Reigel, T. M. (1997). How do Americans want to die? A factorial vignette survey of public attitudes about end-of-life medical decision-making. *Social Science Research*, 26, 95-120.

Dewey, J. (1913). *Interest and Effort in Education*. Boston, MA: Riverside.

Dey, I. (1999). *Grounding grounded theory*. Academic Press.

Dillon, R. F. & Schmeck, R. R. (1983). *Individual Differences in Cognition* (Vol. 1). San Diego, CA: Academic Press.

Division of Clinical Psychology (DCP), (2001). *The Core Purpose and Philosophy of the Profession*. Leicester, England: British Psychological Society.

Dobbins, G. H., Farh, J. L., & Werbel, J. D. (1993). The influence of self-monitoring on inflation of grade point averages for research and selection purposes. *Journal of Applied Social Psychology*, 23, 321-334.

Douglass, J. F. (1982). An analysis of the relationship between professional training in adult education and orientation to the teaching-learning mode in Washington State Hospital and the Washington State cooperative extension service (Doctoral dissertation). Retrieved from Summon.

Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review*, 95, 256-273.

Edward, S. E. (2013). *Learner-centered teaching styles: Comparing face-to-face and*

- online adult educations' commitment level*. (Doctoral Dissertation). Retrieved from Summon. (199443354)
- Eells, T. D. (Ed.). (2007). *Handbook of psychotherapy case formulation* (2<sup>nd</sup> ed.). New York, NY: Guilford Press.
- Eells, T. D. (2010). *Handbook of psychotherapy case formulation*. New York, NY: Guilford Press.
- Eells, T. D. (2013). The case formulation approach to psychotherapy research revisited. *Pragmatic Case Studies in Psychotherapy*, 9, 426-447.
- Eells, T. D., Kendjelic, E., & Lucas, C. P. (1998). What's in a case formulation? Development and use of a content coding manual. *Journal of Psychotherapy Practice and Research*, 7, 144-153.
- Elias, S. M., & Loomis, R. J. (2004). Utilizing need for cognition and perceived self-efficacy to predict academic performance. *Journal of Applied Social Psychology*, 34, 1687-1702.
- Elliott, D. L. (1996). The teaching styles of adult educators at the Buckeye leadership workshop as measured by the principles of adult learning scale (Doctoral dissertation). Retrieved from ProQuest Digital Dissertations (AAT 9710558)
- Ennis, R. H. (1985). Critical thinking and the curriculum. *National Forum*, 65, 28-31.
- Ennis, R. H. (1987). A taxonomy of critical thinking dispositions and abilities. In J. B. Baron & R. J. Sternberg (Eds.), *Teaching for Thinking* (pp. 9-26). New York, NY: Freeman.
- Ennis, R. H. (1989). Critical thinking and subject specificity: Clarification and needed research. *Educational Researcher*, 18(3), 4-10.

- Evans, J. & Parry, G. (1996). The impact of reformulation in cognitive-analytic therapy with difficult-to-help clients. *Clinical Psychology & Psychotherapy*, 3, 109-117.
- Eylon, B., & Reif, F. (1984). Effects of knowledge organization on task performance. *Cognition and Instruction*, 1, 5-44.
- Fendt, J., & Sachs, W. (2008). Grounded theory method in management research: Users' perspectives. *Organizational research methods*, 11(3), p. 430-455.
- Flavell, J. H. (1976). Metacognitive aspects of problem solving. *The Nature of Intelligence*, 12, 231-235.
- Flavell, J. H. (1977). *Cognitive Development* (1<sup>st</sup> ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Fleming, J. A., & Patterson, P. C. (1993). The teaching of case formulation in Canada. *Canadian Journal of Psychiatry*, 38, 345-350.
- Flinn, L., Braham, L., & das Nair, R. (2015). How reliable are case formulations? A systematic literature review. *British Journal of Clinical Psychology*, 54, 266-290. doi:10.1111/bjc.12073
- Flitcroft, A., James, I. A., Freeston, M., & Wood-Mitchell, A. (2007). Determining what is important in a good formulation. *Behavioural and Cognitive Psychotherapy*, 35, 325-333. doi:10.1017/S135246580600350X.
- Freeman, A., Pretzer, J., Fleming, B., & Simon, K. M. (1990). *Clinical Applications of Cognitive Therapy*. New York, NY: Plenum Press.
- Fugard, A. J. B. & Potts, H. W. W. (2014). Supporting thinking on sample sizes for thematic analyses: A quantitative tool. *International Journal of Social Research Methodology*, 18(6), 669-684. Doi: 10.1080/13645579.2015.1005453

- Galton, F. (1908). *Memories of My Life*. London: Methuen.
- Garb, H. N. (2005). Clinical judgement and decision making. *Annual Review of Clinical Psychology, 1*, 67-89. doi:10.1146/annurev.clinpsy.1.102803.143810.
- Glaser, B. G., & Strauss, A. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Chicago: Aldine.
- Goldman, B. A., Flake, W. L., & Matheson, M. B. (1990). Accuracy of college students' perceptions of their SAT scores, high school and college grade point average relative to their ability. *Perceptual and Motor Skills, 70*, 514
- Gottfried, A. E. (1985). Academic intrinsic motivation in elementary and junior high school students. *Journal of Educational Psychology, 20*, 205-215.
- Gottfried, A. E. (1990). Academic intrinsic motivation in young elementary school children. *Journal of Educational Psychology, 82*, 525-538.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory*. Aldine
- Grant, J. (2006). Training counselors to work with complex clients: Enhancing emotional responsiveness through experiential methods. *Counselor Education and Supervision, 45*, 218–230.
- Guba, E. G., & Lincoln, Y. S. (2005). Paradigmatic Controversies, Contradictions, and Emerging Confluences. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE Handbook of Qualitative Research* (3<sup>rd</sup> ed., pp. 191-215). Sage.
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough?: An experiment with data saturation and variability. *Sage Journals, 18*(1), 59-82.
- Halbesleben, J. R., & Rathert, C. (2008). Linking physician burnout and patient

outcomes: Exploring the dyadic relationship between physicians and patients.  
*Health Care Manage Rev*, 33(1), 29-39.

Hays, D. G., & Singh, A. A. (2012). *Qualitative inquiry in clinical and educational settings*. The Guilford Press.

Henry, W. P. (1997). Interpersonal case formulation: Describing and explaining interpersonal patterns using the structural analysis of social behavior. In T. D. Eells (Ed.), *Handbook of Psychotherapy Case Formulation* (pp. 223-259). New York, NY: Guilford Press.

Henry, W. P., Strupp, H. H., Butler, S. F., Schacht, T. E., & Binder, J. L. (1993). Effects of training in time-limited psychotherapy: Changes in therapist behavior. *Journal of Consulting and Clinical Psychology*, 61, 434-440.

Heppner, M. J., O'Brien, K. M., Hinkelman, J. M., & Flores, L. Y. (1996). Training counseling psychologists in career development: Are we our own worst enemies? *The Counseling Psychologist*, 24, 105-125.

Herr, K., & Anderson, G. (2015). *The action research dissertation: A guide for students and faculty* (2<sup>nd</sup> ed.). (pp.176-198). Thousand Oaks, CA: Sage.

Hess, A. K. (1986). Growth in supervision: Stages of supervisee and supervisor development. *Supervision and Training: Models, Dilemmas, and Challenges*, 51-67.

Hill, C. E., & Gelso, C. J. (2000). Client concealment and self-presentation in therapy: Comment on Kelly (2000). *Psychology Bulletin*, 126, 495

Hmieleski, K. M., Traver, H. A., & Kalsher, M. J. (2003). Teaching and learning styles in

training and development. *18<sup>th</sup> Annual Society for Industrial and Organizational Psychology (SIOP) Conference Orlando, Florida.*

Holloway, E. L., & Neufeldt, S. A. (1995). Supervision: Its contributions to treatment efficacy. *Journal of Consulting and Clinical Psychology, 63*, 207-213.

Holloway, E. L., & Wolleat, P. L. (1980). Relationship of counselor conceptual level to clinical hypothesis formulation. *Journal of Counseling Psychology, 27*, 539-545.

Horowitz, M. J. (1987). *State of Mind: Configurational Analysis of Individual Psychology*. New York, NY: Plenum Press.

Horowitz, M. J. (1994). Configural analysis and the use of the role-relationship models to understand transference. *Psychotherapy Research, 4*, 184-196.

Horowitz, M. J., & Eells, T. D. (1997). Configurational analysis: States of mind, person schemas, and the control of ideas and affect. In T. D. Eells (Ed.), *Handbook of Psychotherapy Case Formulation*. New York, NY: Guilford Press.

Ingram, B. L. (2006). *Clinical Case Formulations: Matching the Integrative Treatment Plan to the Client*. Hoboken, NJ: John Wiley & Son, Inc.

Jacobson, N. S., Schmalings, K. B., Holtzworth-Munroe, A., Katt, J. L., Wood, L. F., & Follette, V. M. (1989). Research-structured vs. clinically flexible versions of social learning-based marital therapy. *Behavior Research and Therapy, 27*, 173-180.

James, W. (1899). *Talks to teachers on psychology: And to students on some of life's ideals*. New York, NY. Henry Holt and Company.

Jensen, A. R. (1989). The relationship between learning and intelligence. *Learning and Individual Differences, 1*, 37-62.

