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PERSONALITY CHARACTERISTICS EFFECTS ON SUPERVISORY WORKING ALLIANCE AND COUNSELOR TRAINEES' SKILL DEVELOPMENT

by

MICHELLE M. CORBIN

DISSERTATION

Submitted to the Graduate School

of Wayne State University

Detroit, Michigan

in partial fulfillment of requirements

for the degree of

DOCTOR OF PHILOSOPHY

2011

MAJOR: COUNSELING

Approved by:

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Advisor Date

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DEDICATION

This dissertation is dedicated to my family. Each and every one of you had a part in making this dream come true. Firstly, I dedicate this to my husband, Joe and our wonderful children, Joshua, Matthew and Rachel. I am forever grateful for your love, your patience and for always believing in me. Also, to my father Robert Gobert and in memory of my late mother, Marlene (Green) Gobert, both of whom instilled in me and my sisters the values of love, compassion, commitment and integrity. We were blessed to have had you for parents and the gift of a strong foundation. Lastly, to a very dear aunt and uncle, Marg and Wilf Gobert, whose help, support, love and guidance provided me the opportunity to bring this dream to fruition. Thank you for your never-ending faith in me.

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TABLE OF CONTENTS

Dedication ii

Acknowledgments iii

List of Figures viii

List of Tables ix

CHAPTER I INTRODUCTION 1

Counselor Supervision 1

Supervisory Working Alliance 3

Basic Counseling Skill Competency 4

Personality Characteristics 4

Introversion/Extraversion 4

Statement of the Problem 6

Research Question 6

Definition of Terms 7

Individual Clinical Supervision 7

Basic Counseling Skills Competency 7

Supervisory Working Alliance 8

Personality Characteristics 8

Assumptions of the Study 8

Limitations of the Study 9

Summary 10

CHAPTER II REVIEW OF THE LITERATURE 11

Counselor Supervision 11

Supervisory Working Alliance 14

Basic Counseling Skill Development 16

Personality Characteristics 17

Summary 21

CHAPTER III METHODOLOGY 22

Research Design 22

Variables 23

Independent Variable 23

Dependent Variables 23

Setting 24

Participants 25

Supervisors 25

Counselor Trainees 26

Preliminary Procedures 26

Experimental Procedures 28

Instruments 29

Demographic Questionnaires (Maxey, 1999) 29

Myers-Briggs Type Indicator (*MBTI*, Form M, Myers et al., 1998) 29

Supervisory Working Alliance Inventory - Supervisor Form (*SWAI*-Supervisor, Efstation et al, 1990) 32

Supervisory Working Alliance Inventory-Supervisee Form (*SWAI*-Supervisee, Efstation et. al., 1990) 32

Basic Skills Observation (*BSO*, Ellington, 1991) 32

Research Question and Hypothesis 33

Data Analysis 34

Summary 36

CHAPTER IV RESULTS 38

Introduction 38

Demographic Characteristics 39

Dyad Descriptions 44

Analysis of Pretests 46

Research Question and Hypothesis 49

Null Hypothesis 49

Summary 55

CHAPTER V SUMMARY AND DISCUSSION 56

Introduction 56

Restatement of the Problem 57

Review of the Literature 58

Review of Methods and Procedures 62

Restatement of the Research Question and Associated Hypothesis 64

Summary of Findings 64

Discussion of Findings 69

Limitations and Recommendations for Future Research 71

Summary 73

Appendix A HIC Approval Form 74

Appendix B Informed Consent Form 75

Appendix C Criterion Instruments 79

Demographic Information – Counselor Trainee (Maxey, 1999) 79

Demographic Information – Supervisor (Maxey, 1999) 81

Basic Skills Observation Form (*BSO*, Ellington, 1991) 83

Tests of Statistical Significance for the *BSO* (Ellington, 1991) 84

Supervisory Working Alliance Inventory-Supervisor Form (*SWAI*, Efstation et.al, 1990) 90

Supervisory Working Alliance Inventory-Supervisee Form *(SWAI*, Efstation et.al, 1990) 92

Appendix D Correspondence 94

References 99

Abstract 108

Autobiographical Statement **110**

LIST OF FIGURES

Figure 1	Kitzrow's Model ……..……	20
Figure 2	Research Design …….	23
Figure 3	Statistical Analyses ……	36
Figure 4	Supervisory Dyads Experimental Matched Group ……	44
Figure 5	Supervisory Dyads Comparison Non-Matched Group ……..	45

LIST OF TABLES

Table 1 Counselor Trainee Demographics by Treatment Group 40

Table 2 Supervisor Demographics by Treatment Group 42

Table 3 Pre-Test Dependent Variable Statistics by Treatment Group 47

Table 4 *t*-Test for Independent Samples Test 48

Table 5 Descriptive Statistics by Treatment Group 50

Table 6 Hotelling's Trace Multivariate Tests 52

Table 7 Descriptive Summated Statistics for the BSO 53

Table 8 Reliability Statistics for the BSO 54

Table 9 Tests of Between-Subjects Effects by Treatment Group 85

Table 10 Paired Samples Descriptive Statistics - Experimental Matched Group 87

Table 11 Univariate Paired Samples Test - Experimental Matched Group 88

Table 12 Paired Samples Descriptive Statistics - Comparison Non-Matched Group 88

Table 13 Univariate Paired Samples Test - Comparison Non-Matched Group 89

CHAPTER I

INTRODUCTION

In the counseling profession, clinical supervision is one of the most critical aspects of counselor education. Typically students are supervised throughout clinical training, with supervision normally continuing on into their professional work settings. Counseling programs across the United States provide clinical individual and group supervision for their students as a part of the counselor training process.

Worthen and McNeill (1996) stated positive supervision experiences for supervisees involve the following two factors: the development of counseling skills as well as a good supervisory relationship. The enhancement of basic counseling skills and the development of competency are identified by many researchers as an essential goal of supervisory process (Bradley & Ladany, 2001; Holloway, 1995; Knapp & VandeCreek, 1997; Watkins, 1994). Bradley and Fiorini (1999) identified the practicum experience as a critical component in counselor education training. Ladany, Walker and Melincoff (2001) also supported supervisory relationship as a key component of the supervisory working alliance, especially as it relates to the supervision process.

Counselor Supervision

Supervision of counselor trainees can be complicated and difficult due to the nature of the relationship, and possible personality differences, along with power differential (D'Andrea & Daniels, 1997) and evaluative responsibility of the supervisors. Clinical individual supervision is described as a process in which a more experienced counselor assists a counselor trainee to develop mastery of, competence in, and insight into, the dynamics of the counseling process

(Hackney & Cormier, 1994). Bernard and Goodyear (2004) offered the following definition of counselor supervision:

> Supervision is an intervention provided by a senior member of a profession to a junior member or members of that same profession. This relationship is: evaluative, extends over time and has the simultaneous purposes of enhancing the professional functioning of the more junior person(s), monitoring the quality of professional services offered to the clients that he/she, or they see(s), and serving as a gatekeeper of those who are to enter a particular profession (p. 8).

Dollarhide and Miller (2006) stated counselor supervision is an explorative process in which skills are honed, the integration of theory and technique are practiced, and a framework for the development of professional identity is initiated.

According to Ladany, Ellis, & Friedlander (1999), many theorists (e.g., Bordin, 1983; Efstation, Patton & Kardash, 1990, Ekstein & Wallerstein, 1972; Mueller & Kell, 1972), identified the supervisory working alliance as an important, even critical component of supervision. Ramos-Sanchez, Esnil, Goodwin, Riggs, Osachy Touster, Wright, Ratanasiripong, & Rodolfa (2002) stated supervisees also identified the supervisory relationship as a critical component of supervision. Chen and Bernstein (2000) discussed the importance of recognizing the reciprocal nature of communication in supervision and how this interaction between the process of supervision and the supervisory relationship affects the supervisory working alliance. Their study sought to continue to investigate ways to enhance counselor education and supervision. It appears there is a general consensus for continued focus on potential factors within the supervisory relationship which may serve to enhance the supervisory working alliance

for counselor trainees, ultimately enhancing their training and development into competent professionals.

Supervisory Working Alliance

According to some theorists (e.g., Bordin, 1983; Efstation, Patton & Kardash, 1990; Ekstein & Wallerstein, 1972; Mueller & Kell, 1972), the supervisory working alliance is one of the most important common factors in the change process of supervision. Likening the supervisory alliance to the therapeutic alliance in counseling, Bordin (1983) described the need for trainee and supervisor to collaborate by establishing a mutual understanding of goals and tasks of supervision as well as developing a strong emotional bond. The process of developing a good working alliance in supervision was also recommended by Inskipp and Proctor (1995) who discussed the importance of negotiating and contracting a supervisory relationship that makes explicit the responsibilities of both parties based on the needs of clients, agencies, and counseling profession.

Similar to the theory of a psychotherapeutic working alliance, Bordin (1983) identified the following three basic tenets required for effective change within the supervisory working alliance: 1) a basic mutual agreement and understanding between the supervisor and supervisee of the goals of supervision; 2) a clear and mutual understanding by the supervisor and supervisee of the tasks involved in meeting the goals; and 3) awareness and recognition of the emotional bonds, i.e., liking, caring, and trusting, between the supervisor and supervisee which are necessary in order to facilitate working towards meeting those various goals and tasks. According to Worthen and McNeill (1996), "…with the creation of a facilitative supervisory relationship, a supervisor will be attuned to opportunities to intervene strategically with trainees

to meet their unique supervisory needs" (p. 33). The ultimate goal of the supervisory working alliance is to develop counseling skill and competency in the trainee.

Basic Counseling Skill Competency

Basic counseling skill competency is described by Ellington (1993) as the use of basic counseling skills and techniques necessary for implementing the counseling treatment plan. The basic counseling skills to be examined within this study include: 1) effective listening, 2) open and closed ended questions, 3) minimal encouragers, 4) paraphrasing, 5) reflection of feeling, 6) reflection of content, 7) goal planning, 8) evaluation of goals, and 9) summarization (Ellington, 1993). Several researchers (Boyes, 2008; Mekani-Tatone, (2002); Maxey, 2001; & Pich, 2000) have used the Basic Skills Observation (BSO, Ellington, 1991) form to measure basic counseling skills competency.

Personality Characteristics

Specific areas of interest relating to this particular study focus on the supervisory working alliance and basic counseling skill development of counselor trainees in order to develop further awareness of possible influencing factors, i.e., differential effects of matching/non-matching (introvert or extravert) congruence on the supervisory relationship and subsequently, identify any impact on basic counseling skill development. Lawrence (2009) asserted understanding personality type of mental processing is fundamental, especially in "explaining why certain approaches to instruction or supervision work with some people and not with others" (p. 8).

