The Relationship of Supervisory Styles and Differentiation of Self to the Counseling Self-efficacy of Counselors-in-training in the Masters' Level Practicum

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THE RELATIONSHIP OF SUPERVISORY STYLES AND
DIFFERENTIATION OF SELF TO THE COUNSELING SELF-EFFICACY
OF COUNSELORS-IN-TRAINING IN THE MASTERS’ LEVEL PRACTICUM

A Dissertation
presented in partial fulfillment of the requirements
for the degree of Doctor of Philosophy in Counselor Education and Supervision
in the Department of Leadership and Counselor Education
The University of Mississippi

by
AMELIA BINTI MOHD NOOR

July 2018
ABSTRACT

A primary goal of counselor education programs is to prepare counselors-in-training (CITs) who are competent to provide counseling services to serve clients’ needs in particular practice areas. This competency is rooted in CITs’ counseling self-efficacy. Thus, the goal of this study was to examine factors associated with CITs’ counseling-self-efficacy, including the supervisory style they experienced during clinical supervision in practicum, their differentiation of self, and the moderation effect of differentiation of self on the relationship between counseling self-efficacy and supervisory style. Specifically, this study aims to explore the relationship among the variables of interest through the lens of the Social Cognitive Model of Counselor Training (SCMCT) in conjunction with the Integrative Developmental Model (IDM), Bowen’s Family System Theory (BFST), and Social Cognitive Theory (SCT). The participants in this study were practicum CITs who met the target population criteria. They completed a set of instruments consisting of a demographic questionnaire, the Counseling Self-Estimate Inventory (which measured counseling self-efficacy), the Supervisory Styles Index (which measured supervisory style), and the Differentiation of Self Inventory-Revised (which measured differentiation of self).

An analysis of the data revealed that the CITs’ reported being exposed to four clusters of multiple styles of supervision: (a) Affiliative, Directive, and a mixture of Non-Self-Disclosure – Self-Disclosure supervisory styles, (b) Authoritarian, Directive, and Non-Self-Disclosure supervisory styles, (c) Affiliative, Directive, and Self-Disclosure supervisory styles, and (d) a mixture of Authoritarian – Affiliative, Directive, and Self-Disclosure supervisory styles.
Additionally, there was a significant moderate negative relationship between those reporting the Authoritarian – Affiliative dimension of supervisory style and their overall degree of DOS. This study clarifies and extends the theoretical framework used in the study. The theorized multiple styles of supervision from SCMCT and IDM was confirmed based on the findings in this study. Overall, the findings of the current study provide information to counselor educators and supervisors that can be used to better match supervisory styles to varying degrees of differentiation of self in CITs early clinical training with the aim to optimizing their degree of counseling self-efficacy. With the aim to increase the generalizability and extrapolating the findings, a replication is strongly recommended based on the promising framework and due to the low statistical power in the current study.
### LIST OF ABBREVIATIONS

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<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACA</td>
<td>American Counseling Association</td>
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<tr>
<td>BFST</td>
<td>Bowen’s Family System Theory</td>
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<tr>
<td>CACREP</td>
<td>Council for Accreditation of Counseling and Related Educational Programs</td>
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<td>CITI</td>
<td>Collaborative Institutional Training Initiative</td>
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<td>CITs</td>
<td>Counselors-in-training</td>
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<td>CMHC</td>
<td>Clinical Mental Health Counseling</td>
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<td>COSE</td>
<td>Counseling Self-Estimate Inventory</td>
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<tr>
<td>CSE</td>
<td>Counseling Self-Efficacy</td>
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<tr>
<td>DOS</td>
<td>Differentiation of Self</td>
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<td>DSI-R</td>
<td>Differentiation of Self-Revised</td>
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<td>FERPA</td>
<td>Family Educational Right and Privacy Act</td>
</tr>
<tr>
<td>IDM</td>
<td>Integrative Developmental Model</td>
</tr>
<tr>
<td>IRB</td>
<td>Institutional Review Board</td>
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<tr>
<td>SAMHSA</td>
<td>Substance Abuse and Mental Health Services Administration</td>
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<tr>
<td>SSIndex</td>
<td>Supervisory Styles Index</td>
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<tr>
<td>SSInventory</td>
<td>Supervisory Style Inventory</td>
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<tr>
<td>SCMCT</td>
<td>Social Cognitive Model of Counselor Training</td>
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<td>SCT</td>
<td>Social Cognitive Theory</td>
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ACKNOWLEDGMENTS

The One and Only,

His plans will have a reason,

Have full faith in Him.

Far, a thousand miles,

Yet, so close; never apart,

Kinship you and I.

‘Goodbyes’ hurt the most,

Although it isn’t the end,

My prayers for you.

My lovely gurus,

Your genuine love, care, concern …

I’m touched – beyond words.

Dears… who stand by me,

Greatly indebted to you,

Locked… deep in my soul.
Once, nowhere to turn,
Through the good times and the bad,
Your light, I rise again.

You, with smile and joy,
Plot the world like never end,
I embrace the vibes!

Those different colors,
Come and go, may stay and change,
We aim unique routes.

Everything happens,
Memories so dear to heart,
Life moving along.

Haiku Poem: *The Journey*

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CHAPTER 1 - INTRODUCTION

This chapter discusses the conceptual basis of the present study. It identifies the nature of the study and its underlying theoretical framework, discusses the problem the study addresses and its purpose, describes the study’s conceptual framework, presents the research questions and hypotheses, details the study’s significance, and acknowledges its delimitations and limitations as well as the underlying assumptions of the study. The final section of this chapter defines key terms used in this study.

Background of the Study

According to the Substance Abuse and Mental Health Services Administration (SAMHSA, 2016), an estimated 17.9 percent of the U.S. population (43.4 million people) had a mental illness in 2015. Additionally, 1 in 25 adults experienced severe functional impairment due to a mental illness (National Institute of Mental Health, 2015). This is an alarming situation; mental illnesses account for a larger proportion of disabilities than any other group of illnesses (Reeves et al., 2011). The prevalence of adults with mental illness imposes high financial costs on the United States (Insel, 2008; Poisal et al., 2007) including the cost for medical and mental health care (Dhingra, Zack, Strine, Pearson, & Balluz, 2010). SAMHSA (2016) data showed that of the 43.4 million adults who suffered mental illnesses in 2015, about 18.6 million adults (43.1 percent), accessed mental health care services. This suggests that mental health counseling service is in high demand.

Providing counseling services requires a counselor to be adequately equipped with knowledge and skills that align with a wide variety of clients, including individuals who suffer
from mental illnesses, and their needs. Thus, it is vital that counselor preparation programs train and prepare counselors-in-training (CITs) to be competent to practice across all specialized practice areas, including specialty areas in clinical mental health counseling (CMHC). Indeed, a primary aim of counselor preparation programs is to promote CITs’ confidence in or sense of competence about their abilities to conduct counseling-related activities (Bernard & Goodyear, 2014; Corey & Corey, 2016; Granello & Young, 2012), especially at the early stage of a CITs’ development (McNeill & Stoltenberg, 2016; Pitts & Miller, 1990; Prieto, 1998; Ronnestad & Skovholt, 2003; Stoltenberg & McNeill, 2010). Larson et al. (1992) termed counselors’ competence to practice as counseling self-efficacy (CSE), which they defined as counselors’ beliefs that they can provide effective counseling to clients. Studies have found that CSE is positively related to counseling outcomes and performance (Cashwell & Dooley, 2001; Heppner et al., 1998; Mehr, Ladany, & Caskie, 2015). Moreover, Lent, Hill, and Hoffman (2003) asserted that CITs with a higher degree of CSE have better cognitive, behavioral, and affective responses when providing counseling services to clients, as compared to CITs with a lower degree of CSE. Because CSE has a significant impact on CITs’ efficacy to practice counseling, thus, it is important to identify the factors associated with CSE in CITs. In doing so, this study drew on Larson’s (1998a, 1998b) Social Cognitive Model of Counselor Training (SCMCT). Figure 1 depicts part of the SCMCT’s determinants that influence CITs’ CSE. Each of the determinants interact in bidirectional relationships.
According to Larson (1998b), the SCMCT’s heuristic model postulates the internal context of the CITs and the external context of the training environment, which are determinants or factors that relate to CITs’ CSE. Specifically, the internal context refers to stable characteristics of the CIT such as the differentiation of self (DOS), whereas the external context refers to counseling and supervision environments, such as supervisory styles. The SCMCT model suggests that if CITs have a higher degree of positive stable characteristics and experience positive/effective supervisory environments, their degree of CSE will increase (Larson 1998a 1998b). Thus, the SCMCT offers a basis for theory-driven research and forms a foundation for this study.

**Nature of the Study**

The Council for Accreditation of Counseling and Related Educational Programs’ (CACREP) 2016 standards required master’s level CITs to engage in entry-level practice (i.e., pre-practicum), practicum, and internship (i.e., post-practicum). Unlike pre-practicum, which involves CITs in laboratory experiences and with role-played clients (Etringer, Hillerbrand, & Caliborn, 1995; Woodside, Oberman, Cole, & Carruth, 2007), practicum is the first opportunity for CITs to apply their understanding of the connection between the theory and practice with actual clients (O’Connell & Smith, 2005; Rushlau, 1998) under the supervision of a faculty
member. Previous research has indicated that the CITs’ degree of CSE was low in this period of clinical training (Kozina, Grabovari, Stefano, & Drapeau, 2010) compared to pre-practicum and post-practicum semesters (Potenza, 1990; Sipps, Sugden, & Faiver, 1988). Beginning CITs have significant doubt in their ability to perform counseling due to limited clinical experience (Ronnestad & Skovholt, 1993; Skovholt & Ronnestad, 1992). Thus, being preoccupied by the beliefs in incompetence in conjunction with poor supervision may affect the quality of the CITs’ clinical performance (Bischoff & Barton, 2002). Therefore, beyond the academic requirements, the key developmental task in counselor education programs is the need to build and increase the CITs’ clinical self-confidence (Bischoff, 1997; Bischoff & Barton, 2002; Skovholt & Ronnestad, 1992; Wei, Tsai, Lannin, Du, & Tucker, 2015). Additionally, CSE is an important measure of the progress of CITs’ professional development (Kozina et al., 2010; Larson, 1998a, 1998b). Thus, it is necessary to explore the factors that relate to CITs’ CSE during their practicum training in counselor education programs.

Counselor training and supervision in counselor education programs is a complex dynamic. Counselor training refers to all aspects of the process of becoming a professional counselor, whereas, supervision is a special type of counselor training that often occurs after completing curricular-skills training (Kincade, 1998). While various curricular models have been developed for use in counselor training (Buser, 2008; Hill & Lent, 2006) and there are numerous theoretical models for understanding the supervision (Bernard & Goodyear, 2014), the literature lacks a substantive theoretical groundwork that includes both counselor training and supervision. Noting a lack of theories of counselor supervision that incorporate all relevant components of early training of counselors, Larson (1998a, 1998b) proposed the SCMCT. According to Larson (1998b), the SCMCT’s heuristic model meets a need for a theoretically organized synthesis of
disparate components of counseling training and supervision under one umbrella. The scaffolding of this model is largely derived from the tenets of Bandura’s (1977, 1986, 1997) Social Cognitive Theory (SCT) and also builds upon CSE literature (Larson & Daniel, 1998; Lent, Hackett, & Brown, 1998). According to Goodyear (1998), although the supervision literature has not discussed models such as SCMCT that are based on formal psychology theories very much, they have the potential to bring a new vitality of research and practice to the counselor training and supervision realm. Because SCMCT is Larson’s early articulation of a comprehensive counselor training and supervision model, indeed, the model warrants continued conceptual and research attention (Goodyear, 1998; Lent et al., 1998).

Many researchers mentioned the SCMCT in their studies, but mostly by minimally acknowledging the model, particularly in relation to the CSE construct (cf. Frick & Glosoff, 2014; Keramati, ShoaKazemi, Reshvanloo, & Hosseinian, 2015). A few studies that have used the SCMCT as their research framework, but only to identify a narrow range of theoretical variables of interest to those particular studies (e.g., Carlyle & Roberto, 2007; Daniels & Larson, 2001; Mutchler & Anderson, 2010). On the other hand, many scholars appeared to agree that relatively little theory-driven research has addressed counseling and clinical supervision (Baker, Daniels, & Greeley, 1990; Goodyear & Bernard, 1998; Larson & Daniels, 1998). Moreover, various scholars have suggested that future empirical research on supervision should use a theoretical supervision training model (Bernard & Luke, 2015; Ellis, Dell, & Good, 1988). The importance of such a foundation, however, has been emphasized by Barnes (2004), for example, who recommends the assessment and exploration of CSE in a manner that is grounded in the self-efficacy theoretical framework. Taken together, due to Larson’s model has not been adequately studied, doing so provided a strong theoretical basis for this study to explore factors
that may contribute to a higher degree of CSE among practicum CITs. According to Creswell (2015), utilizing a theoretical rationale to determine the variables, which such a study makes possible, “represents the most rigorous form of quantitative research” (p. 121).

To advance the profession of counseling toward CITs’ professional development, the promulgation of the 20/20 Principles for Unifying and Strengthening the Profession outlined that “the counseling profession should promote mentor/practicum/internship relationships” (Kaplan & Gladding, 2011, p. 371). Many studies have concurred with their claim, showing that professional counseling relationships play an important role in the supervision context, which is supervisory relationship (Bernard & Goodyear, 2014; Borders, et al., 2014; McNeill & Stoltenberg, 2016; Mehr, et al., 2015; Sumerel &Borders, 1996), and enhance counselors’ and CITs’ CSE (Efstation, Patton, & Kardash, 1990; Kincade, 1998; Larson, 1998b; Stoltenberg & McNeill, 2010). Although developing a positive supervisory relationship is considered the cornerstone for successful work in clinical supervision (Bernard & Goodyear, 2014; Borders, 2014; Corey, Haynes, Moulton & Muratori, 2010; Stoltenberg, 2005), supervisors’ distinctive manner of approaching CITs also contributes to the establishment of a supervisory relationship (Friedlander & Ward, 1984; Kaiser, 1992; Leighton, 1991). Moreover, Goodyear (2014) suggested that supervisory styles are among the underlying key factors and processes that affect the quality of the supervisory relationship. Four qualitative studies in the past two decades have identified the underlying aspects of the development of quality supervisory relationships, which depends on the supervisors’ styles of approaching CITs in clinical supervision (Furr & Carroll, 2003; Jacobsen & Tanggaard, 2009; Jordan, 2006; Ladany, Mori & Mehr, 2013). In accordance with the literature published at the time, SCMCT suggested that in order to promote CITs’
confidence in counseling performances, the style through which supervisors interact with their CITs is the key aspect of clinical supervision (Larson, 1998b; Larson & Daniels, 1998).

Scholars generally appear to agree that CITs at different levels of clinical training (i.e., pre-practicum, practicum, and post-practicum) value different supervisory styles (Bernard, 1979, 1997; Bernard & Goodyear, 2014; Datu & Mateo, 2016; Hanson, 2006; Hogan, 1964; Jensen, McAuliffe, & Seay, 2015; McNeill & Stoltenberg, 2016; Ronnestad & Skovholt, 1993; Stoltenberg & McNeill, 2010). As well, existing studies on supervisory styles differed as to the style of supervision that CITs value at the practicum level of clinical practice. For example, one set of studies found that practicum CITs value a structured style (Friedlander & Ward, 1984; Goodyear, 2014; Jacobsen & Tanggaard, 2009; Tracey, Ellickson, Sherry, 1989; Worthington, 1987; Worthington & Roehlke, 1979), while another set showed a preference for a supportive style (Daniels & Larson, 2001; Jordan, 2006; Mohd Ali, Hassan, & Jailani, 2014), and other suggested value for a structured-supportive style (Borders, 2009; Guest & Beutler, 1988; Hart & Nance, 2003; Kozina et al., 2010), and also support-challenge supervisory style (Freeman & McHenry, 1996; Steward, Brelan, & Neil, 2001). Moreover, Miller and Ivey (2006) suggested that supervisors’ self-disclosure is a separate style of clinical supervision. Worthington and Roehlke (1979) and Ladany et al. (2013) reported that CITs value supervisors who disclose their own early counseling experiences that relate to CITs’ presenting concern in clinical supervision. Taken together, these studies do not provide clarity as to the style of supervision that benefits practicum CITs the most. This inconclusive results exists in part, because all these studies focused on a single style that the researchers believed to be dominant.

Findings regarding the relationship between supervisory styles and CITs’ CSE at varying levels of clinical practice have also been inconclusive. The existing studies found that structured,
supportive, and collegial supervisory styles are associated with CITs’ CSE (Daniels & Larson, 2001; Efstation et al., 1990; Fernando & Hulse-Killacky, 2005; Friedlander & Snyder, 1983; Terranova-Nirenberg, 2013). However, very few studies examine supervisory styles in relation to CSE and with respect to CITs’ practicum level. For instance, Meissner (2012) and Lorenz (2009) found that supervisory style predicts master’s level practicum CITs’ CSE. Unlike Meissner, who reported that structured supervisory styles significantly predicted practicum CITs’ CSE, Lorenz did not report which specific style of supervision predicted CSE. Additionally, Lorenz’s study suffers from a small sample size and undetailed statistical reports of how supervisory styles predict CITs’ CSE. VanDerWege (2011) conducted research examining the source of CSE from the perspective of master’s level practicum CITs. Her results suggested that CITs’ CSE increased after they experienced a supportive supervisory style, but the study used a qualitative framework and therefore could not explain the causality of the relationship. Given that very limited number of existing studies that examined the relationship between supervisory styles and practicum CITs’ CSE produced findings that must be interpreted with caution, there is an indispensable need for research on the association between supervisory styles and CSE.

Because supervisory style is more complex than researchers have thought (Borders, 2005; Hart & Nance, 2003; Steward, Breland, & Neil, 2001), several researchers have concluded that CITs have a need for a mixture of supervisory styles rather than a single style (Ladany et al., 2013; Ladany, Marotta, & Muse-Burke, 2001; Ladany, Walker, & Melincoff, 2001; Morgan & Sprenkle, 2007; Worthington & Roehlke, 1979). However, the mixture of supervisory styles that will most benefit CITs remains unclear, leading to an unguided pathway on which one must attempt to find the most effective mix-styles of supervision in approaching practicum CITs. Theoretically, Larson theorized through the SCMCT model that the ideal supervisory style that
increases CITs’ CSE included a balanced structured learning and supportive feedback such that it influences CITs’ learning by communicating it in realistic, thoughtful, and changeable ways. Larson’s hypothetical ideal supervisory style is a multidimensional construct. However, the available research reviewed has not isolated a measure of such a construct. This makes it difficult to identify which mixture of styles supervisors should adopt to promote CITs’ CSE. Therefore, there is a need to addresses this limitation by exploring and measuring supervisory style as a multidimensional construct.

Besides hypothesizing an ideal mixture of multiple styles of supervision that would promote CSE among CITs, Larson (1998a, 1998b) also proposed that CITs’ stable characteristics can moderate the influence of supervisory styles on their confidence to perform counseling practice. Such characteristics include personality (Larson, 1998b). Given that the DOS construct is a personality variable of maturity development (Charles, 2001; Jenkins, Buboltz, Schwartz, & Johnson, 2005; Majerus & Sandage, 2010; Peleg, Miller, & Yitzhak, 2015; Skowron & Friedlander, 1998; Skowron, Wester, & Azen, 2004; Vancea, 2013; Zerach, 2015), the present study utilized the DOS to conceptualize CITs’ stable characteristics. Thus, it is assumed that the CITs’ DOS may directly affect or moderate the relationship between the supervisory styles CITs experience and their level of confidence in conducting counseling-related tasks. Larson (1998b) hypothesized that CITs’ stable characteristics can influence the association between supervisory styles and CSE whether it may weakened or strengthened the relationship, which suggested that CITs’ DOS at certain degrees may serve as a barrier or catalyst, but in any case, it influences the relationship between supervisory styles and practicum CITs’ CSE.

Differentiation of self is a self-energizing process that promotes one’s individuation (Bowen, 1978; Kerr & Bowen, 1988). According to Skovholt and Ronnestad (1992), CITs’ DOS
is one of the core elements of their professional growth and development. Understanding CITs’ DOS may provide a different lens to improve understanding of and addressing the stagnate points of growth and development opportunities that CITs experience in the supervision context (MacKay & Brown, 2014). Moreover, CITs’ DOS is an essential way to acquire critical self-reflective capabilities and also is necessary for CITs’ competence to perform clinical practice (Rosin, 2015). Therefore, it is important for future helping professionals to understand their own DOS construct (Sandage Jankowski, Bissonette, & Paine, 2016) and to have self-awareness about how their degree of differentiation of self has shaped their relational systems with significant others (Sandage & Harden, 2011). Moreover, future helping professionals who are aware of their degree of DOS will have the capacity to engage authentically in helping relationships with their clients and will be more ability to help clients increase their own degree of DOS (Gushue et al., 2013; Seay 2015). Existing research suggested that DOS has significant impact on future helping professionals; however, how these findings can be extrapolated to CITs remains unclear. This is because the available research examining DOS used samples of psychology trainees (e.g., Gushue et al., 2013; Seay, 2015) and a combination of psychology trainees and theology-based trainees (e.g., Sandage et al., 2016; Sandage & Harden, 2011). Thus far, limited research has examined the implications of DOS on CITs’ CSE. The only known exception, Savitz-Smith (2004) suffers from small sample size. CITs at practicum and post-practicum levels were recruited from both a school program and a marriage and family program from a single institution, which limited the generalizability of the findings to other specialty areas of counselor preparation programs such as CMHC.

Because the CITs’ DOS at the early stages of the counseling preparation program is fragile and highly reactive to negative response (Skovholt & Ronnestad, 2003), supervisors must
acknowledge this variation so that supervisors can tailor their approach to serve CIT’s needs and promote CITs’ DOS at a higher degree (MacKay & Brown, 2014; Watkins, 2012). However, little is known about the degree of DOS among practicum CITs and what mixture of styles of supervision best suits to parallel the degree of DOS of CITs. Instead, the bulk of available research has been confined to the therapeutic implication with the aim of improving future clients’ DOS (e.g., Jenkins et al., 2005; Kim-Appel, Appel, Newman, & Parr, 2007; Murdock & Gore, 2004; Ross & Murdock, 2014; Skowron et al., 2004; Zerach, 2015). In their conceptual study, MacKay and Brown (2014) suggested that a collegial style of supervision will promote CIT’s DOS more than a direct-structured style of supervision. They also proposed that the less experienced CITs are more likely to benefit from disclosures by supervisors that relate to CITs’ experience in clinical practice. However, a lack of empirical evidence leaves assertions such as those of MacKay and Brown in the hypothetical realm. A number of researchers have called for research in this area (Barnes, 2004; Goodyear & Bernard, 1998; Larson, 1998b), and while none of the literature review identified were less than a decade old, the gap in the literature remains.

**Statement of the Problem**

Empirical research that has explored the relationship between supervisory style and CSE (e.g., Friedlander & Snyder, 1983; Meissner, 2012) and the relationship between DOS and CSE (e.g., Savitz-Smith, 2004; Seay, 2015) is suggestive and valuable. However, research has not inadequately explored the theorized relationship among the supervisory styles as perceived by master’s level practicum CITs, their DOS, and their CSE. Given the importance of CITs’ development of CSE, the need for research consistent with Larson’s suggestion to examine all three constructs simultaneously is indispensable. Therefore, this study’s exploration of the
Theorized relationship was structured using the SCMCT framework, and the results of the current study have yielded a better understanding of how to prepare effective counselors.

**Purpose of the Study**

The purpose of this study was to explore the relationship among the supervisory styles as perceived by master’s level practicum CITs, their DOS, and their CSE. The study assessed the degree to which the DOS moderated the relationship between the supervisory styles and the CSE as perceived by CITs in their master’s level practicum.

**Conceptual Framework**

Figure 2 provides a visual depiction of the purpose for this study. Research questions are identified with labels.
Research Questions and Hypotheses

The main research question guiding this study is: What is the relationship among the supervisory styles perceived by master’s level practicum CITs, their DOS, and their CSE? To explore this question, this study attempted to answer the following research questions and test the following hypotheses.

Research Question 1: Based on three dimensions of supervisory styles, what categories of supervisory styles are perceived by the master’s level practicum CITs?

Research Question 2: To what extent is the degree of each dimension of supervisory styles experienced by master’s level practicum CITs associated with their degree of overall DOS?

Research Question 2a: To what extent is the degree of Authoritative – Affiliative dimension of supervisory styles experienced by master’s level practicum CITs associated with their degree of overall DOS?

Hypothesis 2a H0: There will be no significant relationship between the degree of Authoritative – Affiliative dimension of supervisory styles experienced by master’s level practicum CITs and their degree of DOS.

Research Question 2b: To what extent is the degree of Directive – Non-Directive dimension of supervisory styles experienced by master’s level practicum CITs associated with their degree of overall DOS?
**Hypothesis 2b H₀:** There will be no significant relationship between the degree of Directive – Non- Directive dimension of supervisory styles experienced by master’s level practicum CITs and their degree of overall DOS.

**Research Question 2c:** To what extent is the degree of Non-Self-Disclosing – Self-Disclosing dimension of supervisory styles experienced by master’s level practicum CITs associated with their degree of overall DOS?

**Hypothesis 2c H₀:** There will be no significant relationship between the degree of Non-Self-Disclosing – Self-Disclosing dimension of supervisory styles experienced by master’s level practicum CITs and their degree of overall DOS.

**Research Question 3:** To what extent is the degree of each dimension of supervisory styles experienced by master’s level practicum CITs independently associate with their degree of overall CSE?

**Research Question 3a:** To what extent is the degree of Authoritative – Affiliative dimension of supervisory styles experienced by master’s level practicum CITs independently associate with their degree of overall CSE?

**Hypothesis 3a H₀:** The degree of Authoritative – Affiliative dimension of supervisory styles experienced by master’s level practicum CITs is not independently associate with their degree of overall CSE.
Research Question 3b: To what extent is the degree of Directive – Non-Directive dimension of supervisory styles experienced by master’s level practicum CITs independently associate with their degree of overall CSE?

Hypothesis 3b $H_0$: The degree of Directive – Non-Directive dimension of supervisory styles experienced by master’s level practicum CITs is not independently associate their degree of overall CSE.

Research Question 3c: To what extent is the degree of Non-Self-Disclosing – Self-Disclosing dimension of supervisory styles experienced by master’s level practicum CITs independently associate with their degree of overall CSE?

Hypothesis 3c $H_0$: The degree of Non-Self-Disclosing – Self-Disclosing dimension of supervisory styles experienced by master’s level practicum CITs is not independently associate their degree of overall CSE.

Research Question 4: Are master’s level practicum CITs perception of their degree of DOS independently associate with their degree of overall CSE?

Hypothesis 4: Master’s level practicum CITs perception of their DOS are not independently associate with their degree of overall CSE.

Research Question 5: Does master’s level practicum CITs perception of their overall degree of DOS moderate the link between their degree of each dimension of supervisory styles and their overall degree of CSE?
**Research Question 5a:** Does master’s level practicum CITs perception of their overall degree of DOS moderate the link between their degree of Authoritative – Affiliative dimension of supervisory styles and their overall degree of CSE?

**Hypothesis 5a \( H_0 \):** Master’s level practicum CITs perception of their overall degree of DOS does not act as a moderator between their degree of Authoritative – Affiliative dimension of supervisory styles and their overall degree of CSE.

**Research Question 5b:** Does master’s level practicum CITs perception of their overall degree of DOS moderate the link between their degree of Directive – Non-Directive dimension of supervisory styles and their overall degree of CSE?

**Hypothesis 5b \( H_0 \):** Master’s level practicum CITs perception of their overall degree of DOS does not act as a moderator between their degree of Directive – Non-Directive dimension of supervisory styles and their overall degree of CSE.

**Research Question 5c:** Does master’s level practicum CITs perception of their overall degree of DOS moderate the link between their degree of Non-Self-Disclosing – Self-Disclosing dimension of supervisory styles and their overall degree of CSE?

**Hypothesis 5c \( H_0 \):** Master’s level practicum CITs perception of their overall degree of DOS does not act as a moderator between their degree of Non-Self-Disclosing – Self-Disclosing dimension of supervisory styles and their overall degree of CSE.
Significance of the Study

This study attempted to enhance the counseling literature pertaining to counselor preparation and clinical supervision literature in several ways. First, because this study drew on Larson’s (1998a, 1998b) SCMCT model, it critically examined the underlying assumptions that related to the interest of the study. Because the theory base research contributed to theory revision and expansion by testing the related variables on the basis of theory with new participants and/or sites (Creswell, 2015; Frazier, Tix, & Barron, 2004; Goodyear, 1998; Goodyear & Bernard, 1998), the findings of this theory-based study provided empirical support used to refine and extend the SCMCT. For example, the extent to which SCMCT’s ideal supervisory styles affect CITs’ CSE and the degree to which CITs’ DOS serves a moderating role attempted to discover how the finding supports or hinders CITs’ ability to translate the supervisory styles they experience in practicum into their degree of CSE. This information can be useful in guiding supervision practice of counselor preparation programs, an area in need of research (Barnes, 2004; Goodyear & Bernard, 1998; Larson, 1998a, 1998b).

Second, this study intended to provide information to counselor educators to be used to better match supervisory styles to varying degrees of DOS in CITs’ early clinical training, particularly in practicum. Moreover, understanding such matching can serve as an underlying element in constructing effective pedagogical aspects of counselor training and supervision, an area in need of development (Sexton, 1998; 2000; Sommers-Flanagan, 2015).

Third, understanding such matching can also give supervisors the tools to support and benefit CITs in developing high levels of CSE (Ladany, Marotta, & Muse-Burke, 2001; Ronnestad & Skovholt, 2003; Stoltenberg & McNeill, 2010) during their counselor preparation.
This can enhance their counseling performance and professional counseling development to the benefit of their clients.

Ultimately, by understanding the relationship among supervisory styles, DOS, and CSE from CITs’ perspectives, this study provided a basis for developing and improving the realistic practice of clinical supervision. This parameter of competent supervision is a point of connection between CITs and counselor educators (Borders et al., 2014).

**Delimitations**

This study was conducted within five delimitations. First, the scope of this study was to examine the factors that related to CITs’ CSE. The chosen factors were drawn from the SCMCT theoretical framework. Second, this study used particular instruments to measure three studied variables: (a) CSE, (b) supervisory styles, and (c) DOS. Specifically, the study used the Counseling Self-Estimate Inventory (COSE; Larson et al., 1992), the Supervisory Styles Index (SSIndex; Long, Lawless, & Dotson, 1996), and the Differentiation of Self Inventory-Revised (DSI-R; Skowron & Schmitt, 2003) to measure the CSE, the supervisory styles, and the DOS, respectively. Chapter 3 presents details pertaining to each of these instruments.

Third, this was a quantitative study that utilized descriptive and correlational research methods. Therefore, there was no intention to gather the data via interview, observations, or an experiment to compare a control group and a treatment group.

Fourth, the potential participants for this study were CITs at master’s level in CMHC preparation programs who were currently under the clinical supervision of a practicum faculty supervisor or who had just completed a period of such supervision at the time of the study conducted. The study did not include CITs at any other level of clinical practice (i.e., pre-practicum and post-practicum) or from other specialty areas of counselor preparation programs.
Fifth, participants were recruited only from counselor preparation programs in the United States that are accredited by the CACREP.

Limitations

The present study had five potential limitations. First, because of the delimitation of collecting data only in the United States, the findings may be less generalizable to CITs at the master’s level outside of the United States. Second, because the sample for this study was delimited to practicum CITs, specifically those enrolled in CACREP-accredited CMHC preparation programs, generalization of the findings were limited to CITs who represent within similar criteria.

Third, because participants were selected using a nonprobability purposive sampling technique, the participants who voluntarily participated in this study possibly underrepresented or overrepresented particular characteristics in relation to the target population, due to characteristics unknown to the researcher. As a result, extrapolating requires caution.

Fourth, the data was collected by using self-report instrumentation. Such instruments depend on participants providing honest responses. However, this self-report method may have presented some potential for response bias, as participants could have exaggerated or inaccurately reported their perception of constructs of interest in this study. For example, this study focused on CITs self-reported degree of CSE, it is important to recognize the possibility that their level of CSE may not have accurately reflected their level of competence.

Fifth, because the researcher provided incentives to participants who completed the online survey in an attempt to broaden the sample, the use of incentives may also have encouraged spurious responses from participants who completed the survey only to receive the incentive.
**Assumptions**

The present study was based on four assumptions. The first assumption was that all participants will honestly answer the survey questions. To increase the likelihood of truthful and accurate self-reporting, this study relied on volunteer participants and assured participants that their responses would remain anonymous. The second assumption was that the CITs who participated in this study had similar preparation prior to the practicum. Toward this end, the sample for this study was drawn exclusively from CACREP-accredited counselor preparation programs, all of which have been recognized as meeting a comprehensive set of curricular standards, thus helping to ensure an acceptable level of consistency among CMCH programs.

Third, this study assumed that the participants will have experienced DOS at intrapsychic and interpersonal levels already. This assumption was based on the BFST, which postulates that individuals begin their differentiation process once they enter adulthood (Bowen, 1978; Kerr & Bowen, 1988). Because the participants were students at the graduate master’s level who verified that they were at least 18 years of age, it was assumed that they had already entered adulthood.

Fourth, it was assumed that the data collected would accurately represent the constructs of interest in this study. In an effort to ensure this, this study utilized instruments with empirically demonstrated and adequate psychometric properties.

**Definition of Key Terms**

The following definitions are provided to clarify meanings based on the literature and use of operational terms in this study.

**Master’s level practicum counselors-in-training:** For the purposes of this study, master’s level practicum CITs were defined as practicum students who were enrolled at the master’s level in a CACREP-accredited in a CMHC counselor preparation program in the United
States. In this study, references to master’s level practicum CITs were used interchangeably with “practicum CITs” or “beginning supervisees.”

**Supervisee:** This study used the definition of supervisee provided in the ACA Code of Ethics: “A professional counselor or counselor-in-training whose counseling work or skill development is being overseen in a formal supervisory relationship by a qualified trained professional” (2014, p. 21).

**Practicum:** For the purposes of this study, practicum was defined based on the CACREP standard (2016) as “a distinctly defined, supervised clinical experience in which the student [i.e., CITs] develops basic counseling skills and integrates professional knowledge. The practicum is completed prior to internship [i.e., post-practicum]” (p. 47). The practicum experience for this study referred to the initial supervised experience in a master’s program, requiring a minimum of 100 clock hours, 40 of which involved direct service, provided over a full academic term that was a minimum of 10 weeks.

**Clinical supervision:** This study used the definition Corey et al. (2010) provided for clinical supervision: “A process whereby consistent observation and evaluation of the counseling process is provided by a trained and experienced professional who recognizes and is competent in the unique body of knowledge and skill force” (p. 3).

**Counseling self-efficacy:** For the purpose of this study, CSE was defined as “one’s beliefs or judgments about her or his capabilities to effectively counsel a client in the near future” (Larson & Daniels, 1998, p. 180). Larson et al. developed the Counseling Self-Estimate Inventory (COSE; Larson et al., 1992) which measures five factors underlying the CSE construct, as follows: (a) micro skills, (b) counseling process, (c) difficult client behaviors,
(d) cultural competence, and (e) awareness of values. This study measured the CSE construct using the COSE.

**Supervisory styles:** For the purpose of the present study, supervisory styles were defined as “the way in which the personality and convictions of the supervisor are demonstrated in the supervisory relationship” (Long et al., 1996, p. 589). Long and her colleagues developed the Supervisory Styles Index (SSIndex; Long et al., 1996), which measures complementary types of supervisory style: (a) affiliative and authoritative, (b) directive and non-directive, and (c) non-self-disclosing and self-disclosing. This study measured the supervisory styles construct using the SSIndex.

**Differentiation of self:** For the purpose of this study, DOS was defined as a process of “defining a self or working toward individuation” (Bowen, 1978, p. 539). Kerr and Bowen (1988) further described DOS as the degree to which a person is able to balance internal processes (i.e., ability to balance objectivity and subjectivity dimensions) and life forces (i.e., ability to balance separateness and connectedness dimensions). Skowron and Friedlander (1998) identified four aspects of DOS, as follows: (a) emotional reactivity, (b) I-position, (c) emotional cutoff, and (d) fusion with others. To measure these four aspects of DOS as identified by Skowron and Friedlander, Skowron and Schmitt (2003) developed the Differentiation of Self Inventory-Revised (DSI-R). This study measured the DOS construct using the DSI-R.

**Summary**

This chapter included an introduction to the present study. Specifically, it addressed the nature of the study, basis of theoretical frameworks, statement of the problem, purpose of the study, conceptual framework of the study, identification of variables, research questions and
hypotheses, significance of the study, delimitations and limitations of the study, assumptions of the study, and definition of key terms.

Chapter 2 provides a review of related literature and more in-depth discussions of theoretical frameworks for the study. This review includes sections on the SCMCT’s principles within this study, on the practicum CITs, and on the constructs of interest in this study, including CSE, supervisory styles, and DOS.

