

Trainee's anxiety and counseling self-efficacy in counseling sessions

by

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ABSTRACT

The purpose of this study was first to develop and validate the Trainee's Anxiety in Clinical Work (TACW) scale. A total of 235 counselor trainees recruited nationally participated an online study at two different time points. The dataset was divided for exploratory factor analysis (Sample A; $n= 118$) and for confirmatory factor analysis (Sample B; $n= 117$). Three factors were identified, Supervisor's Negative Evaluation ($\alpha = .90$), Advanced Counseling Skills ($\alpha = .81$), and Client's Negative Evaluation ($\alpha = .77$). The coefficient alpha for the TACW was .87. The TACW significantly predicted counseling self-efficacy over and above trait anxiety. The test-retest reliabilities ranged from .66 to .74 for the TACW and its three subscales. A paired-samples t-tests indicated that TACW is sensitive to detect the change for counselor trainee's anxiety in clinical work from the beginning to the end of practicum. Next, based on the Social Cognitive Model of Counselor Training (SCMCT) proposed by Larson (1998), this study conducted a cross-lagged panel model to examine the causal relationships among trainee's anxiety in clinical work, supervisory working alliance, and self-compassion and how those factors impacted trainee's counseling self-efficacy. The results found that supervisory working alliance at Time 1 and self-compassion at Time 1 would contribute to lessening trainee's anxiety in clinical work at Time 2, which in turn, would relate to their counseling self-efficacy at Time 2. The result for this model was after controlling for number of completed practicum. Finally, results from hierarchical regression analyses indicated that after controlling for number of completed practicum, the interaction of supervisory working alliance at Time 1 and trainee's anxiety in clinical work at Time 1 significantly predict counseling self-efficacy at Time 2. However, the interaction of self-compassion at Time 1 and trainee's anxiety in clinical work at

Time 1 did not significantly predict counseling self-efficacy at Time 2. Specifically, results from simple effects indicated trainees with higher anxiety in clinical work (Time 1), the association between supervisory working alliance (Time 1) and counseling self-efficacy (Time 2) was significantly positive. However, for trainees with lower anxiety in clinical work (Time 1), the association between supervisory working alliance (Time 1) and counseling self-efficacy (Time 2) was not significant. In other words, counseling self-efficacy (Time 2) would remain relatively high no matter the levels of supervisory working alliance (Time 1). Alternatively, results from simple effects revealed that trainees with lower supervisory working alliance (Time 1), the association between trainee's anxiety in clinical work (Time 1) and counseling self-efficacy (Time 2) was significantly negative. However, for trainees with higher supervisory working alliance (Time 1), the association between trainee's anxiety in clinical work (Time 1) and counseling self-efficacy (Time 2) was not significant. That is to say, counseling self-efficacy (Time 2) would remain high regardless the levels of trainee's anxiety in clinical work (Time 1).

CHAPTER 1

INTRODUCTION

Trainee's Anxiety in Clinical Work and Counseling Self-Efficacy

Entering into a helping profession, such as counseling, may make counseling trainees feel both excited and anxious. It is rewarding for trainees to watch clients make progress or work through their presenting issues. Trainees may think that their clinical work has paid off when clients increase their self-awareness and insight of their presenting issues or when counseling helps to relieve clients' presenting symptoms. However, the journey of becoming a therapist can also involve several challenges. Working with a client in counseling sessions is an anxiety-evoking situation (Bowman, Roberts, & Giesen, 1978). During the counseling process, trainees may find anxiety provoking moments unavoidable in counseling sessions with clients.

Trainees' anxiety in counseling sessions may be viewed as a threat to the ego's integrity (Menninger, 1990). A manageable level of anxiety can be motivation for counselor trainees' growth and acquisition of counseling skills. However, if counselor trainees failed to regulate their anxiety in the counseling sessions, their anxiety during the counseling sessions may be channeled into their work with a client which may limit their functioning as an effective counselor (Morrisette, 1996). Theoretically, trainee's counseling self-efficacy 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 (1998) indicated that negative emotion such as anxiety may impair trainees' counseling self-efficacy. Empirically, some studies have shown that high levels of anxiety were negatively associated with counseling performance and counselors' effectiveness in providing service to their clients (e.g., Clark, Murdock, & Koetting, 2009;

Fothergill, Edwards, & Burnard, 2004; Larson & Danial, 1998; Levitt, 2001; Wilkerson, 2009). These results indicate that higher levels of anxiety may impair trainees' self-efficacy and hinder their relationships with clients or impact the quality of treatment provided.

Based on existing literature, trainee's anxiety in counseling sessions can be categorized into two levels: personal level and professional level. On the personal level, anxiety in counseling sessions is related to concerns about not being good enough (i.e., perfectionism) (Corey, 2008), concerns about negative evaluation (Brala, 1983; Corey, 1996) and concerns about being out of control (Corey, 2008). On the professional level, anxiety in counseling sessions is related to concerns about building rapport (Hill, Sullivan, Knox, & Schlosser, 2007) and concerns about competence in utilizing advanced counseling skills (Theriault & Gazzola, 2006).

In terms of personal level, the first common anxiety among trainees in counseling sessions is concerns about not being good enough (i.e., perfectionism) (Corey, 2008). Those with perfectionism tendencies are likely to pay excessive attention to their own mistakes (Frost, Marten, Lahart, & Rosenblate, 1990), engage in self-doubt and self-criticism (Blatt, 1995), have unrealistic expectations, or experience discrepancy between expectations and performance (Slaney, Rice, Mobley, Trippi, & Ashby, 2001). Prior research has indicated that some therapists are likely to have unrealistic expectations that one should perform at highest efficiency and competence with all clients at all times (Deutsch, 1984). Therefore, for counselor trainees, having anxiety related to perfectionism can be detrimental to their counseling self-efficacy and have a negative impact on their working alliance with clients (Ganske, 2008).

The second most common anxiety among counseling trainees is the fear of a negative evaluation. Trainees with a high fear of negative evaluation may tend to seek approval and avoid

disapproval (Brala, 1983). Those trainees may have a strong desire to be liked and strive for approval from their clients or supervisors as validation of their counseling skills (Corey, 1996). Research has shown that trainees' fear of negative evaluation had a negative association with session management self-efficacy (Wei, Chao, Tsai, & Botello-Zamarron, 2012) and client's satisfaction with therapy (Brala, 1983).

The third most frequent anxiety that trainees report is the fear of being out of control during counseling sessions. One recent qualitative study has shown that not knowing what to do in counseling sessions was one of the most typical anxieties among trainees (Wei et al., 2012). Trainees who fear being out of control may have difficulty in tolerating ambiguity (Corey, 2008). In order to feel in control in counseling sessions, they may take too much responsibility for their clients' progress. They are likely to dwell on the clients' presenting issues outside of the counseling sessions. As a result, their worry may even take over the focus of the session.

In terms of professional level, one component of trainees' anxiety in the session is that trainees may worry about the rapport building with their clients (Hill et al., 2007). A meta-analysis examining the working alliance and outcome found client's self-report of working alliance to be the strongest predictor of overall outcomes ($r = .22$) (Martin, Garske, & Davis, 2000). Although rapport building has an important impact on the client's progress (Rønnestad & Skovholt, 2003), it is common for counselor trainees to report difficulty maintaining emotional connection with clients.

Moreover, trainees' anxiety may come from their concerns about competence in utilizing advanced counseling skills (Therriault & Gazzola, 2006). It is an anxiety provoking situation for trainees to encounter challenging clients (Orlinsky & Rønnestad, 2005) or crisis situations. Counselors reported that the most stressful experience was being unable to help acutely

distressed clients feel better (Rodolfa, Kraft, & Reilley, 1988). Counselors may also be worried about not knowing how to help clients process their deep thoughts and emotions (Tyber, 2006).

The Social Cognitive Model of Counselor Training (SCMCT) Model

Building on Bandura's (1989) social cognitive theory, Larson (1998) proposed the Social Cognitive Model of Counselor Training (SCMCT) by expanding self-efficacy concept in counselor training and supervision. This model suggested that the trainee's personal agency factors (e.g., capacity for self-compassion) and supervisory environment (e.g., supervisory working alliance) have reciprocal causation related to counselor trainees' learning process (e.g., trainee's anxiety in clinical work) and ultimately impact their self-efficacy in counseling.

Research has documented that trainee's counseling self-efficacy has been associated with counselors' performance in counseling (Larson & Daniels, 1998). It is equally important for researchers to examine what factors contribute to trainee's counseling self-efficacy. To this point, only Lent et al. (2009) conducted an empirical study to explore trainee's perceived sources of self-efficacy and their results indicated that trainee's affective states (e.g., self-compassion) and supervision (e.g., supervisory working alliance) were important resources for trainee's counseling self-efficacy. Understanding the resources influencing trainees' counseling self-efficacy would enable training programs to help trainees increase their counseling self-efficacy. Based on prior research, this study examined trainee's anxiety in clinical work, supervisory working alliance, and self-compassion as potential sources for trainee's counseling self-efficacy. *Supervisory Working Alliance, Trainee's Anxiety in Clinical Work, and Counseling Self-Efficacy*

Bordin (1983) suggested that supervisory working alliance comprises three components including the establishment of mutual agreement and understandings regarding the goals of supervision, working on the specific tasks related to goals, and development of a strong

emotional bond (e.g., mutual trust and respect). Supervisory relationships have been viewed as one of the most critical incidents in supervision (Nelson & Friedlander, 2001). Research has shown that a good supervisory working alliance is likely to help trainees to build their counseling self-efficacy (Efstation, Patton, & Kardash, 1990; Humeidan, 2002; Larson, 1998). From the perspective of the SCMCT model, supervisory relationship is the essential foundation for supervisees to enhance their counseling self-efficacy under the supportive supervisory working alliance (Larson, 1998). Based on the SCMCT model, with strong supervisory working alliance, supervisors can enhance trainees' counseling self-efficacy by providing modeling experiences, supportive encouragement, and feedback for trainees' counseling work (Larson, 1998). In addition, strong supervisory working alliance enables trainees to be more likely to address their anxiety during counseling sessions (Spence, Wilson, Kavanagh, Strong, & Worrall, 2001). One study found that there was a negative association between supervisory working alliance and trainee's anxiety (Mehr, Ladany, & Caskie, 2010).

Self-Compassion, Trainee's Anxiety in Clinical Work, and Counseling Self-Efficacy

Self-compassion consists of three elements, including self-kindness, common humanity, and mindfulness (Neff, 2003a). Specifically, self-kindness refers to being kind and understanding toward oneself rather than being harshly self-critical. Common humanity means to perceive one's experiences as part of the larger human experience rather than seeing them as separating and isolating. Mindfulness taps into being aware of painful thoughts and feelings rather than being completely overwhelmed by them (i.e., over-identifying). Research has shown that self-compassion has a negative association with anxiety (Neff, 2003a) and a positive association with self-efficacy (Iskender, 2009). Gilbert (2005) suggested that self-compassion could help individuals calm down by deactivating neurological defensive threat systems. He further

indicated that with self-compassion, individuals may not view anxiety as a threat. Instead, they can view anxiety as a positive challenge or opportunity for growth. In the SCMCT model, Larson (1998) suggested that, in counseling sessions, trainees' anxiety may impair their counseling self-efficacy by altering the trainee's thinking. In addition, anxiety was shown to have negative association with counselor's performance in a mock interview (Larson et al., 1992).

Larson (1998) recommended future research to conduct mediation and moderation analyses to explore the reciprocal relationships among the variables presented in the SCMCT model, such as personal agency variable, environmental factor, and counseling self-efficacy. However, thus far, there has been no empirical research conducted to verify the potential causal relationships among the SCMCT variables. The SCMCT model suggests a causal relationship between trainee's anxiety in clinical work and supervisory working alliance (i.e., one of the training environment factors in SCMCT) and the causal relationship between trainee's anxiety in clinical work and self-compassion (i.e., one of the personal agency factors in SCMCT) and how these variables associate with counseling self-efficacy. To respond the call of Larson's suggestion on future mediation and moderation research using the SCMCT model as well as to address the causal relationships for above variables (i.e., supervisory working alliance, self-compassion, and counseling self-efficacy), this study proposed two sets of mediation hypotheses in a cross-lagged panel model (see Figure 1) and two sets of moderation hypotheses (Figures 2 and 3).

For mediations (see Figure 1), the first set was for trainee's anxiety in clinical work at Time 2 as a mediator: (a1) Supervisory working alliance at Time 1 was expected to be though trainee's anxiety in clinical work at Time 2 (i.e., path a) to impact counseling self-efficacy at Time 2 (i.e., path b); (a2) Self-compassion at Time 1 was expected to be through trainee's

anxiety in clinical work at Time 2 (i.e., path c) to impact counseling self-efficacy at Time 2 (i.e., path b).

In the same way, the second set mediation hypotheses was for supervisory working alliance at Time 2 as a mediator and the other was for self-compassion at Time 2 as a mediator:

(b1) Trainee's anxiety in clinical work at Time 1 was expected to be through supervisory working alliance at Time 2 (i.e., path d) to impact counseling self-efficacy at Time 2 (i.e., path e);

(b2) Trainee's anxiety in clinical work at Time 1 was expected to be through self-compassion at Time 2 (i.e., path f) to impact counseling self-efficacy at Time 2 (i.e., path g).

For moderations, the first set (see Figure 2) was for trainee's anxiety in clinical work at Time 1 as a moderator: (c1) Trainee's anxiety in clinical work at Time 1 would moderate the association between supervisory working alliance at Time 1 and counseling self-efficacy at Time 2; (c2) Trainee's anxiety in clinical work at Time 1 would moderate the association between self-compassion at Time 1 and counseling self-efficacy at Time 2.

Likewise, the second set (see Figure 3) was for supervisory working alliance at Time 1 and self-compassion at Time 1 as moderators: (d1) Supervisory working alliance at Time 1 would moderate the association between trainee's anxiety at Time 1 and counseling self-efficacy at Time 2; (d2) Self-compassion at Time 1 would moderate the association between trainee's anxiety at Time 1 and counseling self-efficacy at Time 2. The following section would provide the rationales for each mediation and moderation hypotheses.

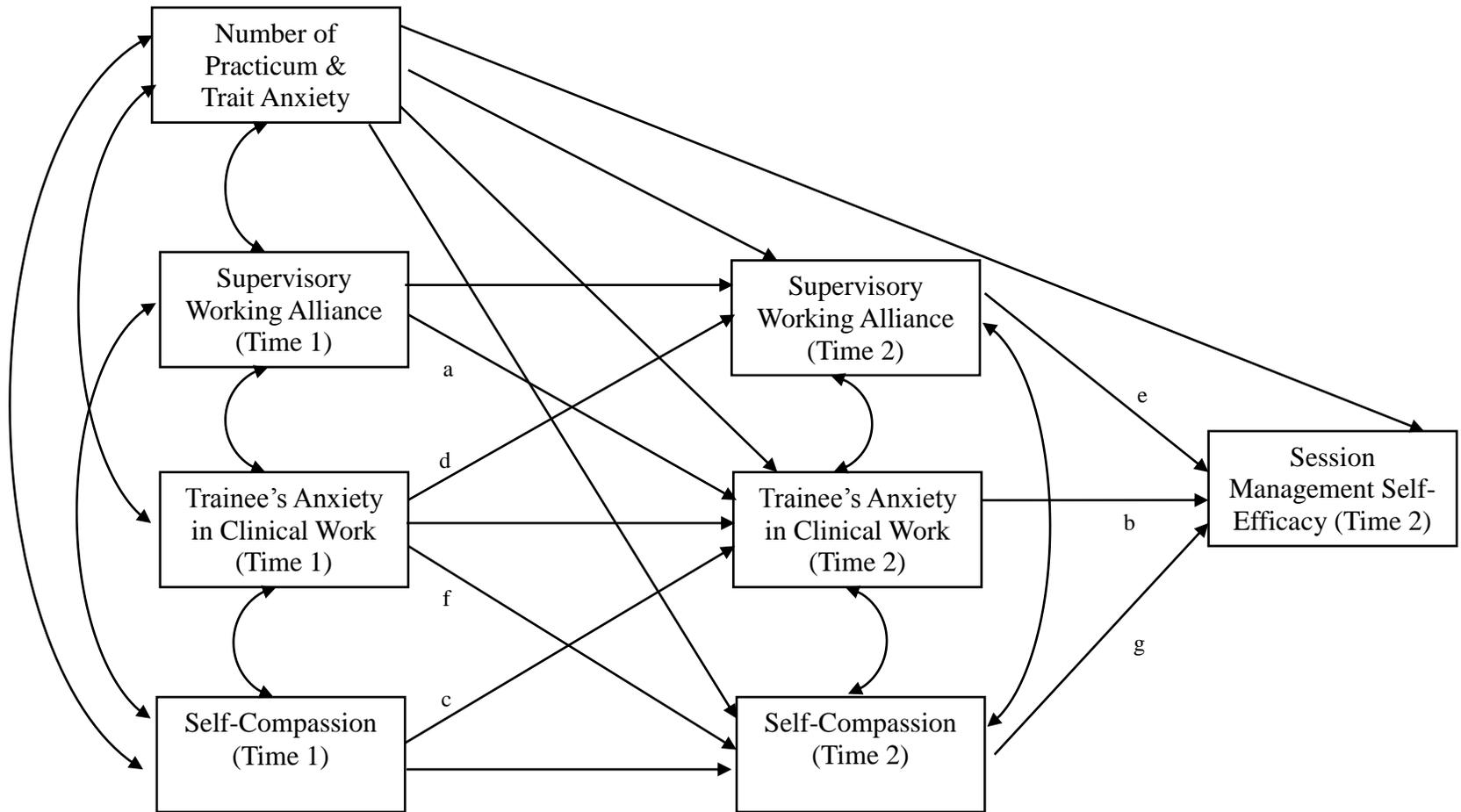


Figure 1. The Conceptual Model for the Cross-Lagged Mediation Hypotheses

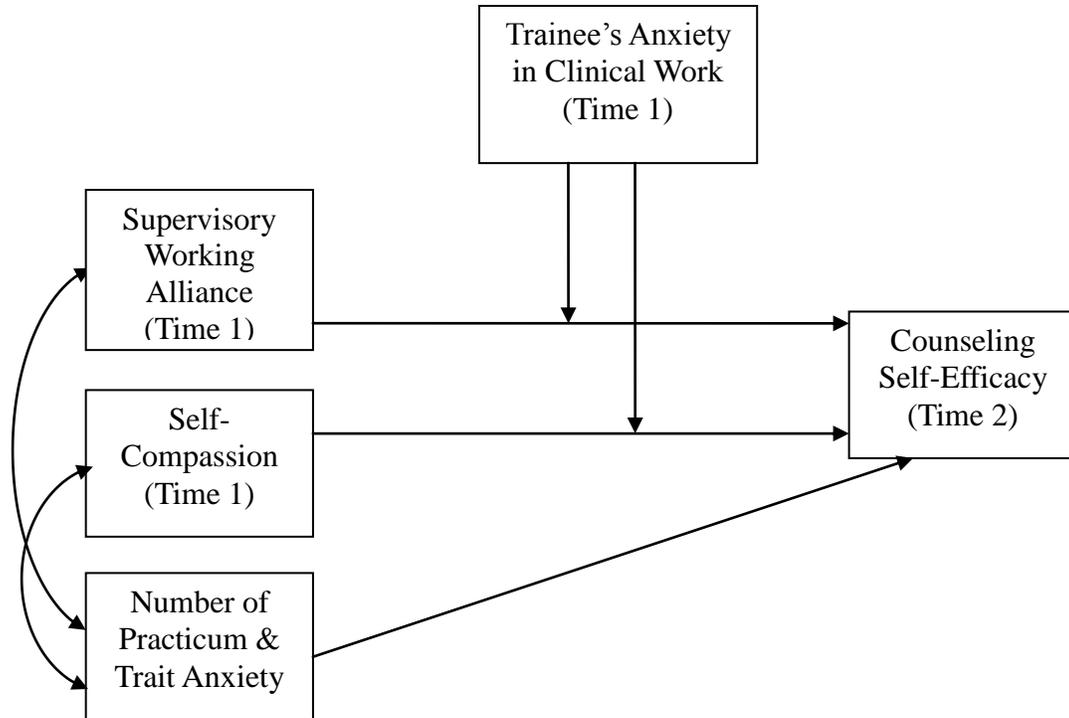


Figure 2. The Conceptual Model for the Moderation Hypotheses- Trainee's Anxiety in Clinical Work at Time 1 as a Moderator

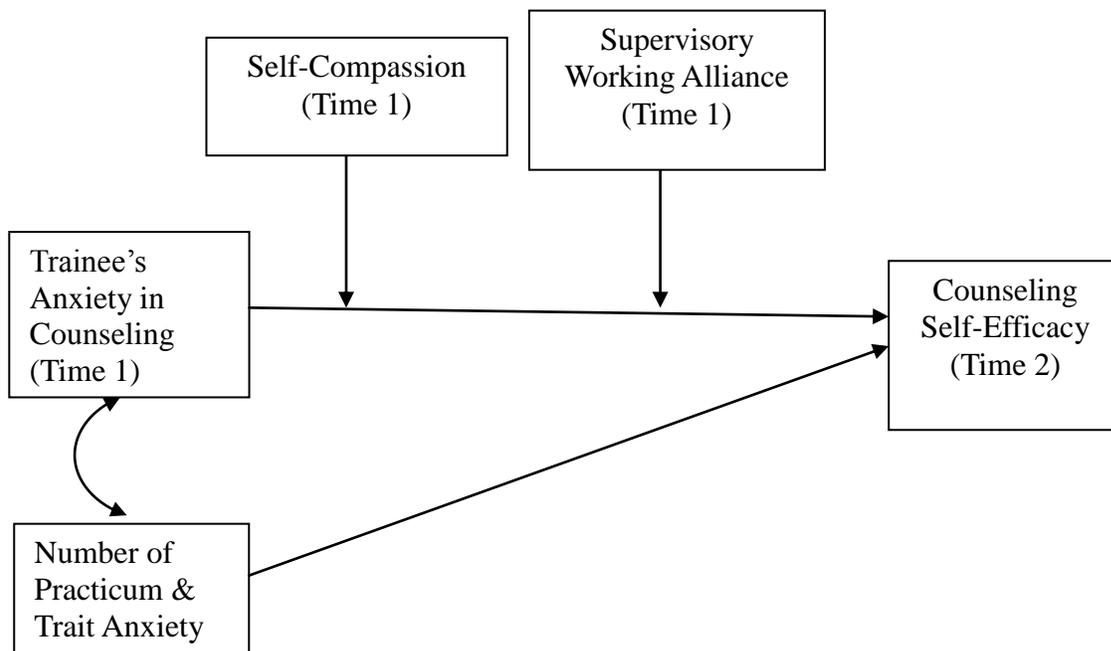


Figure 3. The Conceptual Model for the Moderation Hypotheses- Self-Compassion at Time 1 and Supervisory Working Alliance at Time 1 as Moderators

Rationales for Mediation Hypotheses

In hypothesis (a1), trainee's anxiety in clinical work at Time 2 would mediate the link between supervisory working alliance at Time 1 and counseling self-efficacy at Time 2. The rationale was based on the concept that building a sound supervisory working alliance earlier in the supervision process would make trainees feel understood by their supervisors and enable trainees to openly discuss difficulties in their clinical work which in turn would have a positive association with counseling self-efficacy. Prior research found that addressing supervisory working alliance in the earlier supervision would help trainees develop greater comfort with being evaluated (Parcover & Swanson, 2013). Also, in Parcover and Swanson's (2013) study, they revealed that with stronger supervisory working alliance, trainees were more likely to discuss their learning needs in supervision, and in turn they are more likely to receive desired guidance to help them regulate their anxiety in clinical work.