- John, S., and Segal, D. L. (2015). Case Conceptualization. In R. Cautin, & S. O. Lilienfeld (Eds.), *The Encyclopedia of Clinical Psychology, First Edition* (pp. 1-4). San Francisco, CA: John Wiley & Sons, Inc. DOI: 10.1002/9781118625392.webecp106
- Joyce, A. S., Wolfaardt, U., Sribney, C., & Aylwin, A. S. (2006). Psychotherapy research at the start of the 21st century: The persistence of the art versus science controversy. *Canadian Journal of Psychiatry, 51*, 797-809.
- Karp, D. A. (1996). *Speaking of sadness: Depression, disconnection, and the meaning of illness*. Oxford University Press.
- Kelly, G. (1995). *The psychology of personal constructs: volume two: clinical diagnosis and psychotherapy*. CITY, ST.: Routledge.
- Kendjelic, E. M., & Eells, T. D. (2007). Generic psychotherapy case formulation training improves formulation quality. *Psychotherapy: Theory, Research, Practice, Training, 44*(1), 66-77.
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry, 62*, 593-602.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs.
- Kuhn, T. S. (1970). *The structure of scientific revolutions* (2<sup>nd</sup> ed.). University of Chicago Press.
- Kuyken, W., Fothergill, C. D., Musa, M., & Chadwick, P. (2005). The reliability and

- quality of cognitive case formulation. *Behaviour Research and Therapy*, 43, 1187-1201. doi:10.1016/j.brat.2004.08.007
- Kuyken, W., Padesky, C. A., & Dudley, R. (2008). The science and practice of case conceptualization. *Behavioural and Cognitive Psychotherapy*, 36, 757-768. doi:10.1017/S1352465808004815.
- Lambert, N. M., & McCombs, B. L. (1998). Introduction to learner-centered schools and classrooms as a direction for school reform. In N. M. Lambert and B. L. McCombs (Eds.), *How Students Learn: Reforming Schools Through Learner-Centered Education* (pp. 1-15). Washington, DC: American Psychological Association.
- Larson, L. M. (1998). The social cognitive model of counselor training. *The Counseling Psychologist*, 26, 219–273.
- Larson, L. M., & Daniels, J. A. (1998). Review of the counseling self- efficacy literature. *The Counseling Psychologist*, 26, 179–218.
- Larson, L. M., Suzuki, L. A., Gillespie, K. N., Potenza, M. T., Bechtel, M. A., & Toulouse, A. (1992). Development and validation of the Counseling Self-Estimate Inventory. *Journal of Counseling Psychology*, 39, 105–120.
- Lave, J. (1988). *Cognition in Practice*. Cambridge, England: Cambridge University Press.
- Lazare, A. (1976). The psychiatric examination in the walk-in clinic: Hypothesis generation and hypothesis testing. *Archives of General Psychiatry*, 33, 96-102.
- LeCompte, M. D., & Preissle, J., with Tesch, R. (1993). *Ethnography and qualitative design in educational research* (2<sup>nd</sup> ed.). Academic Press.



- Lee, D. L., & Tracey, T. G. (2008). General and multicultural case conceptualization skills: A cross-sectional analysis of psychotherapy trainees. *Psychotherapy Theory, Research, Practice, Training, 45*(4), 507-522.
- Lee, S. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher, 15*(2), 4-14.
- Lent, R. W., Brown, S. D., & Larkin, K. C. (1984). Relation of self-efficacy expectations to academic achievement and persistence. *Journal of Counseling Psychology, 31*, 356-362.
- Lent, R. W., Hill, C. E., Hoffman, M. A (2003). Developing and validation of the Counselor Activity Self-Efficacy Scales. *Journal of Counseling Psychology, 50*(1), 97-108.
- Levenson, H., & Strupp, H. H. (1997). Cyclical mal-adaptive patterns: Case formulation in time-limited dynamic psychotherapy. In T. D. Eells (Ed.), *Handbook of psychotherapy case formulation*. New York, NY: Guilford Press.
- Lichtman, M.V. (2013). *Qualitative research in education: A user's guide*. Thousand Oaks, CA: Sage.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Thousand Oaks, CA: Sage.
- Lofland, J., and Lofland, L. H. (1984). *Analyzing social settings* (2<sup>nd</sup> ed.). Wadsworth
- Loganbill, C., & Stoltenberg, C. (1983). The case conceptualization format: A training device for practicum. *Counselor Education and Supervision, 22*, 235-242.
- Loughran, J. J. (2002). Effective reflective practice: In search of meaning in learning about teaching. *Journal of Teacher Education, 53*(1), 33-43.
- Luborsky, L. (1997). Core conflictual relationship themes (CCRT): A basic case

- formulation method. In T. D. Eells (Ed.), *Handbook of Psychotherapy Case Formulation*. New York, NY: Guilford Press.
- MacKinnon, R. A., & Yudofsky, S. C. (1991). *The Psychiatric Evaluation in Clinical Practice*. Philadelphia, PA: J. B. Lippincott.
- Malatesta, V. J. (1990). Behavioral case formulation: An experimental assessment study of transient tic disorder. *Journal of Psychopathology and Behavioral Assessment*, *12*, 219-232.
- Malatesta, V. J. (1995a). Case formulation enhances treatment effectiveness. *Behavior Therapist*, *18*, 201–203.
- Malatesta, V. J. (1995b). Technological behavioral therapy for obsessive–compulsive disorder: The need for adequate case formulation. *Behavior Therapist*, *18*, 88–89.
- Maslach, C., & Zimbardo, P. G. (1982). *Burnout: The Cost of Caring*. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Matthews, J. J., Barden, S. M., Sherrell, R. S. (2018). Examining the relationship between multicultural counseling competence, multicultural self-efficacy, and ethnic identity development of practicing counselors. *Journal of Mental Health Counseling*, *40*(2), 139-141.
- McKeachie, W. J. (2003). William James’s Talks to Teachers (1899) and McKeachie’s Teaching Tips (1999). *Teaching of Psychology*, *30*(1), 40-43. Retrieved from: [http://dx.doi.org/10.1207/S15328023TOP3001\\_09](http://dx.doi.org/10.1207/S15328023TOP3001_09)
- McQuiston, H. L., Sowers, W. E., Ranz, J. M., & Feldman, J. M. (Eds.). (2013). *Handbook of Community Psychiatry*. New York, NY: Springer.
- Meier, S. T. (1999). Training the practitioner-scientist: Bridging case conceptualization,

assessment, and intervention. *The Psychologist*, 27, 846-869.

doi:10.1177/0011000099276008.

Merriam S. B. (2009). *Qualitative research: a guide to design and implementation*. San Francisco: Jossey-Bass/Wiley

Merriam, S. B., & Muhamad, M. (2013). Roles traditional healers play in cancer treatment in Malaysia: Implications for health promotion and education. *Asian Pacific Journal of Cancer Prevention*, 14(6), (pp. 3593-3601).

Merriam, S. B., & Tisdell E. J., (2016). *Qualitative Research: A Guide to Design and Implementation*. San Francisco, CA: Jossey-Bass.

Misch, D. A. (2000). Psychosocial formulation training using commercial films. *American Psychiatry*, 24, 99-104.

Morran, D. K., Kurpius, D. J., Brack, G., & Rozecki, T. (1994). Relationship between counselor's clinical hypotheses and client ratings of counselor effectiveness. *Journal of Counseling and Development*, 72(6), 655 – 660.

Murphy, B. (2017). *Psychometric evaluation of the counselor supervision self-efficacy scale* (Doctoral dissertation). Retrieved from <https://irl.umsl.edu/dissertation/717>.

Murphy, P. (2008). Defining pedagogy. In K. Hall, P. Murphy, & J. Soler (Eds.), *Pedagogy and practice: Culture and identities* (pp. 29-39). London: SAGE Publications

Mumma, G. (2011). Validity issues in cognitive behavioral case formulation. *European Journal of Psychological Assessment*, 27(1), 29-49. doi: 10.1027/1015-5759/a000054

National Institute of Mental Health, 2017. Retrieved from:

<https://www.nimh.nih.gov/health/statistics/mental-illness.shtml>

- National Research Council (2000). *How people learn: Brain, mind, experience, and school*. Washington, D.C.: National Academy Press.
- Nelson, M. L., & Neufeldt, S. A. (1998). The pedagogy of counseling: A critical examination. *Counselor Education and Supervision, 38*, 70-88.
- Newman, R. S., & Schwager, M. T. (1992). Student perceptions and academic help-seeking. In D. H. Schunk & J. L. Meece (Eds.), *Student perceptions in the classroom* (pp. 123-148). Hillsdale, NJ: Erlbaum.
- Nezu, A. M., Nezu, C. M., Friedman, S. H., & Haynes, S. H. (1997). Case formulation in behavior therapy: Problem-solving and functional-analysis strategies. In T. D. Eells (Ed.), *Handbook of Psychotherapy Case Formulation*: New York, NY: Guilford Press.
- Nickerson, R. S. (1989). New directions in educational assessment. *Educational Research, 18*(9), 3-7.
- O'Brien, K. M., Heppner, M. J., Flores, L. Y., & Bikos, L. H. (1997). The Career Counseling Self-Efficacy Scale: Instrument development and training applications. *Journal of Counseling Psychology, 44*, 20-31.
- O'Donovan, A., Dyck, M., \* & Bain, J. D. (2000). Trainees' experience of post-graduation clinical training. *Australian Psychologist, 36*, 149-156.
- Orlinsky, D. E., Botermans, J. F., & Ronnestad, M. H. (2001). Towards an empirically grounded model of psychotherapy training: Four thousand therapists rate influences on their development. *Australian Psychologist, 36*, 139-148.
- Osborn, C. J., Dean, E. P., & Petruzzi, M. L. (2004). Use of simulated multidisciplinary

treatment teams and client actors to teach case conceptualization and treatment planning skills. *Counselor Education and Supervision*, 44, 121–134.

- O’Sullivan, M. (2006). Teaching large classes: The international evidence and a discussion of some good practices in Uganda primary schools. *International Journal of Educational Development*, 26(1), 24-37.
- Pain, C. M., Chadwick, P., & Abba, N. (2008). Clients’ experience of case formulation in cognitive behaviour therapy for psychosis. *British Journal of Clinical Psychology*, 47, 127-138. doi: 10.1348/014466507X235962
- Patton, M. Q. (2015). *Qualitative Research and Evaluation Methods* (4<sup>th</sup> ed.). Sage.
- Patton, M. Q. (2002). *Qualitative Research and Evaluation Methods* (3<sup>rd</sup> ed.). Sage.
- Pea, R. D. (1988). Putting knowledge to use. In R. S. Nicherson & P. P. Zodhiates (Eds.), *Technology in Education: Looking Toward 2020* (pp. 162-212). Hillsdale, NJ: Erlbaum.
- Pea, R. D. (1989). Socializing the knowledge transfer problem. *International Journal of Educational Research*, 2, 639-663.
- Perry, J. C. (1994). Assessing psychodynamic patterns using the idiographic conflict formulation method. *Psychotherapy Research*, 4, 239-252.
- Perry, S., Cooper, A. M., & Michaels, R. (1987). The psychodynamic formulation. *American Journal of Psychiatry*, 44, 543-550.
- Persons, J. B. (1992). A case formulation approach to cognitive–behavior therapy: Application to panic disorder. *Psychiatric Annals*, 22, 470–473.
- Persons, J. B. (1993). Case conceptualization in cognitive-behavioral therapy. In K. T.

Kuehlwein & H. Rosen (Eds.), *Cognitive Therapies in Action: Evolving Innovative Practice*. San Francisco, CA: Jossey-Bass.

Persons, J. B. (2012). *The Case Formulation Approach to Cognitive-Behavior Therapy*. New York, NY: Guilford Press.

Persons, J. B. (2013). Who needs a case formulation and why: Clinicians use the case formulation to guide decision-making. *Pragmatic Case Studies in Psychotherapy*, 9, 448-456.