Introversion/Extraversion

Introversion and extraversion according to Jung (1921) are psychological types which help to categorize a type preference for how a person processes information. Myers-Briggs

(1962) developed a personality assessment instrument furthering Jung's theory on psychological type, positing that variation in personality and behavior can be better understood through the use of a template which helps to illuminate differences in mental functioning. Introversion and extraversion are described by Salter, Evans & Forney (2006) as the way people (learners) orient "...to one of two types of stimuli or psychic energy. Extraverts prefer to interact with the external world of people and things around them, and like active involvement in the learning process. Introverts, who tend to be more reflective learners, prefer the subjective energy that comes from within themselves, such as ideas, feelings, thoughts or perceptions" (p. 174). Given that counseling supervision and basic counseling skill development are interactive processes, it seems prudent to attempt to gain a better understanding of how counselor trainees typically process information as greater insight may be gained, along with a better understanding on how they learn within the supervisory relationship. This insight can be useful to the supervisor and the counselor trainee, as well as for possibly enhancing the supervisory working alliance, development of basic counseling skills, and also in the actual work with clients.

Many researchers have examined the supervisory working alliance (Bernard & Goodyear, 2004; Patton & Kivlighan, 1997). Ladany, Ellis and Friedlander (1999) stated "according to several theorists (Bordin, 1983; Efstation, Patton & Kardash, 1990; Ekstein & Wallerstein, 1972; Mueller & Kell, 1972), the supervisory working alliance is potentially one of the most important common factors in the change process of supervision" (p. 447). Bordin (1983) purported mastery of specific counseling skills is expected to result from the development of a strong supervisory alliance. Researchers have examined trainees' counseling skill development (Briggs, Fournier & Hendrix, 1999); basic counselor skills training and counselor cognitive complexity (Duys & Hedstrom, 2000), as well as instructional and learning style impact on basic counseling skill

development (Ellington & Gilroy, 1996) in attempts to further help identify specific influences on skill development and competency. Ellington (1993) describes competency as those basic skills and techniques necessary for developing positive rapport and an effective therapeutic alliance in delivery of the counseling treatment plan.

However, despite the fact that many studies have investigated the supervisory working alliance and/or basic counseling skill development, studies are limited in regard to the matching/non-matching of personality characteristics of introversion/extraversion and the effects on the supervisory working alliance and basic counseling skill development of counselor trainees.

Statement of the Problem

This study examined the differential effects of supervisor/counselor trainees' personality type congruence based on matching/non-matching supervisor-counselor trainee introvert or extravert personality characteristics. This study specifically investigated whether the personality characteristics of introversion/extroversion impacts the supervisors' and counselor trainees' perception of the supervisory working alliance, as well as the outcome effects on the counselor trainees' acquisition of basic counseling skills.

Research Question

This study examined the differential effects of matching/non-matching supervisor/counselor trainee's personality characteristics on the supervisory working alliance and basic skill development of master-level counselor trainees. This research was guided by the following research question:

1. How does the matching and non-matching of introversion and extraversion personality characteristics affect the supervisory working alliance and the basic skill development of counselor trainees?

Definition of Terms

The following are definitions of the terms relevant to this study.

Individual Clinical Supervision

Individual clinical supervision is defined as a supervisory process occurring between a master's-level student (counselor trainee) in the practicum portion of a counseling program and their post-master's-level supervisor. The supervisor and counselor trainee met one time per week for discussion in order to facilitate progress in the development of basic counseling skill competency. The Council for Accreditation of Counseling and Related Educational Programs (CACREP, 2009) requires practicum students to meet for group supervision for a minimum of 1 1/2 hours per week as well as one hour of individual supervision.

Basic Counseling Skills Competency

For the purpose of this study, the task of developing basic counseling skills competency is defined as the basic skills and techniques necessary to effectively deliver the counseling treatment plan (Ellington, 1993). The basic counseling skills relevant to this study are 1) effective listening, 2) open and closed ended questions, 3) minimal encouragers, 4) paraphrasing, 5) reflection of feeling, 6) reflection of content, 7) goal planning, 8) evaluation of goals, and 9) summarization (Ellington, 1993). Focus was also given to developing further awareness of possible influencing factors, i.e., differential effects of matching/non-matching (introvert or extravert) congruence on the supervisory relationship in the development of these basic counseling skills competency.

Supervisory Working Alliance

Bordin (1983) identified the following three basic tenets required for change within the supervisory working alliance: 1) a basic mutual agreement and understanding between the supervisor and supervisee of the goals of supervision; 2) a clear and mutual understanding by the supervisor and supervisee of the tasks involved in meeting the goals; and 3) awareness and recognition of the emotional bonds, i.e., liking, caring, and trusting, between the supervisor and supervisee which are necessary in order to facilitate working towards meeting those various goals and tasks.

Personality Characteristics

Introversion and extraversion are described by Myers & Myers (1980) as "complementary orientations to life" (p. 7). An introvert is described as having a preference for getting energy through reflection and attending to their inner world. An extravert is described as having a preference for getting their energy through action with the outer world. Lawrence (2009) has identified teaching and/or learning preferences associated with introvert and extrovert personality characteristics. Helping supervisors and supervisees to engage in a learning process which may encourage greater self-awareness and integration in identifying personal ways of thinking, feeling and functioning may affect counselor growth and development.

Assumptions of the Study

Assumptions considered by this study include the premise there is not just one standard style of supervision being utilized among supervisors within this particular counseling program. Theoretical style or orientation of supervision was not the focus of the study. Supervisors in an accredited counseling program are mandated to utilize ethical and professional standards as

outlined by the American Counseling Association (ACA), Council for the Accreditation of Counseling Related Educational Programs (CACREP), and professional counselor licensure.

1. All supervisors adhere to the guidelines for clinical supervision as dictated by the guidelines of ACA, CACREP, and professional counselor licensure.
2. All supervisors and counselor trainees have met the requirements and prerequisites for conducting individual clinical supervision and/or practicum counseling sessions.

Limitations of the Study

This study also considered the following limitations:

1. This study was conducted with advanced degree-level student supervisors and master-level counselor trainees from one university, with a limited number of subjects available and therefore, may not be representative of the entire population of counseling students.
2. The evaluation of basic counseling skill development is a very subjective task. Supervisors' and the independent rater's evaluation may be affected by additional factors, e.g., supervisory bias, which was not accounted for in this study.
3. This study did not measure client effect over the supervisory process.
4. Supervisor/counselor relationships may be affected by gender, ethnicity, racial background and/or socio-economic status differences which were not accounted for in this study.
5. This study relied on the use of self-evaluative instruments that may reflect socially acceptable answers.

6. Personal differences in supervisory style or theoretical orientation were not accounted for in this study.
7. There may be unknown factors related to the supervisor/counselor trainee relationship not accounted for in this study.

Summary

Essentially this study sought to examine variables which may enhance counselor education and supervision. Specifically, the elements of matching/non-matching personality characteristics of introversion/extraversion were examined within the context of clinical individual supervision, through the supervisory working alliance, as well as in basic counseling skill development. The research question was proposed, the definitions of relevant terms discussed, along with the assumptions and limitations of the study.

Chapter II presents a literature review in the areas of counselor supervision, the supervisory working alliance, and basic counseling skill development. As well, an exploration of the individual dimensions of personality type pertaining to introversion and extraversion congruence will be discussed.

CHAPTER II

REVIEW OF THE LITERATURE

This chapter presents a literature review in the areas of counselor supervision, the supervisory working alliance, and basic counseling skill development pertinent to this study. Exploration of the individual dimensions of personality type pertaining to introversion and extraversion congruence is discussed. The research methodology of matching/non-matching of the personality characteristics (i.e., introversion/extraversion) in counselor training is provided.

Counselor Supervision

Counselor supervision is increasingly being identified as a profession growing into its own right (Bernard & Goodyear, 2004; McMahon & Simons, 2004; Getz, 1999). Since supervision has been previously identified as a critical factor in counselor education, it would seem prudent to consider factors pertinent to the process. The process of clinical supervision as described by Ringel (2001) is "a complex undertaking that is influenced by multiple factors, including the personalities and characteristics of the supervisory dyad, developmental considerations, social attitudes, ecological factors and the parallel process" (p. 171).

Borders, Bernard, Dye, Fong, Henderson and Nance (1991) have identified the following seven areas to serve as a curriculum guide in training counselor supervisors: models of supervision; counselor development; supervision methods and techniques; the supervisory relationship; ethical, legal and professional regulatory issues; evaluation; and executive (administrative) skills. McMahon and Simons (2004) conducted a longitudinal pretest-posttest experimental design study using an experimental group of 15 and a control group of 42 to investigate the effect of a supervision training program on supervision scores. McMahon & Simons (2004) constructed the *Clinical Supervision Questionnaire (CSQ*) which was based on

the seven competencies identified by Borders et al (1991) as a curriculum guide for training counselor supervisors. They found a significant impact on the supervision scores of the experimental group which continued to be evident six months later. This study also found supervision training was associated with an increase of supervision scores regardless of whether the participants supervised other counselors or not. One area reported to be lacking attention in existing models of supervision is the potential impact of the individual differences in personality between supervisors and counselor trainees on the supervision process (Kitzrow, 2001). In a study conducted by Craig and Sleight (1990), assessing the effect of type difference of 70 clinical supervisors and 401 students in Communications Disorders programs, they proposed type differences may make it difficult for students and supervisors to relate to each other or difficulty understanding how students may relate to their clients.

A particular area of interest in this study concerns the examination of just one aspect of personality, that being the congruence of introversion and/or extraversion personality characteristics in relation to both the supervisory working alliance and in acquiring basic counseling skills within a graduate program. Baird (as cited in King & Howard-Hamilton, 2000) posited successful institutional outcomes are affected by "the extent to which institutional goals emphasize students' personal development and individuation," and "should include goals for personal development and recognition of students' individuality, based as much or more on their approach to thinking and learning as on their background" (p. 528). According to Holloway (as cited in Ward & House, 1998), the supervision process can function to encourage greater self-awareness in supervisees as developing counselors, as well as "fosters an integrated professional and personal identity related to the roles and tasks of counselors" (p. 23).