Regarding the hypothesis (a2), trainee's anxiety in clinical work at Time 2 would mediate the link between self-compassion at Time 1 and counseling self-efficacy at Time 2. There is one possible reason for this hypothesis. Trainees who have already developed the ability to use self-compassion are better able to regulate later anxiety in clinical work through treating themselves kindly and without being judgmental, which in turn would be beneficial for their counseling self-efficacy. Mindfulness has been found to significantly and positively associate with counseling self-efficacy (Wei, Tsai, Lannin, Du, & Tucker, 2014).

For hypothesis (b1), supervisory working alliance at Time 2 would mediate the link between trainee's anxiety in clinical work at Time 1 and counseling self-efficacy at Time 2. It is possible that trainees with less anxiety earlier would allow them to have more psychological space to engage in building greater supervisory working alliance later on, which in turn would

help the development of counseling self-efficacy. Gnilka et al.'s (2012) found that there was a negative association between trainee's perceived stress and supervisory working alliance. In addition, there was a negative association between work-related stress (e.g., personal strain) and supervisory working alliance (Sterner, 2009). Therefore, it was hypothesized that supervisory working alliance would mediate the relationship between trainee's anxiety and counseling self-efficacy.

Regarding hypothesis (b2), self-compassion at Time 2 would mediate the link between trainee's anxiety in clinical work at Time 1 and counseling self-efficacy at Time 2. A possible explanation is that when trainees have low anxiety earlier would make them likely to access their internal resource (e.g., self-compassion) in the future, which in turn would increase their counseling self-efficacy. Research has demonstrated that there was a significant negative association between anxiety and self-compassion (Neff, 2003a). For example, in Shapiro et al.'s (2007) study, they found that compared with the control group, trainees who participated in a mindfulness-based stress reduction program were better in regulating their emotional state. Moreover, self-compassion has been found to significantly and negatively associate with counseling self-efficacy (Wei et al., 2014). Therefore, it is possible that the association between trainee's anxiety at Time 1 and counseling self-efficacy at Time 2 would be mediated through self-compassion at Time 2.

Rationales for Moderation Hypotheses

This study also hypothesized two sets of moderation hypotheses.

For hypothesis (c1), trainee's anxiety in clinical work at Time 1 would moderate the association between supervisory working alliance at Time 1 and counseling self-efficacy at Time 2 (see Figure 4). Specifically, this study expected that, for trainees with high anxiety in clinical

work at Time 1, the association between supervisory working alliance (Time 1) and counseling self-efficacy (Time 2) would be significantly positive. It is possible that trainees with higher anxiety in clinical work can benefit from strong supervisory working alliance to help them manage their anxiety. With sound supervisory working alliance, trainees would feel comfortable talking about difficult experiences and vulnerability in clinical work and feel they were understood by their supervisor (Efstation et al., 1990). Based on the perspective of the SCMCT, supervisors are able to provide realistic and supportive encouragement for trainees to be more efficacious with clients only when a sound supervisory working alliance is already present (Larson, 1998). However, for trainees with lower anxiety in clinical work (Time 1), it is expected that the association between supervisory working alliance (Time 1) and counseling self-efficacy (Time 2) would not be significant. It is possible that for trainees with lower anxiety at Time 1, they may already know how to regulate their anxiety in clinical work. Therefore, regardless of the level of supervisory working alliance, they are able to maintain their self-efficacy at a higher level.

Regarding the hypothesis (c2), trainee's anxiety in clinical work at Time 1 would moderate the association between self-compassion at Time 1 and counseling self-efficacy at Time 2 (see Figure 5). Specifically, this study expected that for trainees with higher anxiety in clinical work at Time 1, the association between self-compassion (Time 1) and counseling self-efficacy (Time 2) would be significantly positive. It is likely that trainees with higher anxiety may benefit from self-compassion to help them regulate their anxiety. McCollum and Gehart (2010) suggested that mindfulness practice would help trainees feel centered and be present in their sessions. However, for trainees with lower anxiety in clinical work (Time 1), it is expected that the association between self-compassion (Time 1) and counseling self-efficacy (Time 2)

would not be significant. The reason is that trainees with lower anxiety in their clinical work at Time 1 may already regulate their anxiety well. Therefore, they are still being able to maintain their counseling self-efficacy at a high level at time 2 no matter their level of self-compassion at Time 1.

In this study, it is expected that (d1) supervisory working alliance at Time 1 would moderate the association between trainee's anxiety at Time 1 and counseling self-efficacy at Time 2 (see Figure 6). Specifically, this study expected that for trainees with a lower level of supervisory working alliance, there would be a negative relationship between trainees' anxiety and counseling self-efficacy. It is possible that trainees with lower supervisory working alliance in the supervision at Time 1 may lack an emotional bond with their supervisor. They may feel vulnerable and less likely to disclose their anxiety in supervision sessions (Mehr et al., 2010). Their anxiety may get in the way of their counseling self-efficacy. Based on the above rationales, it is hypothesized that for trainees with lower supervisory working alliance, there would be a significantly negative association between their anxiety and counseling self-efficacy.

Conversely, it is expected that, for trainees with higher supervisory working alliance, their counseling self-efficacy may maintain at a higher level regardless of their anxiety in counseling sessions. The possible explanation is that trainees with higher supervisory working alliance in the supervision at Time 1 tend to have a greater emotional bond with their supervisor. With greater emotional bond, trainees may feel more comfortable with supervision (Ladany, Ellis, & Friedlander, 1999) to address their anxiety concerns. Therefore, trainees are likely to regulate their anxiety and reduce its negative impact on their counseling self-efficacy. Following the aforementioned rationale, it was hypothesized that for trainees who have a greater level of supervisory working alliance, the association between trainee's anxiety and counseling self-

efficacy would be small or absent (i.e., counseling self-efficacy remains at a higher level no matter the levels of their anxiety in counseling sessions).

Regarding the hypothesis (d2) self-compassion at Time 1 would moderate the association between trainee's anxiety at Time 1 and counseling self-efficacy at Time 2 (see Figure 7). This study expected that, for trainees with a lower level of self-compassion in their clinical work at Time 1, their counseling self-efficacy would be lower when their anxiety in counseling sessions is higher. It is likely that trainees with lower self-compassion may be self-critical or become consumed by feelings of inadequacy when they encounter anxiety in counseling sessions. Therefore, their anxiety is likely to get in the way of their counseling self-efficacy. Henry, Schacht, and Strupp (1990) found that trainees who are more likely to be critical toward themselves and their clients may lead to negative counseling outcomes. Also, trainees with lower self-compassion in their clinical work at Time 1 may be over-identified or be completely absorbed by their own anxiety. Because they are preoccupied with anxiety, it may be hard for them to focus on the present moment with clients and may freeze their counseling self-efficacy. Based on the above rationales, it was hypothesized that the association between trainee's anxiety and counseling self-efficacy would be significantly negative for trainees who have a lower level of self-compassion at Time 1.

Conversely, it was expected that, for trainees with higher self-compassion in their clinical work at Time 1, their counseling self-efficacy would not significantly drop when they encounter anxiety during a counseling session. That is, their counseling self-efficacy may maintain at a higher level regardless of their anxiety during counseling sessions. It is possible that trainees with higher self-compassion in their clinical work at Time 1 are likely to generate kindness toward themselves in the face of anxiety during counseling sessions and accept their anxious

experience as a shared experience by all counselor trainees. With self-kindness and normalization of their experience, they are more likely to regulate their anxiety in sessions and reduce the likelihood that their anxiety would interfere with their counseling self-efficacy. Prior research has found that those with higher self-compassion would comfort themselves and accept their limitations in the face of perceived inadequacy (Neely, Schallert, Mohammed, Roberts, & Chen, 2009; Neff, 2003a, b; Patsiopoulos & Buchanan, 2011). Based on the above rationale and empirical studies, it is hypothesized that the association between trainee's anxiety and counseling self-efficacy would be small or absent for trainees who have a higher level of self-compassion.

Regarding to potential covariate variables, previous studies have shown that personal anxiety was associated with counseling self-efficacy (Friedlander, Keller, Peca-Baker, Olk, 1986; Larson & Daniels, 1998). In addition, previous studies have shown that length of practicum or internship was associated with counseling self-efficacy (Al-Darmaki, 2004; Tang et al., 2004). Accordingly, in the present study, both moderation and mediation hypotheses controlled for personal anxiety and number of completed practicum (see Figures 1, 2 and 3).

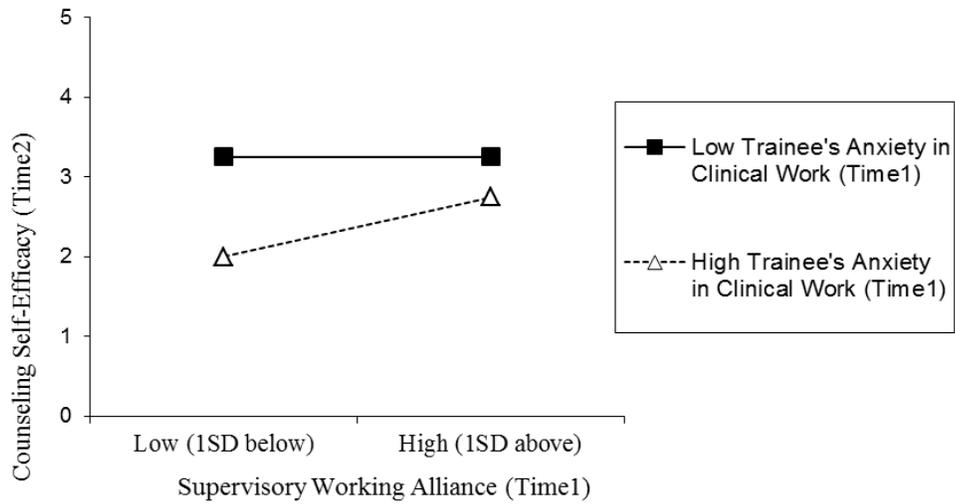


Figure 4. The Hypothesized Moderation Model: Interaction Effects of Supervisory Working Alliance (Time 1) on Counseling Self-Efficacy (Time 2) for Those with Higher and Lower Trainee's Anxiety in Clinical Work (Time 1).

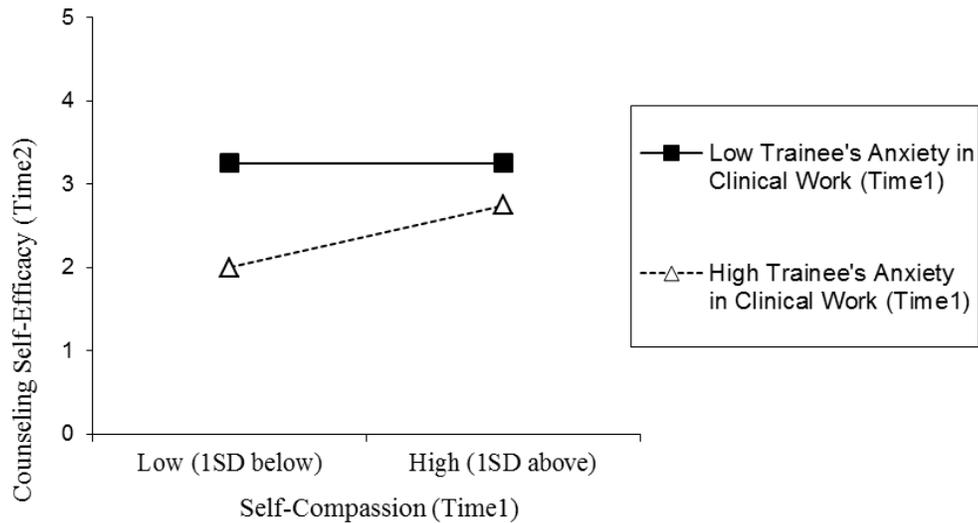


Figure 5. The Hypothesized Moderation Model: Interaction Effects of Self-Compassion (Time 1) on Counseling Self-Efficacy (Time 2) for Those with Higher and Lower Trainee's Anxiety in Clinical Work (Time 1).

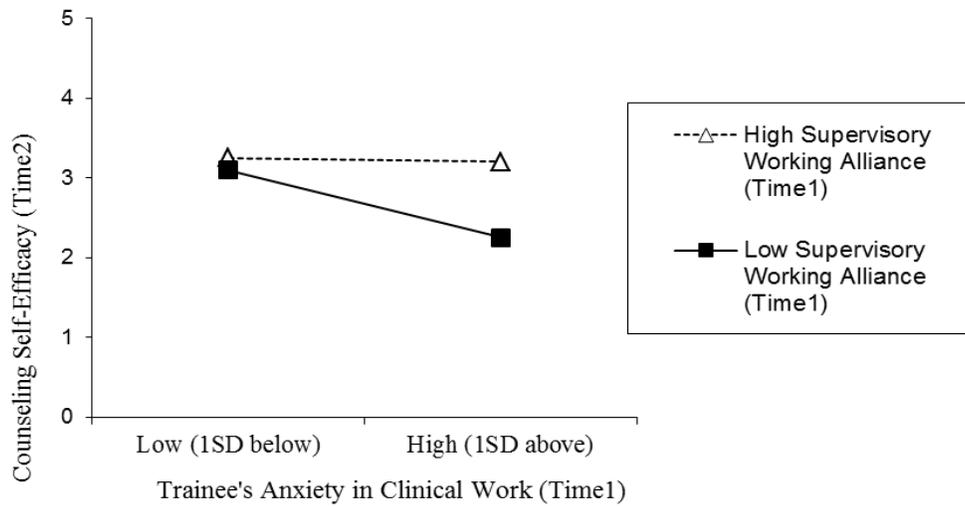


Figure 6. The Hypothesized Moderation Model: Interaction Effects of Trainee's Anxiety in Clinical Work (Time 1) on Counseling Self-Efficacy (Time 2) for Those with Higher and Lower Supervisory Working Alliance (Time 1).

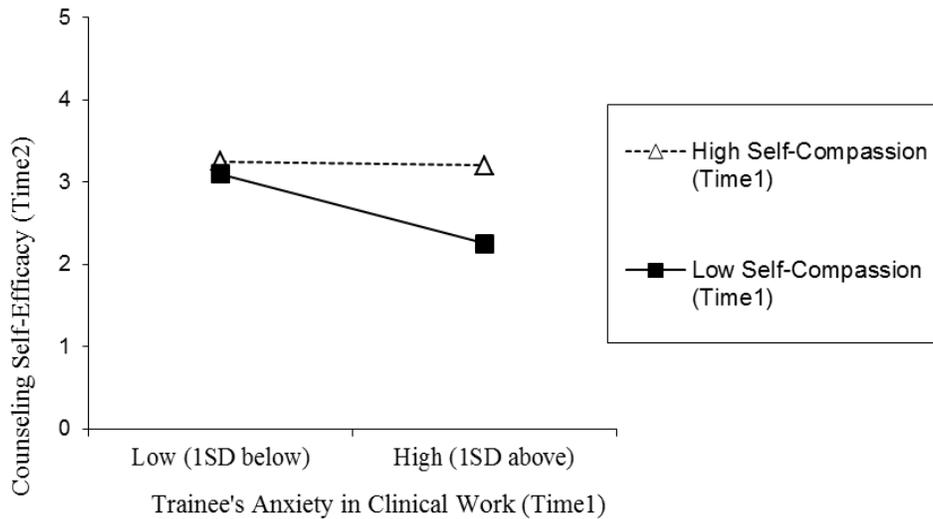


Figure 7. The Hypothesized Moderation Model: Interaction Effects of Trainee's Anxiety in Clinical Work (Time 1) on Counseling Self-Efficacy (Time 2) for Those with Higher and Lower Self-Compassion (Time 1).

CHAPTER 2

LITERATURE REVIEW

The present literature review would be composed of four sections. The first section illustrates trainee's anxiety in clinical work and how this anxiety was related to their counseling self-efficacy. The second section would introduce The Social Cognitive Model of Counselor Training (SCMCT) model. The third section would address the construct of supervisory working alliance and self-compassion. In addition, the third section would describe the casual relationships of these two constructs with trainee's anxiety in clinical work, and how that would be associated with trainee's counseling self-efficacy in the cross-lagged model. Moreover, this section would illustrate how these two constructs interact with trainee's anxiety in clinical work on counseling self-efficacy. Lastly, current study's hypotheses would be listed in the fourth section.

Trainee's Anxiety in Counseling Sessions

Barlow (2000) described the nature of anxiety as "a unique and coherent cognitive-affective structure within our defensive motivational system (p. 1249)" that includes a sense of uncontrollability related to possible future threats, danger, or other upcoming potentially negative events. According to Barlow (2000), individuals may experience anxiety when they perceive inability to predict, control, or obtain desired results or outcomes in certain personally circumstances. The anxiety can be viewed as a signal of threat on one's integrity of the ego (Menninger, 1990). Individuals who believe they can exercise control over potential threat do not engage in apprehensive thinking and are not disturbed by them. However, those who believe they cannot manage threatening events may experience a high level of anxiety arousal (Bandura,

1982). Due to the nature of counseling process which may involve many uncertainties or potential ego- threatening situations (e.g., client's intense emotion, client or supervisor's perception of session, and counselor's performance), counselors are inevitable to experience anxiety in counseling sessions.

It is well documented that counseling is an anxiety evoking experience for trainees (Bowman et al., 1978; Skovholt & Rønnestad, 2003). Bowman and Roberts (1979) found among 28 counselor trainees, those in counseling sessions scored higher on self-report and skin conductance measures of anxiety compared with those in a conversation condition. Hill et al. (2007) conducted a qualitative study to better understand counseling psychology doctoral trainees' experiences related to becoming psychotherapists. Their results indicated that all participants felt quite anxious about meeting clients.

A manageable level of anxiety may serve as a motivation for trainees' growth and mastery (Bandura & Locke, 2003). In addition, Barlow (2000) argued that anxiety reflects one's important capabilities to adapt and plan for the future. However, like two sides of the same coin, excessive or unregulated anxiety may become counterproductive. Researchers have shown that trainees' anxiety in counseling sessions may channel into their work with clients and may interfere with their cognitive functioning and complexity, counseling outcomes, and counseling self-efficacy (Bowman et al., 1978; Daniels & Larson, 2001; Duncan & Brown, 1996; Larson & Daniels, 1998; Williams, Judge, Hill, & Hoffman, 1997). Cognitive complexity in counseling has been linked to many positive counseling characteristics, such as better case conceptualization, more flexibility, less self-focus, better empathy, and better counselor-client relationship (Choate & Granello, 2006). Moreover, trainee's anxiety in counseling sessions may interfere with their cognitive functioning or complexity because they are likely to immobilize themselves when

experiencing extremely tense (Duncan & Brown, 1996). Kelly, Hall, and Miller (1989) conducted a study on counselor's intention and anxiety by observing 38 master's level and doctoral level counseling students and found that anxious counselors tended to rate their sessions unfavorably and be contemptuous of their efforts. Friedlander et al. (1986) found a significant negative association ($r = -.34, p = .007$) between anxiety and self-efficacy expectations among 52 counseling and counseling-related graduate students.