Persons, J. B., & Bertagnolli, A. (1999). Interrater reliability of cognitive-behavioral case formulations of depression: A replication. *Cognitive Therapy & Research*, 23, 271-283. doi:10.1023/A:1018791531158.

Persons, J. B., Bostrom, A., & Bertagnolli, A. (1995). *Clinically significant change in patients treated with cognitive-behavior therapy for depression in a private practice setting*. Paper presented at Society for Psychotherapy Research, Vancouver, British Columbia, Canada.

Persons, J. B., & Tompkins, M. A. (2007). Cognitive-behavioral case formulation. In T. D. Eells (Ed.), *Handbook of psychotherapy case formulation* (pp. 290-316). New York, NY: Guilford Press.

Pearson, T. G. (1980). Managerial philosophy and adult learning principles: Training and development professionals managers of collaborative learning (Doctoral dissertation, Northern Illinois University, 1980). *Dissertation Abstracts International*, 41, 4937A.

Phillips, D. A., & Zimmerman, M. (1990). The developmental course of perceived

- competence and incompetence among competent children. In L. B. Resnick, J. M. Levine, & S. D. Teasley (Eds.), *Perspective on Socially Shared Cognition* (pp. 41-66). New Haven, CT: Yale University Press.
- Pickard, M. J. (2007). The new Bloom's Taxonomy: An overview for family and consumer sciences. *Journal of Family and Consumer Sciences Education*, 25(1), 45-55.
- Pintrich, P. R., Marx, R. W., Boyle, R. A. (1993). Beyond cold conceptual change: The role of motivational beliefs and classroom contextual factors in the process of conceptual change. *Review of Educational Research*, 63, 167-199.
- Pistole, M. C., (2001). Mental Health Counseling: Identity and distinctiveness. *Eric Digest*.
- Plomin, R., & Daniels, D. (1987). Why are children in the same family so different from each other? *The Behavioral and Brain Sciences*, 10, 1-16.
- Plomin, R., & DeFries, J. C. (1985). *Origins of individual differences in infancy*. San Diego, CA: Academic Press.
- Ponterotto, J. G. (2005). Qualitative research in counseling psychology: A primer on research paradigms and philosophies of science. *Journal of Counseling Psychology*, 52, 126-136.
- Preachers, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavioral Research Methods, Instruments, & Computers*, 36(4), 717-731.
- Prevou, M., & Colorado, J. (2003). Simulations in education: Creating an experiential

learning environment. *Proceeding from I/ITSEC: The 24<sup>th</sup> Interservice/Industry Training, Simulation, and Education Conference*, Orlando, FL. Arlington, VA: National Training Systems Association.

Rachelson, J., & Clance, P. R., (1980). Attitudes of psychotherapists toward the 1970 APA standards for psychotherapy training. *Professional Psychologist*, *11*, 261-267.

Redhead, S., Johnstone, L., & Nightingale, J. (2015). Clients' experience of formulation in cognitive behaviour therapy. *Psychology and Psychotherapy: Theory, Research, and Practice*, *88*, 453-467. doi: 10.1111/papt.12054

Reitman, D., Christiansen, H., & Snyder, J. (2008). *Handbook of psychological assessment, case conceptualization, and treatment*. D. Reitman (Ed.). Hoboken, NJ: John & Wiley & Son, Inc.

Remley, T. P., & Herlihy, B. (2020). *Ethical, legal, and professional issues in counseling* (6<sup>th</sup> edition). Pearson

Renninger, K. A. (1992). Individual interest and development: Implications for theory and practice. In K. A. Renninger, S. Hidi, & A. Krapp (Eds.), *The Role of Interest in Learning and Development* ( pp. 361-395). Hillsdale, NJ: Erlbaum.

Resnick, L. B., Levine, J. M., & Teasley, S. D. (1991). *Perspectives on Socially Shared Cognition*. Washington, DC: American Psychological Association

Reynolds, C. R., & Willson, V. L. (Eds.). (1985). *Methodological and Statistical Advances in the Study of Individual Differences*. New York, NY: Plenum.

Richards, L. (2015). *Handling qualitative data* (3<sup>rd</sup> ed.). London: Sage.

Richardson, L., & St. Pierre, E. A. (2005). Writing: A method of inquiry. In N. K. Denzin



- & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (3rd ed.). (pp. 959-978). Thousand Oaks, CA: Sage.
- Rogers, G. M., Reinecke, M. A., & Curry, J. F. (2005). Case Formulation in TADS CBT. *Cognitive and Behavioral Practice, 12*, 198-208.
- Rogoff, B. (1990). *Apprenticeship in Thinking: Cognitive Development in Social Context*. New York, NY: Oxford University Press.
- Ronnestad, M. H., & Ladany, N. (2006). The impact of psychotherapy training: Introduction to the special section. *Psychotherapy Research, 16*, 261-267.
- Ross, C. A., Leichner, P., Matas, M., & Anderson, D. (1990). A method of teaching and evaluating psychiatric case formulation. *Academic Psychiatry, 14*, 99-105.
- Rossi, P. H., & Nock, S. L. (1982). *Measuring Social Judgement*. Beverley Hills, CA: Sage Publications.
- Sangganjanavanich, V. F. (2015). Overview of professional counseling. In R. Parsons & N. Schacht, T. E., & Henry, W. P. (1994). Modeling recurrent patterns of interpersonal relationship with structural analysis of social behavior: The SASB-CMP. *Psychotherapy Research, 4*, 208-221.
- Schacht, T. E., & Henry, W. P. (1994). Modeling recurrent patterns of interpersonal relationship with structural analysis of social behavior: The SASB-CMP. *Psychotherapy Research, 4*, 208-221.
- Scheiber, S. C., Kramer, T. A. M., & Adamowski, S. E. (Eds.). (2003). *Core Competencies for Psychiatric Practice: What Clinicians Need to Know*. Arlington, VA: American Psychiatric Publishing.
- Schiefele, U., & Csikszentmihalyi, M. (1994). Interest and the quality of experience in

- classrooms. *European Journal of Psychology of Education*, 9, 251-270.
- Schiefele, U., & csikszentmihalyi, M. (1995). Motivation and ability in mathematics experience and achievement. *Journal for Research in Mathematics Education*, 26, 163-181.
- Schreck, C. M., Weilbach, J. T., Reitsma, G. M. (2020). Improving graduate attributes by implementing an experiential learning teaching approach: A case study in recreation education. *Journal of Hospitality, Leisure, Sport, and Tourism Education*, 26.
- Scott, W., Williams, J. M. G., & Beck, A. T. (1989). *Cognitive therapy in clinical practice*. New York, NY: Routledge.
- Seevers, B. S. (1991). Factors related to teaching style preferences of Ohio cooperative extension faculty and program staff (Doctoral dissertation). Retrieved from ProQuest Digital Dissertations. (AAT 9130552)
- Seiler, G., & Messina, J. J. (1979). Toward professional identity: The dimension of mental health counseling in perspective. *American Mental Health Counselors Journal*, 1, 3-8.
- Shrauger, J. S., & Schohn, M. (1995). Self-confidence in college students: Conceptualization measurement, and behavioral implications. *Assessment*, 2, 255-278.
- Shulman, G. (2018). *The development of case conceptualization ability in clinical psychology graduate students* (Doctoral dissertation). Retrieved from <http://digitalcommons.unl.edu/psychdiss/105>.
- Silberschatz, G., Fretter, P. B., & Curtis, J. T. (1986). How do interpretations influence

the process of therapy? *Journal of Consulting and Clinical Psychology*, 54, 646–652.

Sim, K., Gwee, K. P., Bateman, A. (2005). Case formulation in psychotherapy:

Revitalizing its usefulness as a clinical tool. *Academic Psychiatry*, 29(3), 289-292.

Skovholt, T. M., & Ronnestad, M. H. (1995). *The evolving professional self: Stages and Themes in therapist and counselor development*. Chichester, England: Wiley

Slawewski, B. (2018). Paradigms in qualitative research. In M. Ciesielska, & D. Jemielniak (Eds.), *Qualitative methodologies in organization studies* (pp. 7-26). Springer Nature

Soriano, F. I. (1995). *Conducting Need Assessments: A Multidisciplinary Approach*. Thousand Oaks, Ca: Sage.

Soto, G. R. (2018). *A needs assessment: Identifying the skill set graduate students need to successfully transition into the department of mental health/psychiatric social work* (Masters Thesis). Retrieved from Summon.

Sperry, L. (2005). Case Conceptualization: The missing link between theory and practice. *The Family Journal*, 13, 17-76. doi:10.1177/106648070427014.

Sperry, L. (2010). *Highly effective therapy: Developing essential clinical competencies in counseling and psychotherapy*. New York, NY: Routledge

Sperry, L. (2011) Core competencies in counseling and psychotherapy: Becoming a highly competent and effective therapist.

Sperry, L. (2013). Family case conceptualization and medical conditions. *The Family Journal*, 21(1), 95-98. doi: [10.1177/1066480712458499](https://doi.org/10.1177/1066480712458499)

Sperry, L., Gudeman, J., Blackwell, B., & Falkner, L. R. (1992). *Psychiatric case*

*formulations*. Washington, DC: APA Press.

Sperry, L. & Sperry, J. (2012). *Case conceptualization: Mastering this competency with ease and confidence*. New York, NY: Routledge.

Spoon, J. C., & Schell, J. W. (1998). Aligning student learning styles with instructor teaching styles. *Journal of Industrial Teaching Education*, 35(2), 41-45.

Stamm, B. H. (2010). *The concise ProQOL manual, 2<sup>nd</sup> Ed.* Pocatello, ID: ProQOL.org

Strauss, A. C. (1987). *Qualitative analysis for social scientist*. Cambridge University Press.

Strauss, A.C. & Corbin, J.M. (1998). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory* (2<sup>nd</sup> ed.). Los Angeles, CA: Sage.

Strauss, A.C. & Corbin, J.M. (1990). *Basic of qualitative research: Grounded theory procedures and technique*. Sage

Strupp, H. H., & Anderson, T. (1997). On the limitations of treatment manuals. *Clinical Psychology: Science and Practice*, 4, 76-82.

Strupp, H. H., & Binder, J. L. (1984). *Psychotherapy in a new key: A guide to time limited dynamic psychotherapy*. New York, NY: Basic Books.

Sturmey, P. (2009). *Clinical Case Formulation: Varieties of Approaches*. Hoboken, NJ: John Wiley & Sons, Ltd.