The research on counselor development by Skovholt & Ronnestad (2003) identifies counselor development as occurring in phases through an integrative process. Kobolt and Zorga (1999) identify the goal of supervision as an integration of the learning process, practical experience combined with theoretical knowledge. The process of learning and development in professional supervision is defined by Zorga (2003) as follows:

> Learning is, on the one hand, usually defined as a process of relatively permanent progressive transformation of the individual on the basis of experience; development, on the other hand, is defined as a constant, dynamic process causing changes governed by specific laws or also as a process of change, which lead to the creation of something new. When transformation, which is above all a product of the environment and education, takes place, we actually speak about the process of learning, which enables new forms of behavior and reaction (p. 263).

Supervision strategies which focus on the supervisory relationship and its effect on supervision process and outcomes, especially by developing an understanding of individual differences between supervisors and counselor trainees, is strongly recommended (Bernard & Goodyear, 2004). Supervision has been identified as being both a relationship and a process (Hess, 1987). Chen & Bernstein (2000) describe the interactions of supervision participants as a process concern which focuses on the reciprocal nature in defining the relationship while the actual relationship "functions as the context within which the supervisor-supervisee interactions unfold" (p. 485). Holloway (1995) stated "Communication influences relational development, and in turn (or simultaneously), relational development influences the nature of the communication between parties in the relationship" (as cited in Miller, 1976, p. 41). Ultimately,

Chen & Bernstein (2000) assert “Any supervision research that ignores this reciprocal and intimate interaction between process and relationship is likely to result in an incomplete view of how supervision facilitates counselor development” (p. 485). A case study by Chen & Bernstein (2000) of graduate students in counseling psychology programs at three universities utilizing the *SWAI* (Efstation et al., 1990), found support for the importance of the reciprocal nature of communication in the supervisory working alliance, as well.

Supervisory Working Alliance

Efforts to measure the therapeutic working alliance have extended to the supervisory relationship. Efstation developed the *Supervisory Working Alliance Inventories* (*SWAI*, Efstation et al., 1990) to measure supervisor and supervisee perceptions of each other. Since counselor supervision is increasingly being identified as a profession growing into its own right (Bernard & Goodyear, 2004; McMahon & Simons, 2004; Getz, 1999), it seems prudent to consider factors pertinent to this process.

Van Kessel and Hann (as cited in Zorga, 2003) identified the ultimate goal of supervision as encompassing a "two-dimensional integration where the professional worker is capable of effectively harmonizing his/her functioning as a human being with his/her own personality characteristics (first dimension) and the characteristics of his/her professional functioning and requirements (second dimension) in such a manner that the result achieved can be referred to as the professional self" (p. 270). This definition is congruent with Hart & Nance’s (2003) philosophy that interpersonal characteristics play an important part in counselor training.

White & Queener (2003) propose that “all supervision takes place within the context of a relationship” (p. 203) and research of supervisor and supervisee individual characteristics may be beneficial in helping to better understand the supervisory relationship. A study by Anderson

(1998) on the level of satisfaction of new nurses being oriented into their new positions indicated a statistically significant result when the orientees were matched congruently on the *Myers-Briggs Type Indicator* (*MBTI*, Myers, McCaulley, Quenk & Hammer, 1998) scale with their preceptors.

Identification of type preferences can help to identify basic motivators and values of counselor trainees which Lawrence (2009) believes is valuable information relating to learning preferences. Awareness and recognition of counselor trainee's type or preference in supervision may be useful in enhancing learning. Attention paid to this may subsequently help counselor trainees be more sensitive to client's preferences and/or needs for taking in and understanding information. Salter, Evans and Forney (2006) conducted a longitudinal study of learning style preferences of 292 master's level students in the student affairs administration program, using the *MBTI* (Myers et al., 1998), and concluded learning styles tend to be relatively stable. They subsequently posit that these predictable tendencies identified through type can be viewed as critical components in the educational process.

Helping supervisors and supervisees to engage in a learning process which may encourage greater self-awareness and integration in identifying personal ways of thinking, feeling and functioning may affect counselor growth and development. While conducting a phenomenological study of "good" supervision events, Worthen and McNeill (1996) remarked "with the creation of a facilitative supervisory relationship, a supervisor will be attuned to opportunities to intervene strategically with trainees to meet their unique supervisory needs." (p. 33).

Basic Counseling Skill Development

Lambert and Ogles (1997) reported counselors receiving training in technical skills develop better skills than counselors receiving no training. Baker, Daniels, and Greeley (as cited in Whiston & Coker, 2000) also highlighted the importance of the teaching and training of technical skills which are identified as first developing the ability to demonstrate facilitative conditions and then the development of basic counseling skills. However, a review of literature detailing counselor skills competency conducted by Eriksen and McAuliffe (2003) showed a dearth of reliable instruments, noting validity data is often very weak or nonexistent. Whiston and Coker (2000) proposed more time should be spent in the development of complex clinical skills and reduced time on basic skill instruction. Duys and Hedstrom (2000) conducted a pre- and posttest design study of 72 graduate level counselor trainees which showed the 36 counselor trainees exposed to a basic skills training course significantly enhanced trainee development of cognitive complexity as compared to a control group of 36 participants. Ultimately, Russell-Chapin and Sherman (2000) opine, "The need for quantifying counsellor skills becomes increasingly important as the counseling profession continues to develop and refine standards for counselor competence" (p. 116).

When functioning as counseling supervisors, Bernard and Goodyear (2004) identified three main supervisory roles as being those of: teacher, counselor and consultant. As counselors, it is important to recognize temperament when treating clients in order to not confuse process-orientation with pathology. Supervisors as teachers may need to be mindful of student's/counselor trainee's differences in temperament, i.e., preference for processing within the learning environment. Campbell (2000) identifies several components necessary for consideration when deciding on supervisory style, including: "personality characteristics,

leadership style, work values, and learning style" (p. 24). Lawrence (2009) explains those processes indicate how a person addresses life:

> "If a person uses the dominant process mainly in the world of people and things, that person's orientation is called extraverted. The person who uses the dominant process mainly in the inner, private world of ideas and thoughts has an introverted orientation" (p. 15).

Personality Characteristics

Although there has been debate over the number of characteristics which encompass "personality," most major current models of personality include the dimensions of introversion-extraversion (Zuckerman, 1992). Eysenck (1981) and Gray (1970) both proposed biological theories of personality proposing links between psychophysiology and personality characteristics of introversion and extraversion. Johnson, Wiebe, Gold, Andreasen, Hichwa, Watkins, & Boles (1999) conducted a study using positron emission tomography (PET) technique to describe brain regions associated with introversion and extraversion. Their study with 18 healthy individuals did show a correlation of increased cerebral blood flow in the anterior insula with introverts while there was a correlation of increased cerebral blood flow in the posterior region with extraverts. Further, according to this study, the greater activity evidenced in the two different regions of the brain also supports the notion of the inward energy focus of introverts toward more introspective activity and the outward energy focus of extraverts and the drive for sensory and emotional stimulation.

According to Laney (2002), being an introvert has typically carried a negative connotation as reflected in the following definition by Laird (1999) in stating an introvert is "... a

brooder, self-observer, egoist, narcissist, solitary, lone wolf, and loner" (p. 428). However, extraverts according to Laney (2002), have been somewhat more positively described whereas, according to Sutherland (1996) "... extroversion is marked by interest in the outside world, including confidence, sociability, assertiveness, sensation-seeking and dominance". Ryckman (2004) relates that extraversion and introversion each have their own dynamic and that both have progressive and regressive properties. Laney (2002) estimates roughly 75% of the US population is extraverted typed while the remaining 25% are introverted. McCaulley and Martin (1995) propose 60-70% of the U.S. population is extraverted.

Lawrence (2009) explains "many things go into the make-up of a personality - genetics, family life, life circumstances outside the family, society's expectations and requirements, and many learned traits; psychological type is just one aspect of personality" (p. 17). The *MBTI* (Myers et al, 1998) is one instrument Campbell (2000) suggests may be beneficial to use in pairing supervisors and supervisees. Campbell provides the following information on the *MBTI* (Myers et al, 1998):

> This well-known instrument is based on Jung's psychology of types: extroverted and introverted; sensing and intuition; thinking and feeling; judgment and perception. The assumption is that these types will affect people's personality preferences, how they take in and process information, what they pay attention to, how they make decisions, and their overall lifestyle choices (p. 26).

The *MBTI* (Myers et al., *1998)* is described as helpful in providing information for discussion regarding learning style, communication and relationship factors. It is identified by Salter, Evans and Forney (2006) as the most widely used instrument for identifying

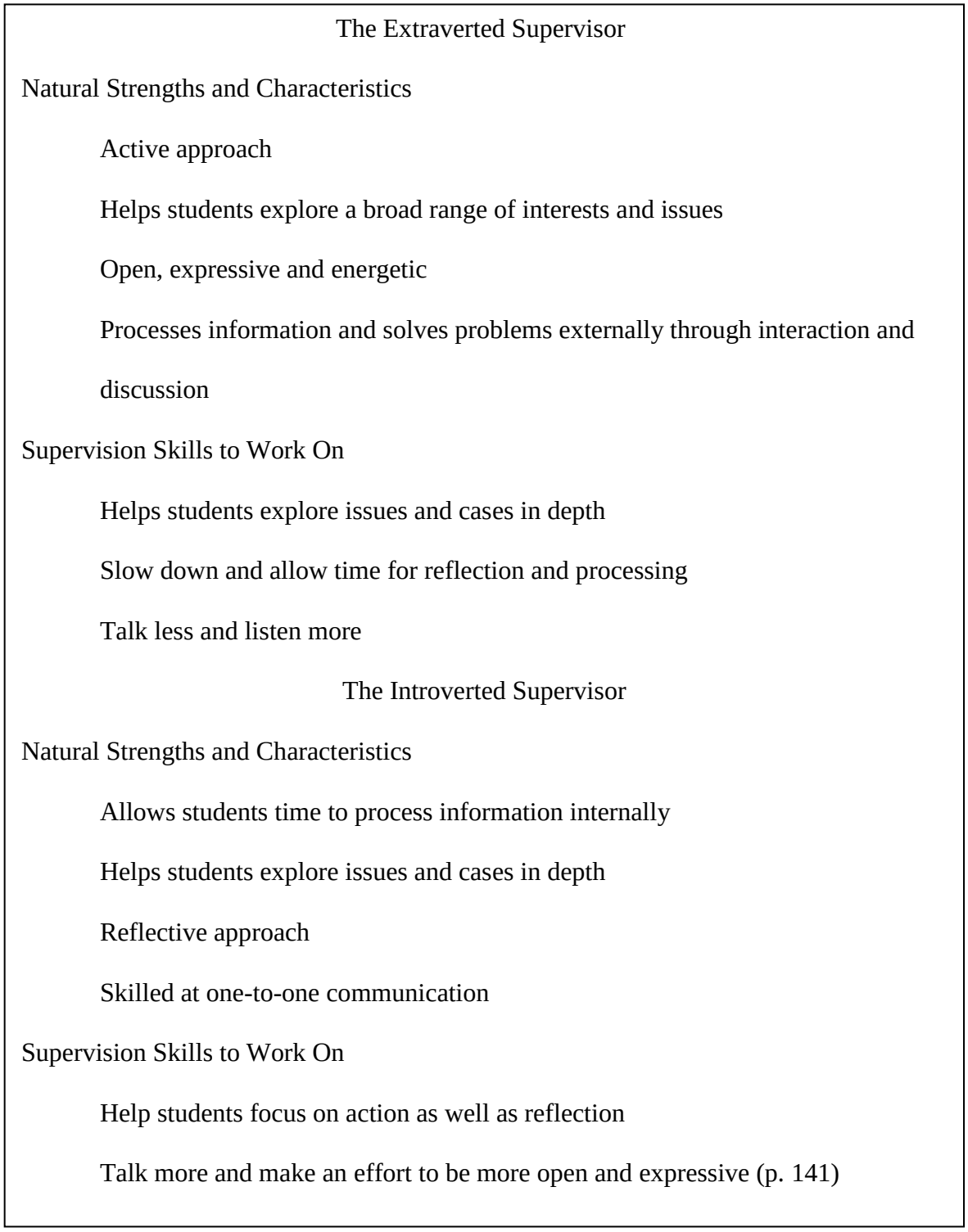
nonpathological differences in psychology type as well as for measurement of an array of student affairs and educational practices. The *MBTI* (Myers et al., 1998) is used for and cited by Lawrence (2009) as a popular measure of student learning styles type and teaching preferences; career development (McCaulley & Martin, 1995); and in the academic achieving and advising process (Crockett & Crawford, 1989) as well as in other fields and domains.