Chapter 3 addresses the methodology of the study. The method-related sections consist of research design, the criteria of participants’ recruitment, instrumentations, and the procedures that were used to conduct the study and analyze the data.
CHAPTER 2 - REVIEW OF THE LITERATURE

The purpose of this study, as introduced in Chapter 1, was to examine the relationship of supervisory styles and differentiation of self (DOS) on counseling self-efficacy (CSE), as perceived by counselors-in-training (CITs) during their master’s level practicum. Accordingly, this review of the literature begins with an overview of the theoretical frameworks used by this study. To further undergird the context of this study, this chapter reviews the existing literature concerning the constructs of CSE, supervisory style, and DOS as presented under the umbrella of SCMCT’s theoretical framework. It discusses the linkage among the extended theoretical frameworks on which this study draws: the Integrative Developmental Model (IDM; McNeill & Stoltenberg, 2016; Stoltenberg, 1993, 2005; Stoltenberg & Delworth, 1987; Stoltenberg & McNeill, 2010), the Bowen’s Family System Theory (BFST; Bowen, 1978; Kerr & Bowen, 1988), and the Social Cognitive Theory (SCT; Bandura, 1977, 1982, 1986, 1989, 1994, 1997, 1999, 2001, 2006). In order to do this, this chapter proceeds as follows: (a) theoretical frameworks, (b) overview of related SCMCT’s principles within this study, (c) counselors-in-training, (d) the CSE construct, (e) the supervisory style construct, and (f) the DOS construct.

Theoretical Frameworks

The Social Cognitive Model of Counselor Training (SCMCT; Larson, 1998a, 1998b) is the primary theoretical framework for this study. SCMCT provides the three conceptual constructs (i.e., CSE, internal context, and external context) examined in this study. Additionally, the SCT (Bandura, 1986, 1997), the IDM (McNeill & Stoltenberg, 2016; Stoltenberg & McNeill,
2010), and the BFST (Bowen, 1978; Kerr & Bowen, 1988) theories were used as extended theoretical frameworks to further explain the specific variables in this study. Therefore, the following subsections provide an overview of the theoretical frameworks for this study by addressing: (a) the Social Cognitive Theory, (b) the Social Cognitive Model of Counselor Training, (c) the Integrative Developmental Model, and (d) the Bowen’s Family System Theory.

**Social Cognitive Theory.** Because SCMCT draws heavily upon Albert Bandura’s (1986) theory, an overview of the SCT is presented here. Bandura’s theory can be summarized through four areas: (a) human agency, (b) triadic reciprocal causation, (c) self-efficacy, and (d) source of self-efficacy.

**Human agency.** In SCT, human agency refers to the notion that all individuals are agents of their own experiences. Specifically, the mode in which human agency is exercised individually is referred to as personal agency. To be an agent is to engage purposefully in individual development and proactively make a causal contribution to one’s own actions (Bandura 1986, 2001, 2006). The underlying process of these agentic capabilities is cognitive appraisal, which is governed by a self-regulating system (Bandura, 2001).

**Development of personal agency.** The development of a sense of personal agency goes beyond action causality; it also involves personal causality. According to Bandura (2006), the development of selfhood involves personal reflection on one’s experiences and recognition that one can produce effects by one’s actions in social environments. Over time, through those agentic capabilities, the self becomes differentiated from others and a sense of selfhood develops as a result of the complexity of one’s individual functioning in social environments. This creates a continuity of personal identity over a person’s lifespan (Bandura, 2006). Thus, the development of selfhood is not a linear product but rather a process involving a continuity between personal
identity and agentic capabilities that operate within a context of triadic reciprocal causation (Bandura, 2006). Thus, individuals are neither autonomous agents (i.e., exclusively driven by inner forces) nor mechanical respondents (i.e., whose actions external influences automatically determine), but as an emergent interactive agency (Bandura, 1989, p. 1175).

**Triadic reciprocal causation.** Bandura (1997, 1999) proposed that triadic reciprocal causation involves the interaction of three major classes of determinants: (a) internal personal factors (i.e., in form of cognitive, affective, and biological events); (b) behavior; and (c) environmental events. Each of the determinants in this interaction function in bidirectional relationships, with each influencing the other, although to varying degrees under different circumstances. Moreover, Bandura (1997, 1999) theorized that it is possible to gain an understanding of how different segments (i.e., the mutual interaction of any two determinants) of reciprocal causation interact.

**Self-efficacy.** Bandura (1986) defined self-efficacy beliefs as “people’s judgement of their capabilities to organize and execute courses of action required to attain designated types of human performances” (p. 391). Personal agency has four core features: intentionality, forethought, self-reactiveness, and self-reflection. Of all the agentic features, self-reflection is the most distinct of them (Bandura, 2001, 2006). According to Bandura (2001), self-reflection refers to metacognitive capabilities for examining the adequacy of one’s own individual functioning. This metacognitive capability is also known as efficacy beliefs, which provide the foundation for individuals’ motivation, well-being, and personal accomplishment.

Self-efficacy has been used to understand the process of gaining self-confidence and is the central component of SCT (Bandura, 1977, 1982, 1986, 1989, 1994, 1997, 1999, 2001, 2006). Bandura suggested that individuals who have lower self-efficacy dwell on their personal
deficiencies and have serious doubts about their capabilities. In contrast, individuals who have higher self-efficacy channel their attention and display greater effort to master the task demands and are able to withstand failures and uncertainty. Accurate appraisal of one’s self-efficacy is of considerable value in human functioning, and misjudgment of one’s self-efficacy leads to unfavorable consequences. Individuals who inaccurately judge themselves to be highly capable choose activities that are beyond their ability and feel little need to invest preparatory effort. In contrast, individuals who underestimate their capability limit their achievement and their learning. According to Bandura (1986), the most functional degree of self-efficacy is one in which self-confidence slightly exceeds current capability. Such efficacious beliefs lead individuals to attempt realistic but challenging tasks, provide motivation for preparatory effort, and promote skill development.

Sources of self-efficacy. Given the importance of self-efficacy and the influence it has on the human functioning; it is important to understand the sources of self-efficacy. According to Bandura (1977, 1982, 1986, 1994, 1997), self-efficacy is based on four principal sources of information: (a) enactive mastery, (b) vicarious experiences, (c) verbal persuasion, and (d) physiological and affective states. The following are the summaries of each source of self-efficacy.

Enactive mastery. Enactive mastery refers to successful experiences of actual performances. Enactive mastery performances are the most influential source of self-efficacy because this source of information provides the most authentic evidence of how much preparatory effort needs to be invested in order to succeed (Bandura, 1977, 1986). Successful experiences increase mastery expectation; repeated failures decrease mastery expectation,
especially if failure is experienced before an efficacious belief is firmly established (Bandura, 1982, 1986, 1997).

**Vicarious experiences.** Vicarious experiences refer to inference from social comparison. According to Bandura (1986, 1997), this social modeling source flows from the observation of others who have similar capabilities and who succeed in their chosen activities. The modeling promotes a sense of confidence that one is able to accomplish the same activities.

**Verbal persuasion.** Verbal persuasion refers to social encouragement that persuades individuals that they possess capabilities to enable them to accomplish the task. Although verbal persuasion is widely used, this source of efficacy can influence successful performance only if the intensity of appraisal is within realistic bounds and the recipients of persuasion have some reasons to believe they can make changes to achieve the goal through their actions (Bandura, 1977, 1986). Simply hearing that one is capable does not necessarily increase self-confidence, especially when it contradicts with the recipient’s preexisting beliefs (Bandura, 1994; 1997). Therefore, verbal persuasion alone may be limited in its power to increase self-efficacy.

**Physiological and affective states.** Physiological and affective states refer to emotional arousal and physical responses that occur in stressful and taxing situations. Depending on the circumstances, this contributing factor of self-efficacy may impede or enhance beliefs about one’s capability to accomplish the performance goal (Bandura, 1977, 1982). Because high arousal can deteriorate performance, individuals interpret the somatic indicators to be a sign of vulnerability to dysfunction (Bandura, 1986, 1994, 1997). As a result, high levels of arousal may decrease the degree of one’s self-efficacy. However, cognitive appraisal of somatic arousal may be both informative and motivating, thereby decreasing the potential negative effect of arousal.
(Bandura, 1986, 1997). Thus, a cognitive reduction of physiological and affective states enhances one’s self-efficacy.

Overall, the development of self-efficacy is not entirely based on the information from environmental events because the impact of this information on self-efficacy actually depends on one’s cognitive appraisal (Bandura 1977, 1986, 1997). In other words, self-efficacy is a product of metacognitive processing of four principal sources of information. Once self-efficacy is developed, it contributes to the quality of human functioning in various ways. For individuals training to become counselors, for example, self-efficacy may influence their performance in field experiences and their experiences of clinical supervision. This is an underlying premise of SCMCT.

These basic tenets of SCT discussed above serve as a scaffolding to SCMCT. The following section provides an overview of the core theoretical framework of SCMCT.

**Social Cognitive Model of Counselor Training.** Larson’s SCMCT (1998a, 1998b) is founded on principles put forth by Bandura’s SCT. Larson called it “the translation of SCT to counselor training” (1998b, p. 224). It frames the discussion of how CITs transform the acquisition of knowledge of self-development, effective counseling, and supervision processes in their clinical performances. This overview of SCMCT addresses four areas that suit the scope of the present study: (a) CITs as agents, (b) triadic reciprocal causation, (c) CSE, and (d) sources of CSE.

**CITs as agents.** Consistent with SCT’s assertion that all individuals are agents of their own experiences, SCMCT views CITs in this way. This personal agency also known as another term called self-efficacy, which was the main variable of interest in this study. As agents, CITs determine their own performance and development as they adapt and function in complex and
dynamic counseling and supervision environments (Larson, 1998b). The underlying process of
the self-determination capability flows from both meta-cognitive (i.e., cognitive appraisal) and
meta-affective (i.e., emotional awareness) processes in CITs (Larson, 1998a). According to
Larson (1998b), the way CITs adapt and function in complex and dynamic environments reflects
what Bandura called emergent interactive agency. This emergent interactive agency may be
understood within a modified version of the SCT model of triadic reciprocal causation.

**Triadic reciprocal causation.** Whereas Bandura’s triadic reciprocal causation involves
behavior, environmental events, and personal factors, Larson (1998b) proposed: (a) action,
(b) proximal training environment (i.e., counseling and supervision environments), and
(c) personal agency as the three main determinants in SCMCT’s version of triadic reciprocal
causation. All three interact in both reactive and proactive processes that are known as
bidirectional relationships. Consistent with SCT, Larson suggested that this simultaneous process
of interaction can be understood in two ways. First, the simultaneous process may include all
three determinants, which holistically influence each other. Second, the simultaneous process can
be understood by focusing on any two out of three determinants in the triadic reciprocal
causation. This study focused on two of these determinants: personal agency (i.e., measured by
CSE variable) and proximal training environment (i.e., measured by supervisory styles variable).

**Determinants.** SCMCT (Larson, 1998a, 1998b) establishes an interaction among three
determinants that are related to CITs’ professional development: action, personal agency, and
proximal training environment. Each of the three main determinants in SCMCT’s triadic
interaction consists of its own related components.
The action determinant includes effective counseling actions, effective supervision by supervisors, and effective participation in supervision by CITs. As noted above, the action determinant is not a focus in this study.

The second determinant is the proximal training environment, an external context, which has two components: supervisory environment and counseling environment. The supervisory environment component, which is a variable of interest in this study, includes two distinct parts: the objective supervisory environment (i.e., what actually occurs in the course of supervision) and the perceived supervisory environment (i.e., the CITs’ and/or supervisors’ perceptions of what occurs in the course of supervision). This study investigated the CITs’ perception of the supervisory environment through their perceptions of supervisory style.

The third determinant of triadic interaction in SCMCT is personal agency. According to Larson (1998b), the personal agency determinant comprises seven components: CSE, counseling-related knowledge or skills, outcome expectations, supervision and counseling goals and plans, cognitive processes, affective processes, and self-evaluation. Of these, Larson (1998b) identified CSE as the primary factor between knowing how to counsel and being able to execute effective actions in counseling and supervision sessions. Given that CSE is the core construct of SCMCT, this construct was the outcome variable for this study.

Counseling self-efficacy. Just as Bandura highlighted self-efficacy as one of the core constructs in the SCT, Larson emphasized counseling self-efficacy as the primary concept in the SCMCT. Counseling self-efficacy (CSE) by definition is a “capability to effectively counsel” (Larson, 1998a, p. 328). Offering a more comprehensive definition, Larson and Daniels (1998) further defined CSE as “one’s beliefs or judgments about her or his capabilities to effectively
counsel a client in the near future” (p. 180). The following section addresses the sources of CSE and their importance for CITs’ professional development.

**Sources of CSE.** According to SCMCT, CITs’ cognitive appraisal and emotional awareness across four main sources will largely determine their CSE (Larson, 1998a, 1998b). This tenet of SCMCT is aligned with the SCT’s principles. In descending order of priority, the sources are: mastery, modeling, social persuasion, and affective arousal.

**Mastery.** Mastery refers to CITs’ effective counseling actions, with the threshold for effectiveness increasing according to their levels of clinical training (i.e., pre-practicum, practicum, and post-practicum or internship). As Bandura (1977, 1986) suggested, successful experiences with clients are the most potent way of increasing CSE. However, these mastery experiences only have a positive influence on CITs’ CSE if CITs evaluate their objectively successful performances as mastery (Larson, 1998b).

**Modeling.** SCMCT describes modeling, which SCT terms “vicarious experiences,” as social and/or self-comparison. According to Larson (1998b), CITs’ CSE is not only expected to increase via effective modeling from supervisors but also through participant modeling, which provides CITs multiple opportunities to review recordings of their own performance in counseling sessions.

**Social persuasion.** According to Larson (1998b), social persuasion as it relates to SCMCT refers to “the extent to which the supervisor provides realistic, supportive encouragement, and structured learning situations that increase the chance of counseling successes for the counselor” (p. 240). It also involves the extent to which supervisors provide feedback regarding the CITs’ performances in a relevant and convincing way. Consistent with Bandura’s suggestion, the influence of social persuasion alone may be limited if the supervisor
offers unrealistic appraisals or appraisals that contradict the CITs’ preexisting beliefs. One additional aspect related to the potency of social persuasion in the SCMCT’s framework pertains to the competence of the supervisors, which may involve the supervisors’ related clinical experiences and expertise (Larson, 1998a).

*Affective arousal.* Affective arousal refers to negative emotions, such as anxiety that is associated with executing counseling actions. Negative emotions may emerge as a hindrance to CITs and subsequently may impair the effectiveness of their counseling actions. However, negative emotions may also motivate CITs to revise or to try new counseling actions. This motivation flows from both meta-cognitive (i.e., cognitive appraisal) and meta-affective (i.e., emotional awareness) processes (Larson, 1998a).

In addition to posting that the three determinants of action, personal agency, and proximal training environment are related to CITs’ professional development, Larson also pointed to the importance of internal contextual determinants.

*Internal contextual determinants.* Larson (1998a, 1998b) suggested that one contextual determinant that consistently has a major influence on CITs’ performance involves the CITs’ stable characteristics, which constitute their internal context (Larson, 1998b). This internal context is consistent with what Bandura termed as one’s personal factors (Bandura, 1986). According to Larson (1998b), the internal context of CITs includes, but is not limited to, their developmental stage, personality, aptitude, values, self-esteem, theoretical orientation, and racial identity. These inner developmental attributes may be significant either as supports or barriers to the CITs’ self-confidence (Larson, 1998b; Larson & Daniels, 1998). This study examined the relationship of one such internal characteristic to CITs. Specifically, this study examined the
relationship between DOS – a variable that is part of CITs’ internal context – and counseling self-efficacy. The next section addresses the theory from which the DOS construct is drawn.

Bowen’s Family System Theory. In addition to SCMCT, this study drew on Bowen’s Family System Theory (BFST). Developed by Murray Bowen (1978; Kerr & Bowen, 1988), BFST provided a developmental paradigm that focuses on how a person’s sense of self emerges in the context of a relational, or emotional system. The dynamics of an individual’s emotional system underlies the core construct in BFST, which is the DOS (Bowen, 1978; Kerr & Bowen, 1988). The discussion below explained this through a description of the emotional system and the DOS.

Emotional system. According to Kerr and Bowen (1988), the emotional system is “the existence of a naturally occurring system in all forms of life that enables an organism to receive information (from within itself and from the environment), to integrate, and to respond on the basis of it” (p. 27). In other words, the emotional system provides a basis to understand behavioral links between individuals and others. Moreover, the emotional system can be extended beyond the individual by including relationship systems in individuals’ lives (Kerr & Bowen, 1988), such as family emotional systems, social emotional systems, or work emotional systems (Bowen, 1978). Guided by their emotional systems, individuals may choose to respond based on self-interest or based on the interests of the group in a particular relational system.

Given that the emotional system drives and guides all behaviors, Bowen postulated that the operation of the emotional system reflects an interplay between internal processes and life forces (Kerr & Bowen, 1988). The internal processes consist of two fundamental elements: the intellectual system and the feeling system. The life forces also consist of two fundamental elements: individuality and togetherness. The subsections below present a brief summary of how
these four fundamental elements can regulate a person’s functioning within the emotional system.

*Internal processes.* The intellectual system includes an individual’s capacity to know and to understand any phenomenon (Kerr & Bowen, 1988). Objectivity refers to the intellectual understanding of a phenomenon, unaffected by the feeling system. However, the feeling system may influence the intellectual system, resulting in a loss of objectivity. Likewise, the intellectual system may influence the feeling system, thereby affecting the extent to which the emotional system guides the individual’s functioning (Kerr & Bowen, 1988).

*Life forces.* Individuality is reflected when a person’s behavior follows his or her own directive, which is to be independent, autonomous, and unique (Kerr & Bowen, 1988). In contrast, when a person behaves in response to the directive of others, which is to be dependent, connected, and indistinct, they enact togetherness (Kerr & Bowen, 1988). Although a person’s tendency to demonstrate individuality and togetherness is to some extent innate, learning heavily influences their relative intensity. According to Bowen, the influence of learning depends on a person’s acquisition of values in the intellectual and feeling systems (Bowen, 1978; Kerr & Bowen, 1988). Thus, the extent to which individuality and togetherness each regulate a person’s actions and reactions depends on whether the intellectual system or the feeling system is most heavily influential in his or her significant relational or emotional system.

In short, the dynamic interplay between the two fundamental elements of life forces and the two fundamental elements of internal processes within the emotional system (i.e., the relational system) influence individuals’ functioning and patterns of behavior. Bowen suggested that all four fundamental elements within the emotional system underlie the core construct of BFST, namely, DOS (Bowen, 1978; Kerr & Bowen, 1988).
Differentiation of self. According to Bowen (1978), differentiation is essentially synonymous with the process of “defining a self or working toward individuation” (p. 539). This self-energizing process of an individual’s sense of self occurs in the context of an emotional or relational system that guides an individual’s functioning. In BFST, the sense of self (i.e., differentiation) needs to be comprehended from two paradigms: the degree of DOS and the level of DOS.

Degree of differentiation of self. The degree of DOS is the extent to which a person can counterbalance internal processes (i.e., ability to balance objectivity and subjectivity) with life forces (i.e., ability to balance separateness and connectedness) (Kerr & Bowen, 1988). Therefore, the variation of DOS may range from a low to high degree. The degree of DOS will be discussed in greater detail later in this chapter.

Level of differentiation of self. The level of DOS is a functioning pattern of how a person defines his or her individuation as it appears in his or her significant relational or emotional systems (Kerr & Bowen, 1988). Bowen postulated two levels of DOS: the basic level, which is also known as the solid self, and the functional level, which is also known as the pseudo self (Bowen, 1978; Kerr & Bowen, 1988), as described below.

The level of DOS is a functioning pattern of how a person defines his or her individuation as it appears in his or her significant relational or emotional systems (Kerr & Bowen, 1988).

Solid self. Solid self (i.e., basic level) is a definite functioning pattern illustrated by a person. According to Bowen (1978), the solid self depicts a person’s convictions pertaining to life principles that emerges within his or her family of origin. Because the functioning pattern of solid self is already developed due to adapting to parental family in childhood, the functioning of solid self is neither dependent on the relationship process nor negotiable in the other relationship
systems (Kerr & Bowen, 1988). Thus, the solid self does not change in response to coercion or pressure, or the desire to gain approval from others or even to enhance standing among others. However, Bowen (1978) has suggested that new knowledge and significance experiences may change the basic level self.

**Pseudo self.** In contrast to the fixed level of solid self, the pseudo self (i.e., functional level) shifts (Kerr & Bowen, 1988). The pseudo self is comprised of various facts, beliefs, and other principles that are acquired through significant relationship systems (Bowen, 1978). According to Kerr and Bowen (1988), the functioning pattern at this level is created through the learned facts that people need to know and beliefs or principles that they accept from others in order to enhance their position in relation to others. In other words, significant relationship systems beyond family of origin, such as social and work relational systems, determine the functioning pattern of the pseudo self and it is negotiable.

Overall, this study has discussed DOS construct from a Bowenian theoretical framework. Because this study examined the CITs’ self-confidence in association with DOS and supervisory styles, the next section addresses the theory from which the CITs’ professional development is contextualized.

**Integrative Developmental Model.** Initially proposed as the Counselor Complexity Model (Stoltenberg, 1981), this model has evolved into the IDM (McNeill & Stoltenberg, 2016; Stoltenberg, 1993, 2005; Stoltenberg & Delworth, 1987; Stoltenberg & McNeill, 2010). The theorists of IDM conceptualize the growth of counselors, CITs, and supervisees as progressing through four levels of professional development. To best enhance the developmental progression through these levels, supervisors should also consider elements of supervisory structure and supervisor approach in supervision environment at each level of their supervisees’ professional
development (McNeill & Stoltenberg, 2016; Stoltenberg & McNeill, 2010). Therefore, the following overview of IDM has three sections: (a) levels of counselor development, (b) supervisory structure, and (c) supervisor approach in supervision environment.

**Levels of counselor development.** The IDM identifies four primary levels of counselor development: Level 1, Level 2, Level 3, and Level 3i (McNeill & Stoltenberg, 2016; Stoltenberg, 1993, 2005; Stoltenberg & Delworth, 1987; Stoltenberg & McNeill, 2010). To be able to achieve excellent professional development, counselors must pass through the prior levels of professional development before moving on toward the next level (McNeill & Stoltenberg, 2016; Stoltenberg & McNeill, 2010). Level 1 counselors are typically entry-level counselors in counselor preparation programs. According to Stoltenberg and McNeill (2010), the background of these beginning counselors may vary, but usually they have an interest in human nature. Level 1 counselors have some knowledge related to the counseling theory, process, and other relevant areas; however, their actual practice in counseling sessions is limited. Moreover, counselors who may have had related experience in clinical practice will be functioning at Level 1 if their previous experiences are significantly different from the primary context of the training environment (McNeill & Stoltenberg, 2016; Stoltenberg & McNeill, 2010).

The Level 2 counselors are experiencing a transition. Depending on counselors’ personal characteristics and the training circumstances, a successful transition results in growth, whereas a difficult and conflictual transition may hinder their professional development (Stoltenberg & McNeill, 2010). The Level 3 counselors normally are more advanced counselors. However, McNeill and Stoltenberg (2016) theorized that counselors at Level 3 do not simply reflect their age or years of practice or training experience. The fourth level, literally denoted as Level 3i counselors have generally reached the highest point of their professional development. The “i”
refers to “integrative,” and according McNeill and Stoltenberg (2016), counselors at Level 3i have achieved an integrated level across almost all aspects of their clinical practice and have a solid professional identity. Because counseling is a profession of lifelong development, Level 3i may be more theoretical than actual.

In addition to these four primary levels of development, IDM postulates two other levels not included above: sublevel 1 and pseudo-level 3 (Stoltenberg & McNeill, 2010). Sublevel 1 counselors are unable to progress in their development and therefore have not reached Level 1. This becomes clear when they start practicing with clients in practicum. Pseudo-level 3 counselors are those who do not complete or circumvent the transition experiences in Level 2. Rather, they imitate the Level 3 behavior without experiencing the real professional development that an advanced counselor must have.

In short, each counselor will progress at his or her own pace. The counselors may experience only certain progressive levels through their whole growth development.

Supervisory structure. There are three overriding supervisory structures: (a) the cognitive and affective self-and-other-awareness, (b) motivation, and (c) autonomy (McNeill & Stoltenberg, 2016; Stoltenberg, 1993, 2005; Stoltenberg & Delworth, 1987; Stoltenberg & McNeill, 2010). The cognitive and affective self-and-other-awareness structure refers to a conscious realization about oneself as a counselor and a cognizance of the client(s) experiences. This conscious realization comprises the content of thought processes and changes of emotions that occur in the professional context that clients also experience. The motivation structure refers to a counselors’ investment of preparatory effort, interest, willingness, and involvement in training and practice. This structure changes over time and the cognitive and affective self-and-other-awareness structure affects it by influencing the counselors’ self-confidence. The third
structure is autonomy. This structure is referred to as independence. IDM theorists have suggested that changes in the motivation structure will affect the degree of independence a counselor demonstrates and can limit his or her self-confidence (McNeill & Stoltenberg, 2016; Stoltenberg & McNeill, 2010). In other words, IDM proposes that self-confidence may be related to both motivation and autonomy. Also, the prior structures influence the latter structures.

**Supervisory approach in supervision environment.** The effectiveness of a supervision environment depends significantly on the supervisor’s approach (Holloway, 1982; McNeill & Stoltenberg, 2016; Stoltenberg, 2005). In IDM, the supervisor’s approach to scaffolding the supervision environment utilizes five supervisory interventions: (a) facilitative intervention, (b) prescriptive intervention, (c) conceptual intervention, (d) confrontive intervention, and (e) catalytic intervention (McNeill & Stoltenberg, 2016; Stoltenberg, 1993, 2005; Stoltenberg & McNeill, 2010).

The facilitative intervention is an approach in which supervisors communicate their support, warmth, encouragement, acceptance, self-disclosure of their early struggles in practice, and trust to their supervisees. This approach is the most important supervisory intervention and it influences all four levels of professional development (Stoltenberg, 2005; Stoltenberg & McNeill, 2010). When using prescriptive interventions, supervisors provide a specified treatment goal and plan to their supervisees. Supervisors execute this directive approach for the sake of client welfare. A conceptual intervention is an approach supervisors use to help their supervisees develop analytical thinking. Through this approach, supervisees learn to make conceptual ties between theory and practice and to understand the rationale behind a particular counseling technique (McNeill & Stoltenberg, 2016; Stoltenberg & McNeill, 2010).
Supervisors use confrontive interventions to highlight and examine the discrepancies between supervisees’ functioning during examination. Stoltenberg (2005) suggested that supervisors should not use the confrontive intervention in hostile or punitive ways but rather with objectivity for the purpose of increasing supervisees’ self-understanding and insight. Catalytic interventions occur when a supervisor acts as a catalyst to challenge the supervisees’ comfort level by expanding their awareness of the clinical aspects related to their practice. According to McNeill and Stoltenberg (2016), both the confrontive and catalytic interventions are helpful in addressing the supervisees’ emotional reactions that occur in counseling or supervision sessions. However, addressing these emotional reactions should be limited to supporting supervisees’ professional development rather than for purely therapeutic purposes.

In summary, IDM does not prescribe any distinct supervisory interventions. Rather, to build a constructive supervision environment, supervisors are encouraged to demonstrate flexibility in their approach and to draw from five supervisory interventions according to their supervisees’ needs at each individual level of development (McNeill & Stoltenberg, 2016; Stoltenberg, 2005; Stoltenberg & McNeill, 2010).

Thus far, the section above has provided overviews of IDM, SCT, SCMCT, and BFST, which together comprise the theoretical frameworks for this study. The following discussion begins by revisiting the related SCMCT’s principles within this study and also revisits the three constructs of interest for this study: CSE, supervisory styles, and DOS.

**Overview of Related SCMCT’s Principles Within This Study**

Again, SCMCT served as the theoretical framework for this study, which examined CITs’ development by exploring the theoretical relationships among the three constructs: CSE, supervisory style, and DOS. In addition to incorporating SCT’s concept of triadic reciprocal
causation, Larson (1998b) suggested that four causal determinants interact with each other within the main triadic interaction of SCMCT. Among these, three pertain to this study: CSE, external context (i.e., counseling and supervision environments), and internal context (i.e., CITs’ DOS, a stable characteristic). For this study, an external context and an internal context were operationalized as the supervisory style and the DOS constructs, respectively. Based on an understanding of CSE as the primary causal determinant of CITs’ knowledge acquisition and counseling performances (Larson 1998a, 1998b), this core construct in SCMCT was selected as the outcome variable for this study. The following section provides necessary background for the application of the three constructs in this study through the specific context of master’s level practicum CITs.

**Counselors-in-Training**

Larson (1998b) remarked that CITs’ level of clinical practice training (e.g., practicum and post-practicum) is a vital consideration for assessing their mastery of professional clinical practice, which is related to the dynamic aspects of CITs’ CSE. Given that CITs’ initial level of clinical practice training plays a major role in fostering their confidence in their ability to perform counseling, Larson et al. (1992) and Larson (1998b) called on researchers to explore the development of CIT’s CSE in practicum training. However, they did not offer details pertaining to how CITs’ level of clinical practice training determines CSE. Noting a lack of theoretical explanation about the development of CITs’ CSE in proximal training, Stoltenberg (1998) suggested that it is possible to fuse IDM’s developmental perspective to frame the CITs’ level of clinical practice training as postulated in the SCMCT. Therefore, this study used IDM to frame the specific contextual description for CITs’ experiences in master’s level practicum, which is referred to as CITs’ Level 1 professional development.
CITs’ Level 1 professional development. IDM (McNeill & Stoltenberg, 2016; Stoltenberg & Delworth, 1987; Stoltenberg, 1993, 2005; Stoltenberg & McNeill, 2010) is a theory of clinical supervision from the developmental paradigm. According to Stoltenberg (1993), Level 1 professional development refers to counselors who are new or relatively new to professional practice training, including those who are participating in laboratory experiences (i.e., pre-practicum) and those who are in practicum. Because of the research questions this study addressed, this section presents a discussion of Level 1 professional development to frame theoretically the specific context of the master’s level practicum CITs for this study. The lens of IDM reveals three overriding supervisory structures that determine the CITs’ Level 1 professional development: the cognitive and affective self-and-other-awareness structure, the motivation structure, and the autonomy structure.

CITs’ limited direct relevant clinical experiences affect their confidence (McNeill & Stoltenberg, 2016; Stoltenberg, 1993, 2005; Stoltenberg & McNeill, 2010). A lack of confidence can pertain to all three supervisory structures. With respect to self-and-other-awareness, CITs have a tendency to focus on their own rather than their clients’ intellectual and emotional experiences (McNeill & Stoltenberg, 2016; Stoltenberg & McNeill, 2010). They may indulge in reflections on the knowledge they are gathering during sessions instead of being fully present with their clients in counseling sessions and the supervisor in supervision sessions. CITs’ concern about their experience, counseling skills, and ability to perform can create a cognitive barrier to performing well. CITs may also experience affective disturbance such as anxiety, fear, frustration, hopelessness, and confusion (Stoltenberg 2005; Stoltenberg & McNeill, 2010). These negative emotions flow from the CITs’ self-focus and may hinder their ability to gain self-understanding. This self-focus has implications for CITs’ motivation and autonomy structures.
A strong motivation to learn how to provide the “best and correct” counseling practice (McNeill & Stoltenberg, 2016, p. 19) and excitement about becoming professional counselors (Stoltenberg, 2005) can also create self-focus without self-and-other-awareness. Among the causes of CITs’ drive to learn is their desire to overcome the uncomfortable sense of incompetence (Stoltenberg, 1993). Therefore, CITs are not purely inclined to function based on intrinsic motivation. Instead, CITs may experience high levels of extrinsic motivation, to execute the best counseling performance.

Although CITs are highly motivated, they show considerable dependency on their supervisors (Stoltenberg & McNeill, 2010). This low autonomy structure, which is appropriate and expected at Level 1, occurs because CITs rely on their supervisors to provide information about clinical practice and structure in supervision. In fact, Level 1 CITs typically view the supervisors as role models and experts (Stoltenberg & McNeill, 2010) and normally seek their advice on many issues, due to CITs limited knowledge about themselves and also clinical practice (Stoltenberg, 2005).

Over time, CITs’ confidence increases when they receive a positive evaluation of their performance from others, especially from their supervisors (Stoltenberg & McNeill, 2010). Receiving constructive evaluations from others gradually leads to positive self-evaluations. In part, positive self-evaluation changes the source of motivation for CITs from an extrinsic motivation to an intrinsic motivation (McNeill & Stoltenberg, 2016). Also, this positive self-evaluation helps CITs obtain a different perspective on their early perception of inadequacy. In this way, their initial negative emotions diminish. Consequently, CITs begin to shift their focus, both cognitively and affectively, to their clients’ experiences and needs. Once CITs experience progressive professional development and their sense of confidence increases, they enter the late
Level 1 professional development stage and are ready to transition to a higher level of professional development: Level 2 (McNeill & Stoltenberg, 2016; Stoltenberg & McNeill, 2010).

Because master’s level practicum CITs complete supervised clinical practice training, they can be identified interchangeably as supervisees. As such, CITs in this study (i.e., practicum CITs or Level 1 CITs) are be referred to as beginning supervisees. By contrast, ‘advanced supervisees’ will refer to professional counselors, CITs in doctoral level academic training programs, and also CITs who are in a post-practicum at the master's level in an academic training program.

The lens of IDM provides a theoretical and contextual description of the professional development path for the target sample in this study: Level 1 CITs. Within this theoretical context, one of the core issues related to CITs’ early development in the practicum is the importance of CITs’ self-confidence. In fact, McNeill and Stoltenberg (2016) stated that self-efficacy in practicing counseling is regarded as a competency benchmark of counselor professional development, which the following section reviews.

**Counseling Self-Efficacy Construct.**

As the SCT and the IDM define self-efficacy, CSE is the principal focus of counselor training in the SCMCT (Kincade, 1998; Larson, 1998a, 1998b; Stoltenberg, 1998). Whether this self-confidence belief accurately or inaccurately reflects CITs’ actual competence, CSE determines the extent to which the CITs decide to engage in clinical work, how much effort they will spend on their chosen clinical works, and how long they will persevere under failure conditions (Bandura, 1977, 1986, 1997; Larson, 1998b; Larson & Daniels, 1998). In reviewing the CSE construct, the related review of the literature is divided as follows: (a) degree of CSE, (b) research on CSE, and (c) instruments used to assess the CSE construct.
Degree of counseling self-efficacy construct. SCMCT posits that there is a range of degrees of CSE experienced by CITs. According to Larson (1998a, 1998b), for the most part, CITs with high degrees of CSE have more self-aiding thought, set sensible and practical goals for accomplishing the chosen counseling actions, and experience anxiety as motivating rather than debilitating. By contrast, CITs with low degrees of CSE may dwell on their personal deficiencies and have serious doubts about their ability to counsel clients effectively. Self-efficacy judgment varies: CITs who experience similar situations can have different degrees of CSE. However, SCMCT does not describe a high degree of CSE as the best outcome for CITs. As Larson (1998b) writes, “High counseling self-efficacy [is] neither positive nor negative according to SCMCT; rather, CSE is posited to be most beneficial when it is slightly optimistic relative to the counselor’s performance” (p. 264). This suggests that CITs’ ideally are able to accurately estimate their actual capabilities and that their degree of CSE matches the degree of their competence.

SCMCT also describes the impact of unrealistic degrees of CSE among CITs, when they underestimate or overestimate their abilities. CITs who underestimate their abilities may demonstrate unwillingness to take risks, a lack of perseverance in the face of failure, paralyzing reactions to negative feedback, feeling overwhelming with negative emotions, and avoidance of the learning process by choosing counseling-related actions that are either too difficult or too easy (Larson, 1998b; Larson & Daniels, 1998). CITs who overestimate their ability may also experience negative consequences. Being overly confident about their capability to counsel a client may lead CITs to feel they do not need to invest sufficiently in preparation and to set unrealistic goals for counseling and supervision sessions (Larson, 1998b; Larson & Daniels, 1998). Thus, although this study focused on CITs self-reported degree of CSE, it is important to
recognize the possibility that their level of CSE may not have accurately reflected their level of competence.

**Research on counseling self-efficacy construct.** In a major review of research on counseling self-efficacy, Larson and Daniels (1998) identified 32 studies that examine the development and enhancement of CITs’ and professional counselors’ CSE. Based on this review, they concluded that the CSE correlates positively with counseling-related experiences. More recent studies also support these results, indicating that higher levels of CSE are associated with more clinical experiences (Barbee, Scherer, & Combs, 2003; Bischoff & Barton, 2002; Leach, Stoltenberg, McNeill, & Eichenfield, 1997; Lent et al., 2009; Martin, Easton, Wilson, Takemoto, & Sullivan, 2004; Tyron, 1996; Melchert, Hays, Wiljanen, & Kolocek, 1996; Tang, Addison, LaSure-Bryant, Norman, O’Connell, & Stewart-Sicking, 2004), more hours of supervision (Larson et al., 1992; Lent et al., 2003), and more exposure to specific training interventions during counseling coursework (Clark, 2005; Daniels & Larson, 2001; Larson et al., 1999; Lent et al., 2006; Levitt, 2002; Meyer, 2012; O’Brien, Heppner, Flore, & Bikos, 1997; Urbani, Smith, Maddux, Smaby, Torres-Rivera, & Crews, 2002; Waldersee, 1994). Thus, CITs and professional counselors are likely to develop higher level of CSE over time as their clinical training and careers progress.