Swider, B. B., & Zimmerman, R. D. (2014). Prior and future withdrawal and performance: A meta-analysis of their relations in panel studies. *Journal Of Vocational Behavior*, 84(3), 225-236. doi:10.1016/j.jvb.2014.01.004

Tabachnick, B. G., & Fidell, L. S. (2019). *Using Multivariate Statistics* (7<sup>th</sup> ed.). New York, NY: Pearson.

- Tarrier, N., & Calam, R. (2002). New developments in cognitive-behavioural case formulation. Epidemiological, systemic, and social context: An integrative approach. *Behavioural and Cognitive Psychotherapy*, 30(3), 311-328.
- Taylor, B. J. (2005). Factorial survey: Using vignettes to study professional judgement. *British Journal of Social Work*, 36, 1187-1207.
- Textor, P. M. (1989). Family therapy: Schoolism and eclecticism. *Indian Journal of Psychological Medicine*, 121, 9-12.
- Teyber, E. (1992). *Interpersonal process in psychotherapy: A guide for clinical training*. Pacific Grove, CA: Brooks/Cole.
- Tran, Q. D. C. & Henriksen, R. C. (2016). Transition from academic to clinical practice. *In Ideas and research you can use: VISTAS 2016*. Retrieved from <http://www.counseling.org/knowledge-center/vistas>
- Trimble, M., & George, M. S. (2010). *Biological psychiatry* (3<sup>rd</sup> ed.). West Sussex, England: Wiley.
- Toews, J. A. (1993). Case formulation in psychiatry: Revitalizing an ailing art. *Canadian Journal of psychiatry*, 38, 344.
- Tufekcioglu, S., & Muran, J. C. (2015). Case formulation and the therapeutic relationship: The role of therapist self-reflection and self-revelation. *Journal of Clinical Psychology*, 71, 469-477. doi:10.1002/jclp.22183.
- Turkat, I. D. (1987). Invited case transcript the initial clinical hypothesis. *Journal of Behavior Therapy & Experimental Psychiatry*, 18(4), 349-356.
- United States Department of Labor: Bureau of Labor Statistics. (2018). Retrieved from:

<https://www.bls.gov/ooh/community-and-social-service/substance-abuse-behavioral-disorder-and-mental-health-counselors.htm>

- Vavrus, F. (2009). The cultural politics of constructivist pedagogies: Teaching education reform in the United Republic of Tanzania. *International Journal of Educational Development, 29* (3), 303-311.
- Vogt, W. P. (1999). *Dictionary of statistics and methodology; A nontechnical guide for the social sciences*(2<sup>nd</sup>ed.). Thousand Oaks, CA: Sage.
- Vygotsky, L. S. (1978). *Mind in society: The development of the higher psychological processes*. Cambridge, MA: The Harvard University Press (Originally published 1930, New York, NY: Oxford University Press.).
- Westbrook, J., Durrani, N., Brown, R., Orr, D., Pryor, J., Boddy, J., & Salvi, F. (2013). Pedagogy, curriculum, teaching practices and teacher education in developing countries. Education rigorous literature review. Department for International Development.
- Westmeyer, H. (2003). On the structure of case formulations. *European Journal of Psychological Assessment, 19*, 210-216. doi:10.1027//1015-5759.19.3.210.
- White, M. B., & Russell, C. S. (1995). The essential elements of supervisory systems: A modified Delphi study. *Journal of Marital and Family Therapy, 21*, 33-53.
- Wilson, G. T. (1996). Manual-based treatment: The clinical application of research findings. *Behaviour Research and Therapy, 34*, 295-314. doi:10.1016/0005-7967(95)00084-4.
- Wilson, G. T. (1997). Treatment manuals in clinical practice. *Behaviour Research and Therapy, 35*, 205-210. doi:10.1016/S0005-7967(96)00091-5.

- Wilson, N. (1994). *A study of the extent to which the instructional practices of teachers of adult differ from the instructional preferences of adult learners enrolled in post-secondary credit course*. (Doctoral Dissertation). Retrieved from Summon. (199444202).
- Wolpe, J., & Turkat, I. D. (1985). Behavioral formulation of clinical cases. In I.D. Turkat (Ed.), *Behavioral case formulation* (pp. 5-36). New York, NY: Plenum Press.
- Wright, J. H., Basco, M. R., & Thase, M. E., (2003). *Learning cognitive-behavioral therapy: An illustrated guide*. Arlington, VA: Americana Psychiatric Publishing, Inc.

## **Appendix A**

### **Screening Questions/Inclusion Criteria**

1. Are you at least 18 years old
2. Do you identify as a master-level counseling student (e.g., Counselor-in-Training [CIT]) enrolled in a CACREP accredited or CACREP aligned counseling program?
3. Have you completed at least one course in psychopathology and diagnosis (e.g., a course where you learned to use the Diagnostic and Statistical Manual of Mental Disorders [DSM] or the International Classification of Disease [ICD])?
4. Have you completed at least one practicum experience course?



## Appendix B

### Demographic Questionnaire Items

#### Age

- 18-25
- 26-35
- 36-45
- 46-55
- 56+
- Prefer not to answer

#### Gender

- Male
- Female
- Transgender
- Queer
- Gender Non-Conforming
- If not listed above, please describe your gender {Text Box}
- Prefer not to answer

#### Race/Ethnicity (please check all that apply)

- African American/Black
- Asian/ Asian American
- Caucasian/White
- Hawaiian/Pacific Islander
- Hispanic/Latino

- Native American
- Multiracial
- If not listed above, please describe your race/ethnicity {Text Box}
- Prefer not to answer

Highest level of education completed?

- Bachelor of Arts (BA degree)
- Bachelor of Science (BS degree)
- Bachelor of Fine Arts (BFA degree)
- Other {Text Box}

In reference to the degree you listed above, what was your area of specialization (e.g., Psychology; Social Work; Human Services)?

- Other {Text Box}

Are you currently enrolled in an internship experience course?

- Yes/No

Have you completed the internship experience course requirements expected of your counseling program?

- Yes/No

How many classes have you taken where you had to actively use the DSM?

- {numbers 1 - 5}

How many classes have you taken where you had to actively use the ICD?

- {numbers 1 - 5}

My first psychopathology and diagnosis class (DSM or ICD classes) was taught:

- In-person
- (e.g., you met with your classmates and professor in real-time in a classroom environment)
- Online using an asynchronous format (e.g., you did not meet with your classmates and professor in real-time)
- Online using a synchronous format (e.g., you met with your classmates and professor in real-time via Zoom or another video conferencing platform)
- Not applicable

Note: Three options will be provided (with the second word in the sentence reflecting the class sequence) in order for participants to share information about each class

My first practicum class was taught:

- In-person (e.g., you met with your classmates and professor in real-time in a classroom environment)
- Online using an asynchronous format (e.g., you did not meet with your classmates and professor in real-time)
- Online using a synchronous format (e.g., you met with your classmates and professor in real-time via Zoom or another video conferencing platform)
- Not applicable

Note: Two options will be provided (with the second word in the sentence reflecting the class sequence) in order for participants to share information about each class

My first internship class was taught:

- In-person (e.g., you met with your classmates and professor in real-time in a classroom environment)
- Online using an asynchronous format (e.g., you did not meet with your classmates and professor in real-time)
- Online using a synchronous format (e.g., you met with your classmates and professor in real-time via Zoom or another video conferencing platform)
- Not applicable

Note: Two options will be provided (with the second word in the sentence reflecting the class sequence) in order for participants to share information about each class

In what region is the school where you did your coursework?

- New England
- Mid-Atlantic
- Southeast
- Midwest
- The Rocky Mountains
- Southwest
- Pacific Coastal

Please select the options that best reflects your counseling program's current CACREP accreditation status.

- CACREP accredited
- CACREP aligned
- I don't know

Please provide your preferred email address to be contacted for additional information about this study

- {text box}

## Appendix C

### Interview Guide Questions

1. Based on your understanding, what is the purpose of clinical case conceptualization?
  - a. Possible probing questions:
  - b. What role does clinical case conceptualization play in diagnosing a client and treatment planning?
  - c. What role does theory play in diagnosing a client and treatment planning?
2. How did you learn to engage in clinical case conceptualization?
  - a. Possible probing questions:
  - b. What helped you to learn how to do the skill?
  - c. Could you tell me about your thoughts and feelings when you were learning how to engage in a clinical case conceptualization?
  - d. Tell me about your class experiences related to learning to engage in and apply the process of clinical case conceptualization.
3. What was it like for you to complete your first clinical case conceptualization?
  - a. Possible probing questions:
  - b. If you recall, what were you thinking then?
  - c. How did you go about completing the task?
  - d. Who if anyone helped you to complete the task?
    - i. How did they help you?
  - e. Can you describe the most important lesson you learned from engaging in your first clinical case conceptualization?

4. Based on how you learned to engage in clinical case conceptualization, how confident do you feel in your current ability to effectively use clinical case conceptualization as a skill to understand a client's presenting problem?
5. Is there something else about your experience or feelings related to learning and applying case conceptualization that you would like me to know?
6. Is there anything you would like to ask me?

## **Appendix D**

### **Transcription Rules**

Transcripts will be labeled in the following way:

Interview Date:

Interview Time:

Interview Location:

Length of Interview:

Transcriber:

Interviewer:

Interviewee:

Brief description of the setting:

Codebook Reference:

General instructions:

The transcriber shall transcribe all individual interviews using the following formatting:

- Times New Roman 12-point face-font
- One-inch top, bottom, right, and left margins



## Appendix E

### Informed Consent



#### Department of Education Sciences and Professional Programs

One University Blvd.  
St. Louis, Missouri 63121-4499  
Telephone: 314-516-4970  
Fax: 314-516-5784  
E-mail: [coxandr@umsl.edu](mailto:coxandr@umsl.edu)

#### Informed Consent for Participation in Research Activities

Clinical Case Conceptualization Skill Development and Counseling Pedagogy

Participant \_\_\_\_\_ HSC Approval Number \_\_\_\_\_

Principal Investigator \_\_\_\_\_ PI's Phone Number \_\_\_\_\_

---

1. You are invited to participate in a research study conducted by Andrea Cox. The purpose of this research is to understand the experiences and feelings that Counselors-In-Training (CITs) have related to developing clinical case conceptualization skills.
2. a) Your participation will involve:
  - Completion of a questionnaire that includes inclusion requirements for this study and your demographic information
  - At least one video and audio-recorded interview and review of your interview's transcription for accuracy.
  - Optional additional video and audio-recorded interviews
  - Optional participant check-ins via a questionnaire

Approximately 9-12 participants may be involved in this research.

b) The amount of time required for your participation will be about 45-75 minutes. This will include participation in an initial interview and review of your initial interview transcription to assess its accuracy. You may also have optional opportunities for additional interviews and participant check-ins ranging from 15-60 minutes each. If you participate in this project you will receive \$5 per interview and participant check in with a maximum total compensation of \$30. Compensation will be provided in the form of a gift card that will be emailed to you after the final interview and member check have been completed.