Given the numerous potential negative impacts of anxiety on trainee's clinical work, it is important to explore trainees' anxiety in a systematic way. However, so far, there is scant attention of research in this field. This discrepancy between the intellectual understanding and actually addressing of this topic may be due to high emotional charge of this topic. Warnath (1979) pointed out that counselors may feel reluctant to discuss the discomfort of their clinical work for fear that their colleagues may attribute this disclosure to personal inadequacies or professional deficiencies. As suggested in previous literature on trainee's anxiety, trainee's anxiety in counseling sessions can be categorized into personal level and professional level (Wei et al., 2012). On the personal level, anxiety in counseling session is related to concerns about not being good enough (i.e., perfectionism) (Arkowitz, 1990; Corey, 2008), concerns about negative evaluation (Brala, 1983; Corey, 1996) and concerns about being out of control (Corey, 2008). On the professional level, anxiety in counseling session is related to concerns about building rapport (Hill et al., 2007) and concerns about competence in utilizing advanced counseling skills (Therriault & Gazzola, 2006).

On the personal level, the first common anxiety among trainees in counseling sessions is concerns about not being good enough (i.e., perfectionism) (Corey, 2008). Those with perfectionism tendency are likely to concern over making mistakes, engage in self-doubt and

self-criticism (Blatt, 1995; Frost et al., 1990), have unrealistic expectations, or experience discrepancy between expectations and performance (Slaney et al., 2001). Arkowitz (1990) argued that perfectionists' fear of making error leads to various kind of freezing experiences which would block their capacities in counseling sessions. Frost et al. (1990) illustrated that perfectionists tend to set high standards for themselves, but allow little room for making mistakes. This suggests that trainees with perfectionism may consider their minor mistakes in counseling sessions as a sign of failure. Blatt (1995) argued that individuals with perfectionism are likely to be vulnerable to the criticism of others and to their own self-scrutiny and judgment. Blatt (1995) further illustrated that this vulnerability forces perfectionists into an endless cycle of self-defeating and over striving in each task. It is likely that the task may become another threatening challenge due to their desperate effort to avoid errors and failures.

Empirically, researchers have indicated that some therapists are likely to have unrealistic expectations that one has to perform at highest efficiency and competence with all clients at all times (Deutsch, 1984). When those therapists fail to live up to their own expectations or their clients show slow progress, they may interpret it as evidence of their personal failure (Deutsch, 1984). D'Souza, Egan, and Rees (2011) in their study found that counselors with higher level of perfectionism were more likely to experience greater stress levels because they tend to have rigid evaluation on themselves and attend to negative aspects of performance. Ganske (2008) found a positive relationship between maladaptive perfectionism and working alliance between trainees and clients. Ganske (2008) explained that counselors with maladaptive perfectionism may not only feel it is hard to accept their own minor mistakes but also have difficulty accepting shortcomings in their clients, which in turn may affect working alliances. This suggests that for

counselor trainees, having anxiety related to perfectionism can be detrimental to their counseling self-efficacy and have a negative impact on their working alliance with clients.

The second common anxiety among trainees in counseling is fear of negative evaluation. Trainees with high fear of negative evaluation tend to seek approval and avoid disapproval (Brala, 1983). These trainees may hope to be liked and to receive approvals from their clients and supervisors to prove they are good counselors (Corey, 1996). Empirically, research has shown that trainees' fear of negative evaluation had a negative association with their session management efficacy (Wei et al., 2012) and client's satisfaction with therapy (Brala, 1983). Brala (1983) found that trainees with higher level of fear of negative evaluation were more concerned that their supervisors would disapprove their therapy. To avoid disapproval in the supervision, those trainees tended to focus on less threatening topic in supervision sessions. This suggests that trainees with higher level of fear of negative evaluation may not fully benefit from supervision, which in turn may have negative influence on their development of counseling self-efficacy. In a qualitative study on counselors' fear in sessions, Smith (2003) found that several participants reported fears of being disapproved or rejected by supervisors. Smith (2003) further described that these fears may lead counselors to experience a sense of insignificance or unworthiness of themselves.

The third common anxiety among trainees is the fear of being out of control in counseling sessions. Some recent qualitative studies have shown that not knowing what to do in counseling sessions was one of the most typical anxieties among trainees (Hill et al., 2007; Smith, 2003; Wei et al., 2012). One participant in Smith's (2003) qualitative study on trainee's fear in counseling sessions described that the fear of losing control was like "spiraling downwards" and out of his reach. Trainees with anxiety of being out of control may have difficulty tolerating

ambiguity (Corey, 2008). In order to feel in control in counseling sessions, they may take too much responsibility for their clients' progress. Skovholt and Rønnestad (2003) argued that professional development can be conceptualized as a self-other differentiation process where counselors would learn how to differentiate client and counselor responsibilities. Some counselors are likely to be preoccupied by client's intense emotions and tend to carry clients' responsibilities home with them. Cognitively, those counselors cannot stop thinking about the clients' problems; emotionally, they would continually feel the disturbing emotions produced in the sessions or become emotionally overinvolved (Skovholt & Rønnestad, 2003). Emotional over-involvement may invoke counselor trainees' desire to save clients from their sufferings, which may channel into their clinical work and supervision (Morrissette, 1996). Specifically, counselor trainees in this situation are likely to lose their objectivity, transgress therapeutic boundaries, and become defensive and protective of clients during individual or group supervision through excessively justifying their behaviors (Morrissette, 1996). In other words, this suggests that counselor trainees' worry may even take over the focus of the counseling sessions.

On the professional level, one component of trainees' anxiety in the session is that trainees may worry about the rapport building with their clients (Hill et al., 2007). The therapeutic relationship between counselor and client has been viewed as the critical component of client's change/ progress in counseling (Messer & Wampold, 2002). A meta-analysis investigating the working alliance and outcome found client's self-report of working alliance to be the strongest predictor of overall outcomes ($r = .22$) (Martin et al., 2000). Bordin (1983) argued that building a sound therapeutic working alliance requires counselors and clients to share mutual agreement and understanding regarding the goals, and tasks and establishment of

emotional bond. Although rapport building has an important impact on the client's progress (Rønnestad & Skovholt, 2003), it is common for counselor trainees to report their struggle with maintaining emotional connection with clients. Empirically, Schwing, LaFollette, Steinfeldt, and Wong (2011) conducted a qualitative study to explore novice counselors' experiences of therapeutic relationships. They found counselors' anxiety about their therapeutic relationships varied from building rapport, concerning whether their clients will return for next sessions, and maintaining a strong alliance during the time working together.

Moreover, trainee's anxiety may come from their concerns about competence in utilizing advanced counseling skills (Theriault & Gazzola, 2006). Morrissette (1996) argued that for many counselor trainees, skills in effective counseling are much more challenging than initially anticipated. It is an anxiety provoking situation for trainees to encounter difficult clients (Orlinsky & Rønnestad, 2005) or crisis situations. Challenging clients may involve clients who are resistant, reluctant, involuntary, coerced, noncompliant, or uncommitted to counseling sessions (Seligman & Gaaserud, 1994). Empirically, therapists expressed that client's suicidal statements were the most stressful for them (Deutsch, 1984). Also, another study reported the inability to help acutely distressed clients feel better as stressful experience (Rodolfa et al., 1998). In a qualitative study conducted by Theriault and Gazzola (2006), their results indicated that trainees were worried about their insufficient knowledge, lack of training, and lack of related experiences. Beginner trainees may even experience anxiety in staying focused on the client, handling termination, probing the client's feelings, and identifying a focus with the client (Williams et al., 1997). Trainees reported apprehension about using insight skills (e.g., challenge, immediacy, and self-disclosure) because these skills were quite different from communication

skills in the daily life (Hill et al., 2007). Moreover, trainees may express uncertainty about how to use skills to help clients explore a deeper level of their thoughts and emotion (Tyber, 2006).

Trainee's Anxiety and Counseling Self-Efficacy

Theoretically, Larson and Daniels (1998) defined trainee's counseling self-efficacy as "one's beliefs or judgments about her or his capabilities to effectively counsel a client in the near future (p. 180)." Larson (1998) suggested that negative emotion, such as anxiety, may impair trainees' counseling self-efficacy. Levitt (2001) argued that trainees' anxiety may become a source of low self-efficacy and resistance to share feelings about counseling with supervisors because this self-defense mechanism enables trainees to conceal what they concern about their counseling skills and performance. Moreover, some studies have shown that high levels of anxiety could be detrimental to trainee's counseling performance and their effectiveness of providing service to their clients (e.g., Hannigan, Edwards, & Burnard, 2004; Hansen, 1997; Larson & Daniels, 1998; Williams et al., 1997). Williams et al. (1997) conducted a study to identify trainees' anxiety from trainees' and supervisors' perceptions. They found that the interference of trainees' anxiety often appeared in the form of negative or incongruent behaviors, such as becoming overactive, displaying visibly annoyed or distant, pushing their own agenda, becoming very directive, or talking a lot or shutting down. These results suggested that trainees with a higher level of anxiety may hinder their relationship with their clients or impact their treatment.

The Social Cognitive Model of Counselor Training (SCMCT) Model

Bandura (1986) incorporated the concepts of self-efficacy and proposed social cognitive theory (SCT). Bandura (1997) proposed the triadic reciprocal causation model to illuminate the interdependent relationships among behaviors, internal person factors and external environment.

Based on Bandura (1997), self-efficacy would influence and be influenced by these three components in the triadic reciprocal causation model. Self-efficacy theory articulates four major sources of information that would impact the expectations of personal efficacy: (a) mastery experiences, (b) vicarious experiences through modeling, (c) verbal persuasion, and (d) physiological and emotional states (Bandura, 1977, 1986). According to Bandura (1977), mastery experiences are the most influential source of efficacy because they provide the most authentic evidence of whether one can gather whatever it takes to succeed. In terms of vicarious experiences, modeling serves as another important tool for promoting a sense of personal efficacy because observing others successfully perform threatening activities can enhance individual's confidence to successfully complete the same activities (Bandura 1994, 1997). Regarding the verbal persuasion, it can strengthen individuals' beliefs that they have capabilities to achieve their goals and they are able to cope successfully with what has overwhelmed them in the past (Bandura 1977, 1997). As far as physiological or emotional states are concerned, emotional arousal is another source of self-efficacy because it affects how individuals cope with threatening situations. Individuals are more likely to perform effectively when they are not beset by aversive arousal (Bandura 1977, 1997). Bandura (1982) further argued that disruptive arousal may have a negative impact on individuals' self-efficacy of performance.

Moreover, Lent, and Maddux (1997) attempted to build a socio-cognitive bridge between social and counseling psychology. They noted that previous researchers tended to think counseling psychology embraces more about examining intrapsychic factors, yet social psychology would favor investigating social-situational factors. However, Lent and Maddux (1997) argued that Bandura's social cognitive theory emphasizes the interconnectedness between personal and social determinants of behaviors in his triadic reciprocal causality model. In

addition, Goodyear and Bernard (1998) commented that the dearth of theory-driven research in counselor training and supervision. The Social Cognitive Model of Counselor Training (SCMCT) model in general, holds great potential as organizational frameworks for research in counselor training and supervision (Larson, 1998).

Larson (1998) proposed the Social Cognitive Model of Counselor Training (SCMCT) by expanding self-efficacy concept in counselor training and supervision. In this model, Larson and Daniel (1998) defined trainee's counseling self-efficacy as "one's beliefs or judgments about her or his capabilities to effectively counsel a client in the near future (p. 180)." The SCMCT explains the importance of counseling self-efficacy. Larson (1998) argued that counseling self-efficacy is a key component of effective counseling actions and it affects counselor's responses, persistence in the face of failure, and risk taking behaviors in counseling sessions. The SCMCT also adapted from triadic reciprocal model of self-efficacy theory and proposed the reciprocal interactions among personal agency, environment, and actions. The SCMCT postulated that counselor's personal agency allows individuals to be responsive and proactive in the environment and it is partly responsible for the transformation from knowing what to do to actually effectively executing it with the client. The supervisory environment perceived by the counselors has positive correlation with their motivation to process the message and productivity in the supervision. This model suggested that the trainee personal agency factors (e.g., capacity for self-compassion) and supervisory environment (e.g., supervisory working alliance) would be related to counselor trainees' learning process (e.g., trainee's anxiety in clinical work) and ultimately impacts their self-efficacy in counseling.

Many studies have documented that trainee counseling self-efficacy has been associated with counselors' performance in counseling (Larson & Daniels, 1998). It is equally important for

researchers to examine the factors that increase trainee's counseling self-efficacy. Thus far, only Lent et al. (2009) conducted the empirical study to explore trainee's perceived sources of self-efficacy and their results indicated that trainee's affective states and supervision were two important sources for trainee's counseling self-efficacy. Understanding the resources for increasing trainees' counseling self-efficacy would help researchers and training program to identify and use these resources to enhance trainees' counseling self-efficacy. Similar to Bandura's self-efficacy theory, Larson (1998) indicated that negative emotion such as anxiety may impair trainees' counseling self-efficacy. Bandura (1977) argued that potential threats would activate fear mainly through cognitive self-arousal. Individuals who believe that they are less vulnerable than they previously assumed are less likely to generate fearful thoughts in threatening situations. Those who have less fear may decrease their self-doubts and debilitating self-arousal to the point where they are likely to perform successfully. Successful performance in turn would strengthen self-efficacy (Bandura, 1977). The higher the arousal is, such as fear and anxiety in a given situation, the lower the self-efficacy is. In general, people tend to perform more effectively when they feel calm and relaxed than when they experience aversive arousal in a given situation (Bandura, 1977).

Larson (1998) recommended future research to conduct mediation and moderation analyses to further explore the reciprocal relationships among the variables presented in the SCMCT model, such as personal agency variables, environmental factor, and counseling self-efficacy. However, thus far, no empirical research has been conducted to verify the causation relationships between trainee's anxiety in clinical work and supervisory working alliance (i.e., one of the training environment factors in SCMCT) and the causal relationship between trainee's anxiety in clinical work and self-compassion (i.e., one of the personal agency factors in SCMCT)

and how that associate with counseling self-efficacy. To respond the call of Larson's suggestion on future mediation and moderation research using the SCMCT model as well as to address the causal relationships for above variables (i.e., supervisory working alliance, self-compassion, and counseling self-efficacy), this study proposed two sets of mediation hypotheses in a cross-lagged panel model (see Figure 1) and two sets of moderation hypotheses (see Figures 2 and 3).

Regarding to the mediation hypotheses, the first set was (a1) the impact of supervisory working alliance at Time 1 on counseling self-efficacy at Time 2 would mediate through trainee's anxiety in clinical work at Time 2 and (a2) the impact of self-compassion at Time 1 on counseling self-efficacy at Time 2 would mediate through trainee's anxiety in clinical work at Time 2. In an opposite direction, the second set was (b1) the impact of trainee's anxiety in clinical work at Time 1 on counseling self-efficacy at Time 2 would mediate through supervisory working alliance at Time 2 and (b2) the impact of trainee's anxiety in clinical work at Time 1 on counseling self-efficacy at Time 2 would mediate through self-compassion at Time 2.

For moderation hypotheses, the first set (see Figure 2) was (c1) trainee's anxiety in clinical work at Time 1 would moderate the association between supervisory working alliance at Time 1 and counseling self-efficacy at Time 2; (c2) trainee's anxiety in clinical work at Time 1 would moderate the association between self-compassion at Time 1 and counseling self-efficacy at Time 2. The second set (see Figure 3) was (d1) supervisory working alliance at Time 1 would moderate the association between trainee's anxiety at Time 1 and counseling self-efficacy at Time 2; (d2) self-compassion at Time 1 would moderate the association between trainee's anxiety at Time 1 and counseling self-efficacy at Time 2. The following section will introduce the concepts of supervisory working alliance and self-compassion as well as provide the rationales for each mediation and moderation hypotheses.

Supervisory Working Alliance, Trainee's Anxiety in Clinical Work, and Counseling Self-Efficacy

Supervisory relationships have been viewed as one of the most critical component in supervision (Nelson & Friedlander, 2001). Bordin (1983) suggested that supervisory working alliance comprises three components: establishment of mutual agreement and understandings regarding the goals, working on the specific tasks related to goals, and development of a strong emotional bond (e.g., mutual trust and respect). Efstation et al. (1990) shared a similar definition of supervisory working alliance. They argued that supervisory working alliance is a relationship in which both supervisors and trainees set actions interactively to facilitate the learning of trainees. Bordin (1983) maintained that building and repairing alliances plays an important role in client's therapeutic changes. Given the parallel process between issues experienced by counselor trainees in their therapeutic work and those they create in supervisory relationships (Ekstein & Wallerstein, 1958), counselor trainees may enact their personal obstacles (e.g., anxiety in counseling sessions) in the supervision. Thus, it is important to set up the goal and task in supervision to work through or deal with their anxiety.

Moreover, Bordin (1983) proposed eight goals of supervisory process, two of which (i.e., increasing awareness of self and impact on process and overcoming personal obstacles toward learning and mastery) are focused on trainees' personal development and trainees' ability to deal with stress/anxiety (Gnilka, Chang, & Dew, 2012). It is important for trainees to be aware of their own feelings (e.g., anxiety) and how that impacts the counseling process. When trainees' personal obstacles hinder the counseling process or their counseling self-efficacy, it is important for trainees to set goals in the supervision to work through those personal obstacles. Therefore, it is critical to process how trainees' anxiety in counseling sessions and their ability to regulate their anxiety may impact their counseling self-efficacy. With strong supervisory working alliance,

supervisees are able to address their anxiety in counseling sessions (Spence et al., 2001). Efstation et al. (1990) argued that supervisory working alliance would have a positive association with trainee's self-efficacy. Trainees who had received supervision demonstrated stronger perceptions of counseling self-efficacy than did those who had not received supervision (Cashwell & Dooley, 2001; Larson et al., 1992).

From the perspective of the SCMCT model (Larson, 1998), supervisory relationship is the essential foundation for supervisees to enhance their counseling self-efficacy under a supportive supervisory working alliance. Based on the SCMCT model, supervisors can enhance trainees' counseling self-efficacy through providing trainees with modeling experiences, social persuasion, and feedback (Larson, 1998). In terms of providing modeling experiences, Larson (1998) suggested supervisors can offer opportunities for trainees to observe successful performance in the desired counseling action through using themselves, videotapes, as well as trainee's own sessions as a model. Regarding social persuasion, the SCMCT suggested supervisors provide realistic and supportive encouragement as well as structural learning environment to enhance trainees' counseling efficacy in their clinical work. Concerning supervisor feedback, Larson (1998) noted that trainees learn what effective counseling is from their supervisors' specific, constructive, and changeable feedback.

Self-Compassion, Trainee's Anxiety in Clinical Work, and Counseling Self-Efficacy

Self-compassion consists of three elements, including self-kindness, common humanity, and mindfulness (Neff, 2003a). Specifically, self-kindness refers to being kind and understanding toward oneself rather than being harshly self-critical. Common humanity means perceiving one's experiences as part of the larger human experience rather than seeing them as separating and isolating. Mindfulness taps into being aware of painful thoughts and feelings rather than

completely absorbed in them (i.e., over-identifying). Many studies have documented that self-compassion is associated with adaptive psychological functioning, such as greater feelings of connectedness to others, life satisfaction, adaptive response to negative self-related events, wisdom, and a tendency of pursuing life growth (Ardelt, 2003; Leary, Tate, Adams, Allen, & Hancock, 2007; Neff, 2003a,b).

In addition, self-compassion has been shown to have negative associations with depression, anxiety, perceived stress, maladaptive perfectionism, self-rumination, and self-efficacy (Greason & Cashwell, 2009; Iskender, 2009; Neff, 2003a; Neff & Vonk, 2009; Shapiro, Brown, & Biegel, 2007). For instance, Iskender (2009) investigated the relationship between self-compassion and self-efficacy and the results indicated that self-kindness, common humanity, and mindfulness were positively associated with self-efficacy, whereas self-judgment, isolation, and over-identification were negatively related with self-efficacy (Iskender, 2009). Another study examined the relationship between mindfulness and counselor self-efficacy among counseling graduate students, the results revealed that mindfulness increased counselor self-efficacy through enhancing counselors' capability to maintain attention in sessions (Greason & Cashwell, 2009). Gilbert (2005) suggested that self-compassion could help individuals calm down by deactivating neurological defensive threat systems. He further claimed that with self-compassion, individuals may not view anxiety as a threat. Instead, they can view anxiety as a positive challenge or opportunity for growth. Self-compassion enables the ability to effectively care for others because it enlarges counselors' abilities to tolerate pain in self and others without the need to defensive reactions (Gilbert, 2005). Counselors' inner relationships (e.g., self-compassion) with themselves tend to have an impact on their clinical work.

In the SCMCT model, Larson (1998) suggested that, in counseling sessions, trainees' anxiety may evoke emotional arousal to reduce their counseling self-efficacy. Neff, Kirkpatrick, and Rude (2007) argued that self-compassion helps buffer against anxiety when individuals faced with an ego-threat in a laboratory setting. Their study asked participants to describe their greatest weakness in a mock job interview situation. They found that participants with higher level of self-compassion would report less anxiety after writing their greatest weakness. Neff and her colleagues further explained their results that individuals with self-compassion would offer themselves warmth and non-judgmental understanding after recognizing their imperfectness and mistakes. They also explained that self-compassion would lessen individuals' self-evaluative anxiety because it tends to satisfy the need for belonging by making individuals not feeling alone in the experience. Also, people would be mindful about their own negative emotion rather than exaggerating or repressing their feelings.