Research findings about the relationship between the level of clinical practice training (i.e., pre-practicum, practicum, and post-practicum across years in academic training programs) and CSE are far less clear than research on the relationship between clinical experiences and CSE. For example, several researchers have found a positive relationship between the level of clinical practice training and the degree of CSE (Friedlander & Snyder, 1983; Larson et al., 1992; Leach et al., 1997; Melchert et al., 1996; O’Brien et al., 1997; Heppner et al., 1998;
Kocarek, 2001; Rushlau, 1998; Tang et al., 2004; Ward, 2001). In contrast, Johnson and Seem (1989, as cited in Larson & Daniels, 1998) found the opposite to be true. Similarly, Kozina et al. (2010) conducted a longitudinal study in which they assessed 20 CITs’ CSE at two different times during their practicum semester. They found that 25 percent of CITs reported decreased levels of CSE at the end of the clinical practice training period.

Additionally, some researchers have found a nonlinear relationship between the level of clinical practice training and the degree of CSE (Potenza, 1990). Likewise, in a cross-sectional study, Sipps et al. (1988) assessed 78 CITs and also found a nonlinear trend between the years of graduate school and CSE scores. Specifically, the first-year CITs had greater confidence than second-year CITs, although CSE belief increased thereafter. These contradictory results may be explained by the fact that second-year CITs had just begun their practicum, which lowered their confidence, and results thereafter reflected the linear relationship between level of clinical practice training and CSE. The first-year students were in pre-practicum training, which only involved laboratory experience and role-played clients (Etringer et al., 1995; Woodside et al., 2007). Practicum training provides CITs their first encounter with actual clients, which may decrease their confidence (Kurtyilmaz, 2015; Rushlau, 1998).

In exploring CITs’ CSE during the practice of actual counseling, Rushlau (1998) emphasized the importance of practicum training as the first stage of integrating knowledge and skills into actual practice. In recognition of the importance of this stage of training, this study further explored factors associated with CITs’ development of CSE in their initial, master’s level practicum. The next section provides a review of instrumentation used to measure CSE.

**Instruments used to assess the counseling self-efficacy construct.** Researchers have developed a number of instruments to measure the level of CSE. These instruments either
measure the CSE construct in general or within specific counseling specialties (Barnes, 2004; Larson & Daniels, 1998). With regard to measuring specific forms of CSE, the literature presents several instruments, including school counseling (i.e., Counselor Self-Efficacy Scale [CSS]; Sutton & Fall, 1995: School Counselor Self-Efficacy Scale [SCSE]; Bodenhorn & Skaggs, 2005), career counseling (i.e., Career Counseling Self-Efficacy Scale [CCSES]; O’Brien et al., 1997), and group counseling (i.e., Group Leader Self-Efficacy Instrument [GLSEI]; Page, Pietrzak, & Lewis, 2001). These instruments were purposely constructed to assess counselor self-efficacy related to specific counseling specialties and not appropriate for measuring CSE in general.

Other instruments have been developed for measuring CSE in general, regardless of specialization. For example, the Self-Efficacy Questionnaire (Sipps et al., 1988) and the Counselor Self-Efficacy Scale (Johnson, Baker, Kopala, Kiselica, & Thompson, 1989) may be used to measure overall CSE. However, the studies for which these particular instruments were developed reported only limited information regarding their psychometric properties. Therefore, many researchers have used the following four instruments which are intended to measure general CSE construct, all of which offer stronger evidence of reliability and validity: the Self-Efficacy Inventory (SE-I; Friedlander & Snyder, 1983), the Counseling Self-Estimate Inventory (COSE; Larson et al., 1992), the Counselor Self-Efficacy Scale (CSES; Melchert et al., 1996 [has similar name of instrument which developed by Johnson et al., 1989]), and the Counselor Activity Self-Efficacy Scales (CASES; Lent et al., 2003).

Of these, the COSE was most appropriate for the purpose of this study, which is to measure the general CSE for the beginning supervisees, whereas the other three instruments were designed to assess specific domains associated with general CSE. For example, the SE-I
measures CITs’ confidence in the domains of group and family intervention and completion of academic requirements (Friedlander & Snyder, 1983). The CSES assesses CITs’ confidence in the domains of group counseling and therapy (Melchert et al., 1996). The CASES, which applies primarily to CITs at the advanced level of clinical practice training (i.e., post-practicum) and to professional counselors, measures CITs’ confidence in the domains of client distress and relationship conflict (Lent et al., 2003). COSE has good psychometric properties (Larson et al., 1992) and measures CITs’ confidence for individual counseling (Larson & Daniels, 1998). In their review of research on CSE, Barnes (2004) and Larson and Daniels (1998) remarked that the COSE is the most commonly used instrument to measure general CSE. To date, the COSE is still commonly reported in the literature and has been used in several studies to explore CSE construct (e.g., Easton, Martin, & Wilson, 2008; Kozina et al., 2010; Lam, Tracz, & Lucey, 2013; Lorenz, 2009; Marmarosh et al., 2013; McCarthy, 2012; Meissner, 2012; Meyer, 2012; Seay, 2015; Terranova-Nirenberg, 2013). Chapter 3 provides details pertaining to psychometric properties of the COSE.

To summarize, SCMCT postulates CSE as one of the causal determinants in triadic reciprocal causation, suggesting it is the core construct for understanding the CITs’ professional development. Research on supervision has shown that the CSE construct plays a crucial role, particularly in relation to CITs’ levels of clinical practice training and other available instruments used to assess this construct. Because CSE was a construct of interest in this study, this section of literature review has discussed the CSE construct using SCMCT as a theoretical framework, synthesized research related to CSE, and identified various instruments used by previous researchers to measure CSE. The following section discusses the second construct of interest in this study: supervisory style.
**Supervisory Style Construct**

SCMCT describes the external context (i.e., counseling and supervision environments) as one of the causal determinants in triadic reciprocal causation (Larson, 1998a, 1998b). Larson (1998b) suggested that, for CITs, this external context consists primarily of the supervisory environment as they perceive it and, more specifically, the approach they perceive their supervisors as taking in supervision sessions. Accordingly, this study operationalized CITs’ perception of the supervisory approach as the *supervisory style*. The sections below review the literature related to the construct of supervisory style with attention to (a) terms related to supervisory style, (b) supervisory style as social persuasion, (c) research on supervisory style construct, (d) research on supervisory style and CSE constructs, and (e) methodologies used in research on supervisory style.

**Terms related to supervisory style construct.** Researchers have used a variety of terms when referring to the construct of supervisory style. These include supervisor behaviors (Friedlander & Snyder, 1983; Heppner & Roehlke, 1984; Ladany et al., 2013; Worthington, 1984, 1987; Worthington and Roehlke 1979; Worthington, 1987; Wiley & Ray, 1986), supervisor roles (Bernard, 1979, 1997; Ellis & Dell, 1986; Ellis et al., 1988; Freeman & McHenry, 1996; Kreider, 2014; Morgan & Sprenkle, 2007), supervisor feedback through supervisory interventions (Daniels & Larson, 2001; Clark, 2005; Waldersee, 1994), supervisory approach (Hogan, 1964), supervisory approach through supervisory interventions (McNeill & Stoltenberg, 2016; Stoltenberg & Delworth, 1987; Stoltenberg & McNeill, 2010), preferred roles and styles (Schechtman & Wirzberger, 1999), and supervisor variables (Jordan, 2006). Despite the varied terminology, the underlying idea of all of these terms involves the manner or an approach as exhibited by supervisors when interacting with their supervisees during the clinical
supervision process. When referring to this construct, this study used the term “supervisory style,” which has been used in many other studies in the last several decades (Culbreth & Borders, 1999; Dow, Hart & Nance, 2009; Efstation et al., 1990; Fernando & Hulse-Killacky, 2005; Friedlander & Ward, 1984; Hart & Nance, 2003; Ladany & Lehrman-Waterman, 1999; Ladany, Marotta, & Muse-Burke, 2001; Ladany, Walker, & Melincoff, 2001; Long et al., 1996; Lorenz, 2009; Meissner, 2012; Reeves et al., 1997; Teitelbaum, 1998; Terranova-Nirenberg, 2013; VanDerWege, 2011; Wolfsfeld & Haj-Yahia, 2010).

**Supervisory style as social persuasion.** SCMCT suggests that all causal determinants interact bidirectionally with one another. Thus, the supervisory style construct is associated with the CSE construct. This relational interaction can be framed as the source of CITs’ CSE, which SCMCT terms social persuasion. Larson (1998b) defined social persuasion as “the extent to which the supervisor provides realistic, supportive encouragement and structured learning situations that increase the chance of counseling successes for the counselor” (p. 240). Moreover, Larson (1998b) suggested that supervisors should focus on this source of self-efficacy as the key aspect of clinical supervision if they are to promote CITs’ confidence in counseling performances. In other words, a supervisor’s supervisory style is associated with CITs’ CSE.

The SCMCT depicts supervisors’ ideal use of social persuasion via their styles of supervision, including (a) providing supportive learning environments, (b) persuading the CITs to learn new counseling actions in an organized supervisory experience, and (c) being thoughtful in communicating feedback to CITs in a constructive, relevant, positive, and changeable way (Larson, 1998b). SCMCT conceptualizes this ideal supervisory style as consistent with IDM’s supervisory approach through the integration of supervisory interventions for Level 1 CITs.
Supervisory style and CITs’ Level 1 professional development. Theoretically, IDM offers further detail relevant to the SCMCT’s ideal social persuasion or supervisory style from the context of Level 1 CITs’ professional development. Facilitative, prescriptive, and conceptual interventions are three supervisory inventions that align with Level 1 CITs’ needs (McNeill & Stoltenberg, 2016; Stoltenberg, 1993, 2005; Stoltenberg & McNeill, 2010). With the aim of providing effective clinical supervision and promoting CITs’ confidence, supervisors are encouraged to be flexible in their supervisory approach or style by integrating these supervisory interventions within a supervision session or across supervision sessions (McNeill & Stoltenberg, 2016; Stoltenberg & McNeill, 2010).

Supervisors who communicate support, warmth, encouragement, acceptance, and trust to their supervisees are exhibiting a supportive style of supervision through facilitative interventions. Any indication of appreciation and acknowledgement of early success in executing counseling performance has a powerful impact for Level 1 CITs’ subsequent professional development (Stoltenberg, 2005; Stoltenberg & McNeill, 2010). Moreover, according to IDM, supervisors’ self-disclosure of their early struggles in clinical practice is part of effective supervision (McNeill & Stoltenberg, 2016).

Because Level 1 CITs are inexperienced, supervisors help CITs when they implement prescriptive interventions and offer structure in the clinical supervision sessions. The supervisors may exhibit this structured, prescriptive supervisory style by providing CITs’ with concrete plans relating to their specific clinical situation and by providing sufficient information that CITs need to effectively implement these plans (McNeill & Stoltenberg, 2016; Stoltenberg, 1993, 2005; Stoltenberg & McNeill, 2010). This structured supervisory style enhances CITs’ acquisition of counseling skills acquisition and removes some of the uncertainty regarding the complexity of
clinical practice that is associated with early clinical practice training (McNeill & Stoltenberg, 2016). However, IDM theorists postulate that supervisory experiences with too much structure may stifle CITs’ professional development, giving them a very limited breadth of experience with self-initiated clinical interventions (McNeill & Stoltenberg, 2016; Stoltenberg & McNeill, 2010). Therefore, the ideal supervisory style has a balanced degree of structure.

Supervisors can also build Level 1 CITs’ CSE by implementing a conceptual intervention that encourages CITs to engage in self-examination by observing or listening to their own counseling tape and self-reporting. The purpose of this self-examination process is to develop early analytical thinking by connecting clinical theories to practice. Because Level 1 CITs do not perceive what they are doing in counseling sessions with clarity, supervisors must use didactic means to break down this self-examination process into fairly discrete and observable actions, and convey the feedback through constructive, positive, and corrective comments (McNeill & Stoltenberg, 2016). Thus, the use of conceptual interventions underlies the encouraging-systematized approach, which supervisors require to balance the integration of the supportive-structured supervisory styles.

The IDM identifies two additional supervisory approaches, neither of which it recommends for use with Level 1 CITs until they have developed confidence in their ability to perform clinical practice and are no longer overwhelmed with anxiety and other emotions: the confrontative intervention and the catalytic intervention (McNeill & Stoltenberg, 2016; Stoltenberg & McNeill, 2010). According to Stoltenberg and McNeill (2010), supervisors should only use the confrontative interventions with CITs who are causing harm to their clients or are inappropriately breaking a client’s confidentiality for no good reason. The catalytic interventions are helpful in addressing supervisees’ emotional reactions that occur in counseling or supervision.
sessions with the aim to support supervisees’ professional development rather than for therapeutic purposes. Therefore, the use of catalytic interventions can be more useful for CITs at late Level 1 or higher levels of professional development in which they have deeper clarity of understanding of clinical practice. Using these approaches too early may incite resistance and curtail CITs’ progressive professional development. Therefore, IDM suggests that supervisors should integrate and rely primarily upon facilitative-prescriptive-conceptual interventions when working with Level 1 CITs.

Thus far, rather than recommending the use of a single, specific supervisory style, both SCMCT and IDM suggest the use of similar combinations of supervisory styles when working with practicum-level CITs. Specifically, these models both suggest combining supportive, structured, and supportive-structured supervisory styles. The next section reviews studies on supervisory style to examine the significance of these theoretical suggestions.

**Research on supervisory style construct.** Supervision should be conceived of as a developmental process wherein supervisees have different needs at different professional developmental levels (Bernard & Goodyear, 2014; Jordan, 2006; Ronnestad & Skovholt, 1993; Stoltenberg & McNeill, 2010). Much of the research on supervision has used a developmental paradigm to explore the nature of effective supervisory styles. Some studies has focused on CITs, others focused on professional counselors as supervisees, and some focused on both CITs and professional counselors (e.g., Larson et al., 1992; Lent et al., 2003). Studies also vary with regard to whether they focused on specific levels (i.e., pre-practicum, practicum, and post-practicum) of clinical practice training or addressed all levels.

Previous researchers have shown how beginning and advanced CITs (i.e., supervisees) perceptions of supervisory style were associated with the effectiveness of clinical supervision
(Ellis et al., 1988; Stoltenberg, McNeill, & Crethar, 1994). For example, advanced supervisees valued supervisors who adopted a relationship-oriented or a collegial style of supervision (Friedlander & Ward, 1984; Miars et al., 1983; Ronnestad & Skovholt, 1993; 2003; Schechtman & Wirzberger, 1999; Worthington, 1984). Such a supervisory style seems to offer advanced supervisees the chance to process personal issues that may be affecting their professional development (Guest & Beutler, 1988; Rabinowitz, Heppner, & Roehlke, 1986). Through this dynamic, collegial supervisory style, advanced supervisees can process the complexity of case conceptualization in relation to their clients (Ladany, Marotta, & Muse-Burke, 2001) and also become open to critical and constructive feedback from their supervisors for the sake of their professional and career development (Heppner & Roehlke, 1984).

Although both beginning and advanced supervisees valued structured supervisory style for crisis cases (e.g., suicide) and new specialty areas with which they had no prior experience (e.g., a different population of client), researchers have shown that beginning supervisees perceived more value in a more structured supervisory style in almost every aspect of the supervision process (Shechtman & Wirzberger, 1999; Tracey et al., 1989). Clinical supervision theorists have posited that this structured supervisory style is a salient need for beginning supervisees (Bernard 1979, 1997; Bernard & Goodyear, 2014; Borders, 1990; Hogan, 1964; Larson, 1998b; McNeill & Stoltenberg, 2016; Ronnestad & Skovholt, 1993; Stoltenberg & McNeill, 2010). A number of studies support this claim (e.g., Efstation et al., 1990; Friedlander & Ward, 1984; Worthington & Roehlke, 1979). In a phenomenological study, Jacobsen and Tanggaard (2009) examined the beginning supervisees’ preferences concerning supervisory style. They found that beginning supervisees (n=8) valued supervisors who gave them clear and specific instruction to guide their counseling performance.
Other studies have identified supervisory styles other than the structured supervisory style that suit the needs of beginning supervisees. For example, Jordan (2006) conducted a study to identify which supervisors’ variables the master’s level supervisees (n=98) perceive as the most important in their early professional developmental. Findings indicated that the supervisees valued supervisors who showed care and concern in supervision, and that this style encouraged supervisees to take risks that resulted in positive professional development. In other words, a supportive supervisory style promotes the maximization of supervisees’ learning experiences. Similarly, Mohd Ali et al. (2014) surveyed 138 beginning supervisees with respect to their experiences of supervisory style. They found that the supportive supervisory style was the most likely to match supervisees’ levels of readiness in clinical practice training.

Interestingly, research findings have shown that most supervisors implemented a supportive style in their supervision process, regardless of their supervisees’ level of clinical practice training (i.e., pre-practicum, practicum, or post-practicum), the level of their academic training program (master’s or doctoral programs), or their status as CITs or professional counselors (Hindes & Andrews, 2011; Heppner & Roehlke, 1984; Morgan & Sprenkle, 2007; Prieto, 1998; Wiley & Ray, 1986). Beginning supervisees perceived both the structured supervisory style and the supportive supervisory style as important approaches that supervisors should exhibit during the supervision process (Guest & Beutler, 1988; Hogan, 1964). In other words, beginning supervisees value supervisory styles that are somewhat task-oriented and informative but at the same time are also positive and encouraging. A few studies have identified this structured-supportive style. For example, Hart and Nance (2003) conducted a study to examine supervisory style as perceived by both supervisees in the master’s level practicum (n=168) and the supervisors (n=90). The data were collected at two separate times in the...
practicum semester, at the beginning of practicum and after ten sessions of individual supervision. Hart and Nance found that beginning supervisees rated most highly those supervisors who identified as supportive teachers – defined as supervisors who exhibited high support and high direction to their supervisees – were the highest supervisory style.

Instead of a combination of structured-supportive supervision style, Steward et al. (2001) suggested in their study another different combination of supervisory styles. Steward et al. conducted a study to examine the association of supervisory style and supervisees’ evaluation of their counseling performance \((n=36)\). They found that the more supervisees felt that their supervisors offered warmth, supportiveness, openness, and trust as their only style in the supervision process, the more likely supervisees were to express less confidence in their skills than their supervisors felt they should have. Thus, a solely supportive supervisory style through the clinical supervision process negatively affected supervisees’ sense of accomplishment in clinical practice. The findings suggested that supervisors should use whatever style it was that in supervisors’ perspectives the supervisees perceived negatively. Integrating their findings with the literature that shows positive results of a supportive supervisory style, Steward et al. (2001) concluded that supervisors should cultivate a supervisory style involving a balance of support and challenge to meet the varied needs of supervisees.

Other studies go beyond the structured, supportive, structured-supportive, and support-challenge supervisory styles. For instance, Worthington and Roehlke (1979) conducted a study to identify the supervisor behaviors that were perceived as the most effective supervision by master’s level practicum CITs. They found that beginning supervisees \((n=31)\) valued supervisors who shared their own counseling experiences. The researcher concluded that beginning supervisees valued self-disclosure by supervisors because they were still developing their
repertoire of counseling ability and wanted to learn how effective professional counselors behave in counseling sessions. In a more recent study, Ladany et al. (2013) conducted a mixed-method study with a variety of helping professions at a number of professional developmental levels to identify supervisor behaviors that are effective in facilitating advanced supervisees’ \((n=128)\) professional development. They found that advanced supervisees particularly valued supervisor self-disclosure that was relevant to their presenting concern in clinical supervision.

Miller and Ivey (2006) examined whether gender and spiritual issues were associated with supervisees’ perceptions of supervisory style \((n=153)\). They found that during their clinical training programs the supervisees reported that their male supervisors frequently discussed spiritual issues and used the self-disclosure style in the supervision process, but that female supervisors were less likely to do so. As a result, the supervisees reported that they had a better connection with male supervisors than female supervisors. In an ex post facto design study, Rarick and Ladany (2013) investigated gender matching of supervisory style based on 94 dyads in an individual supervision session. Contrary to Miller and Ivey’s (2009) findings, Rarick and Ladany’s (2013) results indicated neither supervisors \((n=84)\) nor advanced supervisees \((n=94)\) perceived gender match between supervisors and supervisees to be significantly related to supervisory style.

Ladany and Lehrman-Waterman (1999) explored the association between supervisors’ self-disclosures, as perceived by CITs \((n=105)\), and supervisors’ supervisory style and the supervisory relationship. Results from this ex post facto design study indicated that the supervisors who engage in a supportive and warm style of supervision self-disclosed neutral counseling experiences more frequently to their supervisees and that supervisors who engage in the collegial supervisory style were less likely to self-disclose neutral counseling experiences to
their supervisees. Moreover, Ladany and Lehrman-Waterman (1999) found that supervisors who engage in the structured supervisory style were least likely to disclose their personal issues and counseling successes to their supervisees. Using correlational study, Ladany and Lehrman-Waterman (1999) explored how supervisors’ self-disclosure related to the supervisors’ supervisory style and the supervisory relationship as perceived by the supervisor (n=137). They found that warm, supportive supervisory styles and collegial supervisory styles were positively related to supervisors’ self-disclosure and that structured supervisory styles were negatively associated with self-disclosure by supervisors.

Both Ladany and Lehrman-Waterman (1999) and Ladany, Walker, and Melincoff (2001) concluded that supervisors’ self-disclosures reflect the supervisors’ style of supervision, which in turn relates to a stronger emotional bond in the supervisory relationship between supervisors and supervisees. This is consistent with results from prior research in Worthington and Roehlke’s (1979) and Miller and Ivey’s (2006) studies, in which the researchers conceptualized supervisors’ self-disclosure as a characteristic of supervisory styles. This suggests that self-disclosure should be explored as one of the supervisory styles in the clinical supervision process experiences. Aligned with the previous researchers’ suggestion, this study addressed self-disclosure as part of variable of interest, specifically by exploring self-disclosure as one of the supervisory styles.

The available studies have shown that beginning supervisees preferred structured, supportive, structured-supportive, supportive-challenge and self-disclosing supervisory styles and described these five styles as most effective during their clinical supervision process. Several researchers have highlighted the need to study this combination of supervisory styles. For instance, Ladany, Marotta, and Muse-Burke (2001) explored advanced supervisees’ (n=100)
preferences for supervisory styles. Although they reported that advanced supervisees’ hours of clinical experiences did not predict their preference for supervisory style, they found their level of professional developmental levels was associated with preferences for various supervision styles. Noting that the relationship among supervisory styles, supervisee experience and level of professional development, and supervisee preferences regarding supervision styles is more complex than previously thought. Ladany et al. (2013) recommended flexible styles of supervision. Ladany et al.’s (2013) and Ladany, Walker, and Melinoff’s (2001) research also suggested that a balance of different supervisory styles was most effective. However, these studies all addressed the needs of advanced supervisees, who may have different needs than beginning supervisees.

Dow et al. (2009) focused on beginning supervisees (n=161) and their supervisors (n=90) and gathered data from 161 dyads at two different times over 10 supervision sessions. Specifically, they asked supervisors and supervisees to identify their preference for supervisory style before the supervision sessions began and then, after they had completed 10 sessions of supervision, asked them to identify which supervisory style they actually experienced. Dow et al. (2009) found disagreement within a sizeable number of dyads regarding which supervisory style supervisors should employ and which they had employed in supervision sessions. Concluding that the relationship among these variables is complex, they recommended additional research to explore which mixture of supervisory styles works best to promote the clinical practice of beginning supervisees.

Likewise, in her review of research on clinical supervision, Borders (2005) found that professional development level alone does not determine the style of supervision supervisees need and concluded that matching the supervisees’ needs with a particular supervisory style is
complex. Consistent with the suggestion from the studies conducted by Hart and Nance (2003) and Morgan and Sprenkle (2007), Border proposed future research to explore whether a mixture of supervisory styles may best meet the changing needs of supervisees that is, that a single supervisee may need different styles at different times. Interestingly, Friedlander and Ward (1984) also called on researchers to explore the supervisory style as a combination of multiple styles of supervision. However, the focus of available research continuously reported on single styles of supervision (e.g., Ladany et al., 2013; Steward et al., 2001; Tracey et al., 1989; Worthington & Roehlke, 1979) rather that identifying the supervisory style construct as a mixture of styles of supervision. Given that a single style likely does not serve the complex needs of beginning supervisees, this may explain why many studies have yielded inconclusive and mixed results. This study addressed this limitation by exploring supervisory style as a multidimensional construct and using an assessment allowing for the measurement of various combinations of supervisory styles, with specific interest in the relationship between supervisory style combinations and CSE. The next section examines the association between supervisory style and CSE.

**Research on supervisory styles and counseling self-efficacy constructs.** Friedlander and Snyder (1983) conducted the earliest study in supervision research to examine the effect of preference supervisory style on CITs’ CSE during their enrollment in an academic training program. The study was conducted on CITs ($n=82$) across all levels of supervised clinical practice training (i.e., pre-practicum, practicum, and post-practicum), at both the master’s and doctoral programs level. Friedlander and Snyder found that only the supportive supervisory style positively affected CITs’ CSE significantly.
Although researchers have called for studies exploring how styles of supervision affect the CITs’ confidence pertaining to their knowledge acquisition and clinical practice of counseling for almost two decades (Etringer et al., 1995; Goodyear & Bernard, 1998), thus far, from the available research on supervision, only three published studies and four unpublished dissertations explored the association between the supervisory style and supervisees’ self-confidence belief.

Two studies have shown that a supportive supervisory style, expressed through giving positive feedback, influences CITs’ CSE. For the first study, Daniels and Larson (2001) used quasi-experimental research to investigate the impact of performance feedback on graduate level CITs’ \( n=45 \) CSE in several academic training programs. The CSE score was collected in a pretest and posttest of a mock counseling session. Each CIT conducted a 10-minute mock counseling session and was randomly assigned to receive either positive or negative feedback from the researchers. The findings indicated that CITs who received positive feedback showed a significant increase in their CSE scores from pretest to posttest. CITs who received negative feedback showed a significant decrease in their CSE scores from pretest to posttest. The value of this finding is limited, however, due to the stimulated and brief nature of this study. In an unpublished dissertation study, VanDerWege (2011) conducted phenomenological research to explore the specific sources of CSE from the perspective of master’s level CITs \( n=8 \) in practicum. This unpublished study involved CITs who were enrolled in their practicum training at the master’s level. VanDerWege found that after receiving positive feedback from supervisors, the CITs were perceived to have more self-confidence to perform counseling sessions. In short, the research findings of Daniels and Larson (2001) and VanDerWege (2011) correspond with
Friedlander and Snyder’s (1983) conclusion that positive feedback, which is related to the supportive supervisory style, appears to promote CITs’ CSE.

In contrast, three studies have found that different supervisory styles significantly predict CITs’ and professional counselors’ CSE. As part of their study to develop an instrument related to clinical supervision, Efstation et al. (1990) investigated the influence of supervisory style and supervisory alliance as perceived by both supervisors ($n=185$) and supervisees ($n=178$) on supervisees’ CSE. The results indicated that both supervisory style and supervisory alliance predicted 14 percent of the variance in supervisees’ CSE. Particularly, Efstation et al. found that both collegial supervisory style (as perceived by supervisors) and the structured supervisory (as perceived by advanced supervisees) were significant predictors of CSE. These dissimilar results may be due to dyad participation in which both supervisors and supervisees may have different interpretations of the same style of supervision.

Fernando and Hulse-Killacky (2005) investigated the effect of supervisory styles on CSE and satisfaction with supervision of advanced supervisees, post-practicum master’s level supervisees ($n=82$). They found that the structured supervisory style, as perceived by supervisees, was the only significant predictor of CSE. In a dissertation study, Meissner (2012) replicated Fernando and Hulse-Killacky’s study design using beginning supervisees ($n=129$) enrolled in a master’s level practicum in a rehabilitation counseling preparation program. Consistent with Fernando and Hulse-Killacky’s results, Meissner found that the structured supervisory style was the only significant predictor of perceived CSE among the respondents.

Terranova-Nirenberg (2013) investigated the relationship among supervisory style, satisfaction with supervision, and the level of CSE among CITs at the doctoral and post-doctoral levels ($n=72$). Findings suggested that supervisory style accounted for 11.6 percent of variance in
the degree of CSE; however, she did not report which particular supervisory style was associated with the higher degree of CSE. Similarly, in a longitudinal study in which data were collected from CITs ($n=44$) at three different points during their practicum semester, Lorenz (2009) also found that supervisory style is a predictive factor of CSE. Although Lorenz did not report which specific style of supervision predicted CSE, she suggested that for CITs to perform counseling-related activities effectively, they needed to experience multiple styles of supervision from their supervisors. Like Terranova-Nirenberg (2013), Lorenz (2009) suffers from a small sample size and undetailed statistical reports, which calls for caution in understanding and interpreting the findings.

Four out of eight studies in this section have reviewed unpublished dissertation studies. According to Ronnestad and Skovholt (1993), the supervision research derived from the unpublished dissertation studies should be reviewed cautiously in comparison to the supervision research conducted by established researchers. Caution is important because these studies are unpublished, as such, they have not undergone the scholarly publishing process. Thus, literature regarding research on supervisory style and CSE is still limited, and there is a need for further examination regarding the association between supervisory style and CSE constructs.

**Methodologies used in past research on supervisory style.** To inform the selection of methodology for this study, this section provides a review of the methodologies used in the studies reviewed above. It also gives an overview of other aspects of the methodology of the reviewed studies, such as participants, research sites, data collection, and research design.

**Timing of data collection.** With regard to the timing of data collection in previous studies, four studies collected the data based on supervisees’ future-oriented expectation of preferences of supervisory styles (Friedlander & Snyder, 1983; Ladany, Marotta, & Muse-Burke,

Apart from comparison studies that used supervisees’ expectations of preferences for supervisory style as baseline data, the studies that solely used supervisees’ imaginative preferences may limit data generalization because the data did not represent the real experience of supervisory style. Thus, 15 of the reviewed studies collected data based on the supervisees’ actual, past supervisory experience, which better allows for generalization. Collecting the data after supervisees completed the supervision process may reflect supervisees’ perception of supervisory style more accurately and holistically because the supervisees neither make assumptions nor are still in a middle of the clinical supervision process, but rather have already undergone the actual supervisory experience. Therefore, this study collected the supervisees’ (or CITs’) reflections of past, actual experiences with supervision in time nearly at the end of the period of clinical practice training and to a few days after the period of clinical practice training ended.
**Samples.** The reviewed studies vary as to whether they used samples of supervisees, their supervisors, or both. Of these available reviewed studies, ten studies examined supervisory dyads (Dow et al., 2009; Efstation et al., 1990; Ellis et al., 1988; Guest & Beutler, 1988; Heppner & Roehlke, 1984; Ladany & Lehrman-Waterman, 1999; Miars et al., 1983; Rarick & Ladany, 2013; Steward et al., 2001; Worthington & Roehlke, 1979). However, collecting data from both supervisees and supervisors pertaining to the supervisory style may cause mismatched results (e.g., Efstation et al., 1990; Ladany & Lehrman-Waterman, 1999) because the two stakeholders may have interpreted the same supervisory style differently because of their differing needs, roles and powers (Stoltenberg, 1998). Although Ladany, Walker, and Melincoff (2001) conducted one study examining supervisors’ reflections of their supervisory styles, the issue of how well supervisors’ and supervisees’ perceptions match remains uncertain.

Whereas the aforementioned ten studies examined supervisory dyads, sixteen other studies collected from supervisees only. Of these, seven studies included supervisees across different levels of professional developments and varied levels of clinical practice training (Fernando & Hulse-Killacky, 2005; Friedlander & Snyder, 1983; Friedlander & Ward, 1984; Ladany et al., 2013; Ladany, Marotta & Muse-Burke, 2001; Miller & Ivey, 2006; Terranova-Nirenberg, 2013). The other nine studies used only beginning supervisees but included students both from psychology programs and counselor preparation programs (Daniel & Larson, 2001; Jacobsen & Taggaard, 2009; Jordan, 2006; Lorenz, 2009; Meissner, 2012; Mohd Ali et al., 2014; Shechtman & Wirzberger, 1999; Tracey et al., 1989; VanDerWege, 2011). This calls for caution in interpreting results, as psychology and counseling programs may be associated with different needs in supervision (Swanson & O’Saben, 1993). Additionally, the psychology and counseling programs may differ with regard to the length of standard clinical training (i.e., either per
semester or per year), the frequency and type of medium through which the supervisees received supervision (i.e., supervision by an individual, a group, or both), and the required hours of counseling and supervised sessions in the different types of programs, which may affect supervisory experience.

Although most studies that focused on supervisees recruited their samples from various levels of academic training programs, including the master’s, doctoral, and post-doctoral levels, only two have focused solely on beginning supervisees in the master’s level practicum (Lorenz, 2009; Meissner, 2012). Lorenz (2009) had a very small sample and both studies recruited the CITs from a single counselor preparation program. Generalization of their results is thus limited. Therefore, this study focused solely on supervisees from counseling programs, specifically CITs from clinical mental health counseling (CMHC) programs at master’s level as its sample population.

**Setting for data collection.** Academic training programs were the most common setting for data collection in the reviewed studies. Because a majority of the supervisees in the reviewed studies were CITs, recruiting CITs based on their level of clinical practice training (i.e. pre-practicum, practicum, or post-practicum) through academic training programs appears reasonable (Pitts & Miller, 1990). Because practicum is the first opportunity for CITs to apply their understanding of the connection between the theory and practice with actual clients (O’Connell & Smith, 2005; Rushlau, 1998) under the supervision of a faculty member, therefore focusing on the practicum level of clinical practice training also seems to be reasonable. To reflect preparation programs approach of supervision in the same way, it is appropriate to study beginning supervisees who are exposed to and experience a standardized academic training program, specifically from CACREP-accredited counselor preparation programs.
By collecting data within academic preparation programs, researchers have focused on supervisees’ perceptions of supervisory style either exhibited by the faculty supervisor (e.g., Miller & Ivey, 2006), the doctoral students’ supervisor (e.g., Dow et al., 2009; Hart & Nance, 2003; Steward et al., 2001), or both (e.g., Worthington & Roehlke, 1979; Fernando & Hulse-Killac, 2005). This is advantageous compared to collecting data at internship sites, as site supervisors may practice more administrative supervision than clinical supervision (Kreider, 2014). Additionally, faculty supervisors are more likely to give their full attention to clinical supervision and to have a more advanced understanding of supervision, and doctoral student supervisors who are training to become supervisors are striving to reflect best practices in clinical supervision (Foster & MacAdams, 2009). Therefore, the study examined faculty supervisors’ supervisory style as experienced by supervisees within academic training programs near and after the supervisees complete their master’s level practicum.

**Research designs.** Correlational design was by far the most common research design in the reviewed research on supervisory style and CSE. Of the reviewed studies, seven studies explored the association between the supervisory style and supervisees’ CSE (Daniels & Larson, 2001; Efstation et al., 1990; Fernando & Hulse-Killac, 2005; Lorenz, 2009; Meissner, 2012; Terranova-Nirenberg, 2013; VanDerWege, 2011). However, the generalization of findings from these correlational studies was limited to a single supervisory style that was associated with CSE. Therefore, there is a need to conduct another correlational design study that explore the association between multiple supervisory styles and supervisees’ CSE, specifically focusing on masters’ level CITs at practicum clinical training practice (cf. Fernando & Hulse-Killac, 2005; Terranova-Nirenberg, 2013) and adequate sample size (cf. Lorenz, 2009; Meissner, 2012).
Most studies using this design focused on supervisees from various levels of academic training programs, including the master’s, doctoral, and post-doctoral levels; only two have focused solely on beginning supervisees in the master’s level practicum (Lorenz, 2009; Meissner, 2012). Lorenz (2009) had a very small sample and both studies recruited the CITs from a single counselor preparation program. Generalization of their results are thus limited.

In sum, the methodology used in the available reviewed research supports the need for this study, which examined the supervisory style and CSE constructs by using a correlational design, with respect to CITs’ CSE based on their supervisory experiences. This study used data collected solely from the supervisees’ perspectives regarding their immediate past experiences with supervision, answering the need for empirical supervision research based on supervisees’ actual experiences. Further, this study collected data only from CITs in the master’s level practicum, specifically from CACREP-accredited CMHC programs.

**Instruments used to assess the supervisory style construct.** This section discusses instruments used in previous studies to measure the construct of supervisory style and, based on this discussion, identify the instruments used in this study. A review of the published, empirical studies identified nine instruments that have been used to assess variables related to the construct of supervisory style. Two of these instruments – the *Supervisor Questionnaire* (SQ; Worthington & Roehlke, 1979) and the *Supervisor Behavior Questionnaire* (SBQ; Wiley & Ray, 1986) – focus exclusively on behaviors that supervisors exhibit during the supervision process. In his review of supervision research, Worthington (1987) noted that the SBQ, which is a revised version of the SQ, was the most commonly used instrument in research on supervisory style published at that time. However, the SBQ and the SQ have little psychometric support (Wiley & Ray, 1986; Worthington, 1987; Worthington & Roehlke, 1979).
Since then, two other instruments used to measure supervisory style have been constructed by revising and adapting instruments established for other uses. The first of these is the *Preferred Roles and Styles of Supervision*, which Schechtman and Wirzberger (1999) adapted from the *Counselor Evaluation of Supervision Questionnaire* originally developed by Bernard and Goodyear in 1992. The second instrument is called the *Supervisory Styles*, which Wolfsfeld and Haj-Yahia (2010) revised and adapted from the *Learning Styles Inventory* originally developed by Kolb in 1999. These two instruments also suffer from a lack of psychometric support as the researchers provided information about the revision and adaptation procedures but said little about these instruments’ psychometric properties.