According to Baron (as cited in Lawrence, 2009) a summary of some of the typical learning preferences of those with an extravert orientation are: they think and learn best when talking; prefer psychomotor skills; like working with a group; use trial and error for problem solving; while those with an introvert orientation: prefer reading and verbal reasoning; need time for internal processing; like working individually; and do not like to have thoughts interrupted.

Lauren (1992) conducted a correlational analysis between 71 faculty advisors and doctoral candidates in educational psychology, counseling and human development services programs which indicated there was a significant relationship between advisor/advisee congruence on the *MBTI* (Myers et al., *1998)* scale and advisee satisfaction with the interpersonal dimension of the academic environment.

Kitzrow (2001) developed a model of supervisory style based on the *MBTI* (Myers et al., 1998) and the data obtained conducting a survey of uses of the *MBTI* (Myers et al., 1998) in clinical supervision. Of the 118 surveys sent to training directors providing clinical supervision to graduate students, 29 surveys were returned and included in her study. Figure 1 presents two areas of Kitzrow's (2001) model which are relevant to this study:

Figure 1 Kitzrow's Model (2001), A Model of Supervisory Style Based on Psychological Type



Although research is scarce in this particular area, Kitzrow (2001) believed the value and use of the *MBTI* (Myers et al., 1998) and personality type theory are extremely valuable resources in clinical supervision.

Summary

This chapter presented a literature review in the areas of counselor supervision, the supervisory working alliance, and basic counseling skill development pertinent to this study. Exploration of the individual dimensions of personality type pertaining to introversion and extraversion congruence was discussed. Application relating to research methodology of matching/non-matching of the personality characteristics (i.e., introversion/extraversion) in counselor training was provided. Chapter III presents the research design, dependent and independent variables, setting, and procedure for evaluating the differential changes in two dependent variables, supervisory working alliance and basic counselling skill development of counselor trainees after participating in one of two research groups.

CHAPTER III

METHODOLOGY

This chapter presents the research design, dependent and independent variables, setting, and procedure for investigating any differences in two dependent variables, supervisory working alliance and basic counseling skill development, of counselor trainees after being matched or non-matched for personality characteristics. Participants were recruited from the graduate counselor training program at Wayne State University located in Detroit, Michigan.

Research Design

The study is a quasi-experimental pretest-posttest design (Hadley & Mitchell, 1995). Differential outcomes for two dependent variables, supervisory working alliance and basic counseling skill development, of counselor trainees after participating in either the Experimental Group (Matched Supervisor/Counselor Trainees Personality Characteristics) or the Comparison Group (Non-Matched Supervisor/Counselor Trainees Personality Characteristics) will be examined.

All participants were randomly assigned to the experimental conditions in order to provide equality of the groups in terms of age, gender and race/ethnicity, actual level of supervisory/counseling experience. Scores from the *MBTI*, Form M (Myers et al., 1998) scale were used to form the matched/non-matched supervisory dyads. During the orientation to practicum, all master-level participants completed the pre-study and demographic information instruments. Prior to the first supervisory meeting, all supervisors completed the pre-study and demographic information instruments. All participants completed the post-study instruments following their respective final supervisory session at the end of the semester. Supervisory working alliance and basic counseling skill development experimental information was

compared pre-and-post between the two groups studied (Between Groups) as well as, between members within each group (Within Groups).

Figure 2 Research Design

Research Group	Pretest	Experiment	Posttest
Experimental Group (Matched Supervisor/Counselor Trainees Personality Characteristics	O_1	X_1	O_2
Comparison Group (Non-Matched Supervisor/Counselor Trainees Personality Characteristics	O_3		O_4

Variables

Independent Variable

The independent variable was assignment to one of two treatment conditions, either the Experimental Group (Matched Supervisor/Counselor Trainees Personality Characteristics) or the Comparison Group (Non-Matched Supervisor/Counselor Trainees Personality Characteristics).

Dependent Variables

The two dependent variables were supervisory working alliance and basic counselling skill development, of counselor trainees. The *Supervisory Working Alliance Inventory* (*SWAI*,- Supervisor/Trainee forms, Efstation et al, 1990) and the *Basic Skills Observation* (*BSO*, Ellington, 1991) were used to measure the supervisory working alliance and basic counsellor skill development of counselor trainees respectively.

Setting

The setting was the Counseling and Testing Center located in the College of Education on the main campus of a large urban metropolitan university. The campus is located in the heart of a large Midwestern city. The student population is diverse in age and background. The Counseling and Testing Center satisfied the guidelines and standards for counseling practicum experience as set by the standards of the Council for Accreditation of Counseling Related Educational Programs (CACREP, 2009).

The Counseling and Testing Center included ten individual counseling rooms along with a room suited for career assessment, a testing resource distribution room and a reception area. The Counseling and Testing Center was equipped with audio and video recording capability. There were two separate galleries for direct observation through one-way mirrors of the counselor trainees' client sessions.

Clients presented at the Counseling and Testing Center seeking assistance in dealing with relationship issues, bereavement issues, substance abuse and addiction, vocational and/or career-related issues, behavioral concerns, as well as for court-ordered counseling. General goals of counseling include:

1. Facilitating a desired behavior change
2. Improving the client’s ability to establish and maintain relationships
3. Enhancing the client’s ability to cope
4. Promoting the decision-making process, and
5. Facilitating client’s growth and development

The Counseling and Testing Center also provides assessment and vocational information services. Specialized support services include:

- Individual and group counseling to assist clients in making realistic vocational choices, to resolve problems in interpersonal functioning and eliminate self-defeating and/or abusive activities.
- Standardized basic educational and life skills assessment.
- Psychological assessment.
- Specialized assessment for vocational interests and vocational aptitudes.

Participants

Participants were master-level students enrolled in Counseling Practicum and doctoral-level students or education specialist certificate students completing supervisory methods and/or advanced internship requirements who volunteered to take part in the research. In order to avoid any potential of coercion, students were apprised of the procedures concerning the study by the researcher without the faculty instructor of the courses present. Students were assured their participation was entirely voluntary. If they chose not to participate, they would not be penalized. Further, the faculty instructor who determined the grades for the course was not privy to any student's decision concerning participation. Additionally, students, supervisors, faculty, and the researcher were bound by the American Counseling Association's ethical and professional standards and CACREP (2009) requirements to maintain program accreditation.

Supervisors

Supervisors were students enrolled in the Doctoral or Education Specialist Certificate programs in Counselor Education at Wayne State University. Typically, there are approximately 8-10 students serving as Counseling Practicum supervisors for each semester. All supervisors completed or were enrolled in the CED 9120 Advanced Course in Supervision Theories and Methods. Individual supervision sessions were conducted under the guidelines of the American

Counseling Association's (ACA) ethical and professional standards and CACREP (2009) requirements. The time commitment for supervisors was 2½ hours for the Initial Information and Pretesting session followed by 12 one-hour weekly individual supervision sessions and a post-testing session of 1½ hours over a period of 14 weeks.

Counselor Trainees

Counselor trainees were students enrolled in the masters-level CED 7150 Counseling Practicum course at Wayne State University. Typically, there are 20 students enrolled in Counseling Practicum for each semester. All counselor trainees completed prerequisite requirements for counseling practicum as set by the department and the standards of CACREP (2009). The time commitment for counsellor trainees was 90 minutes for the Initial Information and Pretesting session followed by 12 one-hour weekly individual supervision sessions and a post-testing session of 30 minutes over a period of 14 weeks.

Preliminary Procedures

Research procedure occurred during regularly scheduled class time. The practicum class consisted of two sections that met two days per week; one on Mondays and Wednesdays the other section met on Tuesdays and Thursdays. Counselor trainees were randomly assigned to each section of the practicum class. The same faculty member conducted both sections of the Counseling Practicum. Therefore, the potential for faculty bias was reduced. All participants were reminded they are professionals and must maintain the American Counseling Association's ethical and professional guidelines concerning research participation.

An overview of the proposed study was provided to all supervisors at the initial group supervision session and to all counselor trainees during the Counseling Practicum Orientation. Both of these meetings occurred during the first week of the semester and prior to the first client

sessions. All supervisors and counselor trainees were informed that participation in this study is voluntary and they would not be penalized if they chose not to participate. An informed consent was provided to further outline the voluntary basis, anonymity, confidentiality and the risk/benefits of participating in this study. Supervisors and counselor trainees who chose to participate were asked to sign the consent form and complete either the *Supervisor Demographic Form*, (Maxey, 1999) or *Counselor Trainee Demographic Form* (Maxey, 1999) and *MBTI*, Form M (Myers et al., 1998).