3. There are no anticipated risks associated with this research.
4. There are no direct benefits for you participating in this study. However, your participation will contribute to knowledge about clinical case conceptualization skill development and may help counselor educators increase their understanding of how best to support the development of this skill.
5. Your participation is voluntary and you may choose not to participate in this research study or to withdraw your consent at any time. If you want to withdraw from the study, you can contact me at: 314-384-6798. You may choose not to answer any questions that you do not want to answer. You will NOT be penalized in any way should you choose not to participate or to withdraw from this study.
6. By agreeing to participate, you understand and agree that your data may be shared with other researchers and educators in the form of presentations and/or publications. In all cases, your identity will not be revealed. In rare instances, a researcher's study must undergo an audit or program evaluation by an oversight agency (such as the Office for Human Research Protection). That agency would be required to maintain the confidentiality of your data. In addition, all data will be stored on a password-protected computer and/or in a locked office.
7. If you have any questions or concerns regarding this study, or if any problems arise, you may call the Investigator, Andrea Cox 314-384-6798 or the Faculty Advisor, Dr. R. Rocco Cottone, at 314.516.6094. You may also ask questions or state concerns regarding your rights as a research participant to the Office of Research Administration, at 314-516-5897.

**I have read this consent form and have been given the opportunity to ask questions. I will also be given a copy of this consent form for my records. I consent to my participation in the research described above.**

\_\_\_\_\_  
Participant's Signature                      Date

\_\_\_\_\_  
Participant's Printed Name

\_\_\_\_\_  
Signature of Investigator or Designee    Date

\_\_\_\_\_  
Investigator/Designee Printed Name

## Appendix F

### Personal Acquaintance Invite

Greetings!

My name is Andrea Cox, and I am a doctoral candidate in the Department of Education Science and Professional Programs at the University of Missouri – St. Louis. I am in the process of collecting data for my dissertation under the advisement of Dr. R. Rocco Cottone. The purpose of my research is to explore the clinical case conceptualization learning experiences had by Counselors-In-Training (CITs).

I am contacting you regarding our previous conversation related to your willingness to forward the following information to any and all students in your program who meet my study's participation criteria. I am seeking to interview master-level counseling students enrolled in a CACREP accredited or CACREP aligned program who have completed a course in psychopathology and diagnosis as well as practicum.

Participation in this study will require that students engage in at least one 45-60 minute interview and a 15 minute review of their initial interview transcription to assess its accuracy. Although not required for participation, students may also be invited to participate in optional follow-up interviews or participant check-ins throughout the process of data collection. If students choose to participate in an initial follow-up interview, the follow-up interview will range from 20-60 minutes. After participating in the first follow up interview, students will be invited to indicate whether they would like to participate in additional follow-up interviews or participant check-in opportunities. Additional follow-up interviews will also range from 20-60 minutes. Participant check-ins will range from 10-20 minutes and will be conducted via survey. Students will receive \$5 per interview and participant check-in with a maximum total compensation of \$30 per participant. Compensation will be provided in the form of a gift card that will be emailed to participants after the final interview and member check have been completed. Students in your program are eligible for participation if they meet the following criteria.

Students are eligible to participate in this study if they are at least 18 years old, identify as a master-level counseling student (e.g., Counselor-in-Training [CIT]) enrolled in a CACREP accredited or CACREP aligned counseling program, have completed at least one course in psychopathology and diagnosis, and have completed at least one practicum experience course.

For those interested in participating in this study, they will click on the following link \_\_\_\_\_ which will take them to the study's survey. The first page of the survey will reflect the participant consent form. Participants will be invited to read the consent form and click "continue" to consent to participation. Participants will then be invited to answer questions regarding the study's inclusion requirements and participant demographic information. Upon completion of the survey, the participant will be invited to provide their preferred email address to be contacted for inclusion in the study.

This research has been approved by the Institutional Review Board for protection of human subjects at the University of Missouri – St. Louis #XXXXXXXX-X.

Please feel free to forward this email announcement to eligible students and relevant listservs. Should you have any questions, please contact me ([andrea.cox@mobap.edu](mailto:andrea.cox@mobap.edu)) or my doctoral advisor, Dr. R. Rocco Cottone, ([cottone@umsl.edu](mailto:cottone@umsl.edu)).

Thank you in advance for your help with my dissertation study! I appreciate your willingness to take the time to forward this study's invitation. By forwarding my announcement, you are aiding in my efforts to contribute to our knowledge of counselor education. Thank you.

Sincerely,

Andrea R. Cox, M.Ed., LPC

Doctoral Candidate, Department of Education Science and Professional Programs

University of Missouri – St. Louis

[andrea.cox@mobap.edu](mailto:andrea.cox@mobap.edu)

314-384-6798

## Appendix G

### Social Media Invite

Greetings!

My name is Andrea Cox, and I am a doctoral candidate in the Department of Education Science and Professional Programs at the University of Missouri – St. Louis. I am in the process of collecting data for my dissertation under the advisement of Dr. R. Rocco Cottone.

I would like to invite you to participate in my study which seeks to understand student's thoughts and feelings about their experience as learners. The purpose of my research is to explore the clinical case conceptualization learning experiences had by Counselors-In-Training (CITs).

You are eligible to participate in this study if you are at least 18 years old, identify as a master-level counseling student (e.g., Counselor-in-Training [CIT]) enrolled in a CACREP accredited or CACREP aligned counseling program, have completed at least one course in psychopathology and diagnosis, and have completed at least one practicum experience course.

Participation in this study will require that you engage in at least one 45-60 minute interview and a 15 minute review of your initial interview transcription to assess its accuracy. Although not required for participation, you may also be invited to participate in optional follow-up interviews or participant check-ins throughout the process of data collection. If you choose to participate in an initial follow-up interview, the follow-up interview will range from 20-60 minutes. After participating in the first follow up interview, you will be invited to indicate whether you would like to participate in additional follow-up interviews or participant check-in opportunities. Additional follow-up interviews will also range from 20-60 minutes. Participant check-ins will range from 10-20 minutes and will be conducted via survey. You will receive \$5 per interview and participant check-in with a maximum total compensation of \$30. Compensation will be provided in the form of a gift card that will be emailed to you after the final interview and member check have been completed.

If you are interested in participating in this study, please click on the following link \_\_\_\_ . It will take you to the study's survey. The first page of the survey will reflect the participant consent form. You are invited to read the consent form and click "continue" to consent to participation. You will then be invited to answer questions regarding the study's inclusion requirements and to provide your demographic information. Upon completion of the survey, you will be invited to provide your preferred email address to be contacted for inclusion in the study.

This research has been approved by the Institutional Review Board for protection of human subjects at the University of Missouri – St. Louis #XXXXXXXX-X.

Please feel free to forward this email announcement to eligible friends, classmates, and relevant listservs. Should you have any questions, please contact me ([andrea.cox@mobap.edu](mailto:andrea.cox@mobap.edu)) or my doctoral advisor, Dr. R. Rocco Cottone, ([cottone@umsl.edu](mailto:cottone@umsl.edu)).

Thank you in advance for your help with this project! By participating, you are contributing to our knowledge of counselor education. I appreciate your willingness to use your time to help our profession better understand the crucial role of counseling instructors. Thank you.

Sincerely,

Andrea R. Cox, M.Ed., LPC

Doctoral Candidate, Department of Education Science and Professional Programs

University of Missouri – St. Louis

[andrea.cox@mobap.edu](mailto:andrea.cox@mobap.edu)

314-384-6798

## Appendix H

### Theoretical Categories

Theoretical Categories	Focused Code
Academic Experience	Didactic Learning Experiential Learning Collaborative learning (working in groups) Peer-mentorship Instructor-mentorship
Clinical Clarity	Case Conceptualization is an ongoing process Comorbidity Diagnosing Differential Diagnosis Intentionally thinking about case conceptualization Practical application of theory is difficult Step-by-Step process The DSM is extremely specific The DSM is important in case conceptualization The DSM provides tangible/observable anchors The DSM requires clinical judgment Theories are complex Theory is important in case conceptualization Theory is philosophical Understanding comorbidities Understanding the clinical picture Understanding differential diagnosis and comorbidity helps avoid misdiagnosis Understanding the importance of treatment planning Using the DSM to diagnose Using the DSM criteria and theory to support client needs Using theory to diagnose Using theory to understand the clinical picture Using theory to create a treatment plan Using the DSM to create a treatment plan
Confidence	Confidence Lack of confidence Feeling frustrated Feeling underprepared

## Appendix I

### Codebook

#### Category 1: Academic Experience

Subcategory	Data
Learning Content	
	Just listening um not helpful (Ash1 204-206)
	Some of our textbooks just hadn't been helpful (Ash1 209)
	As far as actually using it, the knowledge that I just learned from that to write not. I don't think I would have even understood really where to look in the DSM five (Ash1 225-226)
	Just talking about it, like just looking at different diagnosis diagnoses (Ash1 233)
	there was the mental health assessment and he printed it out and gave it to us and said practice this with your partner. And I said, can we see you practice this first because I don't know what this is like he's like well just just practice it and then we'll kind of like debrief afterwards (Jay1 209-210)
	why are we taking 20 minutes to do something. Probably wrong to then debrief and learn it the right way, like why don't we see it in action so, then we can at least have something to like you know we've seen a model we kind of understand how it goes (Jay1 221-212)
	and that's what I my that's my takeaway of mental health assessment and so now, I have to do three of them for field experience and I haven't done them yet (Jay1 213)
	it's like hey guys we're gonna go Bowling today, I hope you win and then I expect you to win, but then we're going to tell you the rules and the scoring afterwards (Jay1 215)
	I should own some of that perhaps you know, like I as a graduate student I should probably putting in a lot of time to study and research everything on my own I maybe actually come to class knowing how to do a mental health assessment versus expecting to learn it but that was not what I did (Jay1 217-218)
	I would expect kind of that you (the student) would familiarize yourself with things, come into the class, and then expand upon what's going on, and I think where that goes wrong is if my only knowledge is what I learned in the book. Then I can't expand on it when I'm presenting it to my peers (Jay1 221-224)