Five other instruments developed to measure the construct of supervisory style were based on theoretical or conceptual frameworks. Three used counseling and supervision theories to guide the process: (a) the *Supervision Level Scale* (SLS; Wiley & Ray, 1986), which drew upon the Counselor Complexity Model (CCM; Stoltenberg, 1981); (b) the *Supervisor Roles and Supervisor Functions* (SRSF; Ellis et al., 1988), which is based upon the Discrimination Model (DM; Bernard, 1979); and (c) the *Supervisory Styles Inventory* (SSI; Hart & Nance, 2003), which is based upon the Adaptive Counseling and Therapy model (ACT; Howard, Nance, & Myers, 1986). As with SBQ, SQ, Preferred Role and Styles of Supervision, and Supervisory Styles, these three instruments were mainly constructed for particular studies and have little to no psychometric support. Without adequate psychometric properties information and limited context of use, it would be questionable to use these instruments for the current study because the value of and use of future findings would be questionable.

Two instruments for which adequate psychometric data does exist are the *Supervisory Styles Inventory* (SSIInventory; Friedlander & Ward, 1984) and the *Supervisory Styles Index*
(SSI Index; Long et al., 1996). The SSInventory was based primarily on a conceptual framework of six supervisory techniques, and the SSIndex drew on feminist theories. Both the SSInventory and the SSIndex reported psychometric properties in published studies by the developers. Although the SSInventory is the most commonly used instrument (Stoltenberg, McNeill, and Crethar, 1994), this study used the SSIndex.

Two factors drove the selection of the SSIndex over the SSInventory. First, the SSInventory suffers from some psychometric issues. Specifically, Ladany, Walker, and Melincoff’s (2001) found that the SSInventory’s subscales inter-correlate with one another relatively strongly. They suggest, rightly, that future researchers should exercise caution because of this limitation. To this date, no study reports that the SSIndex suffers from the same limitation. Second, the SSIndex scoring enables the holistic scoring of all dominant supervisory styles, resulting in a mixture of styles of supervision. The SSInventory scoring, however, only enables a specific scoring of a dominant supervisory style. In other words, assessing a single supervisory style likely does not serve the complex needs of beginning supervisees, therefore there is a need to explore supervisory style as a multidimensional construct. Because of this, the SSIndex fit better with the purpose of this study – to assess the mixture of supervisory styles. Chapter 3 presents details of the SSIndex psychometric properties and multidimensional scoring.

Thus far, this review of literature has examined two of the three major constructs of interest in this study. It began with an examination of literature, research, and instrumentation related to counselor self-efficacy (CSE) before moving to an examination of literature, research, and instrumentation related to supervisory style. This literature review will now turn to the third construct in this study, which is differentiation of self (DOS).
**Differentiation of Self Construct**

SCMCT identifies internal context as another determinant within the triadic reciprocal causation model (Larson, 1998a, 1998b). Moreover, Larson (1998b) postulated that this internal context involves CITs’ stable characteristics. This study operationalized the CITs’ internal context and stable characteristics as *differentiation of self* (DOS). The following review of the literature related to the DOS construct proceeds as follows: (a) DOS and CITs’ stable characteristics, (b) DOS and Bowen’s Family System Theory (BFST), (c) research on DOS, and (d) instrumentations used to assess DOS construct.

**Differentiation of self construct and CITs’ stable characteristics.** Although BFST originally was developed in the field of marriage and family therapy, the constructs and principles of BFST may apply to any relationship system across the family, social, and work contexts (Bowen, 1978). In this study, DOS was contextualized in the clinical supervision relational system.

The lens of SCMCT suggests that CITs’ stable characteristics (i.e., internal context) moderate the influence of the external supervisory environment (i.e., supervisory styles) on their confidence that they can practice counseling (Larson 1998a, 1998b). Specifically, according to SCMCT, an acceptable range of stable characteristics will likely promote a positive relationship between CITs’ experience in supervision and CITs’ CSE. However, CITs without such an acceptable range of stable characteristics will not experience a positive relationship between their experience in supervision and their CSE (Larson, 1998b). Thus, the CITs’ stable characteristics have a dynamic manifestation ranging from distal moderating influences on the association between CITs’ experience in supervision and their confidence that they can perform clinical practice of counseling.
Larson (1998b) suggested that the CITs’ stable characteristics are attributes of CITs that are always present. Larson (1998b) theorized that these relatively stable attributes include, but are not limited to, CITs’ personality, aptitude, developmental level, racial identity, and values. According to Wu and Zumbo (2008), a moderator is an innate attribute, a relatively unchangeable contextual variable, or a relatively stable trait. Because DOS is a personality variable related to maturity (Charles, 2001; Jenkins et al., 2005; Majerus & Sandage, 2010; Peleg et al., 2015; Skowron, et al., 2004; Skowron & Friedlander, 1998; Vancea, 2013; Zerach, 2015), it is considered a relatively stable trait in adults (Larson, 1998b). Thus, it was reasonable to consider DOS as a relatively stable characteristic of CITs and to use this construct to operationalize the internal context within this study.

**Differentiation of self construct and Bowen’s Family System Theory.** In Bowen’s Family System Theory (BFST), DOS is a core construct. According to Bowen (1978), DOS is a self-energizing process, pertaining to an individual “defining a self or working toward individuation” (p.539) that transpires in the context of important relational or emotional systems. This individuation process may likely align with the concept of agentic self in SCT.

**Bowenian differentiation of self construct viewed through Social Cognitive Theory and Integrative Developmental Model lenses.** Larson (1998a, 1998b) proposed that CITs have stable characteristics, which are the inner attributes that represent a type of personality trait. However, SCMCT does not provide further details pertaining to these stable characteristics and how they relate to the impact of supervisory environment. In light of this lack of a theoretical explanation, this study framed CITs’ stable characteristics, which it operationalized as the Bowenian DOS construct, from two other theoretical frameworks: the Social Cognitive Theory (SCT) and the Integrative Developmental Model (IDM). SCMCT is “the translation of SCT to counselor
training” (Larson, 1998b, p. 224), and IDM offers a specific explanation regarding CITs’ professional development. Thus, this application of SCT and IDM has an underlying logic.

According to Bandura (2006), “the differentiation of oneself from others is the product of a more general process of the construction of an agentic self” (p. 169). The development of this sense of personal agency is not entirely constructed through transactional experiences with the social environment but also constructed reciprocally through a personal reflection on one’s experiences (Bandura, 2006). These mutual interactions of social and personal causalities are in accordance with Bowen’s underpinnings pertaining to DOS, including life forces and internal processes in a person’s significant relational systems (Bowen, 1978; Kerr & Bowen, 1988). Although Bandura (2006) theorized that all individuals have their own agentic capabilities, each individual’s sense of self varies in accordance with different life conditions, such as in familial, sociocultural, and occupational aspects of life. This variation of selves aligns with a dynamic manifestation of SCMCT’s stable characteristic that may serve as a barrier or catalyst in supervisory experiences. Moreover, Bandura (2006) asserted that this variability of selves is not due to fragmentation of self but rather because of agents’ adaptive functioning, which is in accordance with Bowen’s pseudo self of a functioning pattern in a relational system (Kerr & Bowen, 1988). In addition, such variation of selves can be framed in the BFST pertaining to the degree of DOS (Kerr & Bowen, 1988). Bandura (2006) also stated that the sense of self continuously develops over different periods in an agent’s life, reflecting the continuity of a complex interplay between the connectedness of human relationships and a personal construal process.

The lens of IDM suggests that the Bowenian DOS construct accords with the balance of the four dimensions of IDM’s core supervisory structure, which is cognitive and affective self-
and-other awareness structure. In IDM, Stoltenberg and McNeill (2010) postulated that CITs at a high level of professional development will exhibit a conscious realization about themselves as CITs and a cognizance of their clients. This consciousness about self-and-other also has intellectual and emotional dimensions (McNeill & Stoltenberg, 2016). Therefore, CITs who exhibit a good balance of cognitive and affective awareness of self and others are likely have a high DOS. It should be noted that IDM’s *cognitive and affective self-and-other awareness* structures resemble the Bowenian principles of *intellectual and feeling systems*, and *individuality and togetherness*, respectively. In BFST, these four fundamental principles underlie the DOS construct (Kerr & Bowen, 1988). According to Stoltenberg and McNeill (2010), CITs may vary in terms of whether they exhibit a balance of cognitive and affective self-and-other awareness structure based on their current level of professional development (i.e., Level 1, Level 2, Level 3, and Level 3i). This variation of progressive professional development functioning can be framed in the BFST as a functioning pattern related to the level of DOS and to the degree of DOS (Kerr & Bowen, 1988).

**Level of differentiation of self construct.** With respect to the DOS construct, Bowen (1978) postulated a pattern of individual functioning at two levels: the basic level (i.e., solid self) and the functional level (i.e., pseudo self). According to Bowen (1978), children learn and internalize basic relationship patterns within their family of origin and continue to use these relational patterns in all other important relationship systems throughout their lives. In a clinical supervision relational system, CITs’ basic level functioning pattern of solid self may underlie their pseudo self at the functional level. Although the relational pattern of CITs’ functioning that appears at both the basic level (i.e., CITs’ families of origin) and functional level (i.e., CITs’ clinical supervision relational system) are identical, Kerr and Bowen (1988) suggested that the
functioning pattern has a different intensity at the functioning level than at the basic level. Because the functioning pattern of solid self remains relatively fixed, its intensity is stable and firm. By contrast, the functioning pattern of the pseudo self, which is developed through learning and is negotiable, can rise and fall rapidly or can stabilize over a long period of time (Bowen, 1978). Thus, the intensity of functioning pattern at the functional level changes and varies from time to time depending on changing significance in the relational system (Kerr & Bowen, 1988).

According to Bowen (1978), instead of the solid self, it is the pseudo self that actually reacts, distances, or fuses with others in prevailing emotions in a person’s significant relational systems. More specifically, rather than the basic level, CITs’ functional level of DOS changes and varies because of the clinical supervision relational system. The variation of intensity pertaining to the CITs’ functioning pattern at the functional level can be further explained in terms of the degree of DOS.

*Degree of differentiation of self construct.* Individuals with a high degree of DOS have the ability to separate their thoughts from their feelings and to take responsibility for their own failures instead of faulting others (Bowen, 1978; Kerr & Bowen, 1988). Although highly differentiated people are interested in other people (e.g., their coworkers, neighbors, and/or friends), their individual functioning is not dependent on acceptance by others. This self-containment is known as *I*-position (Bowen, 1978; Kerr & Bowen, 1988) and is the process wherein people have the ability to be self-sufficient in their significant relationships. Bowen (1978) postulated that a well-differentiated individual “can maintain emotional objectivity while in the midst of an emotional system in turmoil, yet at the same time actively relate to key people in the system” (p. 485). Bowen (1978) postulated that people with the theoretically highest degree of DOS would be completely able to define their sense of self (Kerr & Bowen, 1988). In
summary, highly differentiated CITs emphasize their individuality without imposing their values on others (e.g., including their supervisors, clients, and/or other CITs), and they try to support the best interests of the group with which they connect. Also, highly differentiated CITs have more control over their deliberate thoughts and are more likely to experience calmness, which allows them to make decisions through an objective reasoning process. They are also less reactive to praise or criticism and have a more realistic evaluation of their own sense of “self.”

Unlike highly differentiated individuals, individuals with low degrees of DOS have difficulty separating their thoughts from the felt need for others’ approval and often blame others for their failures (Bowen, 1978; Kerr & Bowen, 1988). For CITs with a low degree of DOS, their feelings predominantly influence most of their major life decisions and choices in clinical practice. This subjective reaction is known as emotional reactivity (Bowen, 1978; Kerr & Bowen, 1988). Because of discomfort and anxiety that exists in the clinical supervision relational system, low differentiated CITs who react to others in the way described herein struggle to maintain emotional objectivity in relationships. Thus, CITs may react by either withdrawing themselves from the clinical supervision relational system in times of need or immersing themselves in the clinical supervision relational system. Each of these strategies (withdrawal or enmeshment) reflects an unhealthy level of individuality within relationships.

When CITs with low DOS levels insulate themselves from important relational systems, they are conceptualized as being emotionally cut-off (Bowen, 1978; Kerr & Bowen, 1988). This emotional distance can be achieved by internally withdrawing from and/or physically avoiding others (Bowen, 1978). Moreover, poorly differentiated CITs who struggle with maintaining their emotional objectivity and who are prone to cutting themselves off from others may also experience unsteady self-development and therefore experience difficulty becoming effective.
counselors. Many will have a tendency to deny the importance of the clinical supervision process and separate themselves from their supervisors, clients, and/or other supervisees, using avoidance.

In contrast, some poorly differentiated CITs who struggle to maintain their emotional objectivity may instead tend to immerse themselves deeply with others in intense emotional relationships in order to gain some emotional gratification from one to another (i.e., their supervisor, clients, and/or other CITs). This emotional enmeshment is known as *emotional fusion* (Bowen, 1978; Kerr & Bowen, 1988) and the deeper this fusion, then, the greater the tendency is for individuals to lose their strong sense of self (Kerr & Bowen, 1988). Low levels of differentiation are also associated with individuals putting less effort into their goal-directed activities. Thus, much like low differentiated CITs who are prone to cutting-off others, the low differentiated CITs who engage in fusion also may experience unsteady self-development and difficulty becoming effective counselors.

In sum, CITs with a low degree of DOS are easily overwhelmed through emotional reactivity and are prone to engage in either emotional fusion or emotional cut-off, which, in turn, causes them difficulty in taking the I-position in relation with others. In a case of an extremely low degree of DOS, Kerr & Bowen (1988) maintained that a person can be classified theoretically as an undifferentiated individual, which is also known as no-self.

**Instruments used to assess the differentiation of self construct.** Researchers have used various self-report instruments to examine the DOS construct. An instrument used in early empirical studies is the *Personal Authority in the Family System Questionnaire* (PAFS; Bray, Williamson, & Malone, 1984). Although the PAFS was developed partly to measure the DOS construct, its basis was Williamson’s concept of personal authority in the family system (Miller,
Anderson, & Keala, 2004; Skowron, Holmes, & Sabatelli, 2003). Because PAFS was not developed based on BFST, it had limited relevance to the validation of the Bowenian DOS construct.

In reviewing the instruments developed specifically to measure the BFST’s DOS construct, six published instruments were identified from previous studies. However, four of these instruments were developed solely to measure certain aspects of the DOS construct. Specifically, the Level of Differentiation of Self Scale (LDSS; Haber, 1984) and the Chabot Emotional Differentiation Scale (CEDS; Chabot, 1993) were designed to measure only the intrapsychic aspect of DOS. Similarly, the Emotional Cutoff Scale (ECS; McCollum, 1991) and the Differentiation in the Family System Scale (DIFS; Anderson & Sabatelli, 1992) were designed to measure only the interpersonal aspect of DOS. Thus, these four instruments are not appropriate to measure the holistic aspect pertaining to the DOS construct as described by Bowen, which consists of both intrapsychic and interpersonal aspects.

A fifth instrument, the Family System Assessment Tool (FSAT) was developed to measure both aspects of the Bowenian DOS construct (Dickinson et al., 1996). However, the FSAT instrument is limited because the construct was designed specifically for a family of origin assessment. Thus, it is not suitable to assess the DOS construct at an individual level within other important relationships. Moreover, the FSAT was not designed to merely to measure the DOS construct but also to measure other Bowenian constructs. The part of the FSAT’s subscales that relate to the DOS construct may not have the same psychometric properties as the whole. Thus, using only that part would limit the generalizability of the findings.

A sixth instrument that was designed to closely measure adherence to the Bowenian DOS closely at an individual level is the Differentiation of Self Inventory Revision (DSI-R; Skowron &
Schmitt, 2003). The DSI-R is a revision of the *Differentiation of Self Inventory* (DSI; Skowron & Friedlander, 1998), specifically to improve the psychometric properties for the Fusion with Others (FO) subscale. Because the DSI-R is theoretically and psychometrically sound, various researchers have noted that it is the most commonly used instrument (Charles, 2001; Licht & Chabot, 2006; Miller et al., 2004). Many studies have used it to measure the DOS construct (e.g., Chung & Gale, 2006; 2009; Hooper & Doehler, 2011; Jankowski, Sandage, & Hill, 2013; Khaddouma, Gordon, & Bolden, 2015; Knauth & Skowron, 2004; Knauth, Skowron, & Escobar, 2006; Krycak, Murdock, & Marszalek, 2012; Sandage & Harden, 2011; Skowron et al., 2004; Zerach, 2015).

Because the DSI-R has 46-items, which can make it onerous to complete, researchers have developed two short-form versions of the full DSI-R: the *Differentiation of Self-Inventory Short Form* (DSI-SF; Drake, Murdock, Marszalek, & Barber, 2015) and the *Brief DSI* (Sloan & Dierendonck, 2016). Each has 20 items. The DSI-SF has three known limitations (Drake et al., 2015). First, because the DSI-SF was developed with a sample solely of college students, the norms may not be generalizable to a more mature and more highly differentiated population. Second, the number of items in the four subscales of the DSI-SF are not proportional to the number of items that represent the four subscales in the full DSI-R. Finally, no factor analysis was performed to examine the possibility of overlapping item content between factors or subscales.

The Brief DSI (Sloan & Dierendonck, 2016) was designed to tackle the limitations of the DSI-SF. Unlike the earlier instrument, it has an equal number of items, five for each of the four subscales. However, the Brief DSI also has its own limitations. First the Brief DSI was developed from working-age adults only, some of whom were unemployed or retired, and the
sample did not include college students or graduate students. Thus, the norms cannot be
generalized to a full range of the adult population as can the norms of the full DSI-R and its
predecessor, the DSI (Skowron & Friedlander, 1998; Skowron & Schmitt, 2003). Second, the
results of the factor analysis of the instrument reported a weakness and a need for clarity
regarding the Fusion with Others subscale. This may reflect the reduction to only 20 items. The
full DSI-R was actually created to improve the psychometric properties for the Fusion with
Others subscale (Skowron & Schmitt, 2003).

Despite the convenience of using the shorter-form versions, the limitations of both the
DSI-SF and the Brief DSI call for caution. Because the full DSI-R (Skowron & Schmitt, 2003) is
a more reliable instrument to assess the DOS construct, it was used in this study to measure the
Bowenian DOS construct. Chapter 3 provides further details with respect to the psychometric
properties of the DSI-R.

**Research on differentiation of self construct.** Bowen theorized that persons with a
lower degree of DOS are at a higher risk for psychological and physical issues (Bowen, 1978;
Kerr & Bowen, 1988) and the majority of empirical research on this construct has explored the
association between DOS and various aspects of psychological functioning. Consistent with
Bowen’s theory, several studies found positive relationships between a low degree of DOS and
indices of lower psychological functioning, such as depressed mood (Chung & Gale, 2006;
Jankowski et al., 2013), chronic anxiety (Knauth et al., 2006), psychological symptoms (Kim-
Appel et al., 2007; Ross & Murdock, 2014), psychological distress (Krycak et al., 2012; Tuason
& Friedlander, 2000), second traumatization symptoms (Zerach, 2015), and separation anxiety
(Peleg et al., 2015; Peleg & Yitzhak, 2011), child maltreatment (Skowron, Kozlowski, & Pincus,
2010), and vulnerable narcissism (Sandage et al., 2016), as well as greater potential to abuse
children physically (Skowron & Platt, 2005). Empirical studies have found positive relationships between high degrees of DOS and indices of better psychological functioning, such as psychological adjustment (Skowron et al., 2004), self-esteem (Chung & Gale, 2006), satisfaction of life (Ross & Murdock, 2014), relationship satisfaction (Norona & Welsh, 2016), forgiveness (Heintzelman, Murdock, Krycak, & Seay, 2014; Sandage & Harden, 2014), social justice commitment (Jankowski et al., 2013), greater social problem-solving (Kauth et al., 2006), healthy parenting styles that promote the processing of emotion (Schwartz, Thigpen, & Montgomery, 2006), and family functioning (Chung & Gale, 2009). In addition, several studies have yielded results linking the higher degree of DOS with identity development (Johnson, Buboltz, & Seemann, 2004), racial identity development (Gushue et al., 2013), and spiritual development (Jankowski & Vaughn, 2009).

A higher degree of DOS also predicts relationship satisfaction for both dating (Ferreira, Narciso, Novo, & Pereira, 2014; Khaddouma et al., 2015) and married individuals (Parsons, Nalbone, Killmer, & Wetchler, 2007; Peleg, 2008), psychological and physical health (Hooper & Doehler, 2011), and fewer interpersonal problems (Skowron, Stanley, & Shapiro, 2009) in young adults.

Taken collectively, these findings support Bowen’s (1978) postulations that a higher degree of DOS is associated with greater well-being.

This systematic review of the available empirical research on DOS yield four observations relevant to this study. The first observation relates to research design. Although Skowron et al. (2009) conducted a short-term longitudinal study over a single semester, all other empirical research on DOS reviewed in this study has employed cross-sectional designs. Second, with respect to the instrumentation, a majority of studies utilized the DSI-R (Skowron & Schmitt,
and the next most common instrument was the DSI (Skowron & Friedlander, 1998). Only one study used the DSI-F (Ross & Murdock, 2014).

A third observation is that, with regard to the samples studied, there was a preponderance of undergraduate and graduate students. Nine exceptions included samples with a wider variety of ages and stages of life (Ferreira et al., 2014; Heintzelman et al., 2014; Kim-Appel et al., 2007; Parsons et al., 2007; Peleg, 2008; Peleg & Yitzhak, 2011; Skowron et al., 2010; Tuason & Friedlander, 2000; Zerach, 2015). The literature refers to students as young adults (e.g., Johnson et al., 2004; Skowron & Platt, 2005). They participated in the studies when they were entering the beginning of a central transition developmental period and creating their individual selfhood separate from their families of origin (Jankowski et al., 2013; Schwatrz et al., 2006; Skowron et al., 2009).

A forth observation that can be drawn from the review is related to the role of counselors and CITs. Most research conducted on DOS to date has focused on the therapeutic implications with the aim to improve future clients’ DOS (e.g., Jenkins et al., 2005; Kim-Appel et al., 2007; Ross & Murdock, 2014; Skowron et al., 2004; Zerach, 2015). Very few studies have emphasized the implications for the academic training of future helpers and counselors (Gushue et al., 2013; Heintzelman et al., 2014). According to Sandage et al. (2016), it is important for future helping professionals to understand their own DOS construct. Future counselors and CITs who are aware of their degree of DOS will have the capacity to engage authentically in helping relationships with their clients and will be more able to help clients to increase their degree of DOS (Gushue et al., 2013). Based on the available reviewed research, Sandage and Harden (2011) conducted research on DOS among future helping professionals. Recruiting master’s level students from six different helping professions \( (n=174) \), Sandage and Harden found that DOS is positively
associated with intercultural development. Concerning the practical implication of DOS, especially in an academic training program, Sandage and Harden concluded that trainees in the helping professions need to have self-awareness about how their own degree of DOS has shaped both their families and other significant relational systems. This, in turn, may influence their clients’ degree of DOS. Therefore, exploring the degree of DOS among CITs is a ripe subject for examination.

Based on these observations, it was appropriate for this study to employ a cross-sectional design in order to examine DOS, a variable of maturity development, in young adults as they underwent a developmental transition. More specifically, it was reasonable to examine the DOS construct among CITs enrolled in master’s level academic training programs. Moreover, given that previous studies have found significant associations between DOS and various indices of psychological functioning, this study examined the possible relationship between DOS and CSE, which is another indicator of psychological functioning. Finally, instead of focusing on the client’s DOS, this study extended the indices of psychological functioning to CITs, focusing on how their CSE is related to their own DOS as well as to the supervisory styles they experience within the clinical supervision relational system.

Summary

Chapter 2 has synthesized a literature review pertaining to the constructs of interest in the current study, including CSE, supervisory styles, and DOS of CITs. It began with an overview of theoretical frameworks used by this study. SCMCT serves as the primary theoretical framework that provides theoretical relationships among the three conceptual constructs of interest. Because SCMCT suggests CSE as the primary causal determinant of CITs’ knowledge acquisition and counseling performances (Larson 1998a, 1998b), this core construct in SCMCT was selected as
the dependent variable for the current study. Noting a lack of theoretical explanation regarding three conceptual constructs of interests from the SCMCT perspective, another three theories were used as extended theoretical frameworks to further explain the constructs: the SCT, the IDM, and the BFST.

This chapter then turned to revisit the SCMCT and discussed the linkage of particular extended theoretical frameworks by contextualizing the CITs and operationalizing the three constructs in greater detail. More specifically, it included an examination of literature, synthesized available research specifically on methodologies used in past research, and identified various instruments used by previous researchers to measure each related construct of interest before selecting instruments that better fit to measure the CSE, supervisory styles, and DOS for this study.

Although previous research has explored the relationship between supervisory style and CSE (e.g., Friedlander & Snyder, 1983; Meissner, 2012), and the relationship between DOS and CSE (e.g., Savitz-Smith, 2004; Seay, 2015), research has not inadequately explored the theorized relationship among the CSE, supervisory styles, and DOS. Thus, additional research is needed to examine how supervisory styles and DOS, both individually and collectively, associate with CITs’ CSE. In accordance with that, the purpose of this study was to explore the relationship among the supervisory styles as perceived by master’s level practicum CITs in CMHC CACREP-accredited programs, their DOS, and their CSE. The study assessed the degree to which the DOS can moderate the relationship between the supervisory styles and the CSE as perceived by CITs in their master’s level practicum.
The following chapter discusses the current study’s methodology. Specifically, Chapter 3 outlines in details regarding the plan of research design, sampling criteria, instruments that were used to measure the constructs of interest as well as data collection and analyses.
CHAPTER 3 - METHODOLOGY

This chapter includes five method-related sections. First, the research design is presented. The next three sections outline, respectively, the sample criteria, the psychometric properties of each of the instruments that were used in the study, and the data collection procedure. The chapter concludes with a description of how the data was analyzed.

Research Design

This descriptive study employed the use of a survey with the intent to explore the relationship among the supervisory styles as perceived by master’s level practicum counselors-in-training (CITs), their differentiation of self (DOS), and their counseling self-efficacy (CSE). This correlational research study enabled the researcher to investigate the relationships among chosen variables (Creswell, 2015; Heppner, Wampold, Owen, Wang, & Thompson, 2016).

Grounded in the Social Cognitive Model of Counselor Training (SCMCT) as the main theoretical framework, this correlational research study was designed to determine whether a relationship exists between two factors that are theoretically associated with CITs’ CSE: the supervisory styles and the DOS.

Participants

The establishment of criteria allows the researcher to select the participants who serve the purposes of a research effort (Creswell, 2015; Kline, 2005). As such, the criterion target population of this study consisted of individuals who: (a) were currently enrolled in or had just finished a practicum at the masters’ level in clinical mental health counseling (CMHC)
preparation programs in the United States, (b) had entered a CACREP-accredited CMHC program at an institution that does not also house a doctoral counselor education program, and (c) were currently under the clinical supervision of a practicum faculty supervisor or had just completed a period of such supervision. The sample specifically excluded CITs studying at universities that offer both master’s and doctoral level counseling preparation programs in order to avoid a potentially confounding influence from a doctoral student supervisor. In other words, all supervision was done by a program faculty member and not a doctoral student.

In order to recruit participants who fit the eligibility criteria for the target population, the researcher reviewed CACREP’s website. The website indicates that there are 318 accredited CMCH programs in the United States. Because one of the delimitations in this study is to restrict participation to CITs enrolled in accredited CMHC programs at universities that do not also house doctoral programs in counselor education in order to avoid the potentially confounding influence of doctoral student supervisors, only 218 of the 318 accredited CMCH master’s degree programs were eligible for this study.

Using the contact information on the CACREP’s website, the researcher approached program coordinators or liaisons from the listed universities to solicit their assistance in inviting students to participate in the study by completing an online survey. This method typically yields fast data collection and is appropriate for a survey of a specific population (Dillman, Smyth, & Christian, 2014). Further details pertaining to the solicitation process are presented in the data collection procedure section of this chapter.

To recruit qualified potential participants for this study, a nonprobability purposive sampling and cross-sectional design was used. A nonprobability purposive sampling approach is appropriate when there is no list of the potential participants to sample directly (Dillman et al.,
The researcher had access to the liaisons from the list of universities that offer mental health counseling preparation programs but not to the CITs in those programs who could potentially participate. Additionally, a cross-sectional design is used in education research to examine participants’ current perceptions of an issue while the participants are practicing actual behavior directly related to the same issue (Creswell, 2015). Therefore, guided by the purpose and research questions of the current study, the researcher utilized a nonprobability purposive sampling and a cross-sectional design to examine the CITs’ perceptions of supervisory style, their DOS, and the CSE they experienced in practicum.

Using the G*Power statistical software (Faul, Erfelder, Lang, & Buchner, 2007; Faul, Erfelder, Buchner, & Lang, 2009), the researcher conducted an a priori power analysis to determine the number of participants who would represent an adequate sample size. According to Faul and colleagues, the “a priori power analysis provides an efficient method of controlling statistical power before a study is actually conducted” (Faul, et al., 2007, p. 176). The power analysis yielded a recommended sample size ($n$) of 173 with a predetermined medium effect size of $f^2 = .15$, a squared multiple correlation value ($R^2$) of .13, and an alpha level ($\alpha$) at .05 to achieve a statistical power of .95. According to Balkin and Sheperis (2011) and Lomax and Hahs-Vaughn (2013), achieving a desired statistical power of at least .80 is common practice in education and behavioral science research. Given the input parameters, 173 potential participants were considered adequate as the target sample size for this study.

**Instrumentation**

The following section described the development of instrumentation for this study. The instrument development process was divided into three phases: (a) initial instrument development, (b) research approval of using the instrument, and (c) data collection of using the
instrument. Each phase is illustrated with figures in the following sections of this chapter.

Figure 3 shows the first phase of instrument development components for the current study.

**Phase 1: Initial instrument development**

![Diagram showing the steps of initial instrument development]

1. Review literature
2. Select constructs
   - Counseling Self-Efficacy (CSE)
   - Supervisory Styles
   - Differentiation of Self (DOS)
3. Search for existing instruments that measure the selected constructs
   - Construct: CSE
     - Counseling Self-Estimate Inventory (COSE; Larson et al., 1992)
   - Construct: Supervisory Styles
     - Supervisory Style Index (SSI; Long et al., 1996)
   - Construct: DOS
     - Differentiation of Self Inventory-Revised (DSI-R; Skowron & Schmitt, 2003)
4. Assemble draft of a set of instruments
   - Informed consent
   - CSE → COSE (Larson et al., 1992)
   - Supervisory Styles → SSI (Long et al., 1996)
   - DOS → DSI-R (Skowron & Schmitt, 2003)
   - Demographic questionnaire

**Figure 3. Initial instrument development**

The set of instruments that were used to measure the key constructs of this study includes: (a) the Counseling Self-Estimate Inventory (COSE; Larson et al., 1992), (b) the Supervisory Style Index (SSI; Long et al., 1996), (c) the Differentiation of Self Inventory-Revised (DSI-R; Skowron & Schmitt, 2003), and (d) a researcher-developed demographic questionnaire. The COSE instrument and its manual was purchased in order to receive permission to use it for this study (Appendix B). The developers of the other two standardized instruments granted the researcher permission to utilize them through email correspondence (Appendices C and D). The following paragraphs provide a detailed description of the collection of these instruments.

**Counseling Self-Estimate Inventory (COSE).** Larson, et al. (1992) developed the COSE based on Social Cognitive Theory (Bandura, 1982). The scale (Appendix E) can be used
to measures counselors’ and CITs’ estimate of their own abilities to counsel a client. The scale consists of 37 items with a 6-point Likert-type scale ranging from 1 (strongly disagree) to 6 (strongly agree). Scores for all items were summed and the total can range from 37 to 222, with higher scores on the COSE reflecting higher levels of CSE. There are five subscales on which participants rate their confidence in their abilities to counsel: The Micro Skills subscale (12 items), the Process subscale (10 items), the Difficult Client Behavior subscale (7 items), the Cultural Competence subscale (4 items), and the Awareness of Values subscale (4 items).

The Micro Skills subscale measures the counselor’s self-efficacy in using basic counseling responses during a session (e.g., “I am certain that my interpretation and confrontation responses will be concise and to the point”). The Process subscale assesses the counselor’s confidence in integrating responses that help develop a positive counselor-client relationship (e.g., “I am sure that in a counseling relationship I will express myself in a way that is natural, without deliberating over every response or action”). The Difficult Client Behavior subscale addresses the counselor’s self-assurance in handling the challenges of certain client behaviors (e.g., “I am uncomfortable about dealing with clients who appear unmotivated to work toward mutually determined goals”). The Cultural Competence subscale measures the counselor’s confidence in responding in culturally appropriate ways (e.g., “In working with culturally different clients, I may have a difficult time viewing situations from their perspective”). The Awareness of Values subscale represents the counselor’s self-efficacy in understanding personal biases (e.g., “I feel confident that I have resolved conflicts in my personal life so that they will not interfere with my counseling abilities”). Just as higher total scores depicted greater overall CSE, higher scores on each subscale represented higher self-efficacy in various counseling activities (e.g., a high score on the Cultural Competence subscale...
connoted higher confidence in competence with respect to ethnicity and social class differences. Larson et al. (1992) suggested the use of the total COSE scores to represent the degree of CSE.

The COSE scale showed good internal reliability with a Cronbach’s alpha of .93 and a three-week test-retest reliability of .87 (Larson et al., 1992). Also, Larson et al. (1992) reported that they calculated Cronbach’s alpha internal reliability coefficients for the five subscales, resulting in reliability estimates of .88 (Micro Skills subscale), .87 (Process subscale), .80 (Difficult Client Behavior subscale), .78 (Cultural Competence), and .62 (Awareness of Values).

To assess construct validity, they conducted an exploratory factor analysis with a varimax rotation. This analysis revealed that 14 initial dimensions underlie the construct of CSE, which explains 63 percent of the variance in scores. Next, Cattel’s’ scree test to identify major factors, which included all items with factor loadings greater than .40, identified five dimensions were captured that resembled the five subscales in the COSE (Larson et al., 1992). To further demonstrate the instrument’s validity, Larson et al., (1992) reported the convergent validity of the COSE, which positively correlated with the Tennessee Self-Concept Scale, an instrument that measures self-esteem. Meanwhile, the COSE is negatively correlated with the State-Trait Anxiety Inventory; this was evidence of divergent validity. Because the COSE is not designed to measure self-concept or anxiety constructs, Lent et al. (2003) reported more convincing psychometric validity by comparing the total score of the COSE with the total score of the Counselor Activity Self-Efficacy Scale (CASES), another instrument that measures CSE. The criterion validity of the total COSE correlated positively with the CASES (r = .76). Overall, the psychometric evidence presented supports the use of COSE in research concerning the measurement of CSE.
Supervisory Styles Index (SSIndex). Long et al. (1996) developed the SSIndex, a 19-item instrument that can be used to assess the CITs’ perceptions of the supervisor’s approach in clinical supervision (Appendix F). The scale is based on feminist theories and emphasizes egalitarian relationships, (Goodrich, Rampage, Ellman, & Halstead, 1988), self-disclosure (Wheeler, Avis, Miller, & Chaney, 1985), indirect guidance (Libow, Raskin, & Caust, 1982), minimization of hierarchy and sharing of responsibility (Wheeler et al., 1985), and the executive ability of the supervisee to be more directive and authoritative (Ault-Riche, 1988). Participants were asked to indicate their agreement or disagreement with each SSIndex item on a 4-point Likert-type response scale ranging from 1 (disagree) to 4 (agree). However, there was no total of all items or total scores of the SSIndex. Further details regarding the scoring are presented later in this SSIndex section.

The SSIndex scale includes three sets of complementary subscales. Each set encompasses two continuous dimensions: Authoritative – Affiliative, Directive – Non-Directive, and Non-Self-Disclosing – Self-Disclosing. The first dimension of the supervisory style subscales ranges from Authoritative to Affiliative. This subscale includes six items that measure the collaboration, egalitarian relationships, and hierarchical boundaries between the supervisor and supervisee. Examples of the items include “the supervisor is respectful of my opinions about the therapy process” and “the supervisor expects me to be in charge of my case load.” The second dimension of the supervisory style subscales ranges from Directive to Non-Directive. This subscale includes six items and represents the respondent’s independence from and dependence on the supervisor in working with clients. Examples of the items include “the supervisor expects me to develop the plan for an upcoming therapy session rather than providing one for me” and “the supervisor insists on strict adherence to her/his directives.” The third dimension of the supervisory style
subscales ranges from Non-Self-Disclosing to Self-Disclosing. This subscale includes seven items that assess the respondent’s connection with and distance from the supervisor within the supervisory relationship. Examples of the items include “the supervisor discloses how current issues in her/his life affect the supervision process” and “the supervisor spends very little time joining with supervisee.”