Rationales for Mediation Hypotheses

Regarding hypothesis (a1), the impact of supervisory working alliance at Time 1 on counseling self-efficacy at Time 2 would mediate through trainee's anxiety in clinical work at Time 2. A possible explanation is that building great supervisory working alliance earlier would help trainees feel comfortable to address their anxiety in the supervision. Also, they are more likely to set goals to work through their anxiety in the supervision, which in turn would associate with positive counseling self-efficacy. Empirically, supervisor's support would facilitate trainee's learning experience through helping trainees decrease their anxiety and facilitating their personal growth (Al-Darmaki, 2004; Linley & Joseph, 2007). Hill et al. (2007) conducted a qualitative study on beginning level trainee's experience in the clinical work and their coping strategies with their anxiety in counseling sessions. Their results indicated that trainees noted supervisor's

support, validation, and clarification of expectations in the supervision was helpful for them to cope with anxiety in counseling sessions.

For hypothesis (a2), the impact of self-compassion at Time 1 on counseling self-efficacy at Time 2 would mediate through trainee's anxiety in clinical work at Time 2. Trainee's earlier built self-compassion would help them treat themselves kindly with non-judgmental manner, and treat their experiences as shared experience with other trainees in the face of anxiety later in their clinical work, which in turn would positively associate with counseling self-efficacy. Empirically, with mindfulness practice, trainees reported they were more likely to step back from their feelings (e.g., anxiety) instead of ruminating about it or fighting with it (Rimes & Wingrove, 2011). Also, in Christopher and Maris' (2010) study, they revealed that mindfulness would help trainees shift from feeling of inadequacy or needing to make something happen in sessions to provide themselves space of self-acceptance and self-compassion.

Regarding the hypothesis (b1), the impact of trainee's anxiety in clinical work at Time 1 on counseling self-efficacy at Time 2 would mediate through supervisory working alliance at Time 2. Trainees with lower levels of anxiety at Time 1 are more likely to have more mental energy to build good bonding with their supervisors and work on their tasks and goals in the supervision (Larson, 1998; Larson & Daniels, 1998; Mehr et al., 2010). Having a good supervisory working alliance is likely to help trainees to build their counseling self-efficacy (Efstation et al., 1990; Humeidan, 2002; Larson, 1998). Empirically, research has shown that there was a negative association between trainee's perceived stress and supervisory working alliance (Gnilka et al., 2012) and a negative association between work-related stress (e.g., personal strain) and supervisory working alliance (Sterner, 2009). Spence et al. (2001) argued that that supervision can provide personal support to alleviate supervisees' work-related stress

through enhancing their abilities in dealing with interpersonal difficulties in their clinical work. Moreover, in Humeidan's (2002) and Ting's (2009) studies, they indicated that supervisory working alliance has shown a positive association with counseling self-efficacy. Hutt, Scott, and King (1983) argued that a positive supervisory working alliance can facilitate trainees' growth and learning. The positive supervisory working alliance may also have a positive impact on trainees' interaction with clients (Hutt et al., 1983). The result in Humeidan's (2002) study has demonstrated that 22% of the variance in counseling self-efficacy was predicted by supervisory working alliance. According to the above conceptual basis and empirical evidence, trainees' anxiety in clinical work at Time 1 is likely to be negatively associated with supervisory working alliance at Time 2, which in turn will be positively associated with counseling self-efficacy at Time 2. Therefore, it was hypothesized that supervisory working alliance would mediate the relationship between trainee's anxiety and counseling self-efficacy.

Concerning the hypothesis (b2), the impact of trainee's anxiety in clinical work at Time 1 on counseling self-efficacy at Time 2 would mediate through self-compassion at Time 2. Due to the lower anxiety in clinical work at Time 1, those trainees may not to be occupied by their anxiety. Therefore, they may have more psychological space to engage in self-compassion (e.g., practice self-kindness, view their anxiety as part of shared experience among trainees, and mindfulness) in clinical sessions, which in turn may increase their counseling self-efficacy. Corresponding with Neff's (2003a, b) conceptualization of self-compassion, trainees with lower anxiety are likely to treat themselves gently when encountering anxiety in counseling sessions or when counseling sessions fail short of their set ideals. Also, they would not isolate themselves in the inadequate situation (e.g., anxiety in counseling sessions) but normalize their experiences that shared with many other trainees. Moreover, they would neither suppress nor exaggerate their

anxiety. Instead, they would take a balance approach to their negative emotion (e.g., anxiety) through putting their situation into a larger perspective.

Research has shown that there was a significant negative association between anxiety and self-compassion (Neff, 2003a; Shapiro et al., 2007). In Shapiro et al.'s (2007) study, they found that trainees who participated in a mindfulness-based stress reduction program were more likely to regulate their emotional states and reported less perceived stress, anxiety, and rumination, compared with the control group. In addition, self-compassion has been found to significantly and negatively associate with counseling self-efficacy (Wei et al., 2014). Therefore, it is possible that the association between trainee's anxiety at Time 1 and counseling self-efficacy at Time 2 would be mediated through self-compassion at Time 2.

Rationales for Moderation Hypotheses

This study hypothesized that (c1) trainee's anxiety in clinical work at Time 1 would moderate the association between supervisory working alliance at Time 1 and counseling self-efficacy at Time 2. Specifically, for trainees with higher anxiety in clinical work, the association between supervisory working alliance (Time 1) and counseling self-efficacy (Time 2) would be significantly positive. In other words, for those trainees with higher anxiety in clinical work, supervisory working alliance would be especially beneficial for them to increase their future counseling self-efficacy. Empirically, research has shown that it is beneficial for trainees to establish congruent goals earlier in the supervision with supervisors and clarify supervisors' expectations on them which would help reduce their anxiety of being evaluated (Parcover & Swanson, 2013). Arkowitz (1990) suggested that supervisor modeling vulnerability in the supervision (e.g., disclosing their own struggle in the clinical work) would help trainees to accept their weakness and limitation in their clinical work. However, for trainees with a lower level of

anxiety on in clinical work, their counseling self-efficacy (Time 2) was expected to maintain in a higher level regardless of their supervisory working alliance (Time 1). It is likely that those trainees may already regulate their anxiety well and supervisory working alliance may have little impact on their counseling self-efficacy.

This study also hypothesized that (c2) trainee's anxiety in clinical work at Time 1 would moderate the association between self-compassion at Time 1 and counseling self-efficacy at Time 2. Specifically, for trainees with higher anxiety in clinical work, the association between self-compassion (Time 1) and counseling self-efficacy (Time 2) would be significantly positive. It is likely that trainees with higher anxiety in clinical work would benefit from their self-compassion, which in turn would increase their counseling self-efficacy. Empirically, with practice of mindfulness, trainees noted they were more likely to stay in the present moment, instead of being preoccupied with dwelling on the past moment or worrying the counseling direction in the future (Christopher & Maris, 2010). However, for trainees with a lower level of anxiety in clinical work, their counseling self-efficacy (Time 2) was expected to maintain in a higher level regardless of their self-compassion (Time 1). It is possible that those trainees may already manage their anxiety well; therefore self-compassion may have little impact on their counseling self-efficacy.

For hypothesis (d1), supervisory working alliance at Time 1 would moderate the association between trainee's anxiety at Time 1 and counseling self-efficacy at Time 2. Specifically, this study expected that for trainees with a lower level of supervisory working alliance at Time 1, there would be a negative relationship between trainees' anxiety and counseling self-efficacy. There are at least two reasons for this hypothesis. First, trainees with lower supervisory working alliance at Time 1 may feel unsafe to address and process their

anxiety in counseling sessions. Therefore, addressing anxiety may not be a goal or task in the supervision session. Consequently, trainees are less likely to receive supervisors' validation or feedback on how to regulate their anxiety. Therefore, it increases the chance that their anxiety may still block their functioning as an effective counselor and feel less a sense of counseling self-efficacy. Second, trainees with lower supervisory working alliance at Time 1 may lack an emotional bond with their supervisor. They may feel vulnerable and less likely to disclose their anxiety in supervision sessions (Mehr et al., 2010). Their anxiety may get in the way of their counseling self-efficacy. Based on the above rationales, it was hypothesized that for trainees with lower supervisory working alliance, there would be a significant negative association between their anxiety and counseling self-efficacy.

Conversely, it is expected that, for trainees with higher supervisory working alliance at Time 1, their counseling self-efficacy may maintain at a higher level regardless of their anxiety in counseling sessions. There are two reasons for this expectation. First, trainees with higher supervisory alliance are likely to address anxiety in the supervision due to the encouraging and supportive supervisory environment. Exploring anxiety enables supervisors to provide modeling, supportive encouragement, and feedback to normalize and validate trainees' anxiety. Empirically, Ladany et al. (1999) indicated that with strong supervisory working alliance, trainees are more likely to benefit from experiencing a sense of self-efficacy (e.g., performance accomplishments) in the supervision. Trainees are likely to learn how to manage and regulate their anxiety in counseling sessions and decrease the chance to impact their counseling self-efficacy. Second, trainees with higher supervisory working alliance at Time 1 tend to have greater emotional bond with their supervisor. With greater emotional bond, trainees may feel more comfortable in the supervision (Ladany et al., 1999) to address their concerns of their anxiety. Therefore, trainees

are likely to be able to regulate their anxiety and reduce its negative impact on their counseling self-efficacy. With an acknowledgement of the above rationale, it is hypothesized that for trainees who have a greater level of supervisory working alliance, the association between trainee's anxiety and counseling self-efficacy will be small or absent (i.e., counseling self-efficacy remains at the similar level no matter the levels of their anxiety in counseling sessions).

In hypothesis (d2), self-compassion at Time 1 would moderate the association between trainee's anxiety at Time 1 and counseling self-efficacy at Time 2. Specifically, this study expected that, for trainees with a lower level of self-compassion at Time 1, their counseling self-efficacy at Time 2 would be lower when their anxiety in counseling sessions is higher at Time 1. Potential explanations are as following. First, trainees with lower self-compassion at Time 1 may be likely to view their anxiety experiences as isolated event experiences. Consistent to Neff's (2003a, b) concept, trainees with low self-compassion may feel cut off or separate from other trainees' experience during times of anxiety. Trainees tend to feel worse about their identity as counselors or even question their ability to help clients. Because they do not normalize their anxiety experiences, their anxiety may channel into their work with clients and hinder their counseling self-efficacy (Morrissette, 1996). Second, trainees with lower self-compassion at Time 1 may obsess about the things that are bothering them when they feel anxious. They may over-exaggerate their anxiety in counseling sessions and fail to hold anxious feelings in mindful awareness. Because they are preoccupied with anxiety, it may be hard for them to focus on the present moment with clients and freeze their counseling self-efficacy. Based on the above rationale and empirical studies, it is hypothesized that the association between trainee's anxiety and counseling self-efficacy will be significantly negative for trainees who have a lower level of self-compassion.

Conversely, it is expected that, for trainees with higher self-compassion at Time 1, their counseling self-efficacy will not significantly drop when they encounter anxiety in counseling session. That is, their counseling self-efficacy may maintain at a higher level regardless of their anxiety in counseling sessions. It is likely that individuals with greater self-compassion are less likely to be self-critical; they tend to focus more on the mastery goals rather than performance goals which may translate into greater resilience in the face of their own drawbacks (Neff, Hsieh, & Dejitterat, 2005). This indicates that individuals with high self-compassion have less fear of failure than individuals with low self-compassion. One study found that self-compassion buffered people against negative self-feelings and engender positive self-feelings when they imagine distressing social events, because self-compassion enables individuals to keep the situation in perspective rather than endorsing the notion that they are "losers" (Leary et al., 2007).

In addition, trainees with higher self-compassion at Time 1 are likely to be aware of their thoughts and feelings at the present moment in counseling sessions. Being self-awareness and mindfulness may reduce the opportunity for trainees to act out their anxiety in counseling sessions (e.g., withdraw from engaging with their clients due to their own anxiety) and feel lower counseling self-efficacy. Empirically, mindfulness has been linked to several positive counseling outcomes, such as counselor's affect tolerance, emotion regulation in sessions, therapeutic alliance, and counseling self-efficacy (Greason & Cashwell, 2009; Shapiro et al., 2007; Rimes & Wingrove, 2011). Greason and Cashwell (2009) found that trainees with a higher level of self-compassion tend to increase their affect tolerance with self or clients in sessions (i.e., the ability to tolerate difficult feelings in the self or others). This indicates that individuals with greater mindfulness would attend but not react to aversive stimuli. Shapiro et al. (2007) also found that graduate counseling students in a mindfulness-based stress-reduction program reported

significant declines in anxiety and increases in their ability to regulate their emotions. Another study utilized content analysis of written responses indicated that trainees with mindfulness training were more likely to stay with difficult feelings and be non-judging (Rimes & Wingrove, 2011). Based on the above rationale and empirical studies, it was hypothesized that the association between trainee's anxiety and counseling self-efficacy would be small or absent for trainees who have a higher level of self-compassion.

Trait anxiety refers to an individual's general level of anxiety (Spielberger, 1983). Previous studies have shown that personal anxiety was associated with counseling self-efficacy (Friedlander et al., 1986; Larson & Daniels, 1998). Counselor trainees may experience not only trait anxiety but also specific anxiety due to their role as trainees in their clinical work. As discussed above, counselor trainees may experience anxiety due to perfectionism, fear of negative evaluation, need of control, and concerns about utilization of advanced counseling skills or concerns about rapport building. Thus, trait anxiety would serve as a covariate in this study. Moreover, length of practicum or internship has demonstrated to be associated with counseling self-efficacy (Al-Darmaki, 2004; Tang et al., 2004). Accordingly, trait anxiety and number of completed practicum would be treated as covariates when conducting mediation and moderation data analyses.

Research Hypotheses

To sum up, on the basis of literature review, the current research proposed two sets of mediation hypotheses in a cross-lagged panel model (see Figure 1) and two sets of moderation hypotheses after controlling for trainee's trait anxiety and number of completed practicum. There were two sets of four mediation hypotheses (see Figure 1).

(a1) The impact of supervisory working alliance at Time 1 on counseling self-efficacy at Time 2 would mediate through trainee's anxiety in clinical work at Time 2.

(a2) The impact of self-compassion at Time 1 on counseling self-efficacy at Time 2 would mediate through trainee's anxiety in clinical work at Time 2.

(b1) The impact of trainee's anxiety in clinical work at Time 1 on counseling self-efficacy at Time 2 would mediate through supervisory working alliance at Time 2.

(b2) The impact of trainee's anxiety in clinical work at Time 1 on counseling self-efficacy at Time 2 would mediate self-compassion at Time 2.

Moreover, there were two sets of four moderation hypotheses.

(c1) Trainee's anxiety in clinical work at Time 1 would moderate the association between supervisory working alliance at Time 1 and counseling self-efficacy at Time 2 (see Figure 2).

(c2) Trainee's anxiety in clinical work at Time 1 would moderate the association between self-compassion at Time 1 and counseling self-efficacy at Time 2 (see Figure 2).

(d1) Supervisory working alliance at Time 1 would moderate the association between trainee's anxiety at Time 1 and counseling self-efficacy at Time 2 (see Figure 3).

(d2) Self-compassion at Time 1 would moderate the association between trainee's anxiety at Time 1 and counseling self-efficacy at Time 2 (see Figure 3).

CHAPTER 3

METHODS

Power Analyses

In terms of sample size for the scale development, based on the rule of thumb, at least 5 participants are needed for one item (Floyd & Widaman, 1995; Gorsuch, 1983). Trainee's anxiety scale includes 40 items. Therefore, at least 200 participants ($5 \times 40 = 200$) are needed for the scale development.

Regarding the moderation analyses, the current study aims to obtain a small to medium effect size for two 2-way interactions. In the G*Power 3.1.5 program (Faul, Erdfelder, Buchner, & Lang, 2009), a power analysis was set at power of .80, an alpha level of .05, and a small, medium, and large effect size (i.e., $f^2 = .02, .15, \text{ and } .35$, respectively) for two incremental two-way interaction effects. The result suggested a sample size of 485, 68, and 32 is needed for a small, medium, and large effect size, respectively. In this study approximately 200 were chosen to yield a small to medium effect.

With regard to the path model in the mediation analyses, Hatcher (1994) suggested that at least 5 participants per parameter to be estimated are needed. In MPlus, a path model can be viewed as one indicator for a latent variable. That is, the factor loading for each path will be fixed to 1 and the error term for each path will be fixed to zero. The parameter to be estimated includes variance for each of the latent variable (i.e., 8 variances for 8 latent variables) and paths among the eight latent variables (i.e., 28 paths among 8 latent variables). Therefore, there is a maximum of 36 parameters to be estimated in the hypothetical mediation model (see Figure 1) and a sample size of $36 \times 5 = 180$ is needed for testing the mediation hypotheses. In conclusion, by

taking into account all the above estimation, I planned to recruit about 200 participants for the present study.

Participants

With regard to Time 1, participants were 235 graduate trainees. The participants' mean age was 28.2 years ($SD = 5.32$, range = 22 to 55 years). Participants were composed of 193 (82%) females, 41 (17%) males, and 1(0.4%) transgender. The majority of participants (161 [69%]) were working toward a doctoral degree, and 73 (31%) were working toward a master degree. Among these participants, 145 (62%) were from counseling psychology program, 43 (18%) were from clinical psychology program, 32 (14%) were from counselor education program, and 15 (6%) were from other counseling-related programs (e.g., mental health counseling, school-clinical counseling, or rehabilitation counseling). On average, participants have completed 5.2 semesters of practicum ($SD = 3.61$, range = 1 to 21 semesters of practicum). This sample included 164 (70%) Caucasian/White, 17 (7%) international students, 16 (7%) Latino/a Americans, 14 (6%) Asian Americans, 13 (6%) Multi-racial Americans, 9 (4%) African Americans, 1 (0.4 %) Native American, and one did not respond to this question. About half (110 [47%]) of participants attended counseling or counseling-related programs in the Midwest, 45 (19%) in the South, 41 (17%) in the Northeast, 38 (16%) in the West, and 1 (0.4%) did not respond to this question.

With regard to Time 2, participants were 116 graduate trainees from Time 1. The participants' mean age was 27.8 years ($SD = 5.37$, range = 22 to 55 years). Participants were composed of 92 (79%) females, 23 (20%) males, and 1(0.9%) did not respond to this question. This sample included 85 (73%) Caucasian/White, 9 (8%) Asian Americans, 8 (7%) Latino/a

Americans, 5 (4%) Multi-racial Americans, 4 (3%) African Americans, 4 (3%) international students, and one (0.9%) did not respond to this question.

Procedure

The approval from the Iowa State University Institutional Review Board to conduct this study was obtained. For Time 1, data collection used the snowball method by sending an invitation email to relevant email listserv owner (e.g., the counseling related divisions in American Psychology Association and American Counseling Association) and asked them to distribute it to potential participants on the listserv. Also, after receiving approval from each university's Institutional Review Board, an invitation email was sent to training directors in counseling or counseling-related programs to be forwarded to their counseling graduate students. In addition, I went to APA-accredited internship programs' websites to obtain the public contact information (i.e., email) of their interns and practicum students. Then, I sent invitation emails to those potential participants. In the invitation email, inclusion criteria for potential participants are stated as follows. Potential participants have to be graduate students in counseling or counseling related programs (e.g., clinical psychology, counselor education, or school counseling). Also, the potential participants have to be currently in the counseling or counseling related practicum/internship and receive at least three supervision sessions in the current practicum/internship before they participate in this study. The reason is that participants need to have supervisory working alliance experiences in the current practicum in order for them to be able to answer the supervisory working alliance measure in this study.

Time 1. Voluntary participants had access to the online survey. After reading an informed consent, participants was asked to click "I agree" to proceed if they agree to participate in this online study. With participants' agreement, the online instruction would guide participants

through the survey, including demographic questions, trait anxiety measure, self-compassion scale, supervisory working alliance scale, measure of anxiety in clinical work, and counseling self-efficacy scale. It would take about 15-20 minutes to complete the Time 1 survey.

Participants were notified in the informed consent that this is a longitudinal study (i.e., this study would collect data for Time 1 and Time 2). Participants were encouraged to participate in the Time 2 survey. Upon the completion of Time 1 survey, a debriefing form of this study and a thank you message would appear.

Time 2. After participants completed the Time 1 survey, they were asked whether they would like to participate in the Time 2 survey of this study. Participants were informed that they are completely voluntary to participate in the Time 2 survey. For those participants who indicated they were interested in participating in the Time 2 survey, they were asked to provide their email and their first name in a separate database to ensure anonymity. In addition, they would be notified that they would receive invitation email for Time 2 survey before finals week of the semester/quarter. Participants would complete Time 2 survey, including demographics, measures of trainee's anxiety in clinical work, self-compassion, supervisory working alliance, and counseling self-efficacy. It would take about 15-20 minutes to complete the Time 2 survey. After they completed Time 2 survey, a debriefing form of this study and a Thank you message would appear.

Originally, 254 participants participated in this study, however, 19 participants did not complete the survey (i.e., those participants only completed demographics and missed the rest of scales). Thus, a final sample of 235 participants was used in the subsequent analyses. I randomly divided this sample into two groups. The first group (Sample 1A, $n = 118$) was used for conducting exploratory factor analyses and the second group (Sample 1B, $n = 117$) was used for

conducting confirmatory factor analyses. However, the total sample ($N = 235$) was used for testing mediation and moderation analyses.