Following completion of these instruments counselor trainees were randomly assigned to one of two groups (Matched or Unmatched). Once counselor trainees were randomly assigned to the Matched Group, counselor trainees and supervisors who had matching personality types were paired. After random assignment to the Unmatched Group, the supervisor's and counselor trainee's personality types were examined to determine that the unmatched condition was met. The Experimental Matched Group consisted of those supervisors and students identified and randomly paired as having had congruent introverted or extraverted personality characteristics as identified through the *MBTI*, Form M (Myers et al., 1998). The Comparison Non-Matched Group was comprised of supervisors and counselor trainees whose introvert/extravert matches were randomly matched for incongruence. Group assignment based on the identification of introverted and extraverted personality characteristics was the independent variable for this study.

At the conclusion of the initial individual supervision session, the second week of class, each supervisor and counselor trainee was asked to complete either the *Supervisory Working Alliance Inventory-Supervisor Form* (*SWAI*, Efstation et al., 1990) or *Supervisory Working*

Alliance Inventory-Trainee Form (*SWAI*, Efstation et al., 1990). Results from these instruments served as the baseline measurements of the supervisory working alliance.

Experimental Procedures

One hour per week of mandatory individual supervision was provided to counselor trainees beginning the second week of the semester. Counselor trainees began treating clients and receiving individual supervision in the Counseling and Testing Center during the second week of the semester. Basic supervisory interventions generally focus on basic counseling skill development using observation of counselor trainees' live sessions, as well as using audio and/or videotaped sessions as a basis for critiquing and providing skill instruction. All individual supervision sessions were conducted in accordance with present ethical standards of the American Counseling Association (ACA).

Following, the initial individual counseling session conducted by each counselor trainee, each supervisor and the researcher rated the basic skill competency utilizing the *Basic Skills Observation* (*BSO*, Ellington, 1991) form. This instrument provided the baseline measurement for basic skills competency. In an attempt to obtain a more accurate evaluation of counseling skill competency, as evaluation of a counselor trainee's skills is subjective in nature, an average of the two raters scores on the *BSO*, (Ellington, 1991) was used in this research to obtain pre-and -post measures of basic skill competency.

At the conclusion of the 40th clinical counseling session, the supervisors and researcher analyzed the final counselling session to provide the outcome score on the *BSO* (Ellington, 1991). The raters for this study were the direct supervisor of each student and the researcher. The supervisor completed the *BSO* (Ellington, 1991) at the first and final counseling session for each student. The researcher also completed the *BSO* for each individual student after the first and

final session and the scores were then averaged. An average of the two raters' scores was used as the outcome score in order to obtain a more realistic measurement of this subjective instrument. Supervisory working alliance outcome was measured by the supervisor and counselor trainee utilizing the *SWAI* (Efstation et al., 1990) forms at the conclusion of the final individual supervision session.

Instruments

The study used the following data gathering, classification, and measurement instruments.

Demographic Questionnaires (Maxey, 1999)

Demographic data used in this study was collected utilizing the: 1) *Counselor Trainee Demographic Form* (Maxey, 1999), 2) and *Supervisor Demographic Form*, (Maxey, 1999). These forms asked participants to answer questions concerning their age, gender, race/ethnic category, and actual level of counseling experience. In addition, the supervisor's form asked the supervisors to provide their actual level of supervision experience, and actual number of trainees supervised during his/her career to date. The demographic information collected was used for descriptive purposes only.

Myers-Briggs Type Indicator (*MBTI*, Form M, Myers et al., 1998)

The *MBTI*, Form M (Myers et al., 1998) is a 93-item fixed choice self-report questionnaire. This study used results from the Introversion/Extraversion Scale to form the matched/non-matched supervisory dyads. This instrument is one of the most widely used personality assessments in the world. Its typology is composed of four pairs of opposite preferences, called *dichotomies:*

_ Extraversion (E) or Introversion (I)—where you focus your attention and get energy

_ Sensing (S) or Intuition (N)—how you take in information

_ Thinking (T) or Feeling (F)—how you make decisions

_ Judging (J) or Perceiving (P)—how you deal with the outer world

The *MBTI* (Myers et al., 1998) assessment combines an individual's four preferences—one preference from each dichotomy, denoted by its letter—to yield one of the 16 possible personality types (e.g., ESTJ, INFP, etc.). Each type is equally valuable, and an individual inherently belongs to one of the 16 types. This model differentiates the *MBTI* (Myers et al., 1998) assessment from most other personality instruments, which typically assess personality traits. Trait-based instruments measure how much of certain characteristics people possess. Unlike the *MBTI* (Myers et al., 1998) assessment, those instruments usually consider one "end" of a trait to be more positive and the other to be more negative. "The *MBTI* (Myers et al., 1998) sets a framework for understanding skills, interests, and values" (McCaulley & Martin, 1995, p. 234).

"The internal consistency of the four *MBTI* (Myers et al., 1998) scales is quite high in all samples available to date, whether computed using logical, split-half, consecutive item split-half, or coefficient alpha. "Test-retest reliabilities show consistency over time with levels of agreement much greater than by chance" (Myers et al., 1998, p. 165). Schaubhut, Herk & Thompson (2009) report:

> Internal consistency reliability of the *MBTI* dichotomies was computed for samples of adults who completed the *MBTI* Form M assessment from June 2008 to May 2009. Samples were generated for each of the following

employment categories: employed full-time, employed part-time, full-time student, retired, and not working for income. Each of the five samples was then screened to arrive at 50% women and 50% men, selected randomly. The reliabilities for all five employment status categories are high, ranging from .86 (employed part-time, S–N) to .92 (employed full-time, Extraversion–Introversion (E–I); full-time student, Judging–Perceiving (J–P); retired, Sensing– Intuition (S–N); and not working for income, Extraversion–Introversion (E–I). These results indicate that the *MBTI* instrument can be used reliably to assess type preferences across a variety of employment situations. Validity was established in several ways. First, are correlations of the *MBTI* Form M assessment with six other assessments. The correlations showed expected relationships with these other instruments. Next, results of best-fit type analyses were shown to be similar to results from previous research, with high rates of agreement between reported and best-fit types and discrepancies occurring more frequently for those with preference clarity indexes in the Slight range. Finally, factor analysis showed the expected four-factor structure of the assessment. The four-factor structure produced by this analysis showed that the *MBTI* Form M items measure what they were intended to measure.

Supervisory Working Alliance Inventory - Supervisor Form (*SWAI-Supervisor,* Efstation et al, 1990)

The supervisors completed the *Supervisory Working Alliance Inventory-Supervisor* Form (*SWAI-Supervisor*, Efstation et al., 1990), a 23-item instrument developed to measure relationship dynamics between the supervisor and the trainee. It assesses the perception of each other's action among the supervisor and trainee, the effect of the interaction on the relationship and the counselor's behavior with clients. Each item is rated on a 7-point Likert scale ranging from 1 (almost never) to 7 (almost always) with higher scores reflecting increased strength in each of the alliance factors. Efstation and others (1990) reported reliability estimates (internal consistency), using Cronbach's alpha, for each subscale as .71 for the Client Focus, .73 for Rapport, and .77 for Identification on the supervisor version.

Supervisory Working Alliance Inventory-Supervisee Form (SWAI-Supervisee, Efstation et. al., 1990)

The *SWAI-Supervisee* form (Efstation et. al., 1990) consists of 19 items that measure the relationship dynamics between the supervisor and the counselor trainee. Each item is rated on a 7-point Likert scale ranging from 1 (almost never) to 7 (almost always) with higher scores reflecting increased strength in each of the alliance factors. Efstation and others (1990) reported reliability estimates (internal consistency), using Cronbach's alpha, for each subscale as .90 for Rapport and .77 for Client Focus on the trainee version.

Basic Skills Observation (BSO, Ellington, 1991)

The *BSO* (Ellington, 1991) is a 16-item subjective self-report scale designed to measure trainees' application of basic counseling skills. Supervisors and the researcher rated the use of basic counseling skills (e.g., reflection of content and feelings, paraphrasing, open-ended

questions, minimal encouragers, confrontation, goal planning, summarization) using an eight-point Likert scale from ("poorly attempted" to "well performed"). Higher scores are assumed to indicate higher levels of basic counseling skill. Reliability and validity data for this instrument has not been gathered nor reported. In order to obtain a more accurate evaluation of basic counseling skill competency, as evaluation of counselor trainee's skills is subjective in nature, an average of the supervisor's and researcher's scores on the *BSO* (Ellington, 1991) was used in this research to obtain pre-and-post measures of basic counseling skill competency.

Research Question and Hypothesis

This quasi-experimental pretest/posttest study examined differential changes in two dependent variables, supervisory working alliance and basic counselling skill development in counselor trainees. The two groups were (1) Experimental Group (Matched Supervisor/Counselor Trainees Personality Characteristics) and (2) the Comparison Group (Non-Matched Supervisor/Counselor Trainees Personality Characteristics). The null hypothesis was tested at an alpha level of .05. Measures for each dependent variable, supervisory working alliance and basic counselling skill development, needed to be statistically significant for the null hypothesis to be rejected. The research question and hypothesis guiding this study was:

1. Does the matching of introvert/extravert personality characteristics of supervisors and counselor trainees have an effect on the supervisory working alliance (as perceived by the supervisor and counselor trainee) and on basic skill development?

   H_1: Counselor Trainees participating in either the Experimental Group (Matched Supervisor/Counselor Trainees Personality Characteristics) or the Comparison Group (Non-Matched Supervisor/Counselor Trainees Personality Characteristics)

will not differ in levels of supervisory working alliance (as perceived by the supervisor and counselor trainee) nor on basic skill development.

Null Hypothesis $\boldsymbol{\mu_1 = \mu_2}$

Alternative Hypothesis $\boldsymbol{\mu_1 \neq \mu_2}$

The use of bold indicates multivariate hypotheses.

Instrument: *SWAI-Supervisor*, (Efstation et al., 1990)

SWAI-Trainee, (Efstation et al., 1990)

Instrument: *BSO* (Ellington, 1991)

Data Analysis

Data was analyzed using *SPSS for Windows*, version 18 (SPSS, Inc., 2009) to determine the differential outcome effects on counselor trainees' supervisory working alliance and basic counselling skill development after participating in either Experimental Group (Matched Supervisor/Counselor Trainees Personality Characteristics) or the Comparison Group (Non-Matched Supervisor/Counselor Trainees Personality Characteristics). The data analysis was separated into two sections.