Each of the three dimensions of complementary subscales (i.e., Authoritative – Affiliative, Directive – Non-Directive, and Non-Self-Disclosing – Self-Disclosing) on the SSIndex scale is distinct. Therefore, there is no total score for the SSIndex full scale (see Long et al., 1996). Rather, each of the three subscales has its own total summed score, and together these three scores represent the SSIndex outcome. The total summed scores for the three distinct subscales ranged from 6 to 24 (Authoritative – Affiliative dimension), 6 to 24 (Directive – Non-Directive dimension), and 7 to 28 (Non-Self-Disclosing – Self-Disclosing dimension). After certain items were reverse scored, the participant’s sum scores for each subscale depicted the dominant supervisory styles per subscale. As each subscale score falls on a continuum associated with the two poles of a dimension, there are three possible dominant supervisory styles per subscale (i.e., the two polar ends of the continuum of the dimension and the median of the dimension). For example, the three possible dominant supervisory styles of the Authoritative – Affiliative subscale are the authoritative supervisory style, the affiliative supervisory style, and the median, the mixture of the authoritative and affiliative supervisory styles. Therefore, there are nine possible dominant supervisory styles based on the set of three complementary subscales that comprise the SSIndex scale. Accordingly, each participant may have a combination list of three different dominant supervisory styles (i.e., known as a category for this study) determined by perceived experiences in the supervision process based on the three subscales. In short, the
SSIIndex scale is a multidimensional scale. Table 1 shows the scoring of each of the three dimensions of the SSIndex subscales with its own total summed scores. Because there is no total score for the SSIndex full scale, the score of these three distinct dimensions represent the SSIndex full scale.

*Table 1. Scoring of the SSIndex as provided by Long et al. (1996)*

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Pole 1</th>
<th>Median</th>
<th>Pole 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authoritative – Affiliative dimension</td>
<td>Authoritative supervisory style (Scores range: 6-24)</td>
<td>Mixture of authoritative and affiliative supervisory style (Scores range: 12-18)</td>
<td>Affiliative supervisory style (Scores range: 19-24)</td>
</tr>
<tr>
<td>Non-Self-Disclosing – Self-Disclosing</td>
<td>Non-self-disclosing supervisory style (Scores range: 7-13)</td>
<td>Mixture of non-self-disclosing and self-disclosing supervisory style (Scores range: 14-21)</td>
<td>Self-disclosing supervisory style (Scores range: 22-28)</td>
</tr>
</tbody>
</table>

Long et al. (1996) evaluated the reliability of the SSIndex by administering the scale to 52 graduate trainees from the marriage and family therapy programs involving 182 of their supervisors. To address internal consistency, they reported that the Cronbach’s alpha that provides the internal consistency for each dimension of complimentary subscales, was as follows: Authoritative – Affiliative = .79, Directive – Non-Directive = .78, and Non-Self-Disclosing – Self-Disclosing = .80. As the scale is based on a feminist approach and has the aim of interpreting gender-sensitivity in terms of executive ability instead of equality, Long et al. (1996) reported that no systematic bias exists in the scale score based on the supervisee’s and supervisor’s sex or gender. In another study, Reeves et al. (1997) reported that gender had no
apparent influence on the SSIndex score, proving that the SSIndex scale was able to capture the supervisory style without influence from stereotypical masculine/feminine qualities. Miller and Ivey’s (2006) test of all three subscales found that male supervisors were rated more affiliative than female supervisors but the Directive – Non-Directive and Non-Self-Disclosing – Self-Disclosing subscales showed no gender and sex bias. Thus, sufficient discriminant validity exists to suggest that the SSIndex is minimally related to sex and gender. Moreover, convergent validity was demonstrated by a significant positive correlation with the Supervisory Style Inventory (SSIInventory; Friedlander & Ward, 1984), another scale that also measures the supervisory style in clinical supervision (Reeves et al., 1997). As the psychometric evidence reported supports the use of the scale in previous studies, it was therefore reasonable to use the SSIndex in this study as a scale to measures the mixtures of supervisory styles that CITs perceive supervisors to exhibit.

**Differentiation of Self Inventory-Revised (DSI-R).** Skowron and Schmitt (2003) developed the DSI-R, a 46-item self-report measure (Appendix G). The scale was a revision of Skowron and Friedlander’s (1998) Differentiation of Self Inventory (DSI), which had 43 items. Both the DSI (Skowron & Friedlander, 1998) and the DSI-R (Skowron & Schmitt, 2003) scales measure respondents’ intrapersonal and interpersonal abilities. Specifically, the scales assess respondents’ ability to differentiate between the intellectual thinking process and the feeling process as well as respondents’ capability to balance connections with and independence from others (Skowron & Friedlander, 1998; Skowron & Schmitt, 2003). In other words, the scales measure respondents’ degree of individuation, their significant relationships, and their current relationship with their families of origin.
The DSI (Skowron & Friedlander, 1998) was based on the multidimensional construct of differentiation derived from the Bowen’s Family Systems Theory (Bowen, 1978; Kerr & Bowen, 1988) and consisted of 96 initial items. By using an exploratory factor analysis that included all items with factor loadings greater than .40, Skowron and Friedlander (1998) eliminated 53 items to create the 43-item DSI. The scale consisted of four subscales: Emotional Reactivity subscale (ER), I-Position subscale (IP), Emotional Cutoff subscale (EC), and Fusion with Others subscale (FO). Later, Skowron and Schmitt (2003) revised the DSI into DSI-R in order to enhance the internal consistency of the FO subscale. The DSI-R consists of the 43 original items as well as three additional items that enhance the internal consistency of the FO subscale.

The ER subscale (11 items) measures the degree to which respondents experience hypersensitivity to environmental stimuli (e.g., “At times my feelings get the best of me and I have trouble thinking clearly”). The IP subscale (11 items) assesses the ability of respondents to adhere to their own convictions when pressured to do otherwise (e.g., “No matter what happens in my life, I know that I’ll never lose my sense of who I am”). The EC subscale (12 items) represents the degree to which respondents feel threatened by intimacy (e.g., “I tend to distance myself when people get too close to me”). The FO subscale (12 items) measures the respondents’ levels of emotional overinvolvement with others (e.g., “I often agree with others just to appease them”). Answers were given on a 6-point Likert-type response scale ranging from 1 (not at all characteristic of me) to 6 (very characteristic of me). After specific items were reverse scored, the total summed scores ranged from 46 to 276, with higher scores indicating a greater degree of DOS, which is a desirable state involving less emotional reactivity, greater ability to take an I-position in relationships, less emotional cutoff, and less relationship fusion and complication with others (Skowron & Friedlander, 1998; Skowron & Schmitt, 2003). Specifically, the
respondents with higher scores have greater individual sense of self in working toward their indviduation process. Specifically, highly differentiated respondents have less emotional reactivity, less emotional cutoff when dealing with certain situations, and less fusing themselves with other people (Skowron & Friedlander, 1998; Skowron & Schmitt, 2003). Therefore, highly differentiated respondents have a greater ability to take an I-position in their relationships with others.

The reliability and validity of the DSI and the DSI-R scales has been tested in several studies. Skowron and Friedlander (1998), in their article describing the scale development reported validity and reliability for the DSI based on a sample of 169 adults of various age levels. Internal reliability for the DSI total scale was .88 and for each of the subscales was as follows: ER = .84, IP = .83, EC = .82, and FO = .74. It was also reported that the construct validity of the DSI is supported by a strong correlation of scores on the DSI with a measure of chronic anxiety and with the amount and intensity of symptomatic distress. Skowron (2000) reported internal consistency reliability estimates as follows: DSI total scale = .90, for the subscales, ER = .85, IP = .85, EC = .80, and FO = .59. Regarding the construct validity, the DSI scale was correlated negatively for relationship distress in a study regarding the marital adjustment (Skowron, 2000).

When Skowron and Schmitt (2003) revised the DSI scale, they used a norming sample of 225 adults who represented various demographic factors such as marital status, age, race and ethnicity, and level of education. Skowron and Schmitt (2003) reported the Cronbach’s alpha coefficients were high for DSI-R full scale and the subscales: DSR-full scale = .92, ER = .89, IP = .81, EC = .84, and FO = .86. They also reported high levels of correlation between the revised FO subscale correlates with measures of personal authority and adult attachment. This demonstrated the construct validity of the revised FO subscale.
Also using the DSI-R, Johnson et al. (2004) studied the relationship between identity development and DOS among 259 college students. They reported that reliability coefficients were good: .84 (total DSI-R scale), .85 (ER), .76 (IP), .82 (EC), and .66 (FO). The results showed that identity development is related to differentiation levels of young adults, which supports the theoretical construct of the scale. In a recent study, Skowron, Kozlowski, and Pincus (2010) examined a 51-person sample of high-risk mothers from urban families and their potential to commit child abuse. The internal consistency scores for each subscale were: .81 (ER), .82 (IP), .79 (EC), and .67 (FO). Overall, the psychometric evidence presented supports the instruments’ use in research concerning the measurement of DOS. Therefore, it was reasonable to use the DSI-R in this study as a scale to measure CITs’ DOS.

**Demographic Questionnaire.** The purpose of collecting participants’ background information was to identify characteristics of the sample for the study. This information aided in interpreting the generalizability of future results by disaggregating their responses with any significant background information that was collected in this study. The participants were asked to identify eight aspects of their background information, including sex, age, race/ethnicity, geographical region of counselor preparation program, types of clients they are working with during practicum, work-related experience prior to entering the counselor preparation program, and personal counseling experience, work-related experience prior to entering the counseling preparation program; they were given the option of identifying three aspects of their faculty supervisor’s background, including sex, race/ethnicity, and rank of academic position. These demographic questions have been examined in previous studies related to constructs of CSE, supervisory styles and DOS. A complete demographic questionnaire can be found in Appendix H.
Research Approval

Figure 4 depicts the second phase of the study process. This phase included four steps of research approval for using the instrument and to officially start the study.

Phase 2: Research approval

![Diagram of research approval process]

*Figure 4. Research approval process*

Because all existing instruments that measured the intended constructs of this study were standardized instruments and had good psychometric properties, all instruments were used without any modification. The next step after assembling the draft instrument was to obtain research approval. In an effort to obtain research approval, the dissertation proposal was presented to the dissertation committee members. After making any suggested changes and receiving committee approval, an application protocol to conduct research with human subjects was submitted to the Institutional Review Board (IRB) at the University of Mississippi (Appendix A). The application included a study proposal as well as other necessary information and materials for further review and approval. As the researcher has already completed the required human subjects training from the Collaborative Institutional Training Initiative (CITI) program, the study officially started once the researcher received the IRB approval.

Data Collection Procedures

The time frame for collecting the data was six weeks. The practicum experience in the United States typically follows a semester schedule, and the time frame for data collection was the last quarter period of the semester, ranging from mid-April 2018 through end-May 2018. The
researcher assumed that, by this time, the participants had already had experience with the supervision process during their current practicum semester, meeting a core criterion for qualified participants in this study. All response data from the potential participants was collected by using Qualtrics. Qualtrics surveys are an electronic survey and data collection system through which the collection of instruments for this study was administered. Figure 5 identifies the key steps in data collection.

Because the Family Educational Right and Privacy Act (FERPA) protects student information, the researcher did not have access to email addresses for the students representing the target population for this study. Thus, the best recruitment option was to contact the counselor education program coordinator or program liaison to request their assistance in recruiting potential participants. Prior to the recruitment of participants, the researcher developed a list of accredited masters’ level CMCH programs in the United States which was derived from the CACREP’s website. As indicated earlier, the researcher eliminated CMHC programs at institutions that house a counselor education doctoral program. Using only the list of schools that met the restrictions for participation, namely those which had CITs who were enrolled in CMHC programs but did not also house doctoral programs in counselor education, the researcher obtained email addresses for each counselor education program coordinator or the counselor education program liaison from the respective institutions’ websites.
Phase 3: Data collection using instrument

Pre-recruitment procedure
- Reviewed CACREP’s website
- Identify CACREP accredited master’s level CMCH programs
- Eliminate CMCH programs institutions that housing a counselor education doctoral program
- Identify program coordinators’ or liaisons’ related information for recruitment
- Develop database of program coordinators’ or liaisons’ in identified CMHC CACREP programs

Survey Administration and procedure
- Request program coordinators’ or liaisons’ in recruiting CITs to participate in this study through three-series of emails
  - First email: solicitation and invitation
  - Second email: first reminder email
  - Third email: second/last reminder email
- Time frame: Six weeks

Figure 5. Key data collection steps
The researcher sent a series of three emails to the program coordinators and the counselor education program liaisons. The first email was sent on the second day of the third week of April 2018. This first email (Appendix I) included a brief description of the study, eligible criteria for participants, an electronic link to the Qualtrics survey, a request for the recipient’s assistance in recruiting participants for the study through dissemination of the survey link to their students, monetary and nonmonetary incentives, and a notice about the planned follow-up emails.

Upon clicking the link to the survey, the potential participants entered the first page of the survey, which is the consent form. The consent form (Appendix L) was a document through which the researcher obtained the participants’ consent to participate in the study. The information in the consent form included a brief introduction of the researcher, a description of the study and the time to complete it, information regarding the IRB approval, confirmation that participation was voluntary and that participants had the right to withdraw at any time, an assurance of confidentiality and the anonymity of the responses, a description of the potential benefits and risks of participation, the survey, and identification of incentive offered for completing the survey. Participants indicated their consent to participate by clicking a button.

The online survey included four instruments in the following order: the COSE, the SSIndex, the DSI-R, and a short demographic questionnaire. After completing the online survey, participants viewed a thank-you statement and an offer to participate in a raffle for one of six Amazon.com gift cards worth $25 each, and also offered to share the results of the study upon request (Appendix N). Clicking the link that indicated an interest in entering the lottery for a gift card directed participants to another Qualtrics survey that solicited their name and email address. The use of a separate survey link ensured that there was no connection between participants’
responses to the research instruments and their identifying information. This de-identification process kept the participants’ identities anonymous.

The second solicitation and invitation email served as a follow-up and as a second call for participation. This second email was sent one week after the first email was sent. The second email (Appendix J) included information similar to the information in the first email, except more emphasis was placed on the potential participants who had not yet responded to the survey.

The third solicitation and invitation email (Appendix K) emphasized that the survey would close soon. It also expressed the researcher’s gratitude to all counselor education program coordinators or liaisons and all study participants. This third and final email was sent four weeks after the second email. A week after the third email was sent, as the semester ended, the survey was closed. Based on the proposed study prior collecting the data, the survey window was planned to be kept open until the researcher collected a large enough sample size needed for this study, which was an estimated 210 respondents. This is because, although the minimum adequate sample size for the study was 173 respondents, it was anticipated that from the estimation of 210 respondents, 15 to 20 percent of respondents’ responses might be eliminated due to invalid responses and missing information. To prevent multiple responses from the same respondent, the researcher imposed a one-time-only participation in Qualtrics setting.

After a six-week time frame for collecting the data, the Web survey was closed. Next, the researcher downloaded all survey data from Qualtrics and transferred the data into a storage device that was secured with the researcher’s access code. Because the researcher had selected the setting in Qualtrics to make sure that no IP addresses are recorded in order to ensure the participants’ anonymity, the data transference process regarding the responses to the survey was secure and confidential. To further ensure that all the recorded data was anonymous, the
researcher assigned each participant a code number. By assigning a random code number, the researcher was able to separate all data from any possible identifiers that might have been derived from the collected demographic information.

**Data Analysis**

After the data collection was completed, the process of data analysis proceeded by using the IBM Statistical Package for the Social Sciences (SPSS) version 25. The Likert-scale data that were obtained from all three instruments used in this study were treated as a ratio scale for the purpose of the statistical analyses.

**Data screening and examination.** Before conducting the data analyses, data screening and examination were conducted. In data screening and examination, the researcher reported the total number of solicitation and invitation emails that were sent out to the program coordinators or the counselor education program liaisons. Because the recipients who disseminated invitations to eligible participants might or might not reply back to the researcher’s email, the total number of all participants either completing or submitting an incomplete the survey was reported before the clean set of data was revealed.

When screening and examining the raw data, the researcher verified any possible unreasonable data values by using frequency distribution to ensure the valid interpretation of study findings. This verification procedure is designed to screen for: (a) the appropriateness of the numerical values for each variable under study, (b) the outliers, and (c) the missing values. With regard to missing and inappropriate numerical values in accord with the response value of the instruments, the researcher substituted the score by using mean substitution. According to Meyers, Gamst, and Guarino (2017) and Tabachnick and Fidell (2007), mean substitution is one of the imputation methods that was executed by replacing all missing and inappropriate
numerical values of a variable with a mean of that variable. After the data screening was conducted, this clean data was used for the main statistical analysis. It was assumed that the verification procedure would decrease the number of participants and/or the number of cases that would be included in the main statistical analyses.

**Preliminary analyses.** Using descriptive statistical analyses, the demographic profile of participants and their supervisors’ characteristics were analyzed. This background information was presented in terms of frequency and percentage with the aim of presenting the profile of participants for this study.

Means, standard deviations, possible ranges, and correlations matrices among the main variables in this study were presented for a more complete understanding of the data. Specifically, the descriptive analyses reflected the general tendencies of the data, the variance, and the standard deviation of scores and the correlation coefficients among sets of variables examined in the study. The reliability coefficients for the COSE, the SSIndex, and the DSI-R were analyzed by using the Cronbach’s alpha internal reliability coefficient. Because all three standardized instruments were administered to a specific sample of the study, the psychometric properties analysis was necessary to explain to what extent the results of this study were meaningful.

**Model assumptions.** Prior to conducting inferential statistics analyses, model assumptions for corational and regression analyses were checked. Checking for linearity and normality was necessary before conducting correlation analyses (Field, 2013). The P-P plots and bootstrap function were used to examine whether there was evidence that the collected data was normally distributed and to obtain a robust confidence interval, respectively.
For the regression analysis to be interpretable and meaningful, Field (2013) and Meyers et al. (2017) suggested that four assumptions needed to be satisfied: additivity and linearity, assumption of normality, homoscedasticity, and multicollinearity. To assess the additivity and linearity, scatterplots between each pair of the variables were graphically inspected. Histogram, skewness, and kurtosis were reviewed to ensure that the assumption of normality was not violated. Regarding homoscedasticity, at each level of the predictor variables, it was necessary to ensure that the variance of the residual terms was constant. The variance inflation factor, tolerance statistic, and Pearson correlation was measured to assess multicollinearity among predictor variables.

**Statistical analyses.** For this study, the alpha level used for statistical analyses was .05. With regard to analyzing the data to test the hypotheses in the current study, Pearson’s product-moment correlation and hierarchical multiple regression analyses were conducted. As introduced in Chapter 1, the overarching research question for this study was: What is the relationship among the supervisory styles perceived by master’s level practicum CITs, their DOS, and their CSE? Table 2 shows a list of research questions, hypotheses, instruments, and statistical tests.

*Table 2. Research questions, hypotheses, instruments, and statistical tests*

<table>
<thead>
<tr>
<th>Research questions</th>
<th>Hypotheses</th>
<th>Instruments</th>
<th>Statistical tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Question 1: Based on three dimensions of supervisory styles, what categories of supervisory styles are perceived by the master’s level practicum CITs?</td>
<td>-</td>
<td>The SSIndex</td>
<td>Cluster analysis</td>
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</table>

(Continued)
Table 2. Research questions, hypotheses, instruments, and statistical tests (Continued)

<table>
<thead>
<tr>
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<th>Hypotheses</th>
<th>Instrumentation</th>
<th>Statistical test</th>
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</thead>
<tbody>
<tr>
<td>Research Question 2: To what extent is the degree of each dimension of supervisory styles experienced by master’s level practicum CITs associated with their degree of overall DOS?</td>
<td>Hypothesis 2a H₀: There will be no significant relationship between the degree of Authoritative – Affiliative dimension of supervisory styles experienced by master’s level practicum CITs and their degree of overall DOS.</td>
<td>The SSIndex and the DSI-R</td>
<td>Pearson’s product-moment correlation</td>
</tr>
<tr>
<td>Research Question 2a: To what extent is the degree of Authoritative – Affiliative dimension of supervisory styles experienced by master’s level practicum CITs associated with their degree of overall DOS?</td>
<td>Hypothesis 2a H₀: There will be no significant relationship between the degree of Authoritative – Affiliative dimension of supervisory styles experienced by master’s level practicum CITs and their degree of overall DOS.</td>
<td>The SSIndex and the DSI-R</td>
<td>Pearson’s product-moment correlation</td>
</tr>
<tr>
<td>Research Question 2b: To what extent is the degree of Directive – Non-Directive dimension of supervisory styles experienced by master’s level practicum CITs associated with their degree of overall DOS?</td>
<td>Hypothesis 2b H₀: There will be no significant relationship between the degree of Directive – Non-Directive dimension of supervisory styles experienced by master’s level practicum CITs and their degree of overall DOS.</td>
<td>The SSIndex and the DSI-R</td>
<td>Pearson’s product-moment correlation</td>
</tr>
<tr>
<td>Research Question 2c: To what extent is the degree of Non-Self-Disclosing – Self-Disclosing dimension of supervisory styles experienced by master’s level practicum CITs associated with their degree of overall DOS?</td>
<td>Hypothesis 2c H₀: There will be no significant relationship between the degree of Non-Self-Disclosing – Self-Disclosing dimension of supervisory styles experienced by master’s level practicum CITs and their degree of overall DOS.</td>
<td>The SSIndex and the DSI-R</td>
<td>Pearson’s product-moment correlation</td>
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<table>
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<tr>
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<th>Hypotheses</th>
<th>Instrumentation</th>
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<tr>
<td>Research Question 3:</td>
<td>-</td>
<td>The SSIndex and the COSE</td>
<td>-</td>
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<td>To what extent is the degree of each dimension of supervisory styles experienced by master’s level practicum CITs independently associate with their degree of overall CSE?</td>
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<tr>
<td>Research Question 3a:</td>
<td>Hypothesis 3a H&lt;sub&gt;0&lt;/sub&gt;: The degree of Authoritative – Affiliative dimension of supervisory styles experienced by master’s level practicum CITs is not independently associate with their degree of overall CSE.</td>
<td>The SSIndex and the COSE</td>
<td>Pearson’s product-moment correlation</td>
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<tr>
<td>To what extent is the degree of Authoritative – Affiliative dimension of supervisory styles experienced by master’s level practicum CITs independently associate with their degree of overall CSE?</td>
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<tr>
<td>Research Question 3b:</td>
<td>Hypothesis 3b H&lt;sub&gt;0&lt;/sub&gt;: The degree of Directive – Non-Directive dimension of supervisory styles experienced by master’s level practicum CITs is not independently associate with their degree of overall CSE.</td>
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<td>Pearson’s product-moment correlation</td>
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<tr>
<td>To what extent is the degree of Directive – Non-Directive dimension of supervisory styles experienced by master’s level practicum CITs independently associate with their degree of overall CSE?</td>
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<tr>
<td>Research Question 3c:</td>
<td>Hypothesis 3c H&lt;sub&gt;0&lt;/sub&gt;: The degree of Non-Self-Disclosing – Self-Disclosing dimension of supervisory styles experienced by master’s level practicum CITs is not independently associate their degree of overall CSE.</td>
<td>The SSIndex and the COSE</td>
<td>Pearson’s product-moment correlation</td>
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<tr>
<td>To what extent is the degree of Non-Self-Disclosing – Self-Disclosing dimension of supervisory styles experienced by master’s level practicum CITs independently associate with their degree of overall CSE?</td>
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</table>
Table 2. Research questions, hypotheses, instruments, and statistical tests (Continued)

<table>
<thead>
<tr>
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<th>Hypotheses</th>
<th>Instrumentation</th>
<th>Statistical test</th>
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</thead>
<tbody>
<tr>
<td>Research Question 4: Are master’s level practicum CITs perception of their degree of overall DOS independently associate with their degree of overall CSE?</td>
<td>Hypothesis 4: Master’s level practicum CITs perception of their degree of overall DOS are not independently associate with their degree of overall CSE.</td>
<td>The DSI-R and the COSE.</td>
<td>Pearson’s product-moment correlation</td>
</tr>
<tr>
<td>Research Question 5: Does master’s level practicum CITs perception of their overall degree of DOS moderate the link between their degree of each dimension of supervisory styles and their overall degree of CSE?</td>
<td>-</td>
<td>The SSIndex, the DSI-R, and the COSE</td>
<td>-</td>
</tr>
<tr>
<td>Research Question 5a: Does master’s level practicum CITs perception of their overall degree of DOS moderate the link between their degree of Authoritative – Affiliative dimension of supervisory styles and their overall degree of CSE?</td>
<td>Hypothesis 5a H₀: Master’s level practicum CITs perception of their overall degree of DOS does not act as a moderator between their degree of Authoritative – Affiliative dimension of supervisory styles and their overall degree of CSE.</td>
<td>The SSIndex, the DSI-R, and the COSE</td>
<td>Hierarchical multiple regression</td>
</tr>
<tr>
<td>Research Question 5b: Does master’s level practicum CITs perception of their overall degree of DOS moderate the link between their degree of Directive – Non-Directive dimension of supervisory styles and their overall degree of CSE?</td>
<td>Hypothesis 5a H₀: Master’s level practicum CITs perception of their overall degree of DOS does not act as a moderator between their degree of Directive – Non-Directive dimension of supervisory styles and their overall degree of CSE.</td>
<td>The SSIndex, the DSI-R, and the COSE</td>
<td>Hierarchical multiple regression</td>
</tr>
</tbody>
</table>

(Continued)
Table 2. Research questions, hypotheses, instruments, and statistical tests (Continued)

<table>
<thead>
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<th>Hypotheses</th>
<th>Instrumentation</th>
<th>Statistical test</th>
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<tbody>
<tr>
<td>Research Question 5c: Does master’s level practicum CIT's perception of their overall degree of DOS moderate the link between their degree of Non-Self-Disclosing – Self-Disclosing dimension of supervisory styles and their overall degree of CSE?</td>
<td>Hypothesis 5a H0: Master’s level practicum CIT's perception of their overall degree of DOS does not act as a moderator between their degree of Non-Self-Disclosing – Self-Disclosing dimension of supervisory styles and their overall degree of CSE.</td>
<td>The SSIndex, the DSI-R, and the COSE</td>
<td>Hierarchical multiple regression</td>
</tr>
</tbody>
</table>

Summary

In summary, the purpose of this study was to explore factors that contribute to CSE in master’s level practicum CITs. Specifically, drawing on Larson’s (1998a, 1998b) SCMCT, this study explored the theorized relationship among the supervisory styles of faculty as perceived by master’s level practicum CITs, their DOS, and their CSE. Moreover, this study assessed the degree to which the DOS acted as moderator between supervisory styles as perceived by master’s level practicum CITs and their degree of CSE.

The results of this study may add to the body of research concerning CITs’ CSE development, which could be valuable to researchers, counselor educators, and supervisors. Furthermore, the results of this study yielded a better understanding of how to prepare effective clinical mental health counselors. In this chapter, the research questions of the present study were presented along with the research design, instrumentation for data collection, data collection procedures, and data analysis procedures. Chapter 4 presents the findings of this study.
CHAPTER 4 - RESULTS

This chapter describes and summarizes the statistical analyses used to address the research questions and hypotheses established in the previous chapters. The main purpose of this study was to explore the relationship among the supervisory styles as perceived by masters’ level practicum counselors’-in-training (CITS), their differentiation of self (DOS), and their counseling self-efficacy (CSE). The study also assessed the degree to which the DOS moderated the relationship between the supervisory styles and CSE as perceived by masters’ level practicum CITS.

Following the data screening and examination process, this chapter presents a description of the sample demographics and their supervisors’ characteristics based on descriptive statistical analyses. Then, it presents the results of preliminary analyses, including the inter-correlations among the variables and reliability coefficients. The chapter concludes with the results pertaining to the five research questions that guided the study in its pursuit of its main purpose.

Data Screening and Examination

Corresponding to the criterion target population of this study, the participants were recruited from 218 accredited Clinical Mental Health Counseling (CMCH) programs in the United States. Because the researcher has no way to directly approach eligible practicum students for the study, the recruitment process was conducted through a series of three emails to the CMCH program coordinators or liaisons. Among these, seven informed the researcher that they were unable to disseminate the survey of the study to their practicum students because their
own institution’s Institutional Review Board would have needed to approve the study \((n = 4)\) or because there were no current practicum CITs in their program, which was not teaching the practicum course that semester \((n = 3)\). An additional 198 programs did not respond; it is possible that many of these had similar constraints. The remaining, 13 CMCH programs’ coordinators reported that they disseminated the survey to their practicum students. Because the number surveys the program coordinators distributed was also not known, thus, the response rate of students who received the survey was not known either.

To ensure the accuracy of data, the raw data were examined for any possible missing and unreasonable data values. All missing and unreasonable data values were replaced by using mean substitution (Meyers et al., 2017; Tabachnick & Fidell, 2007) and none of the data were excluded.

With an alpha level of .05, the recommended adequate power is .80 (Balkin & Sheperis, 2011). To achieve a statistical power of at least .80, results from a \textit{priori} power analysis showed a minimum of 173 participants would be an adequate sample size for this study. However, the survey window was open for six weeks with three-series emails of request without producing 173 responses. The researcher closed the window because the new semester had begun, and the study had been limited to a single semester. Thus, new students enrolled in practicum would not fit the sample criteria. Ultimately, a small numbers of participants were obtained \((n = 18)\). Because of this small sample, the findings were limited due to inadequate power (Balkin & Sheperis, 2011). To overcome the issues of low sample size and inadequate power, parametric bootstrap analyses were conducted to evaluate the stability of the results and to estimate statistical parameters, which include the population mean, standard error \((SE)\), and confidence interval \((CI)\), from the sample by using the method of resampling with replacement (Ong, 2014;
Wright, London, & Field, 2011). Specifically, the bootstrap CI adjusted for bias showed the highest level of statistical power and if the 95% CI does not include zero, the result is considered significant (McKinnon, Lockwood, & Williams, 2004) at the .05 level (i.e., the alpha level of this study). According to Ong (2014), the minimum sample size needed for bootstrapping analysis should be larger than eight samples and suggested 5,000 iterations to reach the simulation converges. Thus, the original sample size of this study ($n = 18$) is reasonable for bootstrap analysis with 5,000 iterations. Because the data was analyzed using parametric bootstrap analyses, the model assumptions were not tested.

**Demographic Profile**

Participants were 18 (two males and 16 females) masters’ level practicum CITs who were enrolled in a CACREP-accredited counselor preparation of CMHC program. Participants ranged in age from 22 to 38, with a mean age of 25.78 ($SD=4.56$). The participants described themselves as White/Caucasian (77.9%), Black/African (11.1%), Hispanic/Latino (5.5%), and Biracial/Multiracial (5.5%). Participants reported their program’s geographical region as North Central (44.4%), Southern region (27.8%), North Atlantic region (22.2%), and Rocky Mountain region (5.6%). A majority of participants reported that they were working with voluntary clients (72.2%) during practicum, and 27.8% reported they were working with both voluntary and non-voluntary clients. Prior to attending the CMCH program, 55.5% of participants reported that they did not have work-experience and 44.5% participants reported they had work-experience, including titles work as case coordinator, case manager, and personnel position related to human relations service. The majority, 83.3%, of the participants reported that they attended counseling or therapy as a client and 16.7% reported they did not attend any helping session.
With regard to the supervisors’ demographic profile, there were three characteristics that participants identified regarding their supervisors, including supervisors’ sex, supervisors’ race/ethnicity, and supervisors’ rank of academic position. Of the 18 supervisors, three were male and 15 were female. The participants identified their supervisors’ race/ethnicity as White/Caucasian (72.3%), as Asian/Pacific Islander (16.7%), as Hispanic/Latino (5.5%), and not sure (5.5%). With respect to supervisors’ rank of academic position, the plurality of participants (38.9%) were not sure, whereas other participants identified their supervisors as a clinical professor (22.2%), professor (16.7%), associate professor (11.1%), and adjunct professor (11.1%).

**Preliminary Analyses**

Estimates of internal consistency of the present sample were examined for the Counseling Self-Estimate Inventory (COSE) total score, the Differentiation of Self-Revised (DSI-R) total score, and the Supervisory Styles Index (SSIndex) total score as well as each dimensions of SSIndex’s complementary subscales (see Table 3). The alpha coefficient for the COSE was 0.734. Although Larson et al. reported an alpha coefficient of the COSE total score was high (i.e., $\alpha = .93$), the alpha coefficient of the COSE total score in the current study is considered acceptable (Field, 2013).

In this study, the internal consistency of the SSIndex and each dimension of complementary subscales was as follows: 0.711 for SSIndex total, 0.413 for Authoritarian – Affiliative dimension, 0.59 for Directive – Non-Directive dimension, and 0.772 for the Non-Self-Disclosure – Self-Disclosure dimension. These initial estimates of reliability suggested that only the SSIndex total and Non-Self-Disclosure – Self-Disclosure dimension had an acceptable level of consistency, whereas the Authoritarian – Affiliative and Directive – Non-Directive
dimensions had a low level of consistency in the practicum CITs sample from the CMCH program. By contrast, Long et al.’s (1996) study of graduate trainees from marriage and family therapy programs reported that all three dimensions of complementary subscales of SSIndex had good internal consistency (Authoritarian – Affiliative dimension; $\alpha = 0.79$, Directive – Non-Directive dimension; $\alpha = 0.78$, and Non-Self-Disclosure – Self-Disclosure dimension; $\alpha = 0.80$). With regard to the internal consistency of DSI-R, Skowron and Schmitt (2003) reported the internal consistency of DSI-R total was high (i.e., $\alpha = .92$). Using the sample of this study, Cronbach’s alpha coefficient for the DSI-R total score was 0.864, which suggests that the DSI-R total of the current study has a good internal consistency.

Table 3 shows means, standard deviations, range scores by the participants, and scale range for the three main variables, the COSE total score, the dimensions of SSIndex’s complementary subscales, and the DSI-R total score. The mean for COSE in this study ($M = 4.4; SD = .318$) and the bootstrap confidence interval around mean value range from 4.36 to 4.55 ($SE = .07$).

The means for the Authoritarian – Affiliative, Directive – Non-Directive, and Non-Self-Disclosure – Self-Disclosure dimensions were $M = 3.03, 1.71, \text{ and } 2.79; SD = .458, .22, \text{ and } .699$ respectively. Whereas, the bootstrap confidence interval around mean value for Authoritarian – Affiliative dimension (range = 2.8 – 3.21, with $SE = .10$), for Directive – Non-Directive dimension (range = 1.62 – 1.81, with $SE = .05$), and for Non-Self-Disclosure – Self-Disclosure dimension (range = 2.48 – 3.08, with $SE = .16$). The mean for DSI-R in the current study ($M = 4.13; SD = .557$) and the bootstrap confidence interval around mean value were ranged from .41 to .64. ($SE = .13$).
Table 3. Descriptive statistics, Cronbach’s alpha coefficients, zero-order correlation coefficients, bootstrap analysis of magnitude, and statistical significance of the COSE, SSIndex, and DSI-R (n=18)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean</th>
<th>SD</th>
<th>Range Scored</th>
<th>Scale Range</th>
<th>α</th>
<th>1</th>
<th>2</th>
<th>2a</th>
<th>2b</th>
<th>2c</th>
<th>3</th>
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</thead>
<tbody>
<tr>
<td>1. COSE</td>
<td>4.4</td>
<td>0.318</td>
<td>4 - 5</td>
<td>1 - 6</td>
<td>0.734</td>
<td>--</td>
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<td>-0.038</td>
<td>-0.106</td>
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<td>SE</td>
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<tr>
<td>2. SSIndex</td>
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<td>2a. AuthAff</td>
<td>3.03</td>
<td>0.458</td>
<td>2 - 4</td>
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<td>0.278</td>
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<tr>
<td>2b. DND Dimension</td>
<td>1.71</td>
<td>0.22</td>
<td>1 - 2</td>
<td>1 - 4</td>
<td>0.590</td>
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<td>0.251</td>
<td>-0.108</td>
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<td>Upper)</td>
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</tr>
<tr>
<td>2c. NSDS Dimension</td>
<td>2.79</td>
<td>0.699</td>
<td>1 - 4</td>
<td>1 - 4</td>
<td>0.712</td>
<td>--</td>
<td>-0.138</td>
<td></td>
<td></td>
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<tr>
<td>Bootstrapa</td>
<td></td>
<td></td>
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<tr>
<td>SE</td>
<td>0.16</td>
<td>0.088</td>
<td></td>
<td></td>
<td>0.188</td>
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<td></td>
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<tr>
<td>95% CI</td>
<td>(2.48,</td>
<td></td>
<td></td>
<td></td>
<td>(-0.473,</td>
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<tr>
<td>with BCa</td>
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<td>0.246</td>
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</tr>
<tr>
<td>3. DSI-R</td>
<td>4.13</td>
<td>0.557</td>
<td>3 - 5</td>
<td>1 - 6</td>
<td>0.864</td>
<td>--</td>
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<tr>
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</tr>
<tr>
<td>SE</td>
<td>0.13</td>
<td>0.081</td>
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<tr>
<td>95% CI</td>
<td>(0.41,</td>
<td></td>
<td></td>
<td></td>
<td>(-0.473,</td>
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<td></td>
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<tr>
<td>with BCa</td>
<td>0.64</td>
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<td>0.246</td>
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<td>Upper)</td>
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</tbody>
</table>

Note: COSE = Counseling Self-Esteem Inventory; SSIndex = Supervisory Styles Index; AuthAff = Authoritarian – Affiliative dimension of supervisory style; DND = Directive – Non-Directive dimension of supervisory style; NSDS = Non-Directive – Self-Disclosure dimension of supervisory style; DSI-R = Differentiation of Self-Revision; n = sample size; SD = Standard Deviation; α = Cronbach’s alpha coefficients; * = Bootstrap results are based on 5000 bootstrap samples; SE = Standard Error; CI = Confidence Intervals; BCa = Bias Corrected Accelerated; * if the 95% CI with BCa does not include zero, it is considered significant at the .05 alpha level.