Measures

Instruments

Demographic information. Participants were asked to fill out age, gender, years in school, ethnic identification, geographic region of their current program, type of professional program (e.g., clinical psychology, counseling psychology), whether they are currently in the practicum class, the number of current supervision sessions, and the number of practicum they have completed.

Trait Anxiety (Time 1). Trait Anxiety was measured with the State Trait Anxiety Inventory (STAI; Spielberger, 1983). The STAI has been used in most of the counseling self-efficacy studies that measured anxiety (Larson & Daniels, 1998). The STAI measures an individual's general level of anxiety. Participants were asked to rate how they generally feel. Sample items are "I feel nervous and restless" or "I worry too much over something that really doesn't matter." Participants were asked to rate on a 4-point Likert scale ranging from 1 (*Not at all*) to 4 (*Very Much So*). The total score ranges from 20 to 80, with higher score reflecting higher levels of anxiety. The coefficient alpha of the STAI is .92 among counselor trainees (Meyer, 2012). In the present study, the coefficient alpha was .92 [95% CI: .90, .93]. In terms of validity, trait anxiety has a negative association with counselor self-efficacy, self-concept, and performance (Larson et al., 1992; Meyer, 2012).

Trainee's Anxiety in Clinical Work (Time 1 and Time 2). The Trainee's Anxiety in Clinical Work (TACW) scale was created for this study. Several steps were used to develop items for this scale. First, I reviewed the literature (i.e., qualitative and quantitative studies on trainees'

concern in counseling sessions) and asked about 50 undergraduate students who were taking a counseling theory course to write down several statements regarding their anxiety in counseling sessions. Second, one counseling faculty member (who is a licensed psychologist and has been teaching counseling practicum for 10 years) and I categorized these statements into five domains which were supported by literature on counselor training and development, counselor self-efficacy, and competence (Brala, 1983; Corey, 1996; Corey, 2008; Hill et al., 2007; Theriault & Gazzola, 2006). Under the identified domains, an initial of 67 items were developed.

The domains consist of personal level and professional level of anxiety. On the personal level, the first domain is perfectionism, which indicates concerns about being afraid of making mistakes or missing important information in counseling sessions or not being good enough in counseling sessions (Corey, 2008). The second domain concerns negative evaluation which taps into fear of invalidation or negative evaluation from clients or supervisors (Brala, 1983; Corey, 1996). The third domain concerns being out of control which refers to worry about not knowing what to do in counseling sessions (Corey, 2008). With regard to the professional level, the first domain concerns building rapport which points to concerns about establishing good therapeutic relationship with clients (Hill et al., 2007). The second domain concerns competence in utilizing advanced counseling skills which refers to worry about inability to use advanced skills to help clients (Theriault & Gazzola, 2006). Third, twelve counseling graduate students (seven females and five males) and one counseling intern were invited to serve as experts to review and provide feedback on the draft of the scale using a 5-point Likert scale with 1 meaning *Strongly Disagree* and 5 *Strongly Agree*. They were provided with the definitions of the five domains along with corresponding items. Those experts were asked to provide feedback and comments on the appropriateness of the items, comprehensiveness of the items, or any missing items/domains. On

the basis of their feedback and comments, modifications were made to the items, resulting in 9 items for perfectionism, 7 items for concerns about negative evaluation, 8 items for concerns about being out of control, 7 items for concerns about building rapport and 9 items for concerns about competence in utilizing advanced counseling skills. A total of final 40 items were developed to use for data collection.

The instructions are stated as “In thinking about your clinical work with your clients, please indicate to what extent you are concerned about the following items.” Participants were asked to respond to these items using a 5-point Likert scale (1 = *Strongly Disagree*, 2 = *Disagree*, 3 = *Neutral*, 4 = *Agree*, and 5 = *Strongly Agree*). In addition, each item begins with the statement of “In working with my clients, I am concerned that...”

Self-Compassion (Time 1 and Time 2). The Self-Compassion Scale short form (SCS; Neff, 2003a) contains 12 items. The SCS measures participants' levels of self-compassion. Participants were asked to rate how often they behave in the manner as indicated by each of the items. The sample items are “When I fail at something important to me, I become consumed by feelings of inadequacy” and “When I'm going through a very hard time, I give myself the caring and tenderness I need.” The SCS has six subscales, including self-kindness (2 item), self-judgment (2 items), common humanity items (2 items), isolation (2 items), mindfulness (2 items), and over-identified (2 items). In this study, the total score of the SCS was used in the data analysis. Trainees were asked to rate on a 5-point Likert scale ranging from 1 (*almost never*) to 5 (*almost always*). The total scores ranges from 1 to 60, with higher scores indicating higher levels of self-compassion. The coefficient alpha of the scale was .95 among clinical psychology trainees (Stafford-Brown & Pakenham, 2012). In the present study, the Time 1 coefficient alpha was .88 [95% CI: .86, .90] and Time 2 coefficient alpha was .90 [95% CI: .87, .93]. Evidence of

construct validity for the SCS was provided by significant negative associations with burnout and compassion fatigue as well as a positive association with compassion satisfaction (Ringebach, 2009).

Supervisory Working Alliance (Time 1 and Time 2). The Supervisory Working Alliance Inventory- Trainee Version (SWAI; Efstation et al., 1990) consists of 19 items. The SWAI measures the supervisee's perspective of supervisory working alliance. The sample items are "I feel comfortable with my supervisor" and "I feel free to mention to my supervisor any troublesome feelings I might have about him/her." Participants were asked to rate on a 7-point Likert scale ranging from 1 (*almost never*) to 7 (*almost always*). The total score ranges from 7 to 133, with higher score indicating higher levels of supervisory working alliances. The coefficient alpha of the scale was .96 among counseling supervisees (Gnilka et al., 2012). In the present study, the Time 1 coefficient alpha was .96 [95% CI: .95, .97] and Time 2 coefficient alpha was .95 [95% CI: .94, .96]. Evidence of construct validity for the SWAI was provided as significant positive correlations with coping resources effectiveness, emotional control, and trusting oneself as well as a negative association with perceived stress (Gnilka et al., 2012).

Counseling Self-Efficacy (Time 2). Counseling self-efficacy was measured by the Session Management Self-Efficacy scale (SMSE; Lent, Hill, & Hoffman, 2003). The SMSE (10 items) measures participants' perceived capability to facilitate the process of counseling sessions. The sample items are "Help your client to explore his or her thoughts, feelings, and actions" and "Build a clear conceptualization of your client and his or her counseling issues." Participants were asked to rate items on a 10-point scale ranging from 0 (*no confidence at all*) to 9 (*complete confidence*). The total score ranged from 0 to 90, with higher score reflecting greater session management self-efficacy. In Wei et al. (2012), the reliability of the SMSE was proved to be

high, as the coefficient alpha of the scale was .94 among counselor trainees. In the present study, the coefficient alpha was .94 [95% CI: .92, .96]. Evidence of construct validity for the SMSE was provided by a significant positive correlation with counselor evaluation of session quality (Lent et al., 2006) and negative associations with concerns about offending clients, concerns about having biased thoughts and behaviors, and concerns about client perceptions among counseling trainees (Wei et al., 2012).

CHAPTER 4

RESULTS

Preliminary Analyses

Two chi-square analyses were conducted to compare the ratios of gender and race in my sample with the national populations. The national data was obtained from the American Psychology Association (<http://www.apa.org/ed/accreditation/about/research/>). Given the majority of my sample were participants from counseling ($N = 145, 62\%$) and clinical programs ($N = 43, 18\%$), participants from these two programs were used to examine how comparable the sample ratio of gender and race to the national data. The results of chi-square tests revealed that they were non-significant in terms of gender $\chi^2(1, N = 188) = 1.69, p = .19$, and ethnicity $\chi^2(1, N = 188) = 0.19, p = .67$. These results suggest that the proportion of gender and ethnicity in my sample were comparable to the proportion of gender and ethnicity in the national data.

Next, I examined whether the participants who completed questionnaires on both Time 1 and Time 2 varied from participants who only completed questionnaire on Time 1. A series of analyses of variance were conducted to investigate whether these two groups were different in terms of gender and ethnicity. Results were not significant for gender ($F[1, 233] = 2.06, p = .15$), and ethnicity ($F[1, 232] = 1.42, p = .24$). Also, a series of t-tests were computed to investigate whether these two groups were different regarding the four main variables (i.e., trait anxiety, trainee's anxiety in clinical work, self-compassion, and supervisory working alliance) that I measured in Time 1. There were no significant differences for trait anxiety ($t[225] = 0.66, p = .51$), trainee's anxiety in clinical work ($t[233] = -0.92, p = .36$), self-compassion ($t[223] = 0.25, p = .81$), and supervisory working alliance ($t[214] = -0.65, p = .51$).

With regard to missing data in Time 1, the results indicated 1.31% for the measure of trainee's anxiety in clinical work, 3.49% for the measure of trait anxiety, 4.57% for the measure of self-compassion, and 6.00% for the measure of supervisory working alliance. With regard to missing data in Time 2, the results revealed that 0.09% for the measure of counseling self-efficacy, 1.08% for the measure of trainee's anxiety in clinical work, 2.54% for the measure of supervisory working alliance, and 2.73% for the measure of self-compassion. Results from Little's Missing Completing at Random (MCAR) test, $\chi^2(23, N = 235) = 22.13, p = .51$, indicated that the data were missing completely at random.

I also conducted a paired samples *t* test to examine whether there was a change in the mean score from Time 1 to Time 2 for the TACW, its three subscales, self-compassion, supervisory working alliance, and counseling self-efficacy. The results indicated that there were statistically mean differences for the TACW and its three subscales, $t(115) = 2.57$ to $5.03, ps$ ranged from .00 to .01. The effect size was calculated for the mean differences for the TACW and its three subscales. Cohen's *d* for the TACW was .34 (i.e., small to medium effect size), Supervisor's Negative Evaluation was .20 (i.e., small to medium effect size), Advanced Counseling Skills was .95 (i.e., large effect size), and Client's Negative Evaluation was .26 (i.e., small to medium effect size). Also, there were statistically mean differences for counseling self-efficacy from Time 1 to Time 2, $t(115) = -2.70, p = .01$, Cohen's *d* was .17 (i.e., small effect size). However, there were no statistical mean differences for self-compassion, $t(113) = -0.05, p > .05$ and supervisory working alliance, $t(112) = -0.90, p > .05$.

The results of means, standard deviations, and zero-order bivariate correlations are presented in Table 1. It is noted that trait anxiety (STAI) was significantly and highly correlated ($r = -.75$) with one of mediators (i.e., self-compassion in Time 1) in this study. Based on Cohen's

guideline, $r = -.75$ indicates a large effect size in terms of correlation. In order to avoid the concern of multicollinearity issue between mediator/moderator and covariate, trait anxiety was dropped from the subsequent mediation and moderation data analyses.

Table 1

Means, Standard Deviations, and Zero-Order Correlations

	1	2	3	4	5	6	7	8	9
1. # Practicum	-----								
2. STAI (T1)	.01	-----							
3. TACW (T1)	-.22**	.40**	-----						
4. SCS (T1)	.04	-.75**	-.37**	-----					
5. SWA (T1)	.01	-.23**	-.23**	-.20**	-----				
6. TACW (T2)	-.34**	.49**	.74**	-.42**	-.33**	-----			
7. SCS (T2)	.07	-.65**	-.21*	.83**	.12	-.34**	-----		
8. SWA (T2)	.06	-.22*	-.18	.28**	.79**	-.36**	.21*	-----	
9. SMSE (T2)	.39**	-.39**	-.46**	.37**	.32**	-.64**	.31*	.33**	-----
<i>Mean</i>	5.15	1.94	1.98	3.33	5.64	1.81	3.31	5.73	7.22
<i>SD</i>	3.61	0.45	0.59	0.71	1.11	0.59	0.75	0.99	0.99
<i>Actual score range</i>	1-21	1.05-3.35	1.00-3.92	1.17-4.92	1.32-7.00	1.00-3.50	1.58-4.83	2.32-7.00	4.10-9.00
<i>Possible range</i>	-----	1-4	1-5	1-5	1-7	1-5	1-5	1-7	0-9
<i>α</i>	-----	.92	.87	.88	.96	.89	.90	.95	.94
[95% CI]		[.90, .93]	[.84, .89]	[.86, .90]	[.95, .97]	[.85, .91]	[.87, .93]	[.94, .96]	[.92, .96]

Note. $N = 235$ for T1 (Time 1); $N = 116$ for T2 (Time 2). CI = confidence intervals for alpha. # Practicum= Number of Practicum; STAI=Trait Anxiety; TACW= Trainee's Anxiety in Clinical Work; SCS= Self-Compassion Scale; SWA= Supervisory Working Alliance; SMSE= Session Management Self-Efficacy.

* $p < .05$, ** $p < .01$

Exploring Factor Structure

The whole dataset was split into two datasets. One was for exploratory factor analysis (Sample A; $n = 118$) and the other was for confirmatory factor analysis (Sample B; $n = 117$). In order to conduct the exploratory factor analysis, I first conducted a parallel analysis (Kahn, 2006) to determine the number of possible factors. The main idea of parallel analyses implies that factors extracted from the real data set have to account for more variance than the factors retrieved from a random data set (Brown, 2006). After computing 1000 random data sets, the eigenvalues of the first three factors (i.e., 13.01, 3.14, and 2.12) in the real data set (i.e., Sample 1A) were higher than in random data set of parallel analyses (2.33, 2.15, and 2.03).

Then, a principle axis factor analysis was conducted to explore two factor, three factor, and four factor solutions along with the orthogonal (i.e., varimax) or oblique (i.e., promax) rotations of the extracted factors. The most interpretable and meaningful solution was determined to be the three-factor oblique solution. The following criteria were used to select items for the measure: (a) factor loading has to be greater than .50, (b) cross-loading on other factors has to be less than .35 (c) to keep the scale brief, no more than four items for each representing factor (e.g., Brown, 2006). Based on the above criteria, this study retained 12 items out of original 40 items. Furthermore, another exploratory factor analyses with Principle Axis Factoring extraction method was conducted using these 12 items. The results suggested that a three-factor solution accounted for 66.80% of the total variance. The results indicated that loadings of each factor were all greater than .50 and the cross-loading on other factors were all less than .25. The three factors and their respective items, factor loadings, communality estimates, item-total correlation, means, and standard deviations were presented in Table 2.

Table 2
Items, Factor Loadings, Communality Estimates, Item-Total Correlations, Mean, and SD for the Trainee's Anxiety in Clinical Work Scale.

	1	2	3	h^2	item-total r	M	SD
23. my supervisor invalidates of my work	.84	-.13	-.04	.57	.70	1.64	0.81
29. my supervisor thinks poorly of my work	.84	.03	.04	.69	.73	1.77	0.88
31. my supervisor is not be happy with my work	.81	.13	.06	.70	.59	1.79	0.99
38. my supervisor disapproves of my interventions	.74	.06	.04	.56	.69	1.70	0.75
5. I cannot explore my client(s)' emotion on a deeper level	-.05	.85	.08	.66	.66	2.32	1.13
20. I have difficulty staying with my client(s)' emotion	.13	.72	-.11	.51	.63	2.15	0.97
15. I cannot handle my client(s)' emotion	.08	.70	-.10	.44	.65	1.74	0.81
37. I cannot handle difficult issues (e.g., trauma, abuse, eating disorder...etc.) in session	-.09	.61	.11	.49	.61	2.13	1.04
13. my client(s) evaluate me negatively	.07	-.15	.86	.48	.67	2.03	0.87
3. my client(s) see me as incompetent	-.21	.23	.61	.45	.63	2.24	1.04
7. my client(s) do not like me	.06	.03	.56	.33	.64	1.84	0.83
18. I am being judged by my client(s)	.18	-.04	.51	.31	.54	2.36	0.95

Note. $N=118$. Participants respond to these items using five response options (1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral*, 4 = *agree*, and 5 = *strongly agree*). The instructions to participants are as follows: "In thinking about your clinical work with your clients, please indicate to what extent you are concerned about the following items." In addition, for each statement, please begin with "In working with my clients, I am concerned that..."

Factor 1 was labeled *Supervisor's Negative Evaluation* (four items, accounting for 35.27% of the total variance after rotation; all four items were from the domain of fear of negative evaluation). This factor reflected trainee's concerns or worries about supervisor's negative evaluation. The highest loading items were, "My supervisor invalidates of my work" and "My supervisor thinks poorly of my work."

Factor 2 was labeled *Advanced Counseling Skills* (four items, accounting for 19.45% of the total variance after rotation; all four items were from the domain of utilizing advanced counseling skills). This factor referred to trainee's concerns or worries about using advanced counseling skills. The highest loading items were, "I cannot explore my client(s)' emotion on a deeper level" and "I have difficulty staying with my client(s)' emotion."

Factor 3 was labeled *Client's Negative Evaluation* (four items, accounting for 12.07% of the total variance after rotation; all four items were from the domain of fear of negative evaluation). This factor referred to trainee's concerns or worries about client's negative evaluation. The highest loading items were, "My client(s) evaluate me negatively" and "My client(s) see me as incompetent."

Validating Factor Structure

In addition, the second data set (i.e., Sample B; $N = 117$) was used for confirmatory factor analyses in Mplus 6.11. Based on Hu and Bentler's (1999) suggestions, three fit indices would be used to evaluate the fit of model for the data, (1) the comparative fit index ($CFI \geq .95$), (2) the root-mean-square error of approximation ($RMSEA \leq .06$ for a good fit; $RMSEA \leq .08$ for a fair fit), and (3) the standardized root-mean-square residual ($SRMR \leq .08$). Additionally, in this study, three-factor oblique model was compared with (a) a three-factor orthogonal model, (b) a one-factor model, and (c) a bi-factor model (see Figure 8). The fit indices for these four models

were shown in Table 3. Because three-factor oblique model and three-factor orthogonal model are nested models, the chi-square difference between these two models was statistically significant, $\chi^2(3, N = 117) = 55.63, p < .001$. Also, compared to three-factor orthogonal model, three-factor oblique model demonstrated better adequate fit-indices. Therefore, three-factor oblique model was a better fit for the data. Moreover, one-factor model is compared with the three-factor oblique model because they are nested models. The chi-square difference between these two models was statistically significant, $\chi^2(3, N = 117) = 126.16, p < .001$. Similarly, compared to one-factor model, three-factor oblique model demonstrated better adequate fit-indices. Therefore, three-factor oblique model was a better fit for the data. In addition, I compared three-factor oblique model with bi-factor model. Given these two models were not nested models, I compared their Akaike's Information Criterion (AIC), with smaller value as a better model (Maruyama, 1998). As shown in Table3, bi-factor model has smaller AIC value than three-factor oblique model. Therefore, bi-factor model was determined to be a better fit model for this data (see Figure8). This implies that this newly developed scale can be used as one general concept (i.e., Trainee's Anxiety in Clinical Work) or three specific factors (i.e., Supervisor's Negative Evaluation, Advanced Counseling Skills, and Client's Negative Evaluation).