Descriptive statistics including frequency distributions for the nominally scaled demographic characteristics (age, gender, racial/ethnic category) provided a profile of the sample. Cross-tabulations to determine the assumption of approximate normal distribution, measures of central tendency (mean, median, and mode), measures of variability (variance and standard deviation), and correlation of the dependent variables were performed.

Hypothesis tests were conducted through a pretest-posttest two independent Hotelling's Trace multivariate anaylsis with group membership as the fixed, independent variable, with the pretest scores serving as the covariates, and the posttests as the outcome variables. The

multivariate test was conducted to maximize power in a typically small sample sized counseling research study. There was no multivariate hypothesis per se. Therefore, to determine whether the Hotelling's Trace was or was not statistically significant, step-down tests, (i.e., two independent samples *T*-tests), were conducted. Although it is somewhat unsettled in the statistical literature the consensus of opinion is that multiple comparison corrections (i.e., Bonferroni), are not necessary. If the Hotelling's Trace was significant there was at least weak protection against experiment wise type I inflation. The statistical analyses are presented in Figure 3.

Figure 3 Statistical Analyses

Research Question	Variables	Statistical Analyses
1. Does the matching of introvert-extravert personality characteristics of supervisors and counselor trainees have an effect on the supervisory working alliance (as perceived by the supervisor and counselor trainee) and basic skill development? H_1: Counselor Trainees participating in either Experimental Group (Matched Supervisor/Counselor Trainees Personality Characteristics) or Comparison Group (Non-Matched Supervisor/Counselor Trainees Personality Characteristics) will not differ in levels of supervisory working alliance nor basic skill development.	<u>Independent Variable:</u> Group Assignment: Experimental Group (Matched Supervisor/Counselor Trainees Personality Characteristics) Comparison Group (Non-Matched Supervisor/Counselor Trainees Personality Characteristics) <u>Dependent Variables:</u> Posttest scores on the *Supervisory Working Alliance Inventory* (*SWAI*,-Supervisor/Trainee forms, Efstation et al, 1990) Posttest scores on the *Basic Skills Observation* (*BSO*, Ellington, 1991) <u>Covariates:</u> Pretest scores on the *Supervisory Working Alliance Inventory* (*SWAI*,-Supervisor/Trainee forms, Efstation et al, 1990) Pretest scores on the *Basic Skills Observation* (*BSO*, Ellington, 1991)	A multivariate Hotelling's Trace with group membership as the fixed independent variable was used to compare level of supervisory working alliance of counselor trainees (as perceived by the supervisor and counselor trainee) and basic skill development from pre-experiment to post-experiment at the completion of the study. Pretest scores on this measure will be used as covariates. Mean scores were compared to determine which group had the most increased level of supervisory working alliance (as perceived by the supervisor and counselor trainee) and increase in basic skill development following the experiment at the completion of the 14-week period.

Chapter III presented the research design, dependent and independent variables, setting, and procedure for evaluating the differential changes in two dependent variables, supervisory working alliance and basic counselling skill development, of counselor trainees after

participating in either the Experimental Group (Matched Supervisor/Counselor Trainees Personality Characteristics) or the Comparison Group (Non-Matched Supervisor/Counselor Trainees Characteristics).

CHAPTER IV

RESULTS

Introduction

This chapter presents the research design, dependent and independent variables, setting, and procedure for investigating any differences in two dependent variables, supervisory working alliance and basic counseling skill development, of counselor trainees who were assigned to supervisory dyads and who were either matched or non-matched based on their personality characteristic (Introversion/Extraversion). A quasi-experimental two-treatment group study design was conducted in one counseling master-level practicum at a CACREP accredited major midwestern urban university.

The dependent variables measured in this study were the supervisor/counselor trainees' perception of the supervisory working alliance, and basic counseling skill competency of the counselor trainees. The data reported in this chapter includes the pre-and-post tests measurement of the supervisory working alliance utilizing the *Supervisory Working Alliance-Supervisor* and *Trainee* forms (*SWAI-Supervisor* and *SWAI-Trainee,* Efstation et al., 1990), and basic counseling skill competency utilizing the *Basic Skill Observation* (*BSO*, Ellington, 1991) form. The research question this study attempted to answer was: Does the matching of introvert/extravert personality characteristics of supervisors and counselor trainees have an effect on the supervisory working alliance (as perceived by the supervisor and counselor trainee) and on basic skill development?

The independent variable was assignment to one of two treatment conditions, the Experimental Group (Matched Supervisor/Counselor Trainee), or the Comparison Group (Non-Matched Supervisor/Counselor Trainee). Following completion of the criterion instruments, counselor trainees were randomly assigned to one of two treatment groups (Matched or

Unmatched). Once counselor trainees were randomly assigned to the Matched Group, counselor trainees and supervisors who had matching personality types were paired. After random assignment to the Unmatched Group, the supervisor's and counselor trainee's personality types were examined to determine that the unmatched condition was met. The supervisory dyads were established by random assignment. The Experimental Matched Group were those supervisors and students identified and randomly paired as having congruent introverted or extraverted personality characteristics as identified through the *Myers Briggs Type Inventory* (*MBTI*, Form M, Myers et al., 1998). The Comparison Non-Matched Group was comprised of supervisors and counselor trainees whose introvert/extravert matches were randomly matched for incongruence. The data in this study was analyzed using *SPSS for Windows*, Version 18 (SPSS, Inc. 2010). An alpha level of .05 was used to analyze the hypothesis.

Demographic Characteristics

The sample consisted of 15 master-level counselor trainees, with a minimum, maximum age of 25-63. The mean age of the counselor trainees was 34.47 (*SD* = 12.57). There were eight counselor trainees in the Experimental Matched Supervisor/Counselor Trainee Personality Characteristics Group and seven counselor trainees in the Comparison Non-Matched Supervisor/Counselor Trainee Personality Characteristics Group. Table 1 describes the additional counselor trainee demographics by treatment group as reported on the *Counselor Trainee Demographic Form* (Maxey, 1999).

Table 1

Counselor Trainee Demographics by Treatment Group

		Counselor Trainee Treatment Group		
		Experimental Group Matched Supervisor/ Counselor Trainee	Comparison Group Non-Matched Supervisor/ Counselor Trainee	Total
Counselor Trainee Gender	Male	1	1	2
	Female	7	6	13
	Total	8	7	15
Counselor Trainee Age Group	25-30 yrs	6	4	10
	31-40 yrs	0	2	2
	41-50 yrs	1	0	1
	61 yrs and over	1	1	2
	Total	8	7	15
Counselor Trainee Ethnicity	Caucasian*	7	4	11
	African American**	1	3	4
	Total	8	7	15
Counselor Trainee Counseling Experience	Novice	6	6	12
	Beginner (1-2 yrs)	1	1	2
	Intermediate (3-5 yrs)	1	0	1
	Total	8	7	15

*White (not of Hispanic origin): All persons having origins in any of the original peoples of Europe, North Africa, or the Middle East.
**Black (not of Hispanic origin): All persons having origins in any of the peoples American Africa, Islands of the Caribbean, or any of the Black racial groups.

The Experimental Matched Group consisted of one male and seven female counselor trainees. Six counselor trainees in the Experimental Matched Group were in the 25-30 years age group, one counselor trainee was in the 41-50 years age group, and one counselor trainee was in the 61 years and older age group. Seven of the counselor trainees in the Experimental Matched Group were Caucasian and one was African American. The Experimental Matched Group had

six novices identified as having no counseling experience other than course work, one beginner with 1-2 years of counseling experience, and one intermediate counselor trainee with 3-5 years of counseling experience.

The Comparison Non-matched Group included one male and six female counselor trainees. Four counselor trainees in the Comparison Non-matched Group were in the 25-30 years age group, two counselor trainees were in the 31-40 years age group, and one counselor trainee was in the 61 years and older age group. Four of the counselor trainees in the Comparison Non-matched Group were Caucasian and three were African American. The Comparison Non-matched Group had six novices identified as having no counseling experience other than course work, and one beginner counselor trainee with 1-2 years of counseling experience.

Eight advanced degree students who were completing the Counselor Education Doctoral Degree and/or Education Specialist Certificate programs served as supervisors for the study. Of the seven supervisors who provided their age on the *Supervisor Demographic Form*, (Maxey, 1999), their years of age ranged 29 to 59 and their mean was 44.14 (*SD* = 13.17) years of age. Table 2 describes the additional supervisor trainee demographics by treatment group as reported on the *Counselor Supervisor Demographic Form* (Maxey, 1999).

Table 2

Supervisor Demographics by Treatment Group

		Counselor Trainee Treatment Group		
		Experimental Group Matched Supervisor/ Counselor Trainee	Comparison Group Non-Matched Supervisor/ Counselor Trainee	Total
Supervisor Gender	Male	0	2	2
	Female	4	2	6
	Total	4	4	8
Supervisor Age Group	25-30 yrs	1	0	1
	31-40 yrs	0	2	2
	41-50 yrs	1	0	1
	51-60 yrs	1	2	3
	61 yrs and over	1	0	1
	Total	4	4	8
Supervisor Ethnicity	Caucasian*	2	1	3
	African American**	2	2	4
	Hispanic	0	1	1
	Total	4	4	8
Supervisor Supervision Experience	Beginner (1-2 yrs)	0	1	1
	Intermediate (3-5 yrs)	2	2	4
	Advanced (6+ years)	2	1	3
	Total	4	4	8
Supervisor Counseling Experience	Beginner (1-2 yrs)	1	0	1
	Intermediate (3-5 yrs)	0	2	2
	Advanced (6+ years)	3	2	5
	Total	4	4	8
Supervisor Number of Trainees Supervised	0-5 Counselor Trainees	0	1	1
	6-10 Counselor Trainees	2	1	3
	over 10 Counselor Trainees	2	2	4
	Total	4	4	8

*White (not of Hispanic origin): All persons having origins in any of the original peoples of Europe, North Africa, or the Middle East.

**Black (not of Hispanic origin): All persons having origins in any of the peoples American Africa, Islands of the Caribbean, or any of the Black racial groups.