	like I could listen to, I could read (the) book and then listen to (the professor) lecture and I have it's fascinating because we're actually digging in there, but to listen to you know Susie Allen down the street, who just read the book, the same amount of time that I read the book but she went to a different website that's just not as engaged (Jay1 227-228)
	I do think that the instructor is uniquely equipped to provide more information than the students (Jay1 232)
	you know really focusing on making it a practical usage of the DSM versus just here's an overview (Jay1 353)
	The first way was just going over the DSM 5 and learn about the different criteria and then taking what I learned about the criteria or what I've learned or the criteria and then applying what I know to looking for those behavior patterns in a case in a case conceptualization so for example, like I learned about autism, so I learned the criteria of autism, and then I was presented a case, and then I had to look for signs or behaviors that meet the criteria for autism (SH1 78-80)
	It was like this is the information now look for it (SH1 83)
	It was the Okay, we learned about these two diagnosis and i'm going to give you a case conceptualization you're gonna tell me which diagnosis (SH1 115)
	We basically just talked about those what that looks like the criteria and he explained in depth like the certain criteria points like ABC and D and what that looks like and then (as a quiz) he gave us a case and out of the four we may have talked about he would give us a case and we had to pick which case or which yeah which diagnosis, was it out of the four (SH1 197-198)
	We really learned just the disorders and their symptomology, so it wasn't like we learned how to diagnose (HHJ1 118)
	I wouldn't call it, you know now that I look back on it, the class wasn't really focused on diagnosis, it was more focused on the DSM and then and on the disorders (HHJ1 120-121)
	we definitely practiced a lot memorizing the die, the criteria (AM1 72)
	A PowerPoint and my teacher He always is very I mean, to be honest i've really mainly had two teachers, for most of my my schooling and both of them are very like giving you an example of what this would look like, which is wonderful, because that's how I learned (AM1 75-77)
	I mean giving us an example of what that would look like and then us asking questions like tons of questions I feel like about that, and how like that works in life and how it affects

	their life and all that kind of stuff and we would watch like movie clips (AM1 79-80)
	Just listening um not helpful (Ash1 204-206)
	Some of our textbooks just hadn't been helpful (Ash1 209)
	As far as actually using it, the knowledge that I just learned from that to write not. I don't think I would have even understood really where to look in the DSM five (Ash1 225-226)
	You can make me read the textbook and it's not going to stick (SugarLips2 57)
	I really enjoyed about that class was that it broke down each section of the DSM and um we studied, each week we studied (SugarLips1 50)
	I love that the she broke down the the diagnoses into sections so like A through of the criteria were the things your client needed but then down here below if it's not, your client should not have these, and that hadn't been explained to us before (SugarLips1 56)
	I don't ever remember going through piece by piece of the DSM and and somebody just sitting down and explaining to us how its organized and the thought process that goes into it and what each piece means and so (SugarLips1 143-144)
	I did utilize it heavily but I wouldn't say that I utilized it correctly (SugarLips1 145)
	Just telling me to read (SugarLips1 174)
Applying Content	
	I think the best way is to go through a case conceptualization together as a group (SH2 44)
	To give people the hands on experience, instead of just sitting down telling him Okay, this is what you look (SH2 45)
	Going over a case a real a real person case was very helpful, at least for, especially for me, I would say, because I've I could it's not as motivating to just learn something just to learn it, but when I actually have like a person, and this is why i'm learning it it's for this person I need to help them, or you know just different different things that just is a lot more motivating and more interesting to to learn to learn about instead of just walking through you know diagnoses (Josie2 182-184)
	I would just strongly suggest doing that (Josie2 184)
	We would bring up a case and we would all talk about it (Josie1 61)
	The most helpful thing would be doing it in class and breaking it down in class. Yes, I learned a lot better if

	someone is kind of holding my hand and just walking me through it someone that's already done it and so. That was really helpful (Josie1 158-159)
	So that was very helpful just doing it in class and then also just hearing my classmates questions too would help you know I might not even have that question that someone asked, but then that helps me in learning how to do it better (Josie1 162-163)
	Doing it with a real person actually going through a case conceptualization with a with a real client is how i'm going to learn the most (Josie1 179)
	Keep having clients and keep having sessions and seeing more and more (Josie1 204)
	It was just right, you know right there in the back of my mind and the DSM you know you just kind of memorize you start to memorize the same thing (Josie1 205)
	I think it's huge to actually practice it and a hands on use a case. That is where I learned the most in the class for sure (Josie1 220-222)
	constantly just doing it like I guess like just um practicing like different cases and things like that um I think that really helps versus just sitting down opening a book and reading it, but actually having a case and applying what you know it helps you to be more familiar with Learning the DSM 5 and, like the different criteria and things to look for that points to certain um diagnosis constantly just going over um different case or case conceptualization is to get you more familiar with the information (SH1 28-30)
	My class experience was very fun, I really enjoyed it, I really liked the opportunity for us to figure it out for ourselves (SH1 38)
	Even though it's a lot. But as you start to go through it you start to learn more and more about the different diagnosis, the difference, the similarities and how the clients can be diagnosed with more than one (SH1 42-43)
	just like let's just diagnose together like let's take a client and here's what here's the case conceptualization maybe that kind of goes through like these are the symptoms that we're seeing let's diagnose, because now we have the symptoms and then. That maybe we do that for three weeks, and then you move into the next section and it's like okay let's talk about what it looks like to gather this information, and so, then maybe we bring Andrea up to the front of the class and we role play this conversation with her, and then we are. You know bullet point down the symptoms that are coming up and it's now here's what we have now, how do we now let's

	<p>put that into action, because then we've used the DSM become familiar with the most commonly used pieces then we've taken the data and we figured out how to apply the DSM to understand the data (unintelligible) good diagnoses and then we're backing up and we're actually gathering the data and then building it through (Jay1 360-365)</p>
	<p>Familiarizing myself and just from previous experience with it, I feel that is um durable um and just based off of even in class where we were left on our own, and I did decent so it gave me the confidence like okay I you know I do know what I'm doing a little bit (SH1 139-140)</p>
	<p>I personally enjoy doing them (SH1 189)</p>
	<p>I think that was a great way to learn about the DSM 5 (SH1 193)</p>
	<p>Scenarios would probably be the best way to kind of describe it (Mr.S 69)</p>
	<p>I think that comes from intuition, you know time time spent you know seeing patients. (HHJ1 181-183)</p>
	<p>It was less like read read the DSM: memorize it all and and more showing us kind of examples and and discussing it and, like a hands on like class activity way, which was really helpful for me as a learner (AM1 81-83)</p>
	<p>he'd give us like a scenario and then like a person or whatever, a case study and then would have to look through that section of the night that we were we were talking about and diagnose them (AM1 88-89)</p>
	<p>we would just I mean have little diagnostic groups set up and then go over them as a whole class and he'd write stuff on board and just give us like the visual plus us talking about it so It was really helpful. (AM1 93-95)</p>
	<p>start from a very entry level educational standpoint, how the case conceptualization maybe tell them what the diagnosis is have them go to the DSM and then have them highlight all the criteria that they see in there right, and then you know, maybe a next step or or that one isn't a good idea, give them the case conceptualization give them the cluster in the DSM and say you know kind of look and then tell me your reasoning for why so that they have to provide evidence (AE2 82-84)</p>
	<p>I think at the beginning, as an up and coming counselor in training it, the more practice that you get the better you'll be ( AE1 21)</p>
	<p>I learned by doing (AE1 35)</p>

	We would learn about the different clusters in the DSM and then. And then go through case conceptualization examples and kind of figure out what diagnosis (AE1 66-67)
	Oh okay um yeah a lot of the time when we were in class, there would be an example that we would all get it would be a client's name and then their whole story kind of like a very first meeting and in a clinical setting. And then you'd be in groups and everybody would kind of have to look through the book (AE1 94-95)
	And then everybody would kind of come back and be like these are the findings that I found based off of the information so that's what we did in class to help with kind of connecting the case to the DSM (AE1 97-98)
	We put it into practice (AE1 101)
	Going through the DSM (AE1 157)
	Yes, yeah definitely (AE1 242)
	Just probably the best thing that, I was able to get to the class was the examples that we went through (AE1 245-246)
	I hope that other people felt the same way that actually breaking off into groups and just not reading about it is the one of the best things that we can do so that when it comes into a clinical setting. It it mirrors what we did in class (AE1 247-249)
	Definitely yes (AE1 251)
	we had case conceptualization a lot and we got into groups and and we had to agree on what we thought the diagnosis was (Ash1 58-59)
	Then kind of do like a little treatment plan and but then we had to like almost justify it in class (Ash1 59-60)
	I think it was just getting in there and doing it together with our with our DSM 5 books (Ash1 67)
	Honestly, just doing it just doing it with then the ending validation of it's right or it's wrong. And then if it wasn't right, justification as to why it wasn't right (Ash1 126-127)
	I think it's like the first time of doing everything and even maybe the second and third time of doing everything until you just get comfortable with it (Ash1 166-167)
	Yes, yeah (Ash1 172)
	Having us do it in class (Ash1 181)
	Then it kind of got a little bit easier (Ash1 194)

	<p>Reading lots of different ones And then just having I'm a very like visual learner and so having someone put it up on the like sharscreen, but it was like um it look like a dry erase board and they can write on the screen and have them or like highlights like have the case conceptualization a shared screen and then have like a highlighting tool that's the easiest way for me to learn that was I have to see it to be able to understand that (Ash1 199-202)</p>
	<p>When I was in the middle of that class writing them all the time, I would have said seven to eight (Ash1 214)</p>
	<p>Huge, I don't think I really would have gotten it or had much benefit out of getting it if I didn't have that kind (Ash1 218)</p>
	<p>Huge like practice was everything, I think (Ash1 220-221)</p>
	<p>Saying what I would have done with the client so that would have been an informative part because I'm still like a sponge like I want to know what do you say to your clients, what do you how do you like, I want to know that part (Ash1 224-225)</p>
	<p>The more it can be modeled and used in a class, probably the more beneficial and the more apt we're going to be to use it in our practice as if we're not seeing it and actively using it in class you're probably not going to use it in our practices either (Ash1 231)</p>
	<p>I think so. I think so yeah (Ash1 241-242)</p>
	<p>It's the the rapport building and the the discussions and dialogues that came within my my course structure (SugarLips2 56)</p>
	<p>Understanding the content and being able to relate it and and teachers, the professors that I had that were able to teach me in that style were the ones that were most impactful (SugarLips2 59-60)</p>
	<p>Case conceptualization like I'm any give you this much time to tell us what's wrong and it put us on a limit, so we had to like summarize it and we couldn't get off, you know I'm I have lots of squirrel moments, and so like forcing us to really consolidate and think like briefly, what is your issue (SugarLips2 66-68)</p>
	<p>I think we've played out scenarios in that class (SugarLips1 54)</p>