The results of inter-correlations among variables as shown in the Table 3 and other results of statistical analyses are reported based on the research questions.
Statistical Analyses

Based on the main purpose of this study, which was to explore the relationship among the supervisory styles as perceived by masters’ level practicum CITs, their DOS, and their CSE, five core research questions were developed. The results of statistical analyses related to each are presented below.

Research Question 1

*Based on three dimensions of supervisory styles, what categories of supervisory styles are perceived by the master’s level practicum CITs?*

According to Heppner and Heppner (2004), cluster analysis is useful for providing a statistical tool for dividing a data set into meaningful subgroups. Because the SSIndex is a multidimensional scale that contains three types of supervisory styles based on each dimension of supervisory styles, therefore, cluster analyses were conducted to identify patterns related to three distinct dimensions of supervisory style of SSIndex.

Using cluster analyses, data from 18 participants who completed the SSIndex for three sets of complementary dimensions of SSIndex were analyzed by entering four clusters with 20 iterations. The number of participants in each cluster is presented in Table 4. The description of each cluster was based on the scoring of the SSIndex (see Table 1 in Chapter 3), which is provided by Long et al. (1996). Participants in Cluster 1 \((n = 6)\) perceive their supervisors exhibit Affiliative, Directive, and a mixture of Non-Self-Disclosure – Self-Disclosure supervisory styles. Participants in Cluster 2 \((n = 1)\) perceive that supervisor exhibit Authoritarian, Directive, and Non-Self-Disclosure supervisory styles. Participants in Cluster 3 \((n = 6)\) perceive their supervisors exhibit Affiliative, Directive, and Self-Disclosure supervisory styles. Participants in
Cluster 4 \((n = 5)\) perceive that supervisors exhibit a mixture of Authoritarian – Affiliative, Directive, and Self-Disclosure supervisory styles.

Table 4. Summary of cluster analyses of the three dimensions of SSIndex \((n=18)\)

<table>
<thead>
<tr>
<th>Dimension of SSIndex</th>
<th>Cluster 1 (n = 6)</th>
<th>Cluster 2 (n = 1)</th>
<th>Cluster 3 (n = 6)</th>
<th>Cluster 4 (n = 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authoritarian – Affiliative (scores range: 6-24)</td>
<td>19</td>
<td>10</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td>Non-Self-Disclosure – Self-Disclosure (scores range: 7-28)</td>
<td>15</td>
<td>10</td>
<td>23</td>
<td>23</td>
</tr>
</tbody>
</table>

Research Question 2

Research question 2a: To what extent does the degree of Authoritative – Affiliative dimension of supervisory styles experienced by master’s level practicum CITs associated with their degree of DOS?

Research question 2b: To what extent does the degree of Directive – Non-Directive dimension of supervisory styles experienced by master’s level practicum CITs associated with their degree of DOS?

Research question 2c: To what extent does the degree of Non-Self-Disclosure – Self-Disclosure dimension of supervisory styles experienced by master’s level practicum CITs associated with their degree of DOS?

It was hypothesized that the Authoritarian – Affiliative dimension of the SSIndex would not significantly correlate with the DSI-R. As shown in Table 5, based on initial correlation analysis, there were nonsignificant correlations between the Authoritarian – Affiliative dimension of supervisory style and CSE \((r = -0.377, p > .05)\). Due to low statistical power,
bootstrap analyses were conducted to evaluate the stability of the results and to estimate
normally distributed data by resampling the sample size of this study. The bootstrap analyses
results showed that the lower bound and upper bound correlation were -0.631 and -0.114
respectively. According to McKinnon et al. (2004), because the values of both lower and upper
bounds were not intercepting with zero and in negative value, there was a significant negative
relationship between the Authoritarian – Affiliative dimension of supervisory style and overall
DOS. With a larger resampling size (i.e., 5,000 iterations), the bootstrap analyses estimate that
the degree of Authoritative – Affiliative dimension of supervisory styles experienced by master’s
level practicum CITs was negatively low associated \( r = -0.377 \) with their degree of DOS.
Moreover, it was considered a rather stable result in terms of the magnitude of relationship
(which is that there was a small difference between SE in initial correlation = 0.114 and SE in
bootstrap analysis = 0.154). Thus, based on the bootstrap coefficients, results of the Pearson
product-moment correlation bootstrap analyses indicated that there was a significant moderate
negative relationship between the Authoritarian – Affiliative dimension of supervisory style
experienced by the CITs and their DOS. In other words, the more Authoritarian supervisory style
experienced by the participants, the lower their overall degree of DOS. Therefore, the finding of
this study rejects the hypothesis related to research question 2a.

With regard to research question two, it was also hypothesized that Directive – Non-
Directive and Non-Self-Disclosure – Self-Disclosure dimensions of SSIndex would not
significantly correlate with the DSI-R. As shown in Table 5, there were nonsignificant
correlations between the Directive – Non-Directive dimension of supervisory style and overall
CSE \( r = -0.108, p > .05 \) and between the Non-Self-Disclosure – Self-Disclosure dimension of
supervisory style and overall CSE \( r = -0.138, p > .05 \). The bootstrap analyses results showed
the value of lower bound and upper bound correlations for the Directive – Non-Directive
dimension of supervisory style (-0.617 and 0.401 respectively) and for the Non-Self-Disclosure –
Self-Disclosure dimension of supervisory style (-0.473 and 0.246 respectively).

Table 5. Pearson product-moment correlations with a bootstrap analysis of the three dimensions
of SSIndex and DSI-R (n=18)

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>1a</th>
<th>1b</th>
<th>1c</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. SSIndex</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>-0.377</td>
</tr>
<tr>
<td>1a. AuthAff Dimension</td>
<td></td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>0.114</td>
</tr>
<tr>
<td>1b. DND Dimension</td>
<td></td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>-0.108</td>
</tr>
<tr>
<td>1c. NSDSD Dimension</td>
<td></td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>-0.138</td>
</tr>
<tr>
<td>Bootstrap^a</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.154</td>
</tr>
<tr>
<td>95% CI with BCa (Lower, Upper)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(-0.631, 0.114)*</td>
</tr>
<tr>
<td>Bootstrap^a</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.293</td>
</tr>
<tr>
<td>95% CI with BCa (Lower, Upper)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(-0.617, 0.401)</td>
</tr>
<tr>
<td>Bootstrap^a</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.194</td>
</tr>
<tr>
<td>95% CI with BCa (Lower, Upper)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(-0.437, 0.246)</td>
</tr>
<tr>
<td>2. DSI-R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.293</td>
</tr>
<tr>
<td>Bootstrap^a</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.293</td>
</tr>
<tr>
<td>95% CI with BCa (Lower, Upper)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(-0.437, 0.246)</td>
</tr>
</tbody>
</table>

Note: DSI-R = Differentiation of Self-Revised; SSIndex = Supervisory Styles Index; AuthAff =
Authoritarian – Affiliative dimension of supervisory style; DND = Directive – Non-Directive dimension
of supervisory style; NSDSD = Non-Self-Disclosure – Self-Disclosure dimension of supervisory style; n =
sample size; ^a = Bootstrap results are based on 5000 bootstrap samples; SE = Standard Error; CI =
Confidence Intervals; BCa = Bias Corrected accelerated;
* if the 95% CI with BCa does not include zero, it is considered significant at the .05 alpha level.

Moreover, the difference between standard error for the Directive – Non-Directive
dimension of supervisory style and overall CSE (SE in initial correlation = .027; SE in bootstrap
analysis = 0.293) and the difference between standard error for the Non-Self-Disclosure – Self-
Disclosure dimension of supervisory style and overall CSE \((SE\text{ in initial correlation } = .089; SE\text{ in bootstrap analysis } = 0.194)\) showed a big change. Thus, the results were not stable. According to McKinnon et al. (2004), because the two set values of both lower and upper bounds intercept with zero, the bootstrap analyses showed nonsignificant relationships: (a) between Directive – Non-Directive dimension of supervisory style and CSE, and (b) between the Non-Self-Disclosure – Self-Disclosure dimension of supervisory style and CSE. Therefore, the finding of this study failed to reject the hypotheses related to research question 2b and 2c.

**Research Question 3**

*Research question 3a: To what extent does the degree of Authoritative – Affiliative dimension of supervisory styles experienced by master’s level practicum CITs independently associate with their degree of overall CSE?*

*Research question 3b: To what extent does the degree of Directive – Non-Directive dimension of supervisory styles experienced by master’s level practicum CITs independently associate with their degree of overall CSE?*

*Research question 3c: To what extent does the degree of Non-Self-Disclosure – Self-Disclosure dimension of supervisory styles experienced by master’s level practicum CITs independently associate with their degree of overall CSE?*

It was hypothesized that all three dimensions of SSIndex would not significantly correlate with the COSE. As shown in Table 6, there were nonsignificant correlations between the Authoritarian – Affiliative dimension of supervisory style and overall CSE \((r = -.038, p > .05)\), between the Directive – Non-Directive dimension of supervisory style and overall CSE \((r = -0.166, p > .05)\), and between the Non-Self-Disclosure – Self-Disclosure dimension of supervisory style and overall CSE \((r = -0.411, p > .05)\). The bootstrap analyses results showed
the value of lower bound and upper bound correlations for Authoritarian–Affiliative dimension of supervisory style (-0.055 and .654 respectively), for the Directive–Non-Directive dimension of supervisory style (-0.565 and 0.346 respectively), and for the Non-Self-Disclosure–Self-Disclosure dimension of supervisory style (-0.720 and .074 respectively).

The difference between standard error in initial correlation and standard error in bootstrap analyses showed large differences: for the Authoritarian–Affiliative dimension of supervisory style and overall CSE (SE in initial correlation = 0.114; SE in bootstrap analysis = 0.332), for the Directive–Non-Directive dimension of supervisory style and overall CSE (SE in initial correlation = .027; SE in bootstrap analysis = 0.237), and for the Non-Self-Disclosure–Self-Disclosure dimension of supervisory style and overall CSE (SE in initial correlation = .089; SE in bootstrap analysis = 0.191). These differences indicate that the results were not stable. Moreover, all three set values of both lower and upper bounds intercept with zero. Thus, the bootstrap analyses showed nonsignificant relationships: (a) between the Authoritarian–Affiliative dimension of supervisory style and CSE, (b) between the Directive–Non-Directive dimension of supervisory style and CSE, and (c) between the Non-Self-Disclosure–Self-Disclosure dimension of supervisory style and CSE. Therefore, there was insufficient evidence to reject the null hypotheses related to research question 3a, 3b, and 3c.
Table 6. Pearson product-moment correlations with a bootstrap analysis of the three dimensions of SSIndex and COSE (n=18)

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>1a</th>
<th>1b</th>
<th>1c</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. SSIndex</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>-0.038</td>
</tr>
<tr>
<td>1a. AuthAff Dimension</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>-0.038</td>
</tr>
<tr>
<td>SE</td>
<td>0.114</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Bootstrap&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.332</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SE</td>
<td>0.114</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>95% CI with BCa (Lower, Upper)</td>
<td>(-0.055, 0.654)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1b. DND Dimension</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>-0.166</td>
<td></td>
</tr>
<tr>
<td>SE</td>
<td>0.027</td>
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<td></td>
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<tr>
<td>Bootstrap&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.237</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>SE</td>
<td>0.019</td>
<td></td>
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</tr>
<tr>
<td>95% CI with BCa (Lower, Upper)</td>
<td>(-0.565, 0.346)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1c. NSDSD Dimension</td>
<td>--</td>
<td>--</td>
<td>-0.411</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SE</td>
<td>0.089</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Bootstrap&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.191</td>
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</tr>
<tr>
<td>SE</td>
<td>0.074</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>95% CI with BCa (Lower, Upper)</td>
<td>(-0.720, 0.074)</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2. COSE</td>
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<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Bootstrap&lt;sup&gt;a&lt;/sup&gt;</td>
<td>--</td>
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</tr>
<tr>
<td>SE</td>
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<td>--</td>
<td>--</td>
</tr>
<tr>
<td>95% CI with BCa (Lower, Upper)</td>
<td>--</td>
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<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Note: COSE = Counseling Self-Estimate Inventory; SSIndex = Supervisory Styles Index; AuthAff = Authoritarian – Affiliative dimension of supervisory style; DND = Directive – Non-Directive dimension of supervisory style; NSDSD = Non-Self-Disclosure – Self-Disclosure dimension of supervisory style; n = sample size; <sup>a</sup> = Bootstrap results are based on 5000 bootstrap samples; SE = Standard Error; CI = Confidence Intervals; BCa = Bias Corrected accelerated; * if the 95% CI with BCa does not include zero, it is considered significant at the .05 alpha level.

Research Question 4

Research question 4: Are master’s level practicum CITs perception of their degree of DOS independently associate with their degree of overall CSE?

It was hypothesized that the DSI-R would not significantly correlate with the COSE. As shown in Table 7, there was a nonsignificant correlation ($r = -.003, p > .05$) between overall DOS and overall CSE. As for the bootstrap analyses results, which were essentially very close to
normally distributed data, the lower bound and upper bound correlation were -0.534 and 0.494 respectively. Because the values of both lower and upper bounds intercept with zero, the bootstrap analysis showed a nonsignificant relationship between DOS and CSE. A comparison between SE of initial correlation analysis (.080) and SE of bootstrap analysis (0.251) for overall DOS and overall CSE showed a large difference indicating that the results were not stable. Therefore, the finding of this study failed to reject the hypothesis related to research question four.

Table 7. Pearson product-moment correlations with a bootstrap analysis of the DSI-R and the COSE (n=18)

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. DSI-R</td>
<td>--</td>
<td>-0.003</td>
</tr>
<tr>
<td></td>
<td>SE</td>
<td>0.080</td>
</tr>
<tr>
<td>2. COSE</td>
<td>Bootstrap*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SE</td>
<td>0.251</td>
</tr>
<tr>
<td></td>
<td>95% CI with BCa (Lower, Upper)</td>
<td>(-0.534, 0.494)</td>
</tr>
</tbody>
</table>

Note: DSI-R = Differentiation of Self-Revised; COSE = Counseling Self-Estimate Inventory; n = sample size; * = Bootstrap results are based on 5000 bootstrap samples; SE = Standard Error; CI = Confidence Intervals; BCa = Bias Corrected accelerated; n.s = nonsignificant. * if the 95% CI with BCa does not include zero, it is considered significant at the .05 alpha level.

**Research Question 5**

*Research question 5a:* Does master’s level practicum CITs perception of their degree of DOS moderate the link between their degree of Authoritative – Affiliative dimension of supervisory styles and their overall degree of CSE?

*Research question 5b:* Does master’s level practicum CITs perception of their degree of DOS moderate the link between their degree of Directive – Non-Directive dimension of supervisory styles and their overall degree of CSE?
Research question 5c: Does master’s level practicum CIT’s perception of their degree of DOS moderate the link between their degree of Non-Self-Disclosure – Self-Disclosure dimension of supervisory styles and their overall degree of CSE?

Due to low statistical power, it is impossible for the current study to test the relevant model assumptions related to the initial hierarchical multiple regressions. Instead, hierarchical multiple regression with a bootstrap analysis was conducted to evaluate the stability of the results and to estimate the statistical inference. It was hypothesized that the DSI-R would not moderate the relationships between all three dimensions of SSIndex and the COSE. Before examining the moderating effect, the predictor (i.e., the three dimensions of SSIndex), the moderator (i.e., the DSI-R), and their interaction terms (e.g., the AuthAuff X the DSIR) were centered (i.e., the scores were put into deviation form). The predictor and moderator variables were examined for collinearity. Result of variance inflation factors (all less than 2.0), and collinearity tolerance (all greater than 0.788) suggest that the estimated βs are well established in the resulting regression model.

Next, to examine the predictive utility of each of the dimensions of supervisory styles (as measured by the SSIndex) and DOS (as measured by the DSI-R) in accounting for variance in CSE (as measured by the COSE), a series of two-stage hierarchical multiple regressions with bootstrap analyses were conducted. In the hierarchical multiple regressions with a bootstrap analysis, the researcher set the specific order of predictors as determined by the Social Cognitive Model of Counselor Training’s theoretical framework as well as the sequence of hypotheses. Following this initial step, the researcher entered scores from one of the dimensions of the SSIndex and DSI-R as the first step. To test for the dimension of SSIndex X DSI-R interaction consistent with a model, the researcher entered the specific multiplicative term (e.g., AuthAff X
DSI-R) in the second step of the equation. Results of these analyses for predicting unique variance in CSE are presented in Table 7.

As shown in Table 8, scores on all three dimensions of SSIndex, DSI-R, and their interaction terms were not found to account for a significant amount of unique variance in CSE (all $p > 0.05$). Moreover, the bootstrap analyses results showed all values of lower bound and upper bound intercept with zero, which indicates all three dimensions, DSI-R, and their interaction terms were insignificant predictors and moderators to COSE scores. Therefore, there was insufficient evidence to reject the null hypotheses related to the research question five in the current study.

Specifically, the Authoritative – Affiliative dimension and DSI-R scores only account for 0.2% in COSE score with a huge difference of $SE$ (i.e. $SE$ in initial multiple regression = 0.279; $SE$ in bootstrap analysis = 0.438), which indicates the result was not stable. A similarly unstable result (i.e., $SE$ in initial multiple regression = 0.450; $SE$ in bootstrap analysis = 0.705) and almost a negligible result (0.2% unique variance in COSE score) found for the Authoritative – Affiliative dimension X DSI-R interaction.

For the second series two-stage hierarchical multiple regressions with a bootstrap analysis, the Directive – Non-Directive dimension and DSI-R scores only account for 2.8% in COSE score. Although the prediction is small, the difference of standard errors (i.e., $SE$ in initial multiple regression = 0.256; $SE$ in bootstrap analysis = 0.285) indicates the result was rather stable. Meanwhile, the Directive – Non-Directive dimension X DSI-R interaction only accounts for 5.5% in COSE score and it was not a stable result (i.e., $SE$ in initial multiple regression = 0.231; $SE$ in bootstrap analysis = 0.527)
Table 8. Summary of hierarchical multiple regression analysis with a bootstrap analysis in examining the moderating effect of the DSI-R between the SSIndex and the COSE

<table>
<thead>
<tr>
<th>Step</th>
<th>COSE</th>
<th>DSI-R</th>
<th>COSE X DSI-R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>0.002</td>
<td>-0.131</td>
<td>0.002</td>
</tr>
<tr>
<td>AuthAff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td>0.002</td>
<td>-0.212</td>
<td>0.000</td>
</tr>
<tr>
<td>AuthAff X DSI-R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1</td>
<td>0.028</td>
<td>-0.102</td>
<td>0.028</td>
</tr>
<tr>
<td>DND DSI-R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td>0.055</td>
<td>-0.147</td>
<td>0.027</td>
</tr>
<tr>
<td>DND X DSI-R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1</td>
<td>0.173</td>
<td>0.062</td>
<td>0.173</td>
</tr>
<tr>
<td>NSDSD DSI-R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td>0.267</td>
<td>0.110</td>
<td>0.094</td>
</tr>
<tr>
<td>NSDSD X DSI-R</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: COSE = Counseling Self-Estimate Inventory; SSIndex = Supervisory Styles Index; AuthAff = Authoritarian – Affiliative dimension of supervisory style; DND = Directive – Non-Directive dimension of supervisory style; NSDSD = Non-Self-Disclosure – Self-Disclosure dimension of supervisory style; DSI-R = Differentiation of Self-Revised; * = Bootstrap results are based on 5000 bootstrap samples; SE = Standard Error; CI = Confidence Intervals; BCa = Bias Corrected accelerated; * if the 95% CI with BCa does not include zero, it is considered significant at the .05 alpha level.

With regard to Non-Self-Disclosure – Self-Disclosure series of two-stage hierarchical multiple regressions with a bootstrap analysis, although the results are not statistically significant, it is interesting to note that Non-Self-Disclosure – Self-Disclosure and DSI-R scores account for a moderate 17.3% of the variance in COSE score. Whereas, Non-Self-Disclosure –
Self-Disclosure dimension X DSI-R interaction was found to account for a large 26.7% of the variance in COSE score. Moreover, there were small differences of standard errors for Non-Self-Disclosure – Self-Disclosure and DSI-R with COSE (i.e., SE in initial multiple regression = 0.237; SE in bootstrap analysis = 0.222), which indicate the results are rather stable. Although the prediction of Non-Self-Disclosure – Self-Disclosure dimension X DSI-R interaction in COSE score is large, the difference of standard errors (i.e., SE in initial multiple regression = 0.355; SE in bootstrap analysis = 0.490) showed a big difference, which indicates the result was not stable. These complex results of hierarchical multiple regressions bootstrap analyses may result due to the low statistical power in the current study, which future research should examine this further.

Summary

Because the original collected survey responses were involved 18 masters’ level practicum CITs from CMCH programs, the current study used a resampling technique which involved bootstrapping with 5,000 iterations. The results from this study suggested that faculty supervisors had a range of supervisory styles. Based on three dimensions of supervisory styles in SSIndex, CITs experienced different clusters multiple styles of supervision during their practicum clinical supervision.

With regard to initial Pearson product-moment correlation results, there were no significant relationships among the three dimensions of supervisory styles with participants’ perception of their DOS and CSE except for the relationship between Authoritarian – Affiliative supervisory style and DOS. However, based on the values of 95% confidence interval with bias corrected accelerated does not include zero, the results of the Pearson product-moment correlation with bootstrap analyses indicated that there was a significant moderate negative relationship between Authoritarian – Affiliative dimension of supervisory style and DOS.
Moreover, based on the bootstrap coefficients, the magnitude of the negatively moderate relationship between Authoritarian – Affiliative supervisory style and DOS was rather stable.

Based on the results of the hierarchical multiple regressions with a bootstrap analysis, both supervisory styles (i.e., all three dimensions of SSIndex) and DOS were not significant predictors of the degree of CSE. Additionally, the DOS did not act as a moderator in the relationship between the supervisory styles and CSE as perceived by study participants. With regard to the magnitude of relationships, all findings showed unstable results except the prediction of Directive – Non-Directive dimension and DSI-R scores in COSE score indicated a rather stable result. Although the Non-Self-Disclosure – Self-Disclosure dimension of supervisory style was a statistically nonsignificant predictor of the variance of CSE and the DOS was a statistically nonsignificant moderator between the Non-Self-Disclosure – Self-Disclosure dimension of supervisory style and COSE, both predictor and moderator accounted for a medium to large amount of the variance of CITs’ CSE.

To summarize, Table 9 shows the summary of the results based on a list of research questions, hypotheses, and statistical tests that were used to analyze the data in the current study.

Table 9. Summary of results based on research questions, hypotheses, and statistical tests that were used to analyze the data in the current study

<table>
<thead>
<tr>
<th>Research questions</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research Question 1:</strong></td>
<td>Four clusters of multiple styles of supervision</td>
</tr>
<tr>
<td>Based on three dimensions of supervisory styles, what categories of supervisory</td>
<td></td>
</tr>
<tr>
<td>styles are perceived by the master’s level practicum CITs?</td>
<td></td>
</tr>
<tr>
<td><strong>Research Question 2:</strong></td>
<td>See specific results of 2a-c</td>
</tr>
<tr>
<td>To what extent is the degree of each dimension of supervisory styles experienced</td>
<td></td>
</tr>
<tr>
<td>by master’s level practicum CITs associated with their degree of overall DOS?</td>
<td></td>
</tr>
</tbody>
</table>

(Continued)
Table 9. Summary of results based on research questions, hypotheses, and statistical tests that were used to analyze the data in the current study (Continued)

<table>
<thead>
<tr>
<th>Research questions</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research Question 2a:</strong> To what extent is the degree of Authoritative – Affiliative dimension of supervisory styles experienced by master’s level practicum CITs associated with their degree of overall DOS?</td>
<td>Significant, moderate negative relationship</td>
</tr>
<tr>
<td><strong>Research Question 2b:</strong> To what extent is the degree of Directive – Non- Directive dimension of supervisory styles experienced by master’s level practicum CITs associated with their degree of overall DOS?</td>
<td>Nonsignificant relationship</td>
</tr>
<tr>
<td><strong>Research Question 2c:</strong> To what extent is the degree of Non-Self-Disclosing – Self-Disclosing dimension of supervisory styles experienced by master’s level practicum CITs associated with their degree of overall DOS?</td>
<td>Nonsignificant relationship</td>
</tr>
<tr>
<td><strong>Research Question 3:</strong> To what extent is the degree of each dimension of supervisory styles experienced by master’s level practicum CITs independently associate with their degree of overall CSE?</td>
<td>See specific results of 3a-c</td>
</tr>
<tr>
<td><strong>Research Question 3a:</strong> To what extent is the degree of Authoritative – Affiliative dimension of supervisory styles experienced by master’s level practicum CITs independently associate with their degree of overall CSE?</td>
<td>Nonsignificant relationship</td>
</tr>
<tr>
<td></td>
<td>However, a rather stable result in terms of magnitude of relationship.</td>
</tr>
<tr>
<td><strong>Research Question 3b:</strong> To what extent is the degree of Directive – Non- Directive dimension of supervisory styles experienced by master’s level practicum CITs independently associate with their degree of overall CSE?</td>
<td>Nonsignificant relationship</td>
</tr>
<tr>
<td><strong>Research Question 3c:</strong> To what extent is the degree of Non-Self-Disclosing – Self-Disclosing dimension of supervisory styles experienced by master’s level practicum CITs independently associate with their degree of overall CSE?</td>
<td>Nonsignificant relationship</td>
</tr>
</tbody>
</table>

(Continued)
Table 9. Summary of results based on research questions, hypotheses, and statistical tests that were used to analyze the data in the current study (Continued)

<table>
<thead>
<tr>
<th>Research questions</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Question 4: Are master’s level practicum CITs perception of their degree of overall DOS independently associate with their degree of overall CSE?</td>
<td>Nonsignificant relationship</td>
</tr>
<tr>
<td>Research Question 5: Does master’s level practicum CITs perception of their overall degree of DOS moderate the link between their degree of each dimension of supervisory styles and their overall degree of CSE?</td>
<td>See specific results of 5a-c</td>
</tr>
<tr>
<td>Research Question 5a: Does master’s level practicum CITs perception of their overall degree of DOS moderate the link between their degree of Authoritative – Affiliative dimension of supervisory styles and their overall degree of CSE?</td>
<td>DOS failed to act as moderator in the relationship</td>
</tr>
<tr>
<td>Research Question 5b: Does master’s level practicum CITs perception of their overall degree of DOS moderate the link between their degree of Directive – Non-Directive dimension of supervisory styles and their overall degree of CSE?</td>
<td>DOS failed to act as moderator in the relationship However, the magnitude of prediction was rather stable result.</td>
</tr>
<tr>
<td>Research Question 5c: Does master’s level practicum CITs perception of their overall degree of DOS moderate the link between their degree of Non-Self-Disclosing – Self-Disclosing dimension of supervisory styles and their overall degree of CSE?</td>
<td>DOS failed to act as moderator in the relationship</td>
</tr>
</tbody>
</table>

Chapter 5 discusses the conclusions of the current study. It also presents the limitations of the study and concludes with the implications and recommendations for future research.
CHAPTER 5 - DISCUSSION

This chapter discusses the conclusions based on the results presented in Chapter 4. The first section summarizes the results. The next section discusses possible explanations for the findings and their convergence and divergence with previous literature. Next, limitations of the study are reviewed. Finally, the chapter concludes with a discussion of future methodological, theoretical, and practice implications of the study.

Summary of Results

The achievement of counseling self-efficacy (CSE) is the key developmental task in counselor education programs (Bischoff, 1997; Skovholt & Ronnestad, 1992; Bischoff & Barton, 2002; Wei, et al., 2015) and a key measure used to assess the professional development of the counselors’-in-training (CITs) (Kozina et al., 2010; McNeil & Stoltenberg, 2016). Previous studies of factors related to CITs’ CSE have focused either on the relationship between supervisory style and CSE (e.g., Friedlander & Snyder, 1983; Meissner, 2012), or the relationship between differentiation of self (DOS) and CSE (e.g., Savitz-Smith, 2004; Seay, 2015). Although valuable, these studies leave a gap in addressing the constructs of supervisory style, DOS, and CSE of CITs within a single study. This study did so while using the Social Cognitive Model of Counselor Training’s (SCMCT) theoretical framework (Larson, 1998a; 1998b). In doing so, this study focused on practicum. Whereas pre-practicum involves CITs in laboratory experiences and with role-played clients (Etringer et al., 1995; Woodside et al., 2007), practicum is CITs’ first opportunity to apply their understanding of the connection between the
theory and practice with actual clients (O’Connell & Smith, 2005; Rushlau, 1998) under the supervision of a faculty supervisor. To recruit the practicum CITs, the current study involved CITs who met the target population as follows: (a) who were currently enrolled in and nearly or had just finished a practicum at the masters’ level in clinical mental health counseling (CMHC) preparation programs in the United States, (b) had entered a CACREP-accredited CMHC program at an institution that does not also house a doctoral counselor education program, and (c) were currently under the clinical supervision of a practicum faculty supervisor or had just completed a period of such supervision.

The main purpose of this study, therefore, was to explore the relationship among masters’ level practicum CITs’ CSE and DOS and their perception of their supervisors’ supervisory styles. The study also assessed the degree to which the DOS moderated the relationship between the supervisory styles and CSE. To pursue the purpose of the current study, the variables studied, including the supervisory styles, DOS, and CSE were measured using the Supervisory Styles Index (SSIndex; Long, Lawless, & Dotson, 1996), the Differentiation of Self Inventory-Revised (DSI-R; Skowron & Schmitt, 2003), and the Counseling Self-Estimate Inventory (COSE; Larson et al., 1992), respectively. The collected data were analyzed using various statistical tools, including descriptive analyses, cluster analyses, Pearson product-moment correlation with a bootstrap analysis, and hierarchical multiple regressions with a bootstrap analysis.

Results from the cluster analyses suggested that the masters’ level CITs experienced different mixtures of supervisory styles during their practicum clinical supervision. The mixture of supervisory styles involved combinations of three distinct dimensions of supervisory styles, including Authoritative – Affiliative dimension, Directive – Non-Directive dimension, and Non-Self-Disclosure – Self-Disclosure dimension. Based on these dimensions, the results from cluster
analyses suggested the mixture of supervisory styles involved seven supervisory styles, including the Authoritarian supervisory style, the mixture of Authoritarian – Affiliative supervisory style, the Affiliative supervisory style, the Directive supervisory style, the Non-Self-Disclosure supervisory style, the Self-Disclosure supervisory style, and the Non-Self-Disclosure – Self-Disclosure supervisory style.

The Pearson product-moment correlation with a bootstrap analysis procedure was used to examine the relationship between perceived supervisory styles and, respectively, DOS and CSE. Although all three dimensions of supervisory styles showed negative correlations with DOS and CSE, the only correlations that was statistically significant was the Authoritarian – Affiliative dimension of supervisory style and DOS. Specifically in this study, the more Authoritarian supervision the CITs experienced during practicum clinical supervision, the lower their DOS.

To examine whether DOS acts as a moderator in the relationship between the supervisory styles and CSE, hierarchical multiple regressions with a bootstrap analysis were conducted. Results showed that the DOS did not significantly moderate the relationship between the supervisory styles and CSE in this study. Although DOS was failed to serve as a moderator in the relationship between Non-Self-Disclosure – Self-Disclosure and CSE, DOS accounted for a large amount of the variance of CITs’ CSE.

The three dimensions of the SSIndex and DOS were not significant predictors of the degree of CSE. However, the bootstrap coefficients showed the Directive – Non-Directive dimension of supervisory style and DOS accounted for a small amount of the variance of CITs’ CSE in a rather stable way. Similarly, the Non-Self-Disclosure – Self-Disclosure supervisory style and DOS accounted for a moderate amount of the variance of CITs’ CSE with a rather stable magnitude.
Discussion of Results

Due to the low statistical power, bootstrap analyses were conducted to evaluate the stability of the results. The discussion of the results is limited to data resulted from the iterations process, which involves 20 iterations for cluster analysis and 5,000 iterations for Pearson product-moment correlation and hierarchical multiple regression with bootstrap analyses. The discussion of the findings will include attention to the following five topics: (a) supervisory styles that masters’ level practicum CITs experienced, (b) the relationship between supervisory styles and DOS, (c) the relationship between supervisory styles and CSE, (d) the relationship between DOS and CSE, and (e) the extent to which DOS served as a moderator between supervisory styles and CSE.

Supervisory styles that masters’ level practicum CITs experienced. Previous researchers who studying supervisory style concluded that assessing supervisory style on a single dimension does not serve the complex needs of beginning supervisees and clinical supervision process. They therefore concluded that there was a need to identify the supervisory style construct as a mixture styles of supervision (Borders, 2005; Friedlander & Ward, 1984; Hart & Nance, 2003; Ladany et al., 2013; Ladany, Marotta, & Muse-Burke, 2001; Ladany, Walker, & Melinoff, 2001; Lorenz, 2009; Morgan & Sprenkle, 2007; Worthington & Roehlke, 1979).

Consistent with this recommendation, this study examined supervisory style as a multidimensional construct, which is based on nine types of supervisory styles derived from three dimensions of the SSIndex that characterized the supervisory style that practicum CITs experienced.

The results of the analyses suggested that the practicum CITs reported supervision in four clusters of multiple styles of supervision: (a) Affiliative, Directive, and a mixture of Non-Self-
Disclosure – Self-Disclosure supervisory styles, (b) Authoritarian, Directive, and Non-Self-Disclosure supervisory styles, (c) Affiliative, Directive, and Self-Disclosure supervisory styles, and (d) a mixture of Authoritarian – Affiliative, Directive, and Self-Disclosure supervisory styles. Because no quantitative study about supervisory styles as a multidimensional construct exists, this finding is meaningful for future research on supervision realm because it identifies the mixture of supervisory styles that CITs experienced during their practicum clinical training.

The current finding can be explained in relationship to previous research through comparing the three dimensions of SSIndex’s complementary subscales (see Long et al., 1996) to the single style of supervisions previous researchers have studied. Three of the clusters of supervisory styles identified in this study are consistent with previous studies of supervisory style as a one-dimensional construct. Previous research has indicated that beginning CITs value structured (Jacobsen & Tanggaard, 2009), supportive (Jordan, 2006; Mohd Ali et al., 2014), structured-supportive (Guest & Beutler, 1988; Hart & Nance, 2003), supportive-challenging (Steward et al., 2001), and self-disclosing (Ladany & Lehrman-Waterman, 1999; Ladany, Walker, & Melinoff, 2001; Miller & Ivey, 2006; Worthington & Roehlke, 1979) supervisory styles. It stands to reason that the affiliative supervisory style is related to the supportive supervisory style, the directive supervisory style to the structured supervisory style, the structured-supportive supervisory to the directive and affiliative supervisory styles, the supportive-challenge supervisory style to the mixture of authoritative-affiliative supervisory style, and the self-disclosing supervisory style is likely related to the self-disclosure supervisory style.

Although determining which mixture of supervisory styles will most benefit CITs is beyond the scope of this study, the findings from the demographic profile revealed that, with
each of the supervisory styles they experienced, all practicum CITs identified themselves with a high degree of CSE. Thus, this study demonstrates that the unique mixture of supervisory styles CITs experienced in practicum may help them to perform counseling with confidence.

Across all four clusters of mixture of supervisory style, the findings showed that CITs reported that the directive supervisory style is presented consistently in their supervision during practicum. The directive style of supervision refers to supervisors who offer structure in the clinical supervision sessions by providing CITs a plan and treatment goal tailored to their clinical situation. Most previous researchers have claimed that beginning CITs have a need for the directive supervisory style (Bernard 1979; 1997; Bernard & Goodyear, 2014; Borders, 1990; Hogan, 1964; Larson, 1998b; McNeill & Stoltenberg, 2016; Ronnestad & Skovholt, 1993; Stoltenberg & McNeill, 2010) because it can enhance CITs’ acquisition of counseling skills and removes some of the uncertainty regarding the complexity of clinical practice that is associated with early clinical practice training (McNeill & Stoltenberg, 2016). Moreover, researchers have shown that beginning CITs perceived more value in a more structured supervisory style in almost every aspect of the supervision process (Shechtman & Wirzberger, 1999; Tracey et al., 1989). For instance, in their qualitative study Jacobsen and Tanggaard (2009) found that beginning supervisees valued supervisors who gave them clear and specific instruction to guide their counseling performance. Therefore, the CITs’ faculty supervisors exhibited directive supervisory styles as part of their approach to clinical supervision.