The Experimental Matched Group of supervisors was comprised of four females. One supervisor in the Experimental Matched Group reported being in the 25-30 years age group, one supervisor was in the 41-50 years age group, one supervisor was in the 51-60 years of age group, and one supervisor was in the 61 years and older age group. Two of the supervisors in the Experimental Matched Group were Caucasian and two were African American. The Experimental Matched Group had two supervisors with 3-5 years of supervision experience (identified as intermediates), and two supervisors with 6 or more years of supervision experience (identified as advanced). The counseling experience of supervisors in the Experimental Matched Group consisted of one beginner with 1-2 years of experience, and three advanced supervisors with 6 or more years of counseling experience. The Experimental Matched Group had two supervisors in the 6-10 range of counselor trainees supervised, and two supervisors with experience providing supervision to 10 or more counselor trainees.

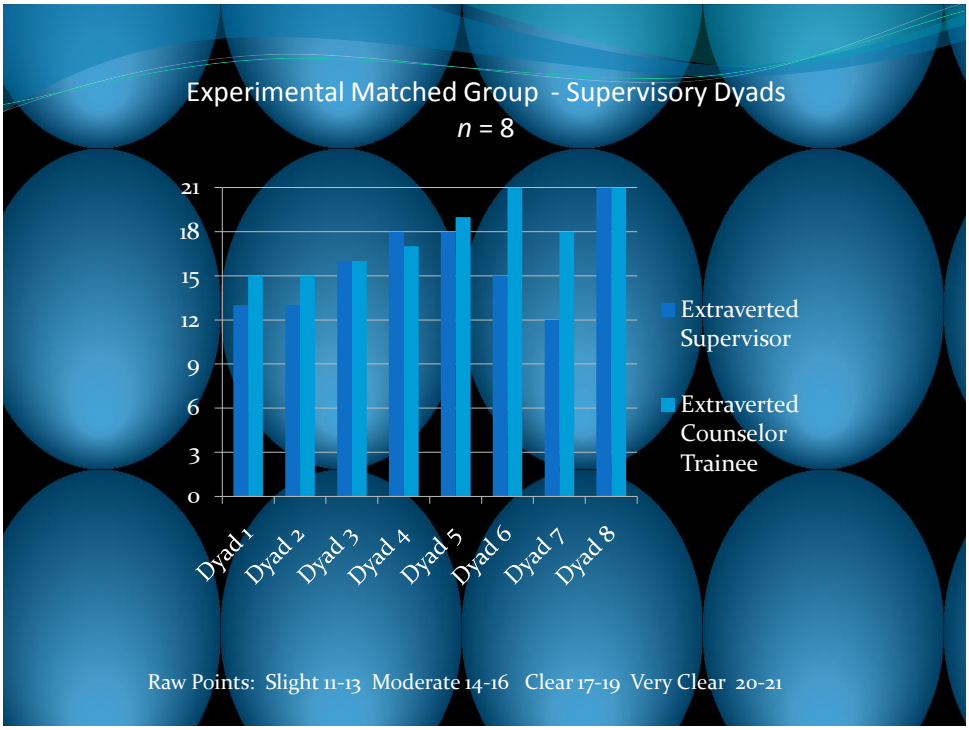
The Comparison Non-matched Group of counselor trainees included two males and two females. Two supervisors in the Comparison Non-matched Group were between 31-40 years of age, and two supervisors were in the 51-60 years of age group. One of the supervisors in the Comparison Non-matched Group was Caucasian, two were African American, and one was Hispanic. Supervision experience for supervisors in the Comparison Non-matched Group had one beginner with 1-2 years supervision experience, and two intermediate supervisors with 3-5 years of experience and one supervisor identified as advanced with 6 or more years of supervision experience. The Comparison Non-matched Group had two supervisors identified as intermediates with 3-5 years of counseling experience and two supervisors identified as advanced with 6 or more years of counseling experience. The number of counselor trainees supervised by category in the Comparison Non-matched Group consisted of one supervisor in

the 0-5, one supervisor in 6-10, and two supervisors in the over 10 counselor trainees supervised category.

Dyad Descriptions

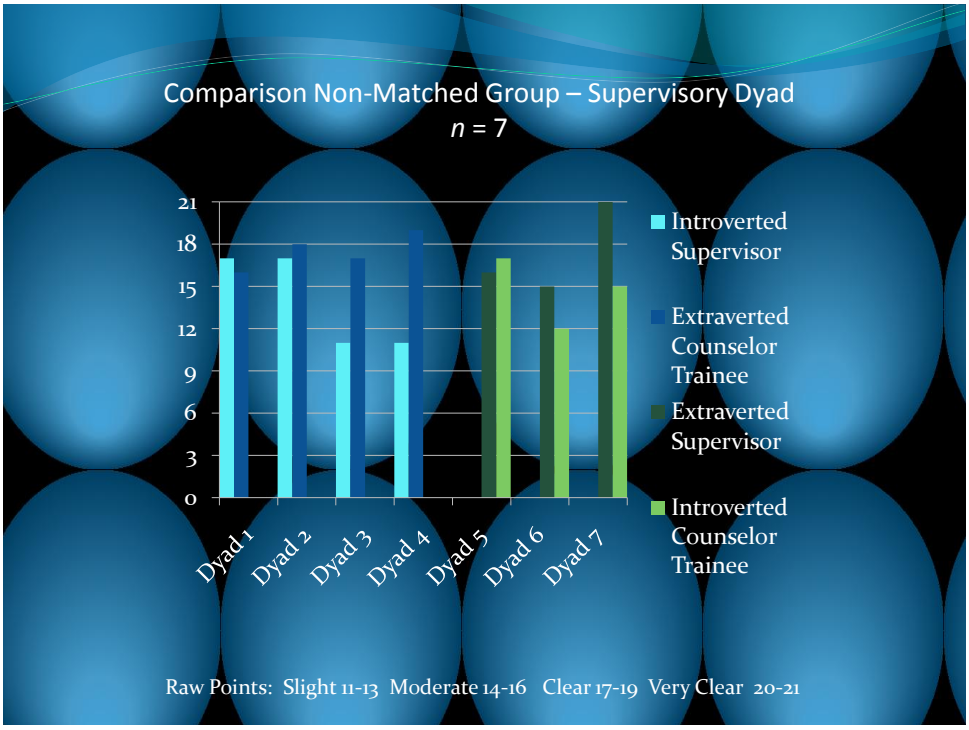
A description of the supervision dyads by treatment group is presented in Figures 4 & 5.

Figure 4 Supervisory Dyads Experimental Matched Group



The Experimental Matched Group consisted of eight supervisory dyads. This group consisted of matched extravert-type supervisors and counselor trainees. The raw point score range for supervisors was 12-21. The extravert-type categories included one supervisor classified as very clear, two supervisors as clear, two supervisors as moderate, and three supervisors in the slight preference category. The raw point range for counselor trainees in the Experimental Matched Group was 15-21. Their scores indicated five very clear extravert-types and three in the moderate preference category.

Figure 5 Supervisory Dyads Comparison Non-Matched Group



The Comparison Non-Matched Group consisted of seven supervisory dyads. The group included four non-matched dyads with introvert-type supervisors and extravert-type counselor trainees. The raw point range for the supervisors was 11-17. There were two supervisors in the clear and two in the slight preference categories. The extravert-type counselor trainees' raw point score range was 16-19 and included three clear and one moderate preference scores.

The other three supervisory dyads in the Comparison Non-Matched Group included three extravert-type supervisors and three introvert-type counselor trainees. The raw point range for the extravert-typed supervisors was 15-21 with one supervisor in the very clear and two supervisors in the moderate preference category. The introvert-type counselor trainees had a raw score range of 12-17 with one counselor trainee in the clear, one in the moderate and one in the slight preference categories.

Analysis of Pretests

In order to determine whether the two treatment groups were statistically equivalent prior to the experiment, a *t*-test for independent samples was used prior to testing the research hypothesis. The dependent variables were the pretest scores on the counselor trainees' basic skill competency (*BSO*, Ellington, 1991) and supervisors' (*SWAI-Supervisor*, Efstation et al., 1990) and counselor trainees' (*SWAI-Trainee,* Efstation et al., 1990) rating of the supervisory working alliance. The pretest dependent variable statistics by treatment group are presented in Table 3.

Table 3

Pre-Test Dependent Variable Statistics by Treatment Group

	Counselor Trainee Treatment Group	N	Mean	Std. Deviation	Std. Error Mean
Basic Skills Observation (Average Pre-test)	Experimental Group Matched Supervisor/Counselor Trainee Personality Characteristics	8	90.19	12.24	4.33
	Comparison Group Non-Matched Supervisor/Counselor Trainee Personality Characteristics	7	90.71	6.78	2.56
Supervisory Working Alliance (Counselor Trainee Pre-test)	Experimental Group Matched Supervisor/Counselor Trainee Personality Characteristics	8	128.88	10.09	3.57
	Comparison Group Non-Matched Supervisor/Counselor Trainee Personality Characteristics	7	122.43	11.67	4.41
Supervisory Working Alliance (Supervisor Pre-test)	Experimental Group Matched Supervisor/Counselor Trainee Personality Characteristics	8	139.62	8.55	3.02
	Comparison Group Non-Matched Supervisor/Counselor Trainee Personality Characteristics	7	136.57	11.62	4.39

No significant differences were found in mean scores for the dependent variables, counselor trainees' basic skill competency (*BSO* Ellington, 1991) and supervisors' (*SWAI-Supervisor*, Efstation et al., 1990) and counselor trainees' (*SWAI-Trainee,* Efstation et al., 1990)

rating of the supervisory working alliance prior to the start of the experiment. Table 4 presents the results of the *t*-test for independent samples.

Table 4

t-Test for Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	*t*	*Df*	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Basic Skills Observation (Average Pre-test)	Equal variances assumed	1.07	.32	-.10	13	.92	-.53	5.23	-11.82	10.76
	Equal variances not assumed			-.11	11.17	.92	-.53	5.03	-11.58	10.53
Supervisory Working Alliance (Counselor Trainee Pre-test)	Equal variances assumed	.27	.61	1.15	13	.27	6.45	5.62	-5.69	18.58
	Equal variances not assumed			1.14	12.01	.28	6.45	5.67	-5.92	18.81
Supervisory Working Alliance (Supervisor Pre-test)	Equal variances assumed	.67	.43	.59	13	.57	3.05	5.22	-8.22	14.33
	Equal variances not assumed			.57	10.93	.59	3.05	5.33	-8.69	14.80

The t-test for independent samples indicated there were no significant differences between the two means. Therefore, baseline equality was established at the pretest stage.