	One of the things that I really liked about that course was not only did we do case conceptualizations, case conceptualizations sorry um but then she also had highlight or bold, um the presenting symptoms, so when you went to diagnose it was right there what you should be looking at, and I feel like that that was a key component in my learning of how do to manage the DSM (SugarLips1 66-67)
	I found it very helpful to listen, to have time to be able to make my own guesses um or hypothesis, they're not guesses hypothesis (SugarLips1 123-125)
	I loved the going section by section and really dissecting the differences between each of those um categories in the DSM each week and just talking them through (SugarLips1 127-129)
	If we didn't understand, we had the capability of asking our Professor to explain it and really dissecting what they were (SugarLips1 129)
	Yes (SugarLips1 172)
	I think that going piece by piece, and having the ability to talk about it was a key component and in being more comfortable with it (SugarLips1 175)
	Again, it goes back to the chunking to that like it was good, we had scenarios I, we had a class (SugarLips1 176)
	The difference between the two would be that with psychopathology and we were told to watch a movie of our choice. But it was after we had went all the way through everything (SugarLips1 179-180)
	I think the best way is to go through a case conceptualization together as a group (SH2 44)

## Category 2: Clinical Clarity

Subcategory	Data
Theoretical Orientation	
	You know you learn all about the theory, but sometimes putting into practice is a little bit difficult (AE1 19)
	theory is kind of just explaining why people behave or think the way that they do and not necessarily saying you have to be diagnosed with anything (SH2 21)
	when I think about case conceptualization I think that your theoretical orientation is going to play a very important part in your information gathering. In your observation and how you engage with the client. (Jay1 292-293)
	I guess you know, is it a psychological or is environmental stressors where's that coming from so he does, I guess, play a part in you know figuring out like what is the problem you

	know versus the problem internal or is the problem with them like your relationship with with someone else (Jay1 296-297)
	Certain theories can help with certain diagnosis, and so it helps bring those issues and things to light, so the clients could better manage them um basically to get better and to not be stuck with where they're at (SH1 16-17)
	I think theory helps with helping the person better understand themselves and their problems um and helping them figure out what it is that they need to do to get better (SH1 15)
	I would definitely say theory and the DSM (Josie2 78)
	I do think once you diagnose them you, you are using more of the theory so at first it's theory and the DSM and then you find your depression and you always kind of go back to that and look at look through that (Josie2 80)
	So yeah theory and the DSM for a while, then you diagnose them and then it's more like okay theory and how we're going to help with that diagnosis (Josie2 82)
	Like I said, Carl Rogers kind of you know theory to fit this but I always think in the back of my mind that's not going to be it's only kind of a small piece of that foundation, and not the overall piece (Mr.S 48)
	I mean the most important thing that I think about is, why they're walking in right now, as opposed to last week so I guess theoretical (HHJ1 57)
	I think that focused that focused, you know, with some people will say 'well coming in you know, because i'm depressed' you know and and then focusing more on the why now. Well how long you've been depressed i've been depressed for a month well why didn't you come in last month, you know you know, and then you know, then zeroing in on well this week I got. I broke up with my boyfriend so you know. You know, focusing you know zeroing in on exactly. What tipped them off, you know too um is what helps me the most. (HHJ1 185-191)
	it's how we see the problem, how we see what's going on with them. Like what we believe the issue is when we hear kind of what's going on with them (AM1 49-50)
	I would probably lean towards theory, because I feel like that's really where I'm like conceptualizing things and trying to then use that to help them (AM1 62-63)
Understanding Diagnostic Criteria	
	Your theory is always at the heart of diagnosis (SugarLips1 20)



	Help shape how you approach helping that person (Josie1 122)
	I would use I hold theory to be more important than the DSM (Josie1 43)
	I guess depending on which theory you are viewing from you would either be thinking about their thoughts or their or their past or their birth order or you know just there's all sorts of different ways so just depending on which theory you use. There could be a lot of different ways (Josie2 57-59)
	diagnosis it obviously plays a part but knowing their diagnosis and what like the characteristics or the criteria is that doesn't always, like exactly explain each person and what we should do with them. You know, like yeah they they have the certain symptoms but there's still more to it than just a diagnosis (AM1 63-66)
	Theory based is important, but I think it's to me, I think it is like building blocks (Mr. S 39)
	I think that's only a kind of basis or foundation that you can build on (Mr. S 42)
	What theory will work best for the client (AE1 6)
	Knowing what the theories are different ones are going to help different clients (AE1 22-23)
	I think that would play a big role in how to reach their end goal (AE1 24)
	I'm going to say theory just because it's more broad (AE1 50)
	theory it's not tangible, you know you can't see it you just have to you just kind of have to put it into work and get the kind of philosophical idea behind it (AE2 45-47)
	Was like I thought counseling was just kind of listening and talking and helping, but you have to assign a theory (AE1 298-299)
	The DSM 5 is giving you like criteria of diagnosing somebody (SH2 21)
	I would say it's mainly symptoms from blank so it's just the presenting problems that are happening right then. But it doesn't it doesn't go deep into what's going on in their life, or their past history, or if it's a biological thing. So it's more just it's more just the symptoms and it could be the symptoms of something that had happened before (Josie2 65-70)
	Like certain behavior patterns (SH1 22)
	The DSM kind of puts diagnoses in a quantitative state, you know to where you have to follow these they have to meet these guidelines (AE2 43-45)

	it just kind of gives you the ideas of what to look (AE2 52)
	I feel if this is your first session, when you are gathering the information for the the from the client um and you're you're gathering that client background, then you are kind of taking it from a diagnostic standpoint, because you have to kind of know what you're dealing with in order to then be able to utilize your theory to get to those goals(SugarLips1 29-30)
	The DSM is a is a good suggestion and a good boundary line but it's not like a black and white boundary line (Josie2 10-11)
	Sometimes they're presenting concerns it doesn't quite match up to a TEE or maybe the age is wrong, maybe the DSM gives a certain age and they're right on the cut off of that say they the DSM says 12 and up and this client that you have is 11 but they're meeting all the you know the same concerns that the DSM presents than that on to say that they have it (Josie1 46-48)
	um I think I really paid attention to how the client kind of acted when they said something so was it harder for them to talk about this certain thing um did this impact them more than this um it was really kind of watching their their non-verbals and listening to what they were how they were saying it that I thought you know that seems to have kind of an impact on them (AE1 181-185)
	Two different people could look at the same person and come up with two different things, and they both be okay if they both fit the criteria (Ash1 128)
	Giving us the perspective of just because you see it one way doesn't mean you're necessarily wrong because somebody else sees it, a different way (SugarLips1 134)
Using the DSM's Diagnostic Criteria to Identify a Diagnosis	
	The goal is to figure out what what needs to be done in order to help the client so with the case conceptualization you have a list of things that the person is going through or just like a little history about them and then you take that information to form some type of diagnosis (SH1 11-13)
	the purpose well to come up with a diagnosis (HHJ1 4)
	based on the criteria (HHJ1 39)
	diagnosis is important and and you know, obviously, for insurance purposes, you know if you don't have that you're not getting paid (HHJ1 264-266)

	most of my teachers have talked about how insurances can be a pain in the butt because they want you to be like diagnosis (AM1 139)
	What might their diagnosis be (AE1 6)
	So the case conceptualization is just going to explain what role. Um the information right it's yes it's the WHO, the client is, and so you use that information to decide um what assessments you're going to use which direction you would go and then what how to make a plan as far as what you would do next, and it helps you to kind of get a diagnosis (Ash1 21-23)
	Diagnosis (Ash1 47)
	Yes (Ash1 25)
	It's basically kind of like um the history of all counseling methods and the background of clients, as well as the therapist or counselors' um uh diagnosis, a history of diagnoses (SugarLips1 7-8)
	Where you begin to see when you use your like your DSM um book, how when you're going to diagnose where you can really focus in on the symptoms um presenting symptoms or concerns that are happening and it allows you to be able to pinpoint the best diagnosis (SugarLips1 12-13)
	Help shape how you approach helping that person (Josie1 122)
	to make the differentiation between a couple of potential diagnoses (Jay1 33)
	There were a few things that like there's a couple criteria that she could hit, but like I could flip it away because we didn't get all of them (Jay1 324)
	it's extremely important, it could throw your whole diagnosis off of you don't use that (Josie1 93)
	I think it's very important (Josie1 94)
	If you do that and you're not looking at the whole thing like if they're sad because they moved away for college, and this is the first time, living without their parents and their only sad because of that it's probably adjustment disorder (Josie1 98-100)
	I guess I just learned what to look for I guess I don't really I can't really explain it, I guess, I learned just by looking for signs I guess of like certain diagnosis and like what those diagnosis look like and then looking for a certain signs in a particular client (SH1 19)
	Looking at the signs and referring back to the DSM 5 of like what I've seen and going over like the criteria (SH1 20)

	It's just figuring out which one because so many of them are like kind of the same, but like have like a little difference and it be like dang (SH1 36)
	Going like off of the criteria and like kind of like checking your it's kinda like a checklist like checking it off like okay do they meet this, do they meet that. And then going from there (SH1 62-63)
	As I got into my other class, I learned that it could be autism, but it could also be something else, and so learning about the DSM 5 but also learned that there could be other diagnosis (SH1 81-82)
	You were able to go over their background and learn and then you were able to apply what you've learned from their background to coming up with a diagnosis (SH1 130)
	They can meet the criteria for this, but let's look at this and kind of like shifting the focus of like okay oh wow that that that can be major depressive disorder, but look at the timing versus six months from three months, and so that kind of helped too, because when you look at even just that little change could change the whole ballgame because it could go from major depressive then it could be something else based off of the timing, or you know things like that (SH1 218-220)
	That really helped too (SH1 220)
	I think that can that can lead to some incorrect diagnosis so it's important, I think, so will affect that for sure yeah (Mr.S 222)
	That they've been having some manic episodes but then they also have some really like depressed episodes it's been going on for six months, so you would just kind of go through all of those key words that you heard and then you would look in the DSM (AE1 96)
	So um learning about that really, really helped go deeper into understanding the differences and the similarities and all of the diagnoses (AE1 134-135)
	If it doesn't, then you know you're in the wrong spot um sometimes it may be, you may be going through and you're like, but it also sounds like this diagnosis and so, then you kind of compare both of them and see what one is a more direct fit and maybe which one you might need to do a rule out of (Ash1 120-122)
	It was good, because it kind of helped you to justify why you are diagnosing somebody one way um because when you start to think Oh, but it could be, and then, when you looked