Ladany and Lehrman-Waterman (1999) and Ladany, Walker, and Melincoff (2001) concluded that supervisors’ self-disclosures reflect their supervisory style, and that self-disclosure can create a stronger emotional bond in the supervisory relationship than to non-self-disclosure. This conclusion was consistent with results from prior research by Worthington and
Roehlke’s (1979) and was also later reached in Miller and Ivey’s (2006) studies in which the researchers conceptualized supervisors’ self-disclosure as a characteristic of supervisory styles. Based on previous researchers’ suggestion to explore self-disclosure as one of the supervisory styles, the current study used the SSIndex to measure the multidimensional supervisory styles and found that the practicum CITs experienced all three types of self-disclosure supervisory style, ranging from non-self-disclosure, a mixture of non-self-disclosure and self-disclosure, and self-disclosure supervisory styles.

**The relationship between supervisory styles and differentiation of self.** The results of Pearson product-moment correlation with a bootstrap analysis suggested that there was a significant negative moderate relationship between the Authoritarian – Affiliative dimension of supervisory style and DOS than those CITs whose faculty supervisors were affiliative. Long et al. (1996) explained that authoritarian supervisors believe that CITs will learn more from their experience and expertise and therefore, establish hierarchy and boundaries between themselves and their CITs, and take charge of the learning process in clinical supervision. In contrast to the aforementioned research, Long et al. (1996) explained that affiliative supervisors encourage collaboration and fosters egalitarian supervisory relationships, and therefore, convey messages and pose questions that reflect respect for the CITs’ opinions and ideas. In Bowen’s Family System Theory (BFST), individuals with low degrees of DOS have difficulty separating their thoughts from their need for others’ approval and often blame others for their failures (Bowen, 1978; Kerr & Bowen, 1988). For CITs with a low degree of DOS, their feelings strongly influence most of their major life decisions as well as their choices in clinical practice. Because of discomfort and anxiety that may exist in the clinical supervision relational system, low
differentiated CITs who react to others emotionally may struggle to maintain objectivity in supervisory relationships.

Understanding CITs’ DOS may provide a different lens to improve understanding of and address the stagnation of growth and development CITs experience in the supervision context (MacKay & Brown, 2014). In line with that, clinical supervision could be considered as one of the relationship systems in individuals’ lives that guides their individuation process (Bowen, 1978; Kerr & Bowen, 1988). Skovholt and Ronnestad (2003) argued that CITs’ DOS at the early stage of the counseling preparation program is fragile and highly reactive to negative feedback. Overall, CITs in this current study indicated a high degree of DOS even despite being at the practicum master’s level. However, those CITs who experienced the more authoritarian style of supervision that occurred in the clinical supervision relational system did report a lower degree of DOS. This is consistent with Skovholt and Ronnestad’s argument.

One hypothesis for the current study was that the Directive – Non-Directive and Non-Self-Disclosure – Self-Disclosure dimensions of supervisory styles would not significantly correlate with the DOS. The results of the study supported this hypothesis. Skovholt and Ronnestad (1992), argued that DOS is one of the core elements of CITs’ professional growth and development. Specifically, highly differentiated CITs emphasize their individuality without imposing their values on others (e.g., including their supervisors, clients, and/or other CITs) and they try to support the best interests of the group which they connect. However, to date, the empirical research on supervisory style and DOS has been absent in the literature. However, MacKay and Brown (2014) published a conceptual study within family system supervision regarding supervisory style and DOS. They postulated that direct-structured style of supervision may not help to promote DOS among CITs and that less experienced CITs will benefit from
disclosures by supervisors that relate to CITs’ experience in clinical practice. Although their theoretical conjecture is valuable due to lack of salient research on this issue, it may nonetheless have little bearing on reality.

**The relationship between supervisory styles and counseling self-efficacy.** Hypotheses related to research questions 3a-c stated that all three dimensions of supervisory styles would significantly correlate with the CITs’ degree of CSE. The results of this study did not support these hypotheses.

The results of this study revealed the lack of a significant relationship between the Authoritative – Affiliative supervisory style and CSE. This finding is inconsistent with the previous research, which has indicated that a supportive supervisory style positively correlates with CITs’ CSE (Friedlander & Snyder, 1983) and that positive feedback from supervisors increase CITs’ CSE (Daniels & Larson, 2001; VanDerWege, 2011). This inconsistency may be partially explained by the fact that Friedlander and Snyder (1983) study involved all levels of clinical training (i.e., pre-practicum, practicum, and post-practicum) in both masters’ and doctoral programs level in an undifferentiated group, whereas the current study concerns only masters’ level practicum CITs. Additionally, methodological differences may explain the discrepancies between the results of the current study and those Daniels and Larson (2001) and VanDerWege (2001). Daniels and Larson (2001) study utilized a quasi-experimental design using simulated sessions. Specifically, their data was collected in pre-posttests of a mock counseling session and the CITs were randomly assigned to receive either positive or negative feedback. This methodology was very different from the methodology of the current study, which utilized a correlational design and studied CITs enrolled in practicum and engaged in
counseling actual clients. Different still was the methodology of VanDerWege (2001), whose study utilized a qualitative design and aimed to explore the sources of CITs’ CSE.

Another explanation for the nonsignificant relationship between Authoritative – Affiliative supervisory style and CSE in the current study is that the Authoritarian – Affiliative supervisory style may be more closely associated with CITs’ counseling performance than their CSE. It is possible that the Authoritative – Affiliative supervisory style maximizes supervisees’ learning experience rather than directly affecting CSE itself. Previous research has indicated that CITs valued supervisors who showed care and concern in supervision, and that this style encouraged CITs to take risks that resulted in positive professional development (Jordan, 2006). Similarly, Mohd Ali et al. (2014) found that the supportive supervisory style was the most likely to match supervisees’ levels of readiness in clinical practice training. Based on the results of this study and the findings of Jordan (2006) and Mohd Ali et al. (2014), it appears that the Authoritative – Affiliative supervisory style may be associated with CITs’ counseling performance but not necessarily CSE.

Likewise, the lack of a significant relationship in the current study between the Directive – Non-Directive supervisory style and CSE is also inconsistent with previous research that emphasized the value of directive supervisory style for the CITs at their early clinical training level (Bernard 1979; 1997; Bernard & Goodyear, 2014; Borders, 1990; Hogan, 1964; Larson, 1998b; McNeill & Stoltenberg, 2016; Ronnestad & Skovholt, 1993; Stoltenberg & McNeill, 2010). Similarly, other researchers have found a significant positive relationship between structured supervisory style and CITs’ CSE (Efstation et al., 1990; Fernando & Hulse-Killacky, 2005; Meissner, 2012). For example, Efstation et al. (1990) and Fernando and Hulse-Killacky
(2005) found that structured supervisory style was an important factor that related to the advanced CITs’ CSE.

The inconsistency of the results of the current study and those of previous studies may be explained by the difference in samples and target populations. The current study specifically focused on beginning CITs in masters’ level practicum clinical training, whereas the studies by Efstation et al. (1990) and Fernando and Hulse-Killacky (2005) focused on advanced CITs in post-practicum clinical training and at the doctoral program level. Also, whereas Meissener (2012) recruited master’s level practicum CITs from a rehabilitation counseling preparation program, the current study recruited the sample from clinical mental health counseling (CMCH) programs.

**The relationship between differentiation of self and counseling self-efficacy.** Existing research on DOS showed that a higher degree of DOS is associated with greater well-being (Chung & Gale, 2006; Chung & Gale, 2009; Gushue et al., 2013; Heintzelman, et al., 2014; Jankowski et al., 2013; Jankowski & Vaughn, 2009; Johnson, et al., 2004; Knauth et al., 2006; Norona & Welsh, 2016; Sandage & Harden, 2014; Schwatrz, et al., 2006; Ross & Murdock, 2014; Skowron et al., 2004).

In contrast to the abundant research on the relationship between DOS and greater well-being, the extant research examining relationship between DOS and CSE is very limited. Savitz-Smith (2004) found a significant relationship between the I-Position (IP) subscale of DOS and female counselors’ CSE, and also found a significant relationship between the Fusion with Others (FO) subscale of DOS and Caucasian counselors’ CSE. In her study with psychology counseling trainees, Seay (2015) reported a significant relationship between the Emotional Cutoff (EC) and FO subscales of DOS and trainees’ CSE.
Based on these various findings, a hypothesis for the current study was that DOS would correlate with CSE. However, the results of this study showed no significant relationship between DOS and CSE. That is, in the current study, the CITs’ sense of self did not correlate with their confidence in their ability to perform counseling. The discrepancies between the current study’s results and those of previous research may be partially explained by the age of the participants and/or the measurement of DOS.

One explanation for the inconsistency between the results of the current study and the finding of past research is that the high overall DOS and CSE of practicum CITs is related to their age. BFST postulates that individuals begin their differentiation process once they enter adulthood (Bowen, 1978; Kerr & Bowen, 1988). Because practicum CITs in the current study were at the graduate level and older than 18 years old, they were considered adults. However, the majority of participants in the current study were in their mid-twenties. This stage of development is a time when individuals are actively searching and developing their sense of self, and demonstrating a strong commitment to the individuation process (Johnson et al., 2004; Khaddouma et al., 2015). Thus, the participants in the current study may have reported a high degree of DOS because they were entering the emerging adulthood phase, rather than because of the effect of supervisory styles.

Although chronological age would not explain the degree of CSE among CITs in this study, professional development could. As Stoltenberg (1993) conceptualized in his Integrative Developmental Model of supervision (IDM), practicum CITs are at Level 1 of professional development, meaning they have some knowledge related to counseling but have limited direct relevant clinical counseling experience. CITs at this Level of professional development have a strong motivation to become effective counselors and a tendency to focus on their own rather
than their clients’ intellectual and emotional experiences (McNeill & Stoltenberg, 2016; Stoltenberg & McNeill, 2010). Therefore, the participants in the current study may have reported a high degree of DOS because they were self-focus and highly motivated to become professional counselors, rather than because of the effect of supervisory styles.

An alternate explanation for the current study’s nonsignificant findings may be related to the measurement of DOS and the DSI-R instrument itself. With regard to the measurement of DOS, the current study measured the DOS by using only the overall scores of DOS, whereas the majority of previous studies examined the DOS construct at the subscale. Specifically, the previous research assessed DOS at the four-subscale levels of DOS, of emotional reactivity (ER), I-position (IP), emotional cutoff (EC), and fusion with others (FO).

The previous studies focusing on overall scores of DOS and examining its relationship to various aspects of psychological functioning produced findings that tend to align with BFST. In contrast, research using the subscales tends to produce mixed findings. For example, Kim-Appel et al. (2007) found an inverse relationship between psychological distress of the elderly and their overall degree of DOS as well as an inverse relationship between psychological distress and ER, IP, and EC but the FO subscale. Similarly, Chung and Gale (2006) found that overall degree of DOS and the ER, and IP subscales of DOS were positively associated with the psychological well-being of college students, but FO was not. Skowron and Schmitt (2003) posited that the items designed to measure FO warranted re-examination due to a lack of clarity regarding the DOS construct in Bowens’ theory, and subsequent research has concurred (e.g., Ching & Gale, 2006; Jenkins et al., 2005).

Available research in counseling practice has also supported Bowen’s claim that persons with a lower degree of DOS are at higher risk for psychological and physical issues. For
instance, two different studies of the relationship between DOS and counselors’ countertransference reaction show the distinction between overall DOS and the subscales (Bakke-Lysaker, 2016; Connery, 2012). Connery (2012) found that counselors at lower degree of overall DOS reported that they become overinvolved countertransference reactions. In contrast, Bakke-Lysaker (2016) found that three of the DOS subscales positively correlate with higher reaction of countertransference, but the IP subscale indicates a negative relationship with the countertransference reaction. Psychometrically, these studies seem to complement each other because most of the items in the EC, ER, and FO subscales need to be reversed coded before computing overall DOS scores. However, the studies did not use the same sample criteria or research design. Additionally, Connery did not test the subscales and Bakke-Lysaker did not test overall DOS. Perhaps, with a larger sample size, future research examining the DOS construct using both overall scores and subscale level may illuminate the connection between DOS and CITs’ CSE in a way that past studies and the current study have not.

This may explain why the findings in the current study are inconsistent with previous research. Overall, the research suggests that the relationship between DOS and CSE is rather complex.

The extent to which differentiation of self served as a moderator between supervisory styles and counseling self-efficacy. With regard to the hypotheses related to research questions 5a-c, this study examined the possible moderating effect of CITs’ degree of DOS in the relationship between three dimensions of supervisory styles and their degree of CSE. The results of this study indicate that DOS failed to act as a moderator in the relationship between supervisory style and CSE. In particular, the degree of DOS did not significantly influence the strength or direction of the relationship between supervisory styles and degree of
Moreover, the multiple regressions of DOS and each of the three dimensions of supervisory styles (i.e., Authoritative – Affiliative, Directive – Non-Directive, and Non-Self-Disclosure – Self-Disclosure supervisory styles) did not significantly predict the CITs’ degree of CSE. The results of the current study showed that the findings did not suffer from multicollinearity among the predictive variables (i.e., DOS and all three dimensions of supervisory styles).

An explanation that remains for the nonsignificant results is lack of statistical power of this study. According to Frazier et al. (2004), examining a moderation effect requires a sufficient sample size to reflect the interaction being studied or that is sensitive enough to detect the interaction effect, and lacking statistical power may lead to a Type II error in which the researcher may fails to reject the null hypothesis even though it is actually false. Thus, due to its very small sample size, the current study’s failure to reject null hypotheses 5a-c, this finding should be considered inconclusive rather than as supporting the null hypothesis.

In spite of the nonsignificant moderation results that may be attributed to a small sample size and concomitant lack of statistical power, the results of the current study appear to partially explain the hypotheses 5b and 5c in different paradigms in terms of magnitude of relationship and prediction. For example, the findings indicate that the magnitude of prediction of CSE was rather stable for the combination of Directive – Non-Directive dimension and DOS as well as the combination of Non-Self-Disclosure – Self-Disclosure dimension and DOS. Specifically, the more directive style of supervision that CITs experienced and the higher degree of DOS predicted a small increase of CITs’ degree of CSE. If a study with a larger sample produces similar results, this will be consistent with the findings that directive or structured supervisory styles predicted CITs’ CSE (Efstation et al., 1990; Fernando and Hulse-Killacky, 2005;
Meissner, 2012). Likewise, CITs with a higher degree of DOS who experienced the self-disclosure supervisory style exhibited a moderate increase in CSE. If a study a larger sample yields similar results, the findings may confirm the IDM notion that supervisors’ self-disclosure of their early struggles in clinical practice is part of effective supervision (McNeill & Stoltenberg, 2016).

In spite of the nonsignificant moderation results attributable to the lack of statistical power, when the interaction term between Non-Self-Disclosure – Self-Disclosure dimension and degree of DOS was added to the regression model in the current study, the moderator accounted for a large effect with regard to prediction of variance in CSE. If a study with adequate sample size yields similar results, this finding consistent with the SCMCT theoretical framework in which Larson (1998b) suggested that in supervision, CITs’ inner developmental attributes (e.g., DOS) may be significant catalysts or barriers to the CITs’ self-confidence (e.g., CSE). Because the current study did not identify a significant moderation effect, the extent to which DOS influenced the relationship between the Non-Self-Disclosure – Self-Disclosure dimension of supervisory style and CSE is unclear. Additionally, the results of this study do not allow for identification of the direction of any influence in terms of whether DOS weakened or strengthened the relationship between the Non-Self-Disclosure – Self-Disclosure dimension of supervisory style and CSE.

Also, these nonsignificant may be explained through consideration of the DSI-R instrument. As discussed in earlier, although a relationship between the overall degree of DOS and psychological functioning has been of interest in previous research, the type of relationship among subscales of DOS and psychological functioning of interest resulted in different findings (e.g., Kim-Appeal et al., 2007). As such, different findings are also a possible explanation when
DOS was treated as a predictor for the outcome variable. For example, Peleg and Yitzhak (2011) found the overall degree of DOS predicted separation anxiety in spouses, in that those with low degrees of overall DOS demonstrated a high level of separation anxiety. However, in examining the predictive role of DOS at the subscale level, Peleg and Yitzhak reported that the FO subscale predicted separation anxiety in both spouses, whereas the ER subscale predicted it in wives alone. The IP and EC subscales did not predict the variance in separation anxiety for either spouse. This mix of results at the subscale level suggested that the interaction of DOS with the variable of interest is complex.

Because thus far the existing studies that research on the same topic are not available (e.g., Bakke-Lysaker, 2016; Savith-Smith, 2004; Skowron et al., 2009), an alternate explanation for the moderation results of this study may relate to the clarification role of DOS beyond than just tested DOS solely as the predictor variable. Based on the SCMCT theoretical framework, DOS in the current study was tested as a potential moderator in the relationship between supervisory style and CSE. The failure of DOS to act as a moderator in the current study is inconsistent with the results of previous studies in which DOS moderated the relationship between stress and adjustment (Murdock, Gore, & Horosz, 1998), and in which DOS moderated the relationship between emotional self-awareness and countertransference behaviors (Connery, 2002).

Interestingly, other studies examined DOS both as moderator and mediator with the intention of clarifying the ways DOS may function with regard to the relationship between two variables of interest (e.g., Hooper & Doehler, 2011; Khaddouma et al., 2015; Skowron et al., 2004). None of these studies stated whether researchers used the moderated mediation model or mediation moderated model (see Wu & Zumbo, 2008), but all three studies preceded the test of
moderation with a test of mediation. The findings of these studies showed that DOS did not significantly mediate but partially moderated the relationship between overall functioning and depressive symptomatology (Hooper & Doehler, 2011). Meanwhile, the other two studies reported the opposite results, in that DOS did not significantly moderate but partially mediated the relationship between college stress and personal adjustment (Skowron et al., 2004) and between mindfulness and relationship satisfaction (Khaddouma et al., 2015). In contrast, Seay (2015) found that DOS partially mediated the relationship between personal growth initiative and CSE. Taken together, although the choice of moderator and mediator variable should be based on theory (Baron & Kenny, 1986; Frazier, et al., 2004), these findings appear to suggest that in a new area of study, DOS may function differently from the way it has functioned in other areas.

**Limitations of the Study**

The findings of the present study must be interpreted in light of its limitations, and generalization of the findings should be tempered by the several considerations. Although the sample consisted of participants from CMCH master’s level programs from across the United States, it was small and may not have been representative of CMCH masters’ level practicum CITs in general. As such, the findings of the current study should be considered preliminary, and future research should explore the same research questions with larger samples within the same target population.

Additionally, because the sample for the current study was so small, the findings of the current study resulted from a resampling technique using bootstrap analysis. Although the bootstrapping does not limit the generalizability of the results from this current study, it is unclear how the findings would have differed if the sample had been large enough for the intended statistical analyses.
Likewise, the participants of this study were recruited through non-probability purposive sampling. Practicum CITs volunteered to participate in the study based on their understanding that the goal of the current study was to provide counselor preparation programs with a better understanding of the CITs’ experience in practicum. It is plausible that the volunteers were interested in this topic and that a self-selection bias may result in the sample not representing all CMCH practicum CITs’ perceptions regarding practicum experience. For example, CITs with a low degree of DOS and CSE may have been less likely to participate in the study. In other words, it seems important to consider the characteristics of the CITs who did not participate. For instance, they may have experienced different styles of supervision experiences and a different relationship between supervisory style, DOS, and CSE.

Another limitation of this study was the nature of the sample criteria. Because the sample was exclusively CMCH practicum masters’ level CITs who were recruited almost at end of the semester, it is inappropriate to generalize the findings of this study to more advanced CITs in the CMCH program or to CITs in an earlier part of practicum.

The time period during which the sample was recruited may represent yet another limitation. Specifically, the limited recruitment time and narrow window for participation may be reasons for the small sample size. The time of recruitment was likely one in which CITs were experiencing high demands to completing the practicum requirements and in which they may have felt fatigued at the end of a long semester.

Another significant consideration before extrapolating the findings was the delimitation of this study to use CMCH CACREP-accredited programs. Compared to counselor preparation program with other specializations, the CMCH CACREP curriculum requires completion of more course work (i.e., a minimum of 27 credit hours) by the CITs prior to enrolling in
practicum. Findings of this study may be skewed in that practicum CITs enrolled in CMCH CACREP-accredited programs may be more likely to score higher on DOS and CSE than CITs in other counselor preparation specializations.

Additionally, another delimitation of the current study involved restricting participation to CITs enrolled in accredited CMHC programs at universities that do not also house doctoral programs in counselor education. This delimitation was employed to avoid a potentially confounding influence from a doctoral student supervisor. However, it likely also contributed to the small sample size, and results from this study may not generalize to masters’ level CITs who receive supervision both from a doctoral student supervisor and a faculty supervisor.

Another limitation concerns the use of on self-report measures of supervisory styles, DOS, and CSE. Mood effects and mono-method bias may affect these findings. Assessing the variables of interest using alternative methods, such as interviews, may provide additional insights. Although CITs reported DOS and CSE by describing their own characteristics, CITs’ report of their faculty supervisors’ style of supervision may not accurately reflect their supervisors’ actual styles and may be vulnerable to CITs’ judgment and biases concerning their supervisors.

An alternate explanation for the unexpected results relates to the instruments used to measure the DOS construct (DSI-R; Skowron & Schmitt, 2003) and supervisory style construct (SSIndex; Long et al., 1996). When determining the psychometric properties of the DSI-R, Savitz-Smith (2004) used all four subscales of DOS as predictor variables. She reported that ER and IP subscales of DOS were highly correlated with each other and suggested that this collinearity may impact the regression model because it makes it difficult to show the predictive strength of the other subscales of DOS.
With regard to the SSIndex, the scale measures supervisory style as a multidimensional construct across three sets of complementary dimensions. Although these three distinct dimensions use a continuous measure with their own total score, each dimension of SSIndex has its own pole. There are three possible categorical measures of supervisory styles for each dimension (e.g., the Authoritarian supervisory style, the mixture of Authoritarian – Affiliative, and the Affiliative supervisory style). Subsequently, there are nine categorical measures of supervisory styles derived from the three continuous measures of the dimension of SSIndex. Because each dimension of the SSIndex consists of six to seven items, it is plausible that the scale may not possess enough items to indicate three different types of supervisory style from one continuum dimension. Taken together, the categorical measure of supervisory style demands more sophisticated statistical analysis.

In addition, the current study found low reliability coefficients for the Authoritarian – Affiliative and Directive – Non-Directive dimensions (α = .413 and .59 respectively). This limits the generalization of the findings related to these dimensions and calls into question, whether the items in these dimensions consistently measured the intended supervisory styles in this study. Thus, in light of these relatively low levels of internal consistency, the findings in this current study must be viewed with caution.

**Implications of the Study**

There are several implications of this study that may strengthen future research in the areas of the counseling supervision and counselor preparation. The following sections discuss these implications and suggest how the current study clarifies or extends the findings in the study: (a) methodological and future research implications, (b) theoretical and future research implications, and (c) practice implications.
Methodological and future research implications. As discussed earlier in this chapter, the sample size of this study was small. Due to low statistical power, the parametric bootstrap analyses were used. Although bootstrapping does not limit generalizability, it supports that the findings in the current study was limited, especially for examining the interactive effect of DOS in relationship to supervisory styles and CSE. Thus, a similar study with a larger number of participants would be helpful for increasing generalizability and extrapolating the future findings.

Likewise, a much larger sample size would be necessary to complete the inferential statistical analyses because of the large number of items used in a set of instruments in the current study. For this study to achieve a statistical power of at least .80 with an alpha level of .05 (Balkin & Sheperis, 2011), results from a priori power analysis showed a minimum of 173 participants as an adequate sample size. Moreover, a larger sample size would make it possible to examine demographic variables pertaining to the current study. These might include CIT characteristics such as gender, race, past work experience, the type of clients with whom CITs were working during practicum, and characteristics of the CITs’ supervisors.

To obtain a larger sample, future researchers might collect data over a longer period of time than one semester. This might result in a larger sample, even if the data collection were limited to the end of the semester, as in the current study. Also, the solicitation and invitation to participate through program coordinators or liaisons could be distributed early in the semester so that potential participants might understand the requirements earlier in the semester and therefore, the researcher can complete any requirements to collect data at particular institutions (e.g., IRB applications).
Although this study has focused on the CITs’ perceptions, it was not possible to match and compare CITs’ perspective on the variables of interest with their faculty supervisors’ perspective. Future research might collect parallel data from faculty supervisors. This might provide a more complete picture of variables collected in this study. For example, this might reveal the extent to which supervisors actually exhibit particular styles of supervision or the extent to which high levels of CITs’ CSE reflect actual competence. Also, collecting data from supervisors would allow researchers to compare the perceptions of each group and may increase the validity of findings.

Additional studies are needed to examine the replicability of the findings with CITs at different levels of clinical training i.e., pre-practicum, practicum, and post-practicum) and CITs’ stages of professional development (i.e., in accordance with the IDM stages of development). As such, future researchers studying the relationship among supervisory styles, DOS, and CSE might consider using stratified sampling procedures to obtain a more diverse range of CMCH CITs across all three levels of clinical training and collecting data to assess CITs stages of professional development.

Because the cross-sectional design used in this study limits understanding of causal relationships, a longitudinal design could provide a better understanding of the interactive relationships among supervisory styles, DOS, and CSE. In other words, longitudinal research would help clarify the extent to which each of the variables of interest changes over the period of the practicum experience. In the future, researchers may also consider a single-case design in which they follow a cohort of practicum CITs throughout the practicum semester and use a mixed-methods approach to better capture all possible variables related to main variables of interest of the study. Future researchers might also use a mixed-methods design. By also using
qualitative methods, such as focus groups or individual interviews, future researchers might obtain a more holistic understanding of the results and allow for a deeper understanding of the sample.

Because the internal consistency coefficient of the SSIndex for Authoritarian – Affiliative and Directive – Non-Directive dimensions \( \alpha = .413 \) and \( .59 \) respectively) in the current study was considerably lower than the original alpha levels for Authoritarian – Affiliative and Directive – Non-Directive dimensions \( \alpha = .79 \) and \( .78 \) respectively) by the developer of the SSIndex. (Long et al., 1996), future studies may conduct further analyses of the SSIndex’s internal consistency and report if the low internal consistency of the scale impacts the study’s findings. A possible reason for the low level of internal consistency in the current study may be the fact that the original SSIndex was developed within the context of a marriage, couple, and family counseling program. Because the SSIndex was developed based on feminist theories and within a marriage, couple, and family context, it is plausible that the clinical supervision process may not apply to other contexts. Therefore, it is possible that some of the items may not be applicable or represent the clinical supervision process conducted in the CMCH program.

With regard to the psychometric issue of the SSIndex found in the sample of the current study and in conjunction with continuous-categorical scoring of the SSIndex, the complexity of this multidimensional scale needs further examination in terms of the extent to which the scores from this scale are statistically meaningful. Because assessing supervisory styles as a multidimensional construct is needed (Borders, 2005; Ladany et al., 2013; Ladany, Marotta, & Muse-Burke, 2001; Ladany, Walker, & Melincoff, 2001) and the available scales are limited in their ability to assess a single supervisory style (e.g., SSInventory; Friedlander & Ward, 1984; SSI; Hart & Nance, 2003), perhaps a new multidimensional scale of supervisory styles that is
more applicable to CMCH CITs or CITs in general regardless of their counselor training specialization program, could be developed within a solid supervision theoretical framework, such as the Integrative Developmental Model (IDM; McNeill & Stoltenberg, 2016; Stoltenberg, 1993, 2005; Stoltenberg & Delworth, 1987; Stoltenberg & McNeill, 2010).

According to the moderation results, the DOS did not act as a moderator in the relationship between supervisory style and CSE. However, because there were several findings in earlier studies indicating rather stable results, future research might explore alternative models with a larger sample to investigate whether DOS could be explained as a moderating variable or as a mediating variable. It seems likely that using either the moderated mediation model or the mediated moderated model (see Wu & Zumbo, 2008) would enrich our understanding of the relationship among supervisory style, DOS, and CSE.

**Theoretical and future research implications.** The results of the study have theoretical implications for understanding the relationship among supervisory style, DOS, and CSE. Specifically, these implications relate to the ways the current study clarifies or extends the theoretical frameworks used to contextualize the study: the Social Cognitive Model of Counselor Training (SCMCT), which is the primary theoretical framework for this study, and the extended theoretical frameworks that give a further conceptual understanding related to variables of interest, including IDM, BFST, and Social Cognitive Theory (SCT).

One of the theoretical aims of this study was to explore theoretical relationships among the three determinants that interact in bidirectional relationships within the main triadic interaction of SCMCT. These three conceptual constructs drawn from SCMCT, including personal agency, external context (i.e., supervision environment), and internal context (i.e., CITs’ stable characteristic) were operationalized in this study as CSE, supervisory style, and
DOS respectively. Although all the variables studied were not correlated with one another and were not predictors of CITs’ CSE – except that the Authoritative – Affiliative supervisory style negatively correlated with DOS, this study extends the previous literature in terms of theoretical understanding.

As postulated in SCMCT (Larson, 1998a; 1998b) and IDM (McNeill & Stoltenberg, 2016; Stoltenberg, 1993, 2005; Stoltenberg & Delworth, 1987; Stoltenberg & McNeill, 2010), CITs at their early clinical level of training typically experience low self-confidence to perform counseling, which is consistent with the results found in the previous research (Barbee, et al., 2003; Bischoff & Barton, 2002; Leach et al., 1997; Lent et al., 2009; Martin, et al., 2004; Tyron, 1996; Melchert, et al., 1996; Ronnestad & Skovholt, 1993; 2003; Tang, et al., 2004; Skovholt & Ronnestad, 2003). However, CITs who participated in the current study have a high degree of CSE. According to Larson (1998b), an ideal and beneficial estimation of CSE is when CITs are able to appraise themselves at a slightly higher estimation compared to their actual capabilities related to counseling competence. Perhaps, the CITs in this study are likely to have unrealistic degrees of CSE, and thus overestimate their abilities to perform counseling clinical practice. This overestimation of CSE can be further explained from the IDM specific contextual description for CITs’ experiences in master’s level practicum, which is CITs’ Level 1 professional development. Because Level 1 CITs have a strong motivation to perform the best counseling practice and excitement about becoming professional counselors, they may have a tendency to indulge in reflections on the knowledge they are gathering during practicum instead of being fully present with their clients in counseling sessions and the supervisor in supervision sessions (Stoltenberg 2005; Stoltenberg & McNeill, 2010). Experiencing high self-focus rather than being fully aware of their clients and supervisors may explain what leads CITs to judge themselves as having a
high degree of CSE although reality they are not very confident about the specific tasks of counseling.

Accurate appraisal of one’s self-efficacy is of considerable value in human functioning, and individuals who inaccurately judge themselves to be highly capable may have a tendency to choose activities that are beyond their ability and feel little need to invest preparatory effort (Bandura, 1977, 1982, 1986, 1989, 1994, 1997, 1999, 2001, 2006). As this suggests, being overly confident about their capability to counsel a client may lead CITs to invest insufficiently in preparation or to set unrealistic goals for counseling and supervision sessions (Larson, 1998b; Larson & Daniels, 1998). Therefore, it stands to reason that CITs who overestimate their CSE may not yet see that the supervision process relates to their acquisition of counseling skills and confidence. Because the CITs sample of this study were recruited nearly or just at the end of their practicum period, an alternate explanation from the IDM perspective is that CITs at late Level 1 or higher levels of professional development have deeper clarity of understanding of clinical practice than CITs at earlier Level 1. Thus, it may shown by indicating high self-confidence in counseling.

With regard to the high overall degree of DOS, in BFST, the sense of self (i.e., DOS) brings together two paradigms: the degree of DOS and the level of DOS. As the degree of DOS is the extent to which individuals can counterbalance internal processes with life forces (i.e., measured by the DSI-R multidimensional scale), the level of DOS is a functioning pattern of how individuals define their individuation as it appears in their significant relational or emotional systems (Kerr & Bowen, 1988). In BFST, there are two-levels of DOS that indicate whether DOS emerges from (a) the basic level – the fixed DOS that emerges within the individual’s family of origin, and (b) the functional level – the shifted DOS that is continuously created
through learning and is negotiable within significant relationship systems beyond family of
origin, such as clinical supervision relational system. According to Kerr and Bowen (1988),
because the basic level of DOS is neither dependent on the relationship process nor negotiable in
the other relationship systems, understanding the measurable degree of DOS is actually based
on the functional level in the clinical supervision relational system. In other words, the degree of
overall DOS of CITs in this study refers to CITs’ functional level in the supervision process. The
intensity of functioning pattern at the functional level can rise and fall rapidly from time to time
(Bowen, 1978) or can stabilize over a long period, depending on the changing significance of the
relational system (Kerr & Bowen, 1988). Moreover, SCT postulates that the development of the
differentiation of oneself from others is not entirely constructed through transactional
experiences with the social environment. Rather, it is also constructed reciprocally through a
personal reflection on one’s experiences (Bandura, 2006). As such, it appears that during the data
collection period, CITs’ individuation process may increase to high degree compared to early
practicum. This change could reflect a different supervisory experience that CITs were exposed
throughout the supervision process, or it may variate into higher degree due to the process of the
agentic self. However, these theoretical explanations need to be tested empirically in future
research. Apart from providing a theoretical explanation of BFST, such research might clarify
the negative correlation between the Authoritative – Affiliative supervisory and DOS.

To increase the chance of counseling successes for practicum CITs, SCMCT proposed
that supervisors should provide “realistic, supportive encouragement and structured learning
situations” (Larson, 1998b, p. 240) and communicate them all in thoughtful and changeable
ways. Likewise, in IDM, it is postulated that for Level 1 CITs, supervisors are encouraged to
communicate, offer structure, encourage CITs to engage in self-examination in order to develop
early analytical thinking, and be flexible with a mixture of styles of supervision, including providing support, warmth, encouragement, acceptance, trust, and disclosure of their early struggles in clinical practice (McKay & Brown, 2014; McNeill & Stoltenberg, 2016; Skovholt & Ronnestad, 2003; Stoltenberg, 1993; 2005; Stoltenberg & McNeill, 2010). If the complex supervisory styles as theorized in both SCMCT and IDM are effective for practicum CITs, then this study has clarified and extended the theoretical conceptualization of multi-styles of supervision by measuring it through SSIndex scale.

The findings of the current study have failed to suggest the interactive role of supervisory styles and DOS on CITs’ CSE. Although the findings were grounded in the self-efficacy theoretical framework, in addition to the issue related to statistical power, it may be that the scope of this study did not cover the relationship among variables that were studied holistically. For example, in line with SCT, SCMCT theorized four sources of CSE, including mastery, modeling, social persuasion, and affective arousal. Because this study only focuses on social persuasion (operationalized through supervisory styles), it does not include CITs’ success as counselor, their self-comparison resulted from review their own counseling recordings, or their anxiety about the counseling related-activities. Future research might extend this study’s analysis to other sources of CSE with the aim of exploring a holistic context that may increase CITs’ CSE.

The parameters in which SCMCT theorizes counselor training and supervision may have driven the unexpected results of this study. Supervision is a special type of counselor training (Kincade, 1998) that occurs in a complex dynamic in counselor education programs. Taken together, because SCMCT is Larson’s early articulation of a comprehensive counselor training and supervision model, indeed, the model warrants continued conceptual and research attention.
(Goodyear, 1998; Lent et al., 1998). For instance, as the SCMCT postulated that supervisors through social persuasion influence CITs’ self-confidence and competency, yet little is postulated regarding supervisors’ evaluative responsibilities in the supervision process (Goodyear, 1998). Perhaps, the CITs who participated are savvy enough not to represent themselves as vulnerable, which might lead their supervisors to evaluate them negatively (Ladany et al., 1996). Another possible explanation that may limit the utility of SCMCT is that Larson does not explicitly address the internal determinants that may serve as a catalyst or barrier in understanding the link between supervisors’ social persuasion and CITs’ CSE. Although DOS relates to personality maturity development, however, to what extent the DOS construct related to CITs’ stable characteristics and how it may overlap with the concept of declarative and procedural knowledge as proposed in SCMCT that has interaction effect to CITs’ CSE is unknown. Therefore, if the current study is replicated, with consideration of carefully selection of CITs’ stable characteristics relates to the SCMCT theoretical framework, then such findings may illuminate the ways in which clinical supervision process in practicum may drive CSE and help to broaden the understanding of masters’ level practicum CITs in CMCH program. In other words, continuous conceptual and research attention on SCMCT is warranted.

**Practice implications.** By examining the relationship among practicum CITs’ CSE, their DOS, and the supervisory styles they experience, the current study partially contributes to the literature relating to counselor education and supervision in CMCH programs. The findings may serve as a basis for understanding clinical training and practice of the CMCH masters’ level practicum CITs and may also serve as a window for further research that may extend to other variables or populations. However, given the current study’s limitations, the implications of its findings for practice should be approached cautiously. Pending replication and extension,
however, the findings of the current study may be useful to facilitate CITs’ attainment of clinical excellence with a realistic self-confidence to perform counseling that may be influenced by their individuation process and their supervisory experience in clinical supervision.