Examining Reliability and Validity

With regard to the reliability, I used all participants in Sample 1 (i.e., $N = 235$) to examine reliability. The results suggested that the TACW ($\alpha = .87, 95\% \text{ CI } [.84, .89]$) and its three subscales, including Supervisor's Negative Evaluation ($\alpha = .90, 95\% \text{ CI } [.88, .92]$), Advanced Counseling Skills ($\alpha = .81, 95\% \text{ CI } [.77, .85]$), and Client's Negative Evaluation ($\alpha = .77, 95\% \text{ CI } [.72, .82]$) all demonstrated appropriate reliabilities. The correlations among these three

Table 3

Goodness-of-Fit Indicators for the Competing Models of the 12-item TACW

Model	<i>df</i>	χ^2	Scaled χ^2	CFI	RMSEA(CI)	SRMR	AIC
1. Three-Factor Orthogonal Model	54	195.90	168.92	.83	.15 [.13, .17]	.29	2969.18
2. One First-Order Model	54	294.03	255.98	.71	.20 [.17, .22]	.11	3067.31
3. Bi-Factor Model	43	72.32	65.21	.96	.08 [.04, .11]	.04	2867.60
4. Three-Factor Oblique Model	51	98.65	87.68	.94	.09 [.06, .12]	.05	2877.93

Note. TACW = Trainee's Anxiety in Clinical Work; CFI = comparative fit index;
 RMSEA = root-mean square error of approximation; CI = 90% confidence intervals for RMSEA;
 SRMR = standardized root-mean-square residual; AIC = Akaike's information criterion;

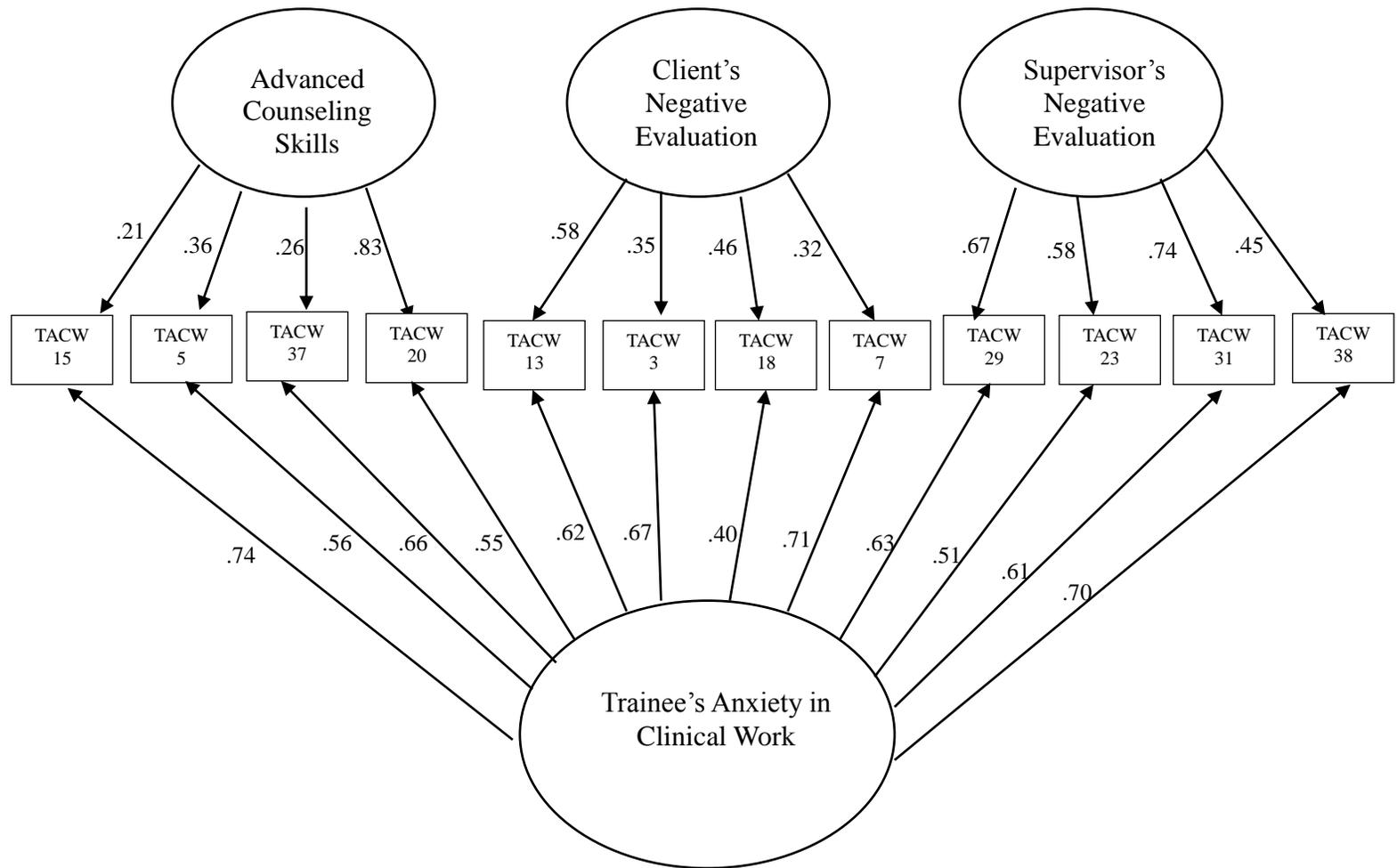


Figure 8. Bi-Factor Model with Factor and Item Loading

subscales ranged from .36 to .46. Supervisor's Negative Evaluation has moderate associations with Advanced Counseling Skills ($r = .36$) and Client's Negative Evaluation ($r = .43$). Advanced Counseling Skills has a moderate association with Client's Negative Evaluation ($r = .46$).

In terms of incremental validity, I examined the role of the TACW (Time 1) in predicting counseling self-efficacy (Time 2) over and beyond trait anxiety. The results indicated that the TACW (Time 1) accounted for an additional 12% of the variance in predicting counseling self-efficacy (Time 2).

Additional Analyses for Demographic Information

T-tests or ANOVAs were computed to examine whether there were mean differences of TACW and its three subscales on demographic information (i.e., gender, ethnicity, education level [master's and doctoral program], professional program [counseling psychology, clinical psychology, and counselor education], and number of completed semester practicum). A p value of .01 was applied for all analyses due to the fact that multiple tests had been performed. Results indicated that there were no mean differences of TACW and its three subscales for gender ($ps = .21$ to $.49$), ethnicity ($ps = .02$ to $.14$), education level ($ps = .50$ to $.78$), professional program ($ps = .08$ to $.77$). The results from correlation analyses indicated that the number of completed semester practicum was significantly associated with TACW ($r = -.22, p < .01$), Supervisor's Negative Evaluation ($r = -.17, p < .05$), Advanced Counseling Skills ($r = -.21, p < .01$), and Client's Negative Evaluation ($r = -.14, p < .05$). Participants who completed more number of practicum indicated less anxiety in their clinical work.

Examining Test-Retest Reliability

The test-retest reliability of the TACW and its three subscales was examined using sample at Time 1 (i.e., around the beginning/middle of spring semester in 2013) and sample at

Time 2 (in the end of the spring semester in 2013). The results of test-retest reliability for the TACW and its three subscales were as follows: TACW ($r = .74$), Supervisor's Negative Evaluation ($r = .66$), Advanced Counseling Skills ($r = .69$), and Client's Negative Evaluation ($r = .69$).

Testing the Mediation Effects: A Cross-Lagged Panel Path Analysis

A cross-lagged panel path analysis was used to test the mediation effects. The path model would be estimated using the maximum likelihood method in MPlus 6.11. The same three fit indices suggested by Hu and Bentler (1999) would be used to assess the goodness of fit. A cross-lagged panel model was used to examine the following four hypotheses: (a1) whether trainee's anxiety in clinical work at Time 2 would mediate the link between supervisory working alliance at Time 1 and counseling self-efficacy at Time 2, (a2) whether trainee's anxiety in clinical work at Time 2 would mediate the link between self-compassion at Time 1 and counseling self-efficacy at Time 2, (b1) whether supervisory working alliance at Time 2 would mediate the link between trainee's anxiety in clinical work at Time 1 and counseling self-efficacy at Time 2, (b2) whether self-compassion at Time 2 would mediate the link between trainee's anxiety in clinical work at Time 1 and counseling self-efficacy at Time 2.

The bootstrap method was implied to test the significance of indirect effects (Shrout & Bolger, 2002). A total of 1,000 bootstraps were performed. Based on MacKinnon, Lockwood, and Williams (2004)'s suggestion, if 95% confidence interval [CI] of bootstrap with bias correction does not include zero which indicates that the indirect effect is considered statistically significant at the .05 level. The results (see Figure 9 and Table 4) confirmed hypotheses (a1) and (a2).

Specifically, after controlling for number of completed practicum, both supervisory working alliance at Time 1 and self-compassion at Time 1 would lessen trainee's anxiety in clinical work at Time 2, which in turn was associated with lower counseling self-efficacy at Time 2. However, the results did not confirm the hypotheses (b1) and (b2). In other words, the results did not support that trainee's anxiety in clinical work at Time 1 would activate supervisory working alliance at Time 2 or self-compassion at Time 2 and, in turn, would be associated with counseling self-efficacy at Time 2 after controlling for number of completed practicum. Additionally, about 65% of the variance in trainee's anxiety in clinical work at Time 2 was explained by number of completed practicum, supervisory working alliance at Time 1, trainee's anxiety in clinical work at Time 1, and self-compassion at Time 1; about 46% of the variance in counseling self-efficacy at Time 2 was explained by number of completed practicum, supervisory working alliance at Time 2, trainee's anxiety in clinical work at Time 2, and self-compassion at Time 2^{1,2}.

Testing the Moderation Effects

I examined whether the dependent variable (i.e., counseling self-efficacy at Time 2) significantly covariates with any of the measured demographic variables. T-tests were conducted to test whether counseling self-efficacy varies as a function of participants' gender, ethnicity (i.e., European Americans and minorities), and education level (i.e., master's or doctoral program). A *p* value of .01 was applied for all t-test analyses considering multiple tests had performed. An analysis of variance was conducted to examine whether the dependent variable (i.e., counseling self-efficacy at Time 2) varied as a function of professional programs (i.e., counseling psychology, clinical psychology, or counselor education). The correlation was used to examine

whether number of practicum that participants completed was associated with counseling self-efficacy.

Table 4

Bootstrap Analysis of Magnitude and Statistical Significance of Indirect Effects

Indirect Effect	β (standardized path coefficient and product)	Mean Indirect Effect (b) ^a	SE of Mean ^a	95% CI of bootstrap with bias correction for Mean Indirect Effect ^a (Lower, Upper)
a1. SWA(T1) → TACW(T2) → SMSE (T2)	(-.18) x (-.50)= .090	.089	.045	[.002, .176]*
b1. SCS(T1) → TACW (T2) → SMSE (T2)	(-.15) x (-.50)= .075	.077	.030	[.018, .135]*
a2. TACW (T1) → SWA(T2) → SMSE (T2)	(-.04) x (.13)= -.005	-.005	.012	[-.029, .019]
b2. TACW (T1) → SCS (T2) → SMSE (T2)	(.06) x (.11)= .007	.006	.010	[-.014, .025]

Note. $N=235$. SWA = Supervisory Working Alliance; TACW = Trainee's Anxiety in Clinical Work; SMSE = Session Management Self-Efficacy; SCS = Self-Compassion.

^a These values based on the standardized path coefficients

* $p < .05$ (95% Confidence Interval does not include zero)

The results from t-tests indicated that there were no significant differences for gender ($t [114] = 1.31, p = .20$), ethnicity ($t [114] = -1.73, p = .09$), and education level ($t [114] = -1.30, p = .20$).

The results from analysis of variance revealed that there were not significant differences for professional programs ($F [3, 112] = 1.47, p = .23$). The result from correlation suggested that there was significant association between number of practicum and counseling self-efficacy ($r = .38, p < .01$). Therefore, number of practicum was included as a covariate in subsequent regression analyses.

Before conducting the first set hierarchical regression for this study, for trainee's anxiety in clinical work at Time 1 as a moderator, [i.e., (c1) supervisory working alliance (Time 1) X trainee's anxiety in clinical work (Time 1) on counseling self-efficacy (Time 2) and (c2) self-compassion (Time 1) X trainee's anxiety in clinical work (Time 1) on counseling self-efficacy (Time 2)], I assessed whether the data collected for this study meet the regression assumptions of linearity, homoscedasticity, and normality (Cohen, Cohen, West, & Aiken, 2003; Tabachnick & Fidell, 2007). The residual scores of skewness (-1.07) and kurtosis (1.56) indicated that there was only a slight departure from normality.

Given supervisory working alliance was slightly associated with self-compassion ($r = .20$ for Time 1 and $r = .21$ for Time 2). Therefore, multicollinearity between two moderators (i.e., self-compassion or supervisory working alliance) would not be a major concern in this study. Therefore, one hierarchical regression was conducted.

Prior to the regression analyses, the covariate (i.e., number of practicum), the predictor variables (i.e., supervisory working alliance [Time 1] and self-compassion [Time 1]) and moderators (i.e., trainee's anxiety in clinical work [Time 1]) were standardized in order to minimize possible multicollinearity among covariate, predictor and moderator variables (Aiken

& West, 1991; Frazier, Tix, & Barron, 2004). In this study, one hierarchical multiple regression analysis was conducted to examine two moderation effects. Specifically, one is for the interaction of supervisory working alliance (Time 1) and trainee's anxiety in clinical work (Time 1) on counseling self-efficacy (Time 2). The other is for the interaction of self-compassion (Time 1) and trainee's anxiety in clinical work (Time 1) on counseling self-efficacy (Time 2). In Step 1 of the hierarchical regression, number of practicum was entered as a covariate. In Step 2, supervisory working alliance (Time 1) and self-compassion (Time 1) were entered as predictors. In Step 3, trainee's anxiety in clinical work (Time 1) was entered as a moderator. In Step 4, the interaction terms (i.e., working alliance [Time 1] x trainee's anxiety in clinical work [Time 1] and self-compassion [Time 1] x trainee's anxiety in clinical work [Time 1]) were entered to examine the interaction effects on counseling self-efficacy. The results supported one of our moderation hypotheses. As seen in Table 5, in Step 1, number of practicum accounted for 15% of the variance in predicting counseling self-efficacy (Time 2). In Step 2, supervisory working alliance (Time 1) and self-compassion (Time 1) accounted for an additional 17% of variance in predicting counseling self-efficacy (Time 2). In Step 3, trainee's anxiety in clinical work (Time 1) added an incremental 8% of the variance in predicting counseling self-efficacy. In Step 4, two-way interaction of working alliance (Time 1) x trainee's anxiety in clinical work (Time 1) was statistically significant ($\Delta R^2 = .09, p < .001$) and added an incremental 9% of the variance in predicting counseling self-efficacy.

Because one of the two-way interactions was significant, then the simple effect analysis was conducted to further investigate the nature of the interaction effects. The results from the simple effect analysis would help identify whether the association between supervisory working alliance (Time 1) and counseling self-efficacy (Time 2) is significant for individuals with high

(+1 *SD*) or low (-1 *SD*) trainee's anxiety in clinical work (Time 1). According to Cohen et al.'s (2003) suggestions, one standard deviation below and above the mean was calculated for the variables in order to plot the nature of the simple effect (see Figure 10). The results indicated that, for trainees with higher anxiety in clinical work, the association between supervisory working alliance (Time 1) and counseling self-efficacy (Time 2) was significantly positive ($b = .53, \beta = .51, p < .001$). However, for trainees with lower anxiety in clinical work (Time 1), the association between supervisory working alliance (Time 1) and counseling self-efficacy (Time 2) was not significant ($b = -.07, \beta = -.07, p > .05$).

Similarly, before conducting the second hierarchical regression for this study, for supervisory working alliance at Time 1 and self-compassion at Time 1 as moderators, [i.e., (d1) trainee's anxiety in clinical work (Time 1) X supervisory working alliance (Time 1) on counseling self-efficacy (Time 2) and (d2) trainee's anxiety in clinical work (Time 1) X self-compassion (Time 1) on counseling self-efficacy (Time 1)], I assessed whether the data collected for this study meet the regression assumptions of linearity, homoscedasticity and normality (Cohen et al., 2003; Tabachnick & Fidell, 2007). The residual scores of skewness (-1.02) and kurtosis (1.51) indicated that there was only slightly departure from normality.

Prior to the regression analyses, the covariate (i.e., number of practicum), the predictor variable (i.e., trainee's anxiety in clinical work [Time 1]) and moderators (i.e., supervisory working alliance and self-compassion [Time 1]) were standardized in order to minimize possible

Table 5

Two-way Interactions of (a) supervisory working alliance at Time 1 and trainee's anxiety in clinical work at Time 1 and (b) self-compassion at Time 1 and trainee's anxiety in clinical work at Time 1 on counseling self-efficacy at Time 2

Variable	<i>B</i>	<i>SE B</i>	β	ΔR^2
Step 1				.15***
Number of practicum	0.34	.08	.39***	
Step 2				.17***
Supervisory Working Alliance (SWA) (Time 1)	0.24	.09	.23**	
Self-Compassion (SC) (Time 1)	0.28	.08	.30***	
Step 3				.08***
Trainee's Anxiety in Clinical Work (TACW) (Time 1)	-0.30	.08	-.30***	
Step 4				.09***
SWA x TACW	0.33	.08	.32***	
SC x TACW	-0.05	.07	-.06	

Note. $N = 115$.

* $p < .05$. ** $p < .01$. *** $p < .001$.

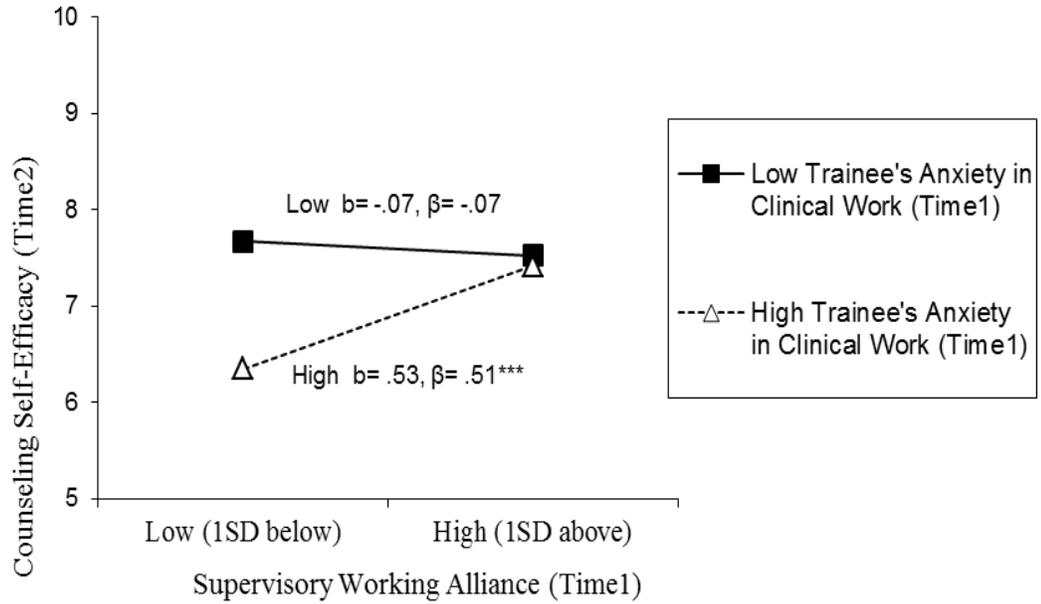


Figure 10. The Interaction Effect of Supervisory Working Alliance (Time 1) and Trainee's Anxiety in Clinical Work (Time 1) on Counseling Self-Efficacy (Time 2)

*** $p < .001$.

multicollinearity among covariate, predictor and moderator variables (Aiken & West, 1991; Frazier et al., 2004). In this study, one hierarchical multiple regression analysis was conducted to examine two moderation effects. Specifically, one is for the interaction of trainee's anxiety in clinical work (Time 1) and supervisory working alliance (Time 1) on counseling self-efficacy (Time 2). The other is for the interaction of trainee's anxiety in clinical work (Time 1) and self-compassion (Time 1) on counseling self-efficacy (Time 2). In Step 1 of the hierarchical regression, number of practicum was entered as a covariate. In Step 2, trainee's anxiety in clinical work (Time 1) was entered as predictors. In Step 3, supervisory working alliance (Time 1) and self-compassion (Time 1) were entered as a moderator. In Step 4, the interaction terms (i.e., (a) trainee's anxiety in clinical work [Time 1] x supervisory working alliance [Time 1] and (b) trainee's anxiety in clinical work [Time 1] x self-compassion [Time 1]) were entered to examine the interaction effects on counseling self-efficacy. The results supported one of our moderation hypotheses.

As seen in Table 6, in Step 1, the number of practicum accounted for 15% of the variance in predicting counseling self-efficacy (Time 2). In Step 2, trainee's anxiety in clinical work (Time 1) accounted for an additional 15% of variance in predicting counseling self-efficacy (Time 2). In Step 3, supervisory working alliance (Time 1) and self-compassion (Time 1) added an incremental 10% of the variance in predicting counseling self-efficacy. In Step 4, two-way interactions added an incremental 9% of the variance in predicting counseling self-efficacy, $\Delta R^2 = .05, p = .01$. Specifically, the interaction of trainee's anxiety in clinical work (Time 1) and supervisory working alliance (Time 1) was statistically significant ($b = .32, \beta = .31, p < .001$), but not significant for the interaction of trainee's anxiety in clinical work (Time 1) and self-compassion (Time 1), $b = -.04, \beta = -.04, p > .05$. Because one of the two-way interactions was

significant, then the simple effect analysis was conducted to further investigate the nature of the interaction effects. The results from the simple effect analysis would help identify whether the association between trainee's anxiety in clinical work (Time 1) and counseling self-efficacy (Time 2) is significant for individuals with high (+1 *SD*) or low (-1 *SD*) supervisory working alliance (Time 1). According to Cohen et al.'s (2003) suggestions, one standard deviation below and above the mean was calculated for the variables in order to plot the nature of the simple effect (see Figure 11). The results indicated that, for trainees with lower supervisory working alliance, the association between trainee's anxiety in clinical work (Time 1) and counseling self-efficacy (Time 2) was significantly negative ($b = -.66, \beta = -.66, p < .001$). However, for trainees with higher supervisory working alliance (Time 1), the association between trainee's anxiety in clinical work (Time 1) and counseling self-efficacy (Time 2) was not significant ($b = -.05, \beta = -.05, p > .05$)³.

Table 6

Two-way Interactions of (a) trainee's anxiety in clinical work at Time 1 and supervisory working alliance at Time 1 and (b) trainee's anxiety in clinical work at Time 1 and self-compassion at Time 1 on counseling self-efficacy at Time 2

Variable	<i>B</i>	<i>SE B</i>	β	ΔR^2
Step 1				.15***
Number of practicum	0.34	.08	.39***	
Step 2				.15***
Trainee's Anxiety in Clinical Work (TACW) (Time 1)	-0.40	.08	-.40***	
Step 3				.10***
Supervisory Working Alliance (SWA) (Time 1)	0.21	.08	.20*	
Self-Compassion (SC) (Time 1)	0.21	.08	.19**	
Step 4				.09***
TACW Time 1 x SWA Time 1	0.32	.08	.31***	
TACW Time 1 x SC Time 1	-0.04	.07	-.04	

Note. $N = 115$.