	<p>over at that one it was either very black and white yep that's it or no that's not it um or it just kind of helped to solidify that you were on the right track. Um then there were times to that it sparked up really good conversation with um, but it could be or and then you know you'd go back into the you know, like multiple settings or you know, was it within one month or was it six months or it just kind of helped you be more um more where you would pay attention more to the details like the the the smaller details of the of the criteria (Ash1 155-160)</p>
	<p>just asking more pointed questions (Josie2 29-30)</p>
	<p>It was very helpful in diagnosing people (Josie1 185-186)</p>
	<p>Listening to like the main things the things that were most important in their story and using our knowledge about the DSM to kind of pinpoint the area, you know, like what the main area is to look in and then obviously go into the DSM (AM1 115-117)</p>
	<p>Things that really stick out that i've seen in the DSM (AE2 32)</p>
	<p>The DSM kind of gives you pointers to look for (AE 35)</p>
	<p>I look at it, as when you look at the DSM you have all of the criteria that you have to meet, I think, for me the case conceptualization is gathering all the information to see you know if the client falls into all of those criteria. And then you know if if you have all the information that you need then you're able to make the diagnosis based off of that okay (AE1 10-11)</p>
	<p>yeah exactly (AE1 26)</p>
	<p>Strategies of going down the criteria (AE1 84-85)</p>
	<p>This is just a boatload of information that you got to figure out, which was important and even though everything they say is important, which one do you need exactly for criteria so yeah kind of deciphering what the client says (AE1 152)</p>
	<p>Yes (AE1 154)</p>
	<p>Then once we figured it out or narrowed it down to an area, then you start going through the diagnostic criteria and and you start going like literally through each one and then, if it says two or more and you've made two or more three or more, or whatever, then you keep going through it (Ash1 119-120)</p>
	<p>I tried to like first just find the information and sometimes I would use different colors and like um like a colored pencil person so like anything that would talk about like who they</p>

	<p>are or their age or like kind of identifying information. Like I would highlight with that with a color underline that with that color and then I would find the next like specifically, why they were there as a family member that brought him or is it, they wanted to come by themselves, and then highlight that, with a different color and just kind of I think once I broke it up like that it made it a lot easier to see it. To try to look for that those pieces of information (Ash1 175-179)</p>
	<p>I think thinking about the client learning who the client is based off of the information that you've got coming at you. It's limited it's not huge, but it's enough to help kind of get you started and kind of get your wheels spinning in a certain direction (Ash1 211)</p>
	<p>In the clients background that are presenting concerns that justified why you were diagnosing that and so you bold it (SugarLips1 71)</p>
	<p>One of the things that we went through was basically elimination (SugarLips1 81)</p>
	<p>How many match up (SugarLips1 85)</p>
	<p>Then go on to your next brainstormed diagnosis and how many matchup how much criteria matches up (SugarLips1 85)</p>
	<p>Utilizing that again the end of the differential um diagnoses section (SugarLips1 85-86)</p>
	<p>When you look at the criteria, hopefully, you minimize the difference (SugarLips1 98)</p>
	<p>I would use or utilize the “rule out” (SugarLips2 9)</p>
	<p>Sometimes it's it's harder for people to fit in a criteria (AE1 50)</p>
<b>Treatment Goal Development</b>	
	<p>Then you're going to work from your theory's core to develop the goals of that those sessions, um based on your theory of choice, um so you will use the intervention practices and methods from that theory um to formulate kind of your game plan for that client (SugarLips1 20-21)</p>
	<p>The learning about the hunch and the learning issue and hypotheses it gave me opportunity to look at the different diagnosis and how they're different and how they're similar to um create an outcome because I learned in class that you don't want to misdiagnose anyone with something and so um it that is really important to learn about to dig deep into those</p>

	learning issues, because you don't want to misdiagnosing anyone (SH1 100-101)
	I... (know a person who) was diagnosed with depression, when (they) started college, but really ...(the person found) out like when (they) finished college, like (their) senior year (they were) diagnosed with ADHD (and) that (the person) went to a very easy high school, and so (they) didn't struggle with it, then as much because ...it was easy (to) just flow through it. But once things got a little more intense (they) couldn't focus on everything, and (they) just had trouble, and so, when (they weren't) doing as well as (they) used to (they) kind of ... lost it. (The person) got really super depressed, but it was really because (they weren't) excelling in school like (they had) always done, and so, once (they) figured that out... (the person) stopped thinking (they were) stupid, which was wonderful. (The person) stopped you know hating on (them self), for all that, and was able to understand so much and it took away that negativity that (they were) feeling towards (them self) because, like (they thought they) couldn't handle college and it just made (them) depressed and it was terrible. (The person wondered) how (they could)... do anything in (their) life if (they couldn't) even handle college and now, in Grad school (the person is) 10,000 times better because (they) know it's ADHD and (they) have a grasp on it... So I think it's super important because... (the person) was diagnosed by like a doctor just um (a) primary care (physician) and they never looked at anything specific, never sent (the person) to a counselor... (they) just fed (the person) meds and so um I think it's super important because I, I mean (the person) was wrongly diagnosed, I mean it was a symptom like (they were) depressed, but it was a symptom of the fact that (the person) didn't know what was going on and (they) couldn't control everything (at school)... (AM1 151-164)
	keep listening and and never like decide this is for sure it because you never fully know you're not in their head they might be leaving something out that they don't even realize is important (AM1 141-142)
	just kind of noticing everything and how it always keeping that in the back of your mind like does this still support the diagnosis, or should I look into other things (AM1 145)
	I think it's really important to understand the whole story and keep listening and really get down to the bottom of it (AM1 175-176)
	ongoing process (HHJ1 62)

	Yeah definitely starting with one, but I even just with the first session, it would be hard to capture an entire case conceptualization. So yes, definitely a process (Josie1 54-55)
	Definitely more of an ongoing type (Mr. S1 65)
	Definitely, I believe, it's going to be the ongoing thing (AE1 57)
	Definitely, I believe, it's going to be the ongoing thing (AE1 57)
	I'm still gonna say ongoing (AE1 62)
	They're having anxiety about feeling like everyone is thinking bad of them everyone's watching them. So, then I would probably use the CBT triangle and just kind of break apart their thoughts and like help change their thoughts (Josie1 32-33)
	you would be writing like your plan from like your treatment would come from like a theoretical piece (Jay1 295)
	how we treat (Jay1 309)
	I actually think that's a maybe a larger role in that too, because I think as a counselor sometimes is if you're going to look at some of the behavioral treatment (Mr.S 31-32)
	I I lean towards CBT So when I look at their case conceptualization which apparently I can't say that word um I always see it through that lens and kind of notice areas that could be worked on through that (AM1 41-43)
	You have all the criteria, the clients given you all the information as to why they're here what they're looking for. And then you can then kind of choose your theory on what best suits the client to help get them to their goal, so that if you know their goal is, if you know their diagnosis is then you can outline outline your treatment plan (AE1 13-14)
	You know that would you know, I think that would be kind of a Piaget, Freud saying, well what level, are you at did you complete a stage, or is it all looking about the present and the future till yeah I think (AE1 41-42)
	I think I would gear theory more towards the treatment plan and how to help the client (AE1 208)
	I guess the theory kind of helps you decide which way you're going to come at it so like um so say CNT or REBT so theory going to help you decide if you're going to look more at their thoughts are their emotions (Ash1 31)
	It just kind of gives you a... how do you look like through what lens do you look at that client (Ash1 34)
	Oh very big that's how you set up like your goals and and and maybe interventions that you're going to do (Ash1 36)



	It's kind of your driving force (Ash1 38)
	Using the theory of how i'm going to work with that that students (Ash1 43)
	Your theory is where what you are utilizing to help guide your client with that DSM diagnosis to more solutions and a better mental health overall (SugarLips2 29-31)
	Your theory is what you use to direct your clients in their therapeutic approach (SugarLips2 32)

### Category 3: Confidence

Subcategory	Data
Lack of Confidence	
	I don't. So I don't think that our program really does a great job of teaching it. So I am in field experience I'm graduating this summer, and I would say I think I've done, four of them (Jay1 95-97)
	It was really not an effective class (Jay1 154)
	And so I think that's where it gets frustrating, so I feel like everything is very flat and surfacing because we don't have a deeper frame of reference (Jay1 225-226)
	like a two or three I don't it would take me forever (Jay1 431)
	Not very confident. I think I just be winging it (AM1 314-315)
	My confidence would be so much lower I would it be like, probably at a 2 instead of a 5 or 5.5 (Josie1 219)
	We had to diagnose somebody. We had to come up with a student and make a diagnosis, I really didn't even understand the book, yet. so I was trying to recall someone that I had had in a classroom years ago and then trying to figure out diagnose. It was hard, because I didn't I didn't understand the breakdown of the book I didn't really understand how to use the book. Like I definitely Google searched a lot like how to do this because I. It wasn't touched on (Ash1 235-237)
	Like a five (SH1 210)
	In the first class and I don't remember which one it was, but I walked away going uuuhh I don't. That's hard. I don't know if I'll ever be able to do that (Ash1 65-66)
	With my professors anytime that I felt comfortable expressing my lack of knowledge or being able to ask questions it it gave me more confidence (SugarLips2 98-99)

	Same thing with my with my peer to peer interaction (SugarLips2 99)
	Here's a situation now go figure it out (SugarLips1 143)
Increased confidence	
	probably like an eight or nine (AM1 30)
	Eight eight or nine (AE1 225-226)
	At that point, it kind of felt like Okay, I can do this. Yeah. And it got easy (Josie1 127-128)
	The tools that I've learned in my classes um to help me break down the um case so using the hypotheses the hunch those learning issues and then going back over it, and going to the DSM 5 and looking for certain behavior patterns and things like that um to kind of help come to an outcome. Um I think I'm confident enough to do that now (SH1 135-139)
	5 or 5.5 (Josie1 179)
	I did feel prepared to do that (Josie1 180)
	six to 6.5 (Josie1 198)
	I did get more confident and was anxiety of diagnosing anxiety because I saw it a lot more (Josie1 205)
	So seeing clients that have similar diagnosis helps build that confidence (Josie1 206)
	Like a seven (SH1 133)
	8ish 9ish like I can I could I could grab the book find it and knock it out (Jay1 426)
	I would put myself at an eight and a half (HHJ1 171)
	I would say I'm a six to seven now when I was in the middle of that class writing them all the time, I would have said seven to eight (Ash1 214)
	Understanding that the DSM also helps to guide you with oh before you say it's this check out these other similar or co-morbidities that could be present, and once that was explained to me then it just helps me feel more confident using the DSM five (SugarLips2 46)
	Probably would have been hmm a three maybe That'd be, that'd be pushing it (SugarLips1 234)
	I'm an eight like I feel a lot more confident (SugarLips1 237)