In terms of supervision practice, the findings suggest that practicum CITs experienced multiple styles of supervision with their faculty supervisors. Because the current study examined CITs perceptions of the actual supervisory experience that occurred in a naturalistic setting, a determination of which styles of supervision CITs value or prefer is beyond the scope of this study. Besides being able to supervise their CITs using varying mixtures of supervisory styles, supervisors may also varying their styles across the practicum semester or even within a single supervision session (Borders, 2005; Daniels & Larson, 2001; Fernando & Hulse-Killacry, 2006). To determine to which degree the flexibility of supervisory styles and which multiple styles of supervision meets CITs’ need, the faculty supervisors might consider executing an ongoing and informal method of evaluation regarding the degree to which aspects of supervisory styles help or impede CITs’ growth. For example, faculty supervisors could ask CITs before they begin their supervision session what and how supervisors might supervise them, and, at the end of supervision session, they would revisit the issues to assess how well their style in that particular supervision met the stated need of CITs. To avoid uncomfortable conversations, this might occur using a short reflection exercise at the end of supervision sessions.

In the current study, the findings suggested that the directive supervisory style was presented consistently in CITs’ supervisory experience during practicum regardless of which mixture of supervisory style was used. In line with that, it might be useful for supervisors to be aware that CITs need sufficient information and well-guided plans for dealing with client situations. Because modeling is a potent learning process for beginning CITs (McNeil &
Stolternberg, 2016; Ronnestad & Skovholt, 1993), CITs may benefit from supervisors who employ a role-play technique. For instance, supervisors may play the role of counselor and CITs play the role as a client about whom CITs need supervision. Through this simulation process, CITs could learn and practice skills that they had comprehended previously only at a cognitive level. The directive style of supervision also could be implemented by the supervisor “walking through” the completion of the case notes with a CIT. For example, while watching a CIT’s recorded counseling session, together, a supervisor might guide the CIT possible ways to write the case notes. As the practicum semester progresses, CITs might have increasing independence in writing the case notes. Because practicum is the first actual clinical experience in which CITs interact with real clients, faculty supervisors are typically well aware that they play a significant role in building the CSE of the CITs they supervise.

In terms of counselor education training, the findings suggest that the more authoritative supervisory style that CITs experience, the lower their DOS. Although the basis of both directive and authoritative styles of supervision is based on the supervisor as an expert, the directive supervisory style is highly instructional and didactic, whereas the authoritative supervisory style is hierarchical and command focused. Additionally, individuals with a lower degree of DOS have a greater need for emotionally supportive relationships (Skowron et al., 2009). Accordingly, during the practicum semester, practicum instructors and faculty supervisors may need to utilize the affiliative style of supervision (i.e., egalitarian-supportive style) to promote a higher sense of self in CITs. It seems appropriate for supervisors, practicum instructors and even counselor educators in general to encourage CITs to consider whether their choice to deal with clinical situations and their comprehension in conceptualizing the counseling cases are truly their own and also to provide support, warmth, and acceptance while CITs begin exploration and
implementation processes. Moreover, because CITs’ individuation process continuously develops over different periods of their life span (Bandura, 2006; Bowen, 1978; Kerr & Bowen, 1988), including the supervision process in practicum, any indication of appreciation and acknowledgement of early success in executing counseling performance has a powerful impact on CITs’ subsequent professional development (Stoltenberg, 2005; Stoltenberg & McNeill, 2010).

The current study did not find a significant moderated effect of DOS and no evidence was found as to which direction of influence it has on the supervisory relationship. However, the fact that its interaction with the Non-Self-Disclosure – Self-Disclosure dimension accounted for a large proportion of variability in CSE is worthy for further research. This suggests that it might be important for supervisors to pay attention to the extent and content of their disclosures to their CITs as well as their beliefs regarding disclosures. Disclosures may affect how deeply the CITs share and what kind of information the CITs disclose to their supervisors. Perhaps normalization of disclosure might help CITs feel more comfortable sharing their difficulties in performing counseling and other difficulties that may impede or boost their confidence in counseling (Gunn & Pistole, 2012; Ladany et al., 1996; Ladany et al., 2013; Ladany & Lehrman-Waterman, 1999; Ladany, Walker, & Melincoff, 2001; Stoltenberg, 2005). By being sensitive to mutual disclosure related to the supervision process, the supervisor may educate the CITs regarding the complex process of self-and-other awareness through which a sense of selfhood develops. Moreover, developing a sense of self is an essential way for CITs to acquire critical self-reflective capabilities and also is necessary for CITs’ competence to perform clinical practice (Rosin, 2015).
Conclusion

Based on the preceding discussion of the results, several conclusions were drawn from this study. First, it appears that this study provides empirical support that supervisory style could be understood from the context of a mixture style of supervision. Second, the study accomplished its goal of examining factors possibly associated with the CITs’ self-confidence in counseling based on theoretical frameworks, including SCMCT, SCT, IDM, and BFST. Third, although the empirical results of this study do not fully support the theorized relationship among supervisory styles and CITs’ DOS and CSE, the current study does provide a path for further exploration within the context of masters’ level practicum CITs in a CACREP accredited CMCH program. Lastly, although the study suffered from a lack of statistical power, it stands to reason that it is important for counseling preparation programs to examine the impact of the clinical supervision experience, CITs’ individuation process, and their confidence in counseling competence, all together, in order to promote the professional development of CITs. The complex relationship of these factors warrants further investigation.
LIST OF REFERENCES
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Appendix A: IRB Approval

IRB Exempt Approval of 18x-253
7 messages

irb@olemiss.edu <irb@olemiss.edu> Fri, Apr 13, 2018 at 4:03 AM
To: Amelia Binti Mohd Noor <amohdnoo@go.olemiss.edu>
Cc: "Dr. Suzanne Dugger" <smdugger@ olemiss.edu>

Ms. Noor:

This is to inform you that your application to conduct research with human participants, "The Relationship of Superorst Styles and Differentiation of Self to the Counseling Self-efficacy of Counselors-in-training in the Masters’ Level Practicum" (Protocol # 18x-253), has been approved as Exempt under 45 CFR 46.101(b)(2).

Please remember that all of The University of Mississippi’s human participant research activities, regardless of whether the research is subject to federal regulations, must be guided by the ethical principles in The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research.

It is especially important for you to keep these points in mind:

* You must protect the rights and welfare of human research participants.

* Any changes to your approved protocol must be reviewed and approved before initiating those changes.

* You must report promptly to the IRB any injuries or other unanticipated problems involving risks to participants or others.

If you have any questions, please feel free to contact the IRB at irb@olemiss.edu.

Miranda L. Core
Intern, Research Integrity and Compliance
Office of Research and Sponsored Programs
The University of Mississippi
213 Barr Hall
University, MS 38677-1848
+1-915-3929
irb@olemiss.edu | www.olemiss.edu
Ms. Noor,

The protocol number should have been 18x-244. It is corrected below.

Miranda L. Core
Intern, Research Integrity and Compliance
Office of Research and Sponsored Programs
The University of Mississippi
213 Barr Hall
University, MS 38677-1848
+1-915-3929
irb@olemiss.edu | www.olemiss.edu
Appendix B: Letter of Correspondence from Developer for Granting Permission to Use the COSE Instrument

October 28, 2016
Amelia Binti Mohd Noor
2112 Old Taylor Rd. Apt 15
Oxford MS 38655-5017

Thank you for your interest in using The Counseling Self-Estimate Inventory (COSE). I am happy to grant you permission to use the instrument for one year for one study.

I have attached a copy of the instrument and a list of references in which the COSE has been used. The instructions read for people to indicate their answers on the instrument. An alternative that we are doing is to use answer sheets so the inventories can be reused. Also there is no place for the person to indicate demographics and identification. You need to include this on a separate sheet of your own design.

The following items on the COSE are reversed scored: Items 2, 6, 7, 9, 16, 18, 19, 21, 22, 23, 24, 26, 27, 28, 31, 33, 35, 36, & 37.

The factors consist of the following items:

Factor 1: Microskills: Item 1, 3, 4, 5, 8, 10, 11, 12, 14, 17, 32, 34.
Factor 2: Counseling Process: Items 6, 9, 16, 18, 19, 21, 22, 23, 31, 33.
Factor 4: Cultural Competence: Items 29, 30, 36, 37.
Factor 5: Values: Items 2, 7, 13, & 35.

I recommend use of the total score rather than the factor scores separately. I have also included some reliability information and validity information for you regarding the measure.

Best wishes in your research endeavors.

Warmly,

Lisa M. Larson, Ph.D.
3243 Evergreen Road
Ames, IA 50014
Appendix C: Email Correspondence from Developer for Granting Permission to Use the SSIndex Instrument

Amelia Binti Mohd Noor <amohdnoo@go.olemiss.edu>

Permission to use SSI
8 messages

Fri, Sep 2, 2016 at 5:28 AM

Dear Dr. Janie Long,

I hope you are doing well.

My name is Amelia Binti Mohd Noor and I am a doctoral student from the Counselor Education and Supervision Program at the University of Mississippi. I am writing to request a permission to use Supervisory Styles Index (SSI) inventory in my dissertation research on counselor trainees’ development. Please advise me if I have your permission, any procedure or manual to using the measure, or any suggestions/additional articles I should refer, and if there is any cost related to the measure.

Thank you in advance for considering my request. Looking forward to hearing from you. have a good day Dr. Janie Long and take care.

Sincerely,
Amelia

Janie Long, Ph.D. <janie.long@duke.edu>
To: Amelia Binti Mohd Noor <amohdnoo@go.olemiss.edu>

Fri, Sep 2, 2016 at 9:14 AM

You do have permission to use the SSI. No cost related. Do you have the article that introduced the inventory?

I'm glad to see it utilized again! Good luck with your dissertation!

Janie Long

Sent from Mail for Windows 10
Appendix D: Email Correspondence from Developer for Granting Permission to Use the DSI-R Instrument

Amelia Binti Mohd Noor <amohdnoo@olemiss.edu>

Permission to use DSI-R
3 messages

To: eskowron@uoregon.edu
Fri, Sep 2, 2016 at 9:05 AM

Dear Dr. Skowron,

I hope you are doing well.

My name is Amelia Binti Mohd Noor and I am a doctoral student from the Counselor Education and Supervision Program, at the University of Mississippi. I am writing to request a permission to use Differentiation of Self Inventory-Revised (DSI-R) in my dissertation research on counselor trainees’ development. Please advise me if I have your permission, any procedure or manual to using the measure, or any suggestion articles I should refer, and if there is any cost related to the measure.

Thank you in advanced for considering my request. Looking forward to hearing from you. Have a good day Dr. Skowron and take care.

Sincerely,
Amelia

Elizabeth Skowron <eskowron@uoregon.edu>
To: Amelia Binti Mohd Noor <amohdnoo@olemiss.edu>
Mon, Sep 12, 2016 at 7:12 AM

Hi Amelia,

You are welcome to use the DSI in your research...all the best,

Elizabeth A. Skowron, Ph.D.
Professor, Counseling Psychology
Research Scientist, Prevention Science Institute
University of Oregon
Eugene, OR 97403
https://education.uoregon.edu/cphs
http://psl.uoregon.edu/index.html
Tel. 541-346-0913
Appendix E: Sample of the Counseling Self-Estimate Inventory (COSE) Instrument

Instructions: This is not a test. There is no right or wrong answer. Rather – it is an inventory that attempts to measure how you feel you will behave as a counselor in a counseling situation. Please respond to the items as honestly as you can so as to most accurately portray how you think you will behave as a counselor. Do not respond with how you wish you could perform each item – rather answer in a way that reflects your actual estimate of how you will perform as a counselor at the present time. Below is a list of 37 statements. Read each statement, and then indicate the extent to which you agree or disagree with that statement, using the following alternatives.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. When using responses like reflection of feeling, active listening, probing, I am confident I will be concise and to the point.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>2. I am likely to impose my values on the client during the interview.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>3. When I initiate the end of a session, I am positive it will be a manner that is not abrupt or brusque and that I will end the session on time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>4. I am confident that I will respond appropriately to the client in view of what the client will express (e.g., my questions will be meaningful and not concerned with trivia and minutia).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>5. I am certain that my interpretation and confrontation responses will be concise and to the point.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>6. I am worried that the wording of my responses lack reflection of feeling, clarification, and probing, and may confusing and hard to understand.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7. I feel that I will not be able to respond to the client in a non-judgmental way with respect to the client’s values, beliefs, etc.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>8. I feel I will respond to the client in an appropriate length of time (neither interrupting the client nor waiting too long to respond).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>9. I am worried that the type of response I use at a particular time, i.e., reflection of feeling, interpretation, etc., may not be the appropriate response.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>
Appendix F: The Supervisory Style Index (SSI) Instrument

**Instructions:** Please indicate your perception of the style of your current or most recent supervisor of therapy on each of the following descriptors. Choose the number on the scale, from 1 to 4, which best reflects your view of him or her.

<table>
<thead>
<tr>
<th>Disagree</th>
<th>Tend to disagree</th>
<th>Tend to agree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

1. The supervisor is respectful of my opinions about the therapy process.
2. The supervisor asks for my input about what is going on with the client(s).
3. In team supervision, the supervisor uses ideas from trainees for phone-ins from behind the mirror.
4. The supervisor recognizes me as a person with expertise.
5. The supervisor expects me to be in charge of my case load.
6. In a team meeting, the supervisor dominates the discussions.
7. The supervisor expects me to develop the plan for an upcoming therapy session rather than providing one for me.
8. The supervisor telephones in directives at least three times per hour during live supervision.
9. The supervisor develops the final intervention to be used in a session.
10. The supervisor develops the homework tasks given to the client(s) at the end of the session.
11. The supervisor enters the session when he/she feels that I am not being effective.
12. The supervisor insists on strict adherence to her/his directives.
13. The supervisor openly shares examples from her/his own experiences as a therapist.
14. The supervisor is willing to discuss how her/his family-of-origin issues affected her/his performance in therapy.
15. The supervisor acknowledges her/his own limitations.
16. The supervisor discloses how current issues in her/his life affects the supervision process.
17. The supervisor admits when she/he makes a mistake.
18. The supervisor is open about her/his own life.
19. The supervisor spends very little time joining with supervisees.
Appendix G: The Differentiation of Self Inventory-Revised (DSI-R) Instrument

**Instructions:** These are questions concerning your thoughts and feelings about yourself and relationships with others. Please read each statement carefully and decide how much the statement is generally true of you on a 1 (not at all) to 6 (very) scale. If you believe that an item does not pertain to you (e.g., you are not currently married or in a committed relationship, or one or both of your parents are deceased), please answer the item according to your best guess about what your thoughts and feelings would be in that situation. Be sure to answer every item and try to be honest and accurate as possible in your responses.

<table>
<thead>
<tr>
<th></th>
<th>Not at all true of me</th>
<th>Very true of me</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>People have remarked that I’m overly emotional.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>2</td>
<td>I have difficulty in expression my feelings to people I care for.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>3</td>
<td>I often feel inhibited around my family.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>4</td>
<td>I tend to remain pretty calm even under stress.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>5</td>
<td>I usually need a lot of encouragement from others when starting a big job or task.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>6</td>
<td>When someone close to me disappoints me, I withdraw from him/her for a time.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>7</td>
<td>No matter what happens in my life, I know that I’ll never lose my sense of who I am.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>8</td>
<td>I tend to distance myself when people get too close to me.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>9</td>
<td>I want to live up my parents’ expectations of me.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>10</td>
<td>I wish that I weren’t so emotional.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>11</td>
<td>I usually do not change my behavior simply to please another person.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>12</td>
<td>My spouse/partner could not tolerate it if I were to express to him/her my true feelings about some things.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>13</td>
<td>When my spouse/partner criticizes me, it bothers me for days.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>14</td>
<td>At times my feelings get the best of me and I have trouble thinking clearly.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>15</td>
<td>When I am having an argument with someone, I can separate my thoughts about the issue from my feelings about the person.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>16</td>
<td>I’m often comfortable when people get too close to me.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>17</td>
<td>I feel a need for approval from virtually everyone in my life.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>Not at all true of me</td>
<td>Very true of me</td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------</td>
<td></td>
</tr>
<tr>
<td>18. At times I feel as if I’m riding an emotional roller-coaster.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>19. There’s no point in getting upset about things I cannot change.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>20. I’m concerned about losing my independence in intimate relationships.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>21. I’m overly sensitive to criticism.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>22. I try to live up to my parents’ expectations.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>23. I’m fairly self-accepting.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>24. I often feel that my spouse/partner wants too much from me.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>25. I often agree with others just to appease them.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>26. If I have had an argument with my spouse/partner, I tend to think about it all day.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>27. I am able to say “no” to others even I feel pressured by them.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>28. When one of my relationships becomes very intense, I feel the urge to run away from it.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>29. Arguments with my parent(s) or sibling(s) can still make me feel awful.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>30. If someone is upset with me, I can’t seem to let it go easily.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>31. I’m less concerned that others approve of me than am in doing what I think is right.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>32. I would never consider turning to any of my family members for emotional support.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>33. I often feel unsure when others are not around to help me make a decision.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>34. I’m very sensitive to being hurt by others.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>35. My self-esteem really depends on how others think of me.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>36. When I’m with my spouse/partner, I often feel smothered.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>37. When making decisions, I seldom worry about what others will think.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>38. I often wonder about the kind of impression I create.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>39. When things go wrong, talking about them usually makes it worse.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>40. I feel things more intensely than others do.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>Not at all true of me</td>
<td>Very true of me</td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>----------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1   2  3  4  5  6</td>
<td></td>
</tr>
<tr>
<td>41. I usually do what I believe is right regardless of what others say.</td>
<td>1  2  3  4  5  6</td>
<td></td>
</tr>
<tr>
<td>42. Our relationship might be better if my spouse/partner would give me the space I need.</td>
<td>1  2  3  4  5  6</td>
<td></td>
</tr>
<tr>
<td>43. I tend to feel pretty stable under stress.</td>
<td>1  2  3  4  5  6</td>
<td></td>
</tr>
<tr>
<td>44. Sometimes I feel sick after arguing with my spouse/partner.</td>
<td>1  2  3  4  5  6</td>
<td></td>
</tr>
<tr>
<td>45. I feel it’s important to hear my parents’ opinions before making decisions.</td>
<td>1  2  3  4  5  6</td>
<td></td>
</tr>
<tr>
<td>46. I worry about people close to me getting sick, hurt, or upset.</td>
<td>1  2  3  4  5  6</td>
<td></td>
</tr>
</tbody>
</table>
Appendix H: Demographic Questionnaire

Instructions: Please self-identify the information that is related to you.

1. Please identify your sex.
   - Male
   - Female
   - Transgendered
   - Other

2. Please enter your age.
   ________ years

3. Please identify your race/ethnicity.
   - Native American
   - White/Caucasian American
   - Black/African American
   - Hispanic/Latino American
   - Asian/Pacific Islanders American
   - Biracial/Multiracial
   - Other: Please identify your race/ethnicity
     ____________________

4. In what geographical region is your program/institution located?
   - North Atlantic (CT, DE, ME, MA, NH, NJ, NY, PA, RI, VT)
   - North Central (IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, OK, SD, WI)
   - Southern (AL, AR, FL, GA, KY, LA, MD, MS, NC, SC, TN, TX, WV, VA)
   - Rocky Mountain (CO, ID, MT, NM, UT, WY)
   - Western (AK, AZ, CA, HI, NV, OR, WA)

5. During your practicum, you are working with:
   - Voluntary clients
   - Non-voluntary/mandated clients
   - Both voluntary and non-voluntary/mandated clients
6. Did you have any work-related experience prior to entering the counselor preparation program?
   No
   Yes. Please state the type(s) of work-related experience you had.
   __________________________________________________________

7. Have you attended counseling or therapy as a client?
   Yes
   No

8. Please identify your faculty supervisor’s sex. (optional)
   Male
   Female
   Transgendered
   Other

9. Please identify your faculty supervisor’s race/ethnicity. (optional)
   Native American
   White/Caucasian American
   Black/African American
   Hispanic/Latino American
   Asian/Pacific Islanders American
   Biracial/Multiracial
   Other: Please identify your race/ethnicity
   __________________________________________________________
   Not sure

10. Please identify your faculty supervisor’s rank of academic position.
    Professor
    Associate Professor
    Assistant Professor
    Clinical Professor
    Clinical Associate Professor
    Clinical Assistant Professor
    Adjunct Professor
    Not sure
Appendix I: Solicitation and Invitation Email

Subject: Counselors-In-Training Practicum Experience Survey Request and Invitation

Dear Dr. ____,

I hope you are doing well.

My name is Amelia Binti Mohd Noor and I am a doctoral candidate at the University of Mississippi.

I am writing to request your help with the Counselors-In-Training (CITs) Practicum Experience Survey. Would you please consider forwarding this participation request to any potential participants who are currently enrolled in or just finished their practicum in the clinical mental health counseling (CMHC) program? If you do decide to disseminate this email to potential participants in your program, it will then be assumed that you have given your consent for solicitation, which would be greatly appreciated. (If this email has reached you in error, please forward it to the appropriate faculty member and thank you in advance for doing so).

A goal of this survey is to better understand how CITs’ experiences in the practicum may vary. In particular, I am interested in learning which factors that may be associated with CITs’ confidence during their experience in practicum training process.

I would like to notify you that this survey research has been approved by the University of Mississippi’s Institutional Review Board (IRB Protocol # 18x-244). I would also like to notify you ahead of time that I will send two follow up emails.

Dear Counselors-In-Training,

Hope this email finds you well.

I understand that you have successfully completed your preliminary courses prior to beginning this practicum and are now at the stage of practicing professional counseling activities.

The questionnaire should take about 25 minutes to complete. I greatly appreciate your help in spending your precious time sharing some of your practicum experience. To complete the questionnaire, simply click on the link below and you will automatically be logged into the survey.

http://uofmississippi.qualtrics.com/jfe/form/SV_1zy9Jb1zLs6xuW9
This survey is confidential. Your individual answers will not be linked with your name or department in any reports of the data. Your participation is voluntary and if you at any point decide that you do not want to continue, you can choose to exit the online survey at any time. Should you have any questions or comments, please feel free to contact me (amohdnoo@go.olemiss.edu) or my chair advisor, Dr. Suzanne Dugger (smdugger@olemiss.edu).

As a way of saying thank you to those who complete the survey, you will have the opportunity to win one out of six $25 Amazon.com gift cards. Also, if you would like to know the result of the study, please click “yes” in the raffle interface.

Again, I very much appreciate your attention considering my request and invitation for this study and also your help should you choose to participate. Take care.

Many thanks
Amelia Binti Mohd Noor
Doctoral candidate
Department of Leadership and Counselor Education
University of Mississippi, MS
Appendix J: First Reminder Email

Subject: How do you perceive your practicum experience?

Dear Dr. ______,

I hope you are doing well.

Last week I sent an email to you requesting your consideration in forwarding an invitation for Counselors-In-Training (CITs) to participate in the Counselors-In-Training Practicum Experience Survey.

The primary criterion for participation in this survey is that participants be CITs who are currently enrolled in or just finished their practicum in the clinical mental health counseling (CMHC) program. I am requesting your help again because the future findings of this survey (i.e., an accurate description of how CITs may have associated with their current practicum experience) depend on hearing from those who have not yet responded. Therefore, I need your help to ensure the results are as representative and accurate as possible.

If you have already disseminated this survey to any appropriate CITs in your program, I am truly appreciative of your willingness and your help. If you have not forwarded the email yet, would you please consider again allowing the CITs to have the opportunity to participate in this survey? Thank you very much in advanced.

Dear Counselors-In-Training,

Hope this email finds you well.

I understand that enrolling in the practicum gives you the experience to practice counseling at new and different levels in your professional development. I would be very interested in hearing about your experiences through a survey. To complete the survey, simply click on this link:

http://uofmississippi.qualtrics.com/jfe/form/SV_1zy9Jb1zLs6xuW9

Responses to the survey are confidential and will not be connected to your name in any report of the data. You may wonder why I am inviting you to complete this survey quite near the end of the semester. I do this in order to get your holistic opinion regarding the practicum experience as you undergo your first steps of the clinical training process. For this reason, it seemed particularly important to do the survey within this particular period of the semester.
If you have any questions about the survey, please do not hesitate to contact me (amohdnoo@go.olemiss.edu) or my chair advisor, Dr. Suzanne Dugger (smdugger@olemiss.edu).

Upon having completed the survey, you will be eligible to enter into a raffle for one out of six $25 Amazon.com gift cards as a token of appreciation. Also, if you would like to know the result of the study, please click “yes” in the raffle interface.

Thank you so much for considering my request during this very busy time of the semester and take care.

Many thanks
Amelia Binti Mohd Noor
Doctoral candidate
Department of Leadership and Counselor Education
University of Mississippi, MS
Appendix K: Second and Final Reminder Email

Subject: Last Chance to Voice Your Opinion About the Practicum Experience

Dear Dr. ______,

I hope you are doing well.

Recently I sent an email requesting your help in kindly forwarding a survey that seeks information about how Counselors-In-Training (CITs) may have associated with their practicum experiences. If you already forwarded this survey to the CITs, I would like to thank you very much. I greatly appreciate your help.

If you have not forwarded the email yet, would you consider disseminating this survey invitation to the CITs who are currently enrolled in or just finished their practicum in the clinical mental health counseling (CMHC) program? As the survey is drawing to a close, your willingness and effort to pave the way for me to collect representative results is greatly appreciated.

Dear Counselors-In-Training,

I hope your day is off to a good start. I am writing to follow up on the message I sent previous weeks inviting you to participate in the Counselors-In-Training Practicum Experience Survey. The survey is important because current CITs who are undergoing the practicum are the only source I have for getting truly representative opinions from the masters’ level graduate students in a CMHC program.

As this is the last reminder I am sending about the study, I would greatly appreciate it if you are able to spend some time completing the survey. It should only take about 25 minutes to complete. To fill out the questionnaire, click on the web address link below:

http://uofmississippi.qualtrics.com/jfe/form/SV_1zy9Jb1zLs6xuW9

If you have already completed the survey, I am very much obliged to you for your participation in helping me to have a better understanding of your true experience in the practicum.

Should you have any questions or are interested in seeing a summary of results, please email me (amohndnoo@go.olemiss.edu) or my chair advisor, Dr. Suzanne Dugger (smdugger@olemiss.edu).
In the meantime, I would like to wish you in advance an enjoyable semester break. Thank you so much for your help and take care.

Many thanks,
Amelia Binti Mohd Noor
Doctoral candidate
Department of Leadership and Counselor Education
University of Mississippi, MS
Appendix L: Consent Form

Consent to Participate in Research

Study Title: The relationship of supervisory styles and differentiation of self to the counseling self-efficacy of counselors-in-training in the masters’ level practicum.

Principal Investigator
Amelia Binti Mohd Noor
Doctoral Candidate
Department of Leadership &
Counselor Education
University of Mississippi, MS
amohdnoo@go.olemiss.edu

Dissertation Chair
Suzanne Dugger, Ph.D.
Professor
Department of Leadership &
Counselor Education
University of Mississippi, MS
smdugger@olemiss.edu

By clicking “Yes,” I am certifying that I am 18 years of age or older.
Yes No

This document is a consent form, which is intended to give you general information about the study. The consent form represents a legal document; therefore, please read this document very carefully before giving your consent. Consent is given by clicking “I agree” at the end of this form. If you have any questions about this consent form or would like to have a copy of it, please email the principal investigator.

Description
The purpose of this study is to examine the factors that may be associated with Counselors-In-Training (CITs) competency in counseling.

What you will do for this study
You will fill out four surveys:
- The competence survey, which asks about your perceived capability of performing counseling,
- The developmental survey, which asks about your perceived attitude about yourself,
- The supervision approach survey, which asks about your perception of the supervision approach that is exhibited by your supervisor, and
- The demographic survey.

Time Required for this Study
This study will take approximately 25 minutes or less.

Benefits from Your Participation
Completing this survey may enhance your personal awareness of your own thoughts about, feelings toward, beliefs about, and behaviors toward yourself and others. Further, information gained from this study may inform changes to counselor preparation programs.
**Possible Risks from Your Participation**
There are no known risks associated in this study. However, some questions on the surveys are reflective in nature. Should any of the questions on the surveys may raise personal concerns that you would like to discuss further, you can contact your university’s counseling center.

**Cost**
There is no cost for participating in this study, except the time. You will have to dedicate approximately 25 minutes of your time to finish the surveys. Your identity and responses will be completely anonymous.

**Incentives**
You may choose to enter into a raffle for one of six $25 Amazon.com gift cards. If you are interested in entering the raffle, you will be asked to click a link at the end of this survey and enter your email address for the use of sending the gift card to you on the occasion that you win one. This information will not be connected to your responses because if you decide to enter the raffle, you will be directed to another link that is not related to the link for the surveys. Also, if you would like to know the result of the study, please do so by clicking “yes” after you enter the raffle interface link.

**Confidentiality**
I understand that the researchers have access to the anonymous responses and that the researchers will maintain confidentiality in accordance with the ethical guidelines and legal requirements of their profession. All responses from surveys will only be used for education and/or research purposes.

**Right to Withdraw**
The participation in this study is completely voluntary. You can choose to be in the study or not. If you begin participating in the study and decide that you do not want to finish, you may close your browser to exit the survey, or you may inform the principal investigator by email (amohdnoo@go.olemiss.edu). Whether you choose to participate or to withdraw from the study, it will not affect your standing within your current graduate program, nor it will cause you to lose any benefits to which you are entitled. Your decision to withdraw at any time will be respected.

**IRB Approval**
This study has been reviewed by The University of Mississippi’s Institutional Review Board (IRB Protocol # 18x-244). The IRB has determined that this study fulfills the human research subject protection obligations required by state and federal law and University policies. If you have any questions, concerns, or reports regarding your rights as a participant of research, please contact the IRB at (662) 915-7482 or irb@olemiss.edu.
Statement of Consent
I certify that I have read, understand, and agree to abide by the information outlined above regarding this study. I hereby give my consent to authorize the University of Mississippi to evaluate or assist as needed. I have had the opportunity to discuss any questions regarding the above information.

By clicking “I agree,” I am giving consent to voluntarily participate in the study.

I agree                                          I do not consent
Appendix M: Incentive Information Page

*This incentive link page appears once the participants have completed the survey.

Dear Counselors-In-Training,

As a way to express my gratitude to you for your participation in completing this survey, you are eligible to enter into a raffle to win one out of six $25 Amazon.com gift cards.

Once you have clicked the link, you will be asked to enter your email address so that I may send the gift card to you on the occasion that you win one. As clicking the link will direct you to a different Web address, the requested information will not be connected to your responses.

Also, if you would like to know the results of the study, please do so by clicking “yes” after you enter the raffle interface link.

If you are interested in entering the raffle, please click the link:

http://surveydirector.qualtrics.com/SD/?Q_SDID=SD_1SxpwDSfDUnq14x

Again, I very much appreciate your help in completing this survey. Take care.

Many thanks,
Amelia Binti Mohd Noor
VITA

Amelia Binti Mohd Noor
amelia@fpm.upsi.edu.my

EDUCATION

Ph.D. in Counselor Education and Supervision, 2018
University of Mississippi, Oxford, MS
- CACREP Accredited Program in Counselor Education and Supervision
- Dissertation Title: The relationship of supervisory styles and differentiation of self to the counseling self-efficacy of counselors-in-training in the masters’ level practicum
- Dissertation Committee Chair: Suzanne Dugger, Ed.D
- Cognate Area: Play Therapy
- Professional Intern: Center for Excellence in Teaching and Learning/ Center for Student Success & First-Year Experience
- Faculty Supervisors: Marc Showalter, Ph.D and Suzanne Dugger, Ed.D
- Site Supervisor: Rebekah Reysen, Ph.D
- Doctoral Clinical Practica: Supervision for Clinical Mental Health Counseling practicum (Marc Showalter, Ph.D) & School Counseling practicum (Amanda Winburn, Ph.D)
- Presentation: Noor, A. M. & Terrell, K. R. (2015). Essential qualities for professional helpers: How can they be identified, personified, and sustained? Presented at Woodall Spring Conference for the Helping Professions: Delta State University, Cleveland, MS, USA
- Conferences Attended: Mississippi Association for Play Therapy Spring 2015 Conference. Hosted by DSU Play Therapy Training Institute, Cleveland, MS & Association for Counselor Education and Supervision (ACES) 2013 Conference. Hosted by ACES, Denver, CO, USA

Master of Social Science in Counseling Psychology, 2005
The National University of Malaysia (Universiti Kebangsaan Malaysia –UKM), Bangi, Selangor, Malaysia
- Thesis Title: Family Functioning: A survey based on quality of life and demographic factors among female delinquents
- Thesis Supervisor: Fatimah Yusooff, Ph.D
- **Professional Intern**: Psychiatric Unit of Children and Adolescents, UKM Medical Center, Selangor, Malaysia & SMK Bandar Baru Bangi, Bangi, Selangor, Malaysia
- **Faculty Supervisor**: Fatimah Yussoff, Ph.D
- **Site Supervisor**: Dr. Zamani Shafiee (Psychiatry Specialist) & Mr. Ek Zakuw Kyal

**Bachelor of Science with Education in Guidance and Counseling, 2002**
*Universiti Teknologi Malaysia - UTM, Skudai, Johor, Malaysia*
- **Final Year Project Title**: The factors that influence teachers’ understanding of moral values
- **Final Year Project Supervisor**: Lokman Hakim, Ph.D
- **Professional Intern**: SMK Infant Jesus Convent (High School), Johor Bahru, Johor, Malaysia & SMK Taman Pelangi (High Schools), Johor Bahru, Johor, Malaysia
- **Faculty Supervisor**: Dato’ Muhd Mansur Abdullah, Ph.D & Mr. Zainal Abidin Mohd Hashim
- **Minor**: History
- **Professional Intern (Minor in History)**: SMK Sri Tebrau, (High School), Johor Bahru, Johor, Malaysia
- **Faculty Supervisor**: Tan Soo Yin, Ph.D
- **Site Supervisor**: Mdm. Wan Lai Lee

**EMPLOYMENT**

- Lecturer, Department of Counseling and Psychology, Faculty of Human Development, Sultan Idris Education University, Perak, Malaysia. 2006 – present.
- Tutor, Department of Guidance and Counseling, Faculty of Science Cognitive and Human Development, Sultan Idris Education University, Perak, Malaysia. 2003 – 2006.
- Substitute Teacher, SRK Pusat Bukit Besar, SRK Sultan Sulaiman I, and SRK Wakaf Mempelam (Primary Schools), Terengganu, Malaysia. Several months in year 2001, 2000, and 1999.

**AWARDS AND HONORS**

- *Anugerah Perkhidmatan Cemerlang – APC* (Excellent Service Award) Academic Staff, Sultan Idris Education University, 2013.
- *Anugerah Perkhidmatan Cemerlang – APC* (Excellent Service Award) Academic Staff, Sultan Idris Education University, 2010.

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- Dean Award, Undergraduate Academic Achievement, *Universiti Teknologi Malaysia – UTM*, 2002.
- Outstanding Student Award for *Sijil Pelajaran Malaysia – SPM*, Terengganu, Malaysia, 1997.

PROFESSIONAL CERTIFICATION

- Registered Counsellor, *Lembaga Kaunselor Malaysia* (Malaysia Board of Counsellors) – #KB02367
- Certified Licensing for Professional Practice, *Lembaga Kaunselor Malaysia* (Malaysia Board of Counsellors) – #PA01791

PROFESSIONAL MEMBERSHIPS

- Life membership of *Persatuan Kaunseling Malaysia Internasional – PERKAMA* (International Malaysian Counselling Association) – #ASH00302
- Life membership of *Persatuan Psikologi Malaysia – PSIMA* (Malaysian Psychological Association) – #B258/11
- Membership of American Counseling Association (ACA) – #6388020
- Membership of Association for Counselor Education and Supervision (ACES)
- Membership of Southern Association for Counselor Education and Supervision (SACES)

PROFESSIONAL SERVICES

- Panel Assessor of Malaysian Qualification Agency (MQA), 2011 – 2013 & 2018 – present (for Counselling Programs & for Psychology Programs).

FUNDED GRANTS

- 103, 170.00 MYR

- 6, 100.00 MYR

- 9, 000.00 MYR

- 40, 000.00 MYR

- 42, 500.00 MYR

- 2, 000.00 MYR
PUBLICATIONS (Articles)


PUBLICATIONS (Book Chapter and Modules)


CONFERENCE PRESENTATIONS

Noor, A. M. & Terrell, K. R. (2015, April). Essential qualities for professional helpers: How can they be identified, personified, and sustained? Presented at Woodall Spring Conference for the Helping Professions: Delta State University, Cleveland, MS, USA


Aslina Ahmad, Ab Aziz Mohd Yatim, Ahmad Jazimin Jusoh, Amelia Mohd Noor, & Md Noor Saper (2013, August). Using Prodigy in increasing school motivation among Malaysian Children: A case study in a school in a rural area in Perak. 3rd Asia Pacific Rim International Counselling & Psychotherapy Conference, Malaysia

Amelia Mohd Noor, Aslina Ahmad, Ab Aziz Mohd Yatim, & Chee Chew Sim. (2012, October). Mindfulness for personal development as effective helper. 5th UPSI-UPI Conference on Education, Malaysia

Aslina Ahmad, Amelia Mohd Noor, Ab Aziz Mohd Yatim, & Taquddin Abd Mukti. (2012, October). Enhancing trust among trainee counselors. 5th UPSI-UPI Conference on Education, Malaysia