* $p < .05$. ** $p < .01$. *** $p < .001$.

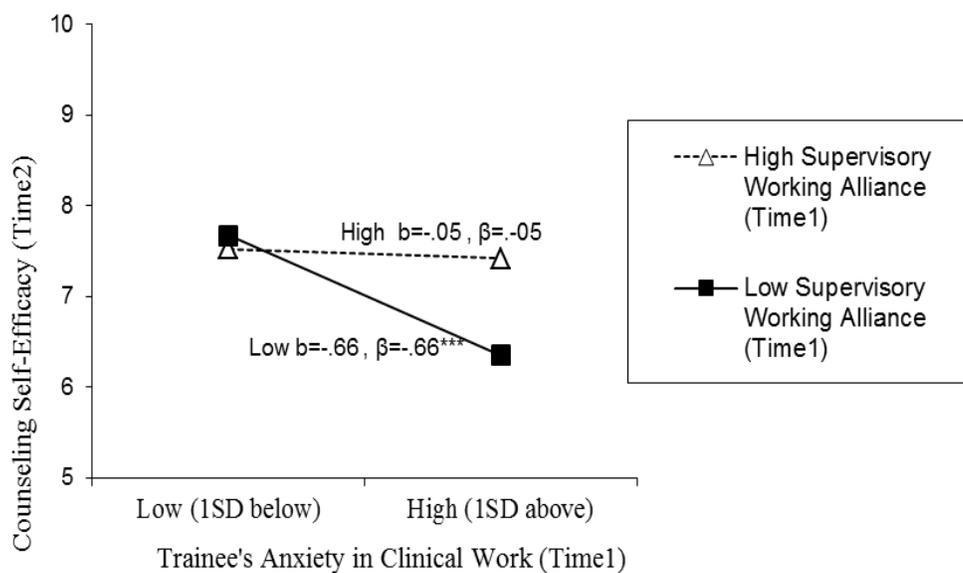


Figure 11. The Interaction Effect of Trainee's Anxiety in Clinical Work (Time 1) and Supervisory Working Alliance (Time 1) on Counseling Self-Efficacy (Time2)
*** $p < .001$.

CHAPTER 5

DISCUSSION

The first purpose of this study was to develop a reliable and valid scale that would measure trainee's anxiety in clinical work. The confirmatory analyses suggested that the bi-factor model demonstrated the optimal fit for the data. Specifically, this newly developed scale can be used as a general concept to measure trainee's anxiety in clinical work as well as three specific factors (i.e., Supervisor's Negative Evaluation, Advanced Counseling Skills, and Client's Negative Evaluation).

With regard to validity, the three subscales (Supervisor's Negative Evaluation, Advanced Counseling Skills, and Client's Negative Evaluation) had moderate and positive associations with each other and with the overall scale (i.e., Trainee's Anxiety in Clinical Work). These results supported the validity for the TACW. In addition, the results also support incremental validity of the TACW. Namely, the TACW accounted for an additional 12% of the variance in predicting counseling self-efficacy over and above trait anxiety. Also, the results indicated there were no mean differences of TACW and its three subscales on demographic information (i.e., gender, ethnicity, education level [master's and doctoral program], and professional program [counseling psychology, clinical psychology, and counselor education]). However, the results found that individual who completed more number of practicum had less anxiety in clinical work. This result was consistent with a previous study indicating that interns or advanced practicum trainees experienced less stress (e.g., inability to help client feel better, desiring to make good impression with supervisor) compared to beginning practicum students (Al-

Darmaki, 2004; Rodolfa et al., 1988). Moreover, our sample was representative compared to national data which supported generalizability of the TACW to graduate level counseling trainees nationally.

Cross-Lagged Panel Path Model

To better understand the causation relationship between trainee's anxiety in clinical work and supervisory working alliance and self-compassion, a cross-lagged panel path model was used to examine the following two sets of hypotheses after controlling for number of completed practicum. The first set was (a1) whether the impact of supervisory working alliance at Time 1 on counseling self-efficacy at Time 2 would mediate through trainee's anxiety in clinical work at Time 2 and (a2) whether the impact of self-compassion at Time 1 on counseling self-efficacy at Time 2 would mediate through trainee's anxiety in clinical work at Time 2. The second set was (b1) whether the impact of trainee's anxiety in clinical work at Time 1 on counseling self-efficacy at Time 2 would mediate through supervisory working alliance at Time 2 and (b2) whether the impact of trainee's anxiety in clinical work at Time 1 on counseling self-efficacy at Time 2 would mediate through self-compassion at Time 2. The results from cross-lagged panel analyses confirmed that hypotheses (a1) and (a2) (see Figure 9 and Table 4). Specifically, after controlling for number of completed practicum, both supervisory working alliance at Time 1 and self-compassion at Time 1 would lessen trainee's anxiety in clinical work at Time 2, which in turn was associated with lower counseling self-efficacy at Time 2. However, the results did not support the hypotheses (b1) and (b2). In other words, the results did not support trainee's anxiety in clinical work at Time 1 activate supervisory

working alliance at Time 2 or self-compassion at Time 2 and, in turn, associated with counseling self-efficacy at Time 2 after controlling for number of completed practicum.

Possible explanation for results from hypothesis (a1) may be that, sound supervisory working alliance established earlier in the supervision would enable trainees to process their obstacles toward mastering counseling skills and their concerns about evaluation from client and supervisor, which would contribute to less anxiety in their clinical work, in turn, would associate with positive counseling self-efficacy. This result corresponded with Bordin's (1983)'s perspective on essential goals in the supervisory working alliance, such as mastery of counseling skills, increasing awareness of self and impact on process, and enlarging supervisee's understanding of clients. This result supported the SCMCT model (Larson, 1998), indicating that supervisors would function well to enhance trainee's counseling self-efficacy only when a sound supervisory working alliance (i.e., an atmosphere of trust and safety) was built. Empirically, in a qualitative study conducted by Hill et al. (2007), the results suggested that supervision would help trainees cope with anxieties through supervisor's validation and encouragement, and in turn, was associated with trainee's self-confidence about the counseling session. In contrast, the result invalidated the hypothesis (b1). Trainee's anxiety in earlier clinical work has little impact on building future supervisory work alliance. Perhaps, trainee's anxiety in clinical work may either impede or facilitate supervisory working alliance which may complicate the direction from trainee's anxiety to supervisory working alliance. It is likely that some trainees may act out their anxiety through being resistant, withdrawing, or non-disclosing in supervision which may obstruct the supervisory working alliance. Others may react to their anxiety through good bonding with their

supervisors and addressing their anxieties in supervision which would facilitate the supervisory working alliance.

One potential explanation for the result from hypothesis (a2) was as follows. Self-compassion would enable trainees to maintain in a “being” mode (e.g., accepting and allowing) toward self and clients instead of in a “doing” mode (e.g., trying to fix client’s presenting concerns). With a being mode, they are likely to fully attend to their clients without judging or reacting which would help alleviate their anxiety in session. However, with a doing mode, trainees are likely to become preoccupied with internal cognitive searching for what to do (Greason & Cashwell, 2009), which would aggregate their anxiety in session, and in turn, would affect their counseling self-efficacy. Empirically, in a study related to mindfulness-based stress reduction program on the graduate counseling students, the results indicated that mindfulness practice was helpful in emotion regulation through decreasing trainees’ anxiety (Shapiro et al., 2007). Also, trainees with greater self-compassion were found to have better affect-tolerance with self and with clients (Greason & Cashwell, 2009).

Conversely, the result did not support the hypothesis (b2). Trainee’s anxiety in earlier clinical work does not seem to activate self-compassion at a later time. It is likely that trainee’s anxiety in earlier clinical work may or may not activate trainee’s self-compassion at a later time. Possibly, some trainees experience anxiety in earlier clinical work may be excessively occupied by their internal anxiety which leaves them limited space to access their internal resources (e.g., self-compassion). Some trainees, however, may still be able to access their internal resources (e.g., self-compassion) in the face of anxiety earlier in their clinical work. The results from cross-lagged model suggested that

personal resource (e.g., self-compassion) at Time 1 contributed to lessening trainee's anxiety in clinical work at Time 2, but not vice versa. This result was similar to Wei et al.'s (2014) study, suggesting that hindering self-awareness mediated the link between mindfulness and counseling self-efficacy (i.e., mindfulness → hindering self-awareness → counseling self-efficacy), but not mindfulness mediated the link between hindering self-awareness and counseling self-efficacy (i.e., hindering self-awareness → mindfulness → counseling self-efficacy).

Moderation

In the first set of hypotheses, the results supported the significant interaction of supervisory working alliance (Time 1) and trainee's anxiety clinical work (Time 1) on counseling self-efficacy (Time 2). Specifically, for trainees with higher anxiety in clinical work, the association between supervisory working alliance (Time 1) and counseling self-efficacy (Time 2) was significantly positive. However, for trainees with lower anxiety in clinical work (Time 1), the association between supervisory working alliance (Time 1) and counseling self-efficacy (Time 2) was not significant. The result implies that supervisory working alliance could be especially helpful for increasing trainees' counseling self-efficacy for those with higher anxiety in clinical work. Trainees with higher anxiety in clinical work can benefit from a strong supervisory working alliance to help them regulate their anxiety. It is possible that when trainees experience anxiety in their earlier clinical work, they need more external validation, supportive feedback from their supervisors. This result also supported the SCMCT's perspective. Specifically, it is especially helpful for trainees to increase their counseling efficacy through early on supervisor's positive feedback, clarification of expectations, and modeling. Consistent

with Hill et al.'s (2007) findings, they suggested that beginning graduate trainees found supervisor's support, feedback, facilitation of exploration were most helpful to them. Conversely, for trainees with a lower level of anxiety in clinical work, their counseling self-efficacy still maintained in a higher level regardless of their supervisory working alliance. Perhaps those trainees are more able to be self-reliant in advancing their counseling self-efficacy, therefore, no matter supervisory working alliance is, they are still capable to stay at a higher level of counseling self-efficacy. An empirical study has shown that counselors with low stress reported greater coping resources than do counselors with higher stress (Sowa, May, & Niles, 1994).

However, contrary to my hypothesis, the results did not support the interaction between self-compassion (Time 1) and trainee's anxiety in clinical work (Time 1) on counseling self-efficacy (Time 2). Perhaps, this result simply implies that self-compassion would positively enhance counseling self-efficacy in the similar rate across trainees with different levels of anxiety.

Moreover, in the second set of hypotheses, the results confirmed the significant interaction of trainee's anxiety in clinical work (Time 1) and supervisory working alliance (Time 1) on counseling self-efficacy (Time 2). Specifically, for trainees with lower supervisor working alliance (Time 1), the association between trainee's anxiety in clinical work (Time 1) and counseling self-efficacy (Time 2) was significantly negative. A possible interpretation for this result is that trainees with less supervisory working alliance tend to have less bonding with their supervisors, which may make them less comfortable to address their anxieties in supervision. Corresponding to the SCMCT's perspective (Larson, 1998), the poor supervisory working alliance would impede

supervisors' ability to provide realistic, structural, and supportive feedback to trainees, which would link negatively to trainees' counseling self-efficacy. Therefore, their unprocessed anxiety is likely to impede their counseling self-efficacy. This result corresponds with Mehr et al.'s (2010) findings, suggesting that less supervisory working alliance was associated with trainee's nondisclosure of concerns about professional inadequacy and supervisor's negative perception toward them. However, for trainees with higher supervisory working alliance (Time 1), the association between trainee's anxiety in clinical work (Time 1) and counseling self-efficacy (Time 2) was not significant. As we can see in Figure 11, trainees with higher supervisory working alliance were able to maintain at a higher level of counseling self-efficacy despite their anxiety in clinical work. Perhaps, those trainees with higher supervisory working alliance were more likely to process their anxiety in supervision, which would help them overcome their obstacles toward mastering counseling skills and deepen their self-awareness about how to manage their own anxiety (Bordin, 1983). This result supported the SCMCT theory (Larson, 1998) that supervisors would function better to help trainees become more efficacious with clients only if a trust and supportive supervisory relationship is present. Therefore, their anxiety in clinical work does not seem to impact their building of counseling self-efficacy.

Conversely, the results did not support the interaction of self-compassion (Time 1) and trainee's anxiety in clinical work (Time 1) on counseling self-efficacy (Time 2). Perhaps, this result may simply suggest that trainee's anxiety in clinical work would impact future counseling self-efficacy with no differences across different levels of self-compassion trainees have.

Contribution to Counselor Training and Supervision Literature

The current study contributed to counselor training and supervision literature in the following two aspects. First, to my knowledge, previous research (e.g., Friedlander et al., 1986; Larson et al., 1992; Meyer, 2012) has been using general anxiety (e.g., trait anxiety or state anxiety) to represent trainee's anxiety in their clinical work which limited their capacity to catch trainee's specific concerns and anxiety in their clinical work. To address this limitation in the previous literature, the current study was the first one to develop the scale to measure trainee's anxiety in clinical work.

Second, the study advanced the SCMCT model (Larson, 1998) by providing empirical support using cross-lagged panel model to better understand the causal relationships among supervisory environment (i.e., supervisory working alliance), personal agency (i.e., self-compassion), trainee's learning process (i.e., trainee's anxiety in clinical work), and how those factors associate with their counseling self-efficacy. The results from this study highlighted that personal agent (i.e., self-compassion) and supervisory environment (i.e., supervisory working alliance) at Time 1 contributed to trainee's learning process (trainee's anxiety in clinical work), and it was not vice versa. Specifically, the findings of this study supported that supervisory working alliance at Time 1 and self-compassion at Time 1 would contributed to lessening trainee's anxiety in clinical work at Time 2, which in turn, would relate to their counseling self-efficacy at Time 2. Meanwhile, the results did not support that trainee's anxiety at Time 1 would activate their self-compassion or elicit building a good supervisory working alliance at Time 2 and then to predict their counseling self-efficacy at Time 2. Additionally, moderation effects also highlight the importance of supervisor working alliance.

Specifically, as shown in Figure 10, trainees with higher anxiety in clinical work at Time 1 would benefit from greater supervisory working alliance at Time 1 to build their counseling self-efficacy at Time 2. From a different angle, as shown in Figure 11, greater supervisor working alliance at Time 1 helps trainees to maintain their sense of counseling self-efficacy at Time 2 even when their anxiety in clinical work increases at Time 1. These results imply that supervisory working alliance plays an important role to help trainees regulate their anxiety in their clinical work.

Limitations

Despite this study's contributions to the current counselor training and supervision literature, there are still some limitations that have to be noted. First, potential participants were told that this study was to examine helpful resources for regulating anxiety in order to build counseling self-efficacy. The self-selection in participation may lead to bias in the sample. That is, it is possible that only those who are interested in this topic would consider participate in this study. Second, this study only examined one aspect of counseling self-efficacy, namely session management self-efficacy, future studies are needed to examine other counseling outcomes, such as other aspects of counseling self-efficacy (e.g., helping skills self-efficacy and counseling challenges self-efficacy), client's satisfaction of counseling sessions, counselor's working alliance with clients, and counselor performance. Third, future research could continue to examine the validity of the TACW scale through other method of investigation (e.g., supervisor's or peer's observation or rating) and behavior-based methods (e.g., analyses recorded tape of counseling sessions). Forth, due to the concern of multicollinearity issue from unexpected

high correlation between self-efficacy and trait anxiety, trait anxiety was dropped from mediation and moderation data analyses.

Future Research Directions

With regard to future research, there are at least four directions. First, the development of the TACW scale potentially provided a sound psychometric measure to examine trainee's anxiety in clinical work. This newly developed scale is important as trainee's anxiety in clinical work is a critical topic in the counselor training and supervision fields. This scale would serve as a useful instrument for future research to continue to examine whether the TACW may serve as a moderator or mediator between counseling training and counselor's performance or serve as predictor for counseling outcomes (e.g., client's satisfaction for counseling sessions). For example, in Ganske's (2008) study, for trainees with higher counseling self-efficacy, maladaptive perfectionism (i.e., one type of trainee's anxieties) was a predictor for lower supervisor's perception of supervisory working alliance.

Second, future research can continue to advance the psychometrical properties of this scale through conducting qualitative studies to better understand underlying reasons for trainee's anxiety in clinical work as well as potential resources for them to regulate their anxieties. For example, a qualitative study on psychology interns was conducted to examine their anxiety in clinical work and how they managed those anxieties, their results suggesting that interns reported anxieties of being out of control, fear of negative evaluation, fear of not being good enough as well as professional issues, such as agency policies. Also interns reported helpful strategies to manage anxiety including mindfulness

skills, normalization, supervisor's support, social support, and environmental support (Wei, Du, Tsai, Shih, & Wang, 2013).

Third, this study measured the TACW at two time points, one was in the beginning of practicum and the other was in the end of practicum. The results from test-retest reliability of the TACW and its three subscales (i.e., Negative Evaluation, Advanced Counseling Skills, and Client's Negative Evaluation) indicated this newly developed scale was sensitive to change, which implies trainees demonstrated significant less anxiety in the clinical work at Time 2. Future studies can continue to explore the cross-lagged panel analyses of the associations between supervisory working alliance and trainee's anxiety in clinical work session by session weekly.

Fourth, the results indicated that trainees with lower anxiety in clinical work can still maintain their counseling efficacy at a high level. Future research can explore other resources (e.g., hindering self-awareness) that may help those individual with lower anxiety in clinical work advance their counseling self-efficacy. For example, in Wei et al.'s (2014) study, they found that hindering self-awareness mediated the association between psychological flexibility and counseling self-efficacy. Specifically, the results revealed that trainees with psychological flexibility reported less experiences of hindering self-awareness, which in turn was positively associated with counseling self-efficacy.

Clinical Implications

Research has demonstrated that trainee's anxiety in clinical work is not uncommon and it can limit trainee's capacity and effectiveness in counseling sessions (Clark et al., 2009; Larson & Daniel, 1998; Wilkerson, 2009). Clinical supervisors and practicum instructors can help trainees to identify their anxieties in clinical work through

using the Trainee's Anxiety in Clinical Work Scale. Trainees are able to recognize which area(s) of anxiety they are experiencing. Supervisors or instructors are encouraged to open discuss trainees' anxieties in supervision and in practicum class. Supervisors or instructors can validate and normalize trainees' anxieties by sharing their similar experiences and modeling how to process this topic. With normalization and validation, trainees would be able to think their anxieties are universal across other trainees, which may decrease their unnecessary self-doubt or self-criticism of their profession identities and self-efficacy. Also, trainees may feel safer and more comfortable addressing their anxieties in supervision which would help them increase awareness of their anxieties and how their anxieties impact their counseling self-efficacy.

In addition, it is important for trainees and supervisors to build a strong positive supervisory working alliance with each other. Greater supervisory working alliance was demonstrated to be helpful in regulating trainee's anxiety in clinical work, and in turn, contribute to their counseling self-efficacy. It is important for trainees and supervisors to examine their supervisory relationship to see whether they have established a good bond. With great bonding, trainees are more able to disclose and address their anxieties in supervision. It is also equally imperative to identify goals in the supervision for trainees to work on their anxieties through deepening self-awareness.

Moreover, with sound supervisory working alliance, supervisors are more likely to help trainees explore their difficulty working with clients and help them understand client's presenting concerns (Efstation et al., 1990). In addition, sound supervisory working alliance enables supervisors to use the supervisory working alliance to provide the following four resources (i.e., performance accomplishments, vicarious experiences,

verbal persuasion, and emotional arousal) to help increase trainees' counseling self-efficacy (Ladany et al., 1999). Specifically, based on the SCMCT model, supervisors can provide feedback and instructions to enhance trainee's performance in counseling skills; vicarious experiences can be conveyed by supervisors through role playing with trainees; supervisors can do verbal persuasion by providing support, validation, and encouragement to their trainees; in terms of emotional arousal, supervisors can also process their supervisory relationship with their trainees in supervision (Larson, 1998).

Despite the importance of supervisory working alliance, earlier developed self-compassion was also found to be beneficial for trainees to reduce their later anxiety in clinical work. Therefore, it is helpful for trainees to practice self-compassion for their clinical work through being kind to self, in a non-judgmental manner, view their anxiety as a universal experience, redirect their attention to here and now, and work towards having the attitude of not avoiding nor exaggerating their experiences in the face of anxiety (Neff, 2003a, b).

REFERENCES

- Al-Darmaki, F. (2004). Counselor training, anxiety, and counseling self-efficacy: Implications for training psychology students from the United Arab Emirates University. *Social Behavior and Personality*, *32*, 429-440.
doi:<http://dx.doi.org/10.2224/sbp.2004.32.5.429>
- Aiken, L. S., & West, S. G. (1991). *Multiple Regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Ardelt, M. (2003). Empirical assessment of a Three-Dimensional Wisdom Scale. *Research on Aging*, *25*, 275-324.
- Arkowitz, S. W. (1990). Perfectionism in the supervisee. *Psychoanalysis & Psychotherapy*, *8*, 51-68.
- Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of human behavior* (Vol. 4, pp. 71-81). New York: Academic Press.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, *84*, 191-215. doi:<http://dx.doi.org/10.1037/0033-295X.84.2.191>
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, *37*, 122-147. doi:<http://dx.doi.org/10.1037/0003-066X.37.2.122>
- Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology*, *4*, 359-373.
doi:<http://dx.doi.org/10.1521/jscp.1986.4.3.359>
- Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, *44*, 1175-1184. doi:[10.1037/0003-066X.44.9.1175](http://dx.doi.org/10.1037/0003-066X.44.9.1175)
- Bandura, A. (1997). *Self-Efficacy: The Exercise of Control*. New York: W.H. Freeman and Company.
- Barlow, D. H. (2000). Unraveling the mysteries of anxiety and its disorders from the perspective of emotion theory. *American Psychologist*, *55*(11), 1247-1263.
doi:<http://dx.doi.org/10.1037/0003-066X.55.11.1247>
- Blatt, S. J. (1995). The destructiveness of perfectionism: Implications for the treatment of depression. *American Psychologist*, *50*, 1003-1020.
doi:<http://dx.doi.org/10.1037/0003-066X.50.12.1003>

- Bordin, E. S. (1983). Supervision in counseling: II. contemporary models of supervision: A working alliance based model of supervision. *The Counseling Psychologist, 11*, 35-42. doi:<http://dx.doi.org/10.1177/0011000083111007>
- Bowman, J. T., & Roberts, G. T. (1979). Counselor trainee anxiety during counseling. *Journal of Counseling Psychology, 26*, 85-88. doi:10.1037/0022-0167.26.1.85
- Bowman, J. T., Roberts, G. T., & Giesen, J. M. (1978). Counselor trainee anxiety during the initial counseling interview. *Journal of Counseling Psychology, 25*, 137-143. doi:<http://dx.doi.org/10.1037/0022-0167.25.2.137>
- Brala, P. M. (1983). Effects of therapist fear of negative evaluation in supervision and supervisory focus on therapist and client anxiety and on a measure of therapy effectiveness. *Dissertation Abstracts International, 2236-2236*.
- Brown, T. A. (2006). Confirmatory factor analysis for applied research. New York, NY: Guilford Press.
- Cashwell, T. H., & Dooley, K. (2001). The impact of supervision on counselor self-efficacy. *The Clinical Supervisor, 20*, 39-47. doi:http://dx.doi.org/10.1300/J001v20n01_03
- Choate, L. H., & Granello, D. H. (2006). Promoting student cognitive development in counselor preparation: A proposed expanded role for faculty advisers. *Counselor Education and Supervision, 46*, 116-130. doi:10.1002/j.1556-6978.2006.tb00017.x
- Christopher, J. C., & Maris, J. A. (2010). Integrating mindfulness as self-care into counselling and psychotherapy training. *Counselling & Psychotherapy Research, 10*, 114-125. doi:<http://dx.doi.org/10.1080/14733141003750285>
- Clark, H. K., Murdock, N. L., Koetting, K. (2009). Predicting burnout and career choice satisfaction in counseling psychology graduate students. *The Counseling Psychologist, 37*, 580-606.
- Cohen, J., Cohen, P., West, S. G., Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: Erlbaum.
- Corey, G. (1996). *Theory and practice of counseling and psychotherapy* (5th ed.). Belmont, CA: Thomson Brooks/Cole.
- Corey, G. (2008). *Theory and practice of counseling and psychotherapy* (8th ed.). Stanford, CT: Wadsworth.
- Daniels, J. A., & Larson, L. M. (2001). The impact of performance feedback on counseling self-efficacy and counselor anxiety. *Counselor Education and Supervision, 41*, 120-130.

- Deutsch, C. J. (1984). Self-reported sources of stress among psychotherapists. *Professional Psychology: Research and Practice, 15*, 833-845. doi:10.1037/0735-7028.15.6.833
- D'Souza, F., Egan, S. J., & Rees, C. S. (2011). The relationship between perfectionism, stress and burnout in clinical psychologists. *Behaviour Change, 28*(1), 17-28. doi:http://dx.doi.org/10.1375/bech.28.1.17
- Duncan, D. M., & Brown, B. M. (1996). Anxiety and development of conceptual complexity in group counselors-in-training. *Journal for Specialists in Group Work, 21*, 252-262. doi:http://dx.doi.org/10.1080/01933929608412257
- Efstation, J. F., Patton, M. J., & Kardash, C. M. (1990). Measuring the working alliance in counselor supervision. *Journal of Counseling Psychology, 37*, 322-329.
- Ekstein, R., & Wallerstein, R.S. (1958). *The teaching and learning of psychotherapy*. New York, NY: Basic Books.
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*, 1149-1160.
- Floyd, F. J., & Widaman, K. F. (1995). Factor analysis in the development and refinement of clinical assessment instruments. *Psychological Assessment, 7*, 286-299. doi:http://dx.doi.org/10.1037/1040-3590.7.3.286
- Fothergill, A., Edwards, D., & Burnard, P. (2004). Stress, burnout, coping and stress management in psychiatrists: Findings from a systematic review. *International Journal of Social Psychiatry, 50*, 54-65.
- Frazier, P. A., Tix, A. P., & Barron, K. E. (2004). Testing moderator and mediator effects in counseling psychology research. *Journal of Counseling Psychology, 51*, 115-134. doi:10.1037/0022-0167.51.1.115
- Friedlander, M. L., Keller, K. E., Peca-Baker, T., & Olk, M. E. (1986). Effects of role conflict on counselor trainees' self-statements, anxiety level, and performance. *Journal of Counseling Psychology, 33*, 73-77. doi:http://dx.doi.org/10.1037/0022-0167.33.1.73
- Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research, 14*, 449-468. doi:http://dx.doi.org/10.1007/BF01172967
- Ganske, K. H. (2008). The relationship between counselor trainee perfectionism and working alliance with supervisor and client. *Dissertation Abstracts International: Section B: The Sciences and Engineering, , 6549-6549*.

- Gilbert, P. (2005). Compassion and cruelty: A biopsychosocial approach. In P. Gilbert (Ed.), *Compassion: Conceptualization, research and use in psychotherapy* (pp.9-74). New York: Routledge.
- Gnilka, P. B., Chang, C. Y., & Dew, B. J. (2012). The relationship between supervisee stress, coping resources, the working alliance, and the supervisory working alliance. *Journal of Counseling & Development, 90*(1), 63-70.
- Goodyear, R. K., & Bernard, J. M. (1998). Clinical supervision: Lessons from the literature. *Counselor Education and Supervision, 38*, 6-22.
- Gorsuch, R. L. (1983). *Factor analysis* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Greason, P. B., & Cashwell, C. S. (2009). Mindfulness and counseling self-efficacy: The mediating role of attention and empathy. *Counselor Education and Supervision, 49*, 2-19. doi:<http://dx.doi.org/10.1002/j.1556-6978.2009.tb00083.x>
- Hannigan, B., Edwards, D., & Burnard, P. (2004). Stress and stress management in clinical psychology: Findings from a systematic review. *Journal of Mental Health, 13*, 235-245. doi:<http://dx.doi.org/10.1080/09638230410001700871>
- Hansen, J. T. (1997). The counseling process and the management of countertransference anxiety with disturbed clients. *Journal of Mental Health Counseling, 19*, 364-372.
- Hatcher, L. (1994). *A Step-by-Step Approach to Using the SAS System for Factor Analysis and Structural Equation Modeling*. Cary, NC: The SAS Institute.
- Henry, W. P., Schacht, T. E., & Strupp, H. H. (1990). Patient and therapist introject, interpersonal process, and differential psychotherapy outcome. *Journal of Consulting and Clinical Psychology, 58*, 768-774. doi:10.1037/0022-006X.58.6.768
- Hill, C. E., Sullivan, C., Knox, S., & Schlosser, L. Z. (2007). Becoming psychotherapists: Experiences of novice trainees in a beginning graduate class. *Psychotherapy: Theory, Research, Practice, Training, 44*, 434-449. doi:10.1037/0033-3204.44.4.434
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*, 1–55. doi:10.1080/10705519909540118
- Humeidan, M. A. (2002). Counseling self-efficacy, supervisory working alliance, and social influence in supervision. *Dissertation Abstracts International: Section B: The Sciences and Engineering, , 1564-1564*.
- Hutt, C. H., Scott, J., & King, M. (1983). A phenomenological study of supervisees' positive and negative experiences in supervision. *Psychotherapy: Theory, Research, and Practice, 20*, 118-123.

- Iskender, M. (2009). The relationship between self-compassion, self-efficacy, and control beliefs about learning in Turkish university students. *Social Behavior and Personality, 37*, 711-720
- Kahn, J. H. (2006). Factor analysis in counseling psychology research, training, and practice: Principles, advances, and applications. *The Counseling Psychologist, 34*, 684–718. doi:10.1177/0011000006286347
- Kelly, K. R., Hall, A. S., & Miller, K. L. (1989). Relation of counselor intention and anxiety to brief counseling outcome. *Journal of Counseling Psychology, 36*(2), 158-162. doi:http://dx.doi.org/10.1037/0022-0167.36.2.158
- Ladany, N., Ellis, M. V., & Friedlander, M. L. (1999). The supervisory working alliance, trainee self-efficacy, and satisfaction. *Journal of Counseling & Development, 77*, 447-455. doi:http://dx.doi.org/10.1002/j.1556-6676.1999.tb02472.x
- Larson, L. M. (1998). The social cognitive model of counselor training. *The Counseling Psychologist, 26*, 219-273.
- Larson, L. M., & Daniels, J. A (1998). Review of the counseling self-efficacy literature. *The Counseling Psychologist, 26*, 179-218.
- Larson, L. M., Suzuki, L. A., Gillespie, K. N., Potenza, M. T., Bechtel, M. A., & Toulouse, A. L. (1992). Development and validation of the counseling self-estimate inventory. *Journal of Counseling Psychology, 39*, 105-120. doi:http://dx.doi.org/10.1037/0022-0167.39.1.105
- Leary, M. R., Tate, E. B., Adams, C. E., Allen, A. B., & Hancock, J. (2007). Self-compassion and reactions to unpleasant self-relevant events: The implications of treating oneself kindly. *Journal of Personality and Social Psychology, 92*, 887-904.
- Lent, R. L., Hoffman, M. A., Hill, C. E., Treistman, D., Mount, M., & Singley, D. (2006). Client-specific counselor self-efficacy in novice counselors: Relation to perceptions of session quality. *Journal of Counseling Psychology, 53*, 453–463. doi:10.1037/0022-0167.53.4.453
- Lent, R. W., & Maddux, J. E. (1997). Self-efficacy: Building a sociocognitive bridge between social and counseling psychology. *The Counseling Psychologist, 25*, 240-255. doi:http://dx.doi.org/10.1177/0011000097252005
- Lent, R. W., Cinamon, R. G., Bryan, N. A., Jezzi, M. M., Martin, H. M., & Lim, R. (2009). Perceived sources of change in trainees' self-efficacy beliefs. *Psychotherapy: Theory, Research, Practice, Training, 46*, 317-327. doi:10.1037/a0017029

- Lent, R. W., Hill, C. E., & Hoffman, M. A. (2003). Development and validation of the Counselor Activity Self-Efficacy Scales. *Journal of Counseling Psychology, 50*, 97-108.
- Levitt, D. H. (2001). Active listening and counselor self-efficacy: Emphasis on one microskill in beginning counselor training. *The Clinical Supervisor, 20*, 101-115.
- Linley, P. A., & Joseph, S. (2007). Therapy work and therapists' positive and negative well-being. *Journal of Social and Clinical Psychology, 26*, 385-403.
doi:<http://dx.doi.org/10.1521/jscp.2007.26.3.385>
- MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research, 39*, 99-128.
doi:http://dx.doi.org/10.1207/s15327906mbr3901_4
- Martin, D. J., Garske, J. P., & Davis, M. K. (2000). Relation of the therapeutic alliance with outcome and other variables: A meta-analytic review. *Journal of Consulting and Clinical Psychology, 68*, 438-450. doi:<http://dx.doi.org/10.1037/0022-006X.68.3.438>
- Maruyama, G. (1998). Basics of structural equation modeling. Newbury Park, CA: Sage.
- McCullum, E. E., & Gehart, D. R. (2010). Using mindfulness meditation to teach beginning therapists therapeutic presence: A qualitative study. *Journal of Marital and Family Therapy, 36*, 347-360.
- Mehr, K. E., Ladany, N., & Caskie, G. I. L. (2010). Trainee nondisclosure in supervision: What are they not telling you? *Counselling & Psychotherapy Research, 10*, 103-113. doi:10.1080/14733141003712301
- Menninger, W. W. (1990). Anxiety in the psychotherapist. *Bulletin of the Menninger Clinic, 54*, 232-246.
- Messer, S. B., & Wampold, B. E. (2002). Let's face facts: Common factors are more potent than specific therapy ingredients. *Clinical Psychology: Science and Practice, 9*, 21-25. doi:<http://dx.doi.org/10.1093/clipsy/9.1.21>
- Meyer, R. L. (2012). Predictors of counselor self-efficacy among master's level counselor trainees: Impact of cohort versus non-cohort educational programs. *ProQuest Dissertations and Theses*, 181.
- Morrisette, P. J. (1996). Recurring critical issues of student counsellors. *Canadian Journal of Counselling, 30*, 31-41.
- Neely, M. E., Schallert, D. L., Mohammed, S. S., Roberts, R. M., & Chen, Y. (2009). Self-kindness when facing stress: The role of self-compassion, goal regulation,

- and support in college students' well-being. *Motivation and Emotion*, 33, 88-97. doi:10.1007/s11031-008-9119-8
- Neff, K. D. & Vonk, R. (2009). Self-compassion versus global self-esteem: Two different ways of relating to oneself. *Journal of Personality*, 77, 23-50.
- Neff, K. D. (2003a). Development and validation of a scale to measure self-compassion. *Self and Identity*, 2, 223-250.
- Neff, K. D. (2003b). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, 2, 85-102.
- Neff, K. D., Hseih, Y., & Dejithirat, K. (2005). Self-compassion, achievement goals, and coping with academic failure. *Self and Identity*, 4, 263-287.
- Neff, K. D., Kirkpatrick, K. & Rude, S. S. (2007). Self-compassion and its link to adaptive psychological functioning. *Journal of Research in Personality*, 41, 139-154.
- Nelson, M. L., & Friedlander, M. L. (2001). A close look at conflictual supervisory relationships: The trainee's perspective. *Journal of Counseling Psychology*, 48, 384-395. doi:http://dx.doi.org/10.1037/0022-0167.48.4.384
- Orlinsky, D. E., & Rønnestad, M. H. (2005). *How psychotherapists develop: A study of therapeutic work and professional growth*. Washington, DC: American Psychological Association.
- Parcover, J. A., & Swanson, J. L. (2013). Career counselor training and supervision: Role of the supervisory working alliance. *Journal of Employment Counseling*, 50, 166-178. doi:http://dx.doi.org/10.1002/j.2161-1920.2013.00035.x
- Patsiopoulou, A. T., & Buchanan, M. J. (2011). The practice of self-compassion in counseling: A narrative inquiry. *Professional Psychology: Research and Practice*, 42, 301-307.
- Rimes, K. A., & Wingrove, J. (2011). Pilot study of mindfulness-based cognitive therapy for trainee clinical psychologists. *Behavioural and Cognitive Psychotherapy*, 39, 235-241. doi:http://dx.doi.org/10.1017/S1352465810000731
- Ringenbach, R. A. (2009). Comparison between counselors who practice meditation and those who do not on compassion fatigue, compassion satisfaction, burnout and self-compassion. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 3820-3820.
- Rodolfa, E. R., Kraft, W. A., & Reilley, R. R. (1988). Stressors of professionals and trainees at APA-approved counseling and VA medical center internship sites. *Professional Psychology: Research and Practice*, 19, 43-49. doi:http://dx.doi.org/10.1037/0735-7028.19.1.43

- Rønnestad, M. H., & Skovholt, T. M. (2003). The journey of the counselor and therapist: Research findings and perspectives on professional development. *Journal of Career Development, 30*, 5-44. doi:<http://dx.doi.org/10.1023/A:1025173508081>
- Schwing, A. E., LaFollette, J. R., Steinfeldt, J. A., & Wong, Y. J. (2011). Novice counselors' conceptualizations and experiences of therapeutic relationships. *International Journal for the Advancement of Counselling, 33*, 51-63. doi:10.1007/s10447-010-9112-2
- Seligman, L. H., & Gaaserud, L. C. (1994). Difficult clients: Who are they and how do we help them? *Canadian Journal of Counselling, 28*, 25-42.
- Shapiro, S. L., Brown, K. W., & Biegel, G. M. (2007). Teaching self-care to caregivers: Effects of mindfulness-based stress reduction on the mental health of therapists in training. *Training and Education in Professional Psychology, 1*, 105-115. doi:10.1037/1931-3918.1.2.105
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods, 7*, 422-445.
- Skovholt, T. M., & Rønnestad, M. H. (2003). Struggles of the novice counselor and therapist. *Journal of Career Development, 30*, 45-58. doi:10.1023/A:1025125624919
- Slaney, R. B., Rice, K. G., Mobley, M., Trippi, J., & Ashby, J. S. (2001). The revised almost perfect scale. *Measurement and Evaluation in Counseling and Development, 34*, 130-145.
- Smith, M. (2003). The fears of the counsellors: A qualitative study. *British Journal of Guidance & Counselling, 31*, 229-240. doi:<http://dx.doi.org/10.1080/0306988031000102388>
- Sowa, C. J., May, K. M., & Niles, S. G. (1994). Occupational stress within the counseling profession: Implications for counselor training. *Counselor Education and Supervision, 34*, 19-29.
- Spence, S. H., Wilson, J., Kavanagh, D., Strong, J., & Worrall, L. (2001). Clinical supervision in four mental health professions: A review of the evidence. *Behaviour Change, 18*, 135-155. doi: <http://dx.doi.org/10.1375/bech.18.3.135>
- Spielberger, C. D. (1983). *Manual for the State-Trait Anxiety Inventory*. Palo Alto, CA: Consulting Psychologists.
- Stafford-Brown, J., & Pakenham, K. (2012). The effectiveness of an ACT informed intervention for managing stress and improving therapist qualities in clinical psychology trainees. *Journal of Clinical Psychology, 68*, 592-613.

- Sterner, W. R. (2009). Influence of the supervisory working alliance on supervisee work satisfaction and work-related stress. *Journal of Mental Health Counseling, 31*, 249-263.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics*. (5th ed). Boston: Allyn and Bacon.
- Tang, M., Addison, K. D., LaSure-Bryant, D., Norman, R., O'Connell, W., & Stewart-Sicking, J. (2004). Factors that influence self-efficacy of counseling students: An exploratory study. *Counselor Education and Supervision, 44*, 70-80. doi:<http://dx.doi.org/10.1002/j.1556-6978.2004.tb01861.x>
- Thériault, A., & Gazzola, N. (2006). What are the sources of feelings of incompetence in experienced therapists? *Counselling Psychology Quarterly, 19*, 313-330.
- Ting, H. C. (2009). Satisfaction with supervision as a function of the supervisory working alliance and self-efficacy among Taiwanese master-level counseling internship students. *Dissertation Abstracts International Section A: Humanities and Social Sciences*, , 1181-1181.
- Tyber, E. (2006). *Interpersonal Process in Therapy: An Integrative Model*. Belmont, CA: Thomson.
- Warnath, C. (1979). Counselor burnout: Existential crisis or a problem for the profession? *Personnel and Guidance Journal, 57*, 325-331.
- Wei, M., Chao, R. C., Tsai, P.-C., & Botello-Zamarron, R. (2012). The Concerns about Counseling Racial Minority Clients Scale. *Journal of Counseling Psychology, 59*, 107-119.
- Wei, M., Du, Y., Tsai, P.-C., Shih, S.-F., & Wang, L.-F. (2013). *Anxiety Management Strategies in Counseling Sessions: A Qualitative Study*. Unpublished manuscript.
- Wei, M., Tsai, P.-C., Lannin, D. G., Du, Y., & Tucker, J. R. (2014, August). The associations between mindfulness, psychological flexibility, and counseling self-efficacy among counselor trainees: Fewer experiences of hindering self-awareness matters. Poster presented at the 122th Annual Convention of the American Psychological Association, Washington, DC.
- Wilkerson, K. (2009). An examination of burnout among school counselors guided by stress-strain-coping theory. *Journal of Counseling & Development, 87*, 428-437.
- Williams, E. N., Judge, A. B., Hill, C. E., & Hoffman, M. A. (1997). Experiences of novice therapists in prepracticum: Trainees', clients', and supervisors' perceptions of therapists' personal reactions and management strategies. *Journal of Counseling Psychology, 44*, 390-399. doi:<http://dx.doi.org/10.1037/0022-0167.44.4.390>

FOOTNOTES

¹ Due to a high correlation between trait anxiety and self-compassion ($r = -.75$), I removed trait anxiety from the cross-lagged panel mediation analysis. However, in order to ensure the significant mediation pattern was the same for supervisory working alliance, I ran model without self-compassion and also controlled for trait anxiety, the results indicated the same significant pattern was found. Specifically, after controlling for trait anxiety and number of completed practicum, supervisory working alliance at Time 1 would contribute to lessening trainee's anxiety in clinical work at Time 2, which in turn, would relate to their counseling self-efficacy at Time 2. Meanwhile, the results did not support trainee's anxiety in clinical work at Time 1 activate supervisory working alliance at Time 2, and in turn, associated with counseling self-efficacy at Time 2.

² The significant pattern of the cross-lagged panel mediation was the same if I removed 13 participants who had less than 3 supervision sessions at Time 1.

³ The significant pattern of moderation was the same if I removed 13 participants who had less than 3 supervision sessions at Time 1.