Research Question and Hypothesis

This quasi-experimental pretest/posttest study examined differential changes in two dependent variables, supervisory working alliance and basic counseling skill development in counselor trainees. The two groups were the (1) Experimental Group (Matched Supervisor/Counselor Trainees Personality Characteristics) and (2) Comparison Group (Non-Matched Supervisor/Counselor Trainees Personality Characteristics). The null hypothesis was tested at an alpha level of .05. Measures for each dependent variable, supervisory working alliance and basic counseling skill development need to be statistically significant for the null hypothesis to be rejected. The research question guiding this study was: Does the matching of introvert/extravert personality characteristics of supervisors and counselor trainees have an effect on the supervisory working alliance (as perceived by the supervisor and counselor trainee) and on basic skill development?

Null Hypothesis

The hypothesis stated the counselor trainees participating in either the Experimental Group (Matched Supervisor/Counselor Trainees Personality Characteristics) or the Comparison Group (Non-Matched Supervisor/Counselor Trainees Personality Characteristics) would not differ in levels of supervisory working alliance (as perceived by the supervisor and counselor trainee) nor on basic skill development. A multivariate Hotelling's Trace with group membership as the fixed independent variable was used to compare the two levels of supervisory working alliance of counselor trainees (as perceived by the supervisor and counselor trainee) and basic skill development from pre-experiment to post-experiment at the completion of the study. Pretest scores on this measure were used as covariates. Table 5 presents the descriptive statistics by treatment group for the null hypothesis.

Table 5

Descriptive Statistics by Treatment Group

	Counselor Trainee Treatment Group	Mean	Std. Deviation	N
Basic Skills Observation (Average Post-test)	Experimental Group Matched Supervisor/Counselor Trainee Personality Characteristics	110.69	9.78	8
	Comparison Group Non-Matched Supervisor/Counselor Trainee Personality Characteristics	115.50	9.47	7
	Total	112.93	9.61	15
Supervisory Working Alliance (Counselor Trainee Post-test)	Experimental Group Matched Supervisor/Counselor Trainee Personality Characteristics	132.62	.74	8
	Comparison Group Non-Matched Supervisor/Counselor Trainee Personality Characteristics	126.57	7.57	7
	Total	129.80	5.88	15
Supervisory Working Alliance (Supervisor Post-test)	Experimental Group Matched Supervisor/Counselor Trainee Personality Characteristics	150.75	8.43	8
	Comparison Group Non-Matched Supervisor/Counselor Trainee Personality Characteristics	146.43	7.28	7
	Total	148.73	7.95	15

The mean for the Experimental Matched Group for the Supervisory Working Alliance (Supervisor Post-Test) was 150.75 (N= 8, SD = 8.43) and for the Comparison Non-Matched

Group was 146.43 (*N* = 7, *SD* = 7.28). The mean for the Experimental Matched Group for the Supervisory Working Alliance (Counselor Trainee Post-Test) was 132.62 (*N*= 8, *SD* = .74) and for the Comparison Non-Matched Group was 126.57 (*N* = 7, *SD* = 7.57). The mean for the Experimental Matched Group Basic Skills Observation (Average Post-Test) was 110.69 (*N*= 8, *SD* = 9.78) and for the Comparison Non-Matched Group was 115.50 (*N* = 7, *SD* = 9.47).

A multivariate Hotelling's Trace with group membership as the fixed independent variable was used to compare levels of supervisory working alliance of counselor trainees (as perceived by the supervisor and counselor trainee) and basic skill development from pre-experiment to post-experiment at the completion of the study. Pretests scores on this measure were used as covariates. Table 6 presents the results of this analysis by treatment group for the null hypothesis.

Table 6

Hotelling's Trace Multivariate Tests[b]

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.71	6.36[a]	3.00	8.00	.02
	Wilks' Lambda	.30	6.36[a]	3.00	8.00	.02
	Hotelling's Trace	2.39	6.36[a]	3.00	8.00	.02
	Roy's Largest Root	2.39	6.36[a]	3.00	8.00	.02
Bsoavepr	Pillai's Trace	.23	.80[a]	3.00	8.00	.53
	Wilks' Lambda	.77	.80[a]	3.00	8.00	.53
	Hotelling's Trace	.30	.80[a]	3.00	8.00	.53
	Roy's Largest Root	.30	.80[a]	3.00	8.00	.53
Cslswpr	Pillai's Trace	.17	.53[a]	3.00	8.00	.67
	Wilks' Lambda	.83	.53[a]	3.00	8.00	.67
	Hotelling's Trace	.20	.53[a]	3.00	8.00	.67
	Roy's Largest Root	.20	.53[a]	3.00	8.00	.67
Supswpr	Pillai's Trace	.40	1.77[a]	3.00	8.00	.23
	Wilks' Lambda	.60	1.77[a]	3.00	8.00	.23
	Hotelling's Trace	.66	1.77[a]	3.00	8.00	.23
	Roy's Largest Root	.66	1.77[a]	3.00	8.00	.23
expgrp_#	Pillai's Trace	.43	2.04[a]	3.00	8.00	.19
	Wilks' Lambda	.57	2.04[a]	3.00	8.00	.19
	Hotelling's Trace	.76	2.04[a]	3.00	8.00	.19
	Roy's Largest Root	.76	2.04[a]	3.00	8.00	.19

a. Exact statistic

b. Design: Intercept + bsoavepr + cslswpr + supswpr + expgrp_#

Hotelling's Trace multivariate analyses regarding each variable showed no significant differences. Therefore, it is concluded the two treatment groups did not differ in impact on the dependent variables of supervisory working alliance and basic skill development of counselor

trainees (Hotelling's F = 2.04, df 3, 8, α = .19) which means there were no significant differences between the two groups.

A reliability analysis was conducted on the pre-and-post measurements of basic counseling skill development in order to determine internal consistency and reliability information for the *BSO (*Ellington, 1991) scale. The *BSO (*Ellington, 1991) scale contained 16 items rated on a Likert scale of 1 "poorly attempted" to 8 "well performed". The total number of counselor trainees evaluated was 15. The Cronbach alpha was computed at the .05 level. Descriptive statistics were obtained for each item, subscale and entire scale. The reliability was re-assessed with each item being deleted. Table 7 presents the supervisors' and independent rater's descriptive summated statistics for the *BSO (*Ellington, 1991) scale.

Table 7

Descriptive Summated Statistics for the BSO

Rater/Time	Mean	Variance	Std. Deviation	N of Items
Supervisors' Pre	84.07	324.50	18.01	16
Supervisors' Post	113.20	94.74	9.73	16
Independent Rater's Pre	94.73	45.78	6.77	16
Independent Rater's Post	113.47	104.41	10.22	16

The Supervisor's summated scores of the BSO (1991) pre- results show the mean was 84.07 (*SD*=18.01). The Supervisor's summated scores of the BSO (1991) post- results show the mean was 113.20 (*SD*=9.73). The summated scores of the BSO (1991) independent rater's pre- results show the mean was 94.73 (*SD*=6.77). The summated scores of the BSO (1991) independent rater's post- results show the mean was 113.47 (*SD*=10.22). Table 8 presents the supervisors' and independent rater's reliability statistics for the *BSO* (Ellington, 1991) scale.

Table 8

Reliability Statistics for the *BSO*

	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Supervisors' Pre	.96	.97	16
Supervisors' Post	.92	.93	16
Independent Rater's Pre	.88	.89	16
Independent Rater's Post	.96	.96	16

The supervisors' pre- results (SPR) for the entire *BSO* (Ellington, 1991) scale for counselor trainees indicated a Cronbach alpha reliability coefficient internal consistency of .96. The supervisors' post- results (SPO) results for the entire *BSO* (Ellington, 1991) scale for counselor trainees indicated a Cronbach alpha reliability coefficient internal consistency of .92. The independent rater's pre- results (IPR) for the entire *BSO* scale for counselor trainees indicated a Cronbach alpha reliability coefficient internal consistency of .88. The independent rater's post- results (IPO) for the entire *BSO* scale for counselor trainees indicated a Cronbach alpha reliability coefficient internal consistency of .96. This analysis is the first published reliability information on this instrument.

Although the research hypothesis was not found to be statistically significant, the Tests of Between-Subjects Effects by Treatment Group for the *BSO* (Ellington, 1991) pre-and-post data showed $\alpha = .04$ which indicated something of statistical significance was found and further analysis was warranted. See Appendix C for the tests of between-subjects effects by treatment group, paired samples descriptive statistics and univariate paired samples tests.

Summary

Chapter IV presented the results of the data analysis that was used to describe the sample and test the hypothesis. Chapter V provides a summary of the study, consideration of the assumptions and limitations, discussion of the results and the conclusions drawn regarding the research question and hypothesis, implications for the field, and recommendations for future research.

CHAPTER V

SUMMARY AND DISCUSSION

This chapter provides a brief overview of the problem addressed by this study, literature which was relevant to the outcome of this research, and the methodologies and procedures which were employed. Summary and discussion of the research results, and limitations and recommendations for future research are presented.

Introduction

Supervision has been described as an essential factor in counselor education. The importance of a strong supervisory working alliance has been reported to not only impact the supervisory process, but also impact the counselor trainee's relationship with their clients (Webb & Wheeler, 1998). Many researchers agree the relationship between a counselor trainee and supervisor is an important factor in helping to shape the counselor trainee into a professional (Holloway, 1995). Continued focus on identification of potentially influential factors within the supervisory relationship may serve to enhance the supervisory working alliance for counselor trainees, and ultimately enhance their training and development as competent professionals.

This study attempted to identify one component which may help to influence or contribute to more effective training to enhance the supervisory working alliance in counseling supervision and subsequently basic counseling skill competency. It was designed to examine the differential effects of supervisor/counselor trainees' personality type congruence/non-congruence based on matching/non-matching supervisor/counselor trainee introvert or extravert personality characteristics. The study was conducted in one counseling practicum course during one semester. Counseling practicum was conducted at a large metropolitan university in the Midwest which serves clients from the community at large. Practicum courses typically involve counselor

trainees having the opportunity to learn how to integrate counseling theory with counseling practice through hands-on experience while in a closely supervised setting which provides opportunity for immediate feedback.

Restatement of the Problem

In the counseling profession, clinical supervision is one of the most critical aspects of counselor education. Typically students are supervised throughout clinical training, with supervision normally continuing on into their professional work settings. Counseling programs across the United States provide individual and group supervision for their students as a part of the counselor training process.

Worthen and McNeill (1996) stated positive supervision experiences for supervisees involve the following two factors: the development of counseling skills as well as a good supervisory relationship. The enhancement of basic counseling skills and the development of competency are identified by many researchers as an essential goal of the supervisory process (Bradley & Ladany, 2001; Holloway, 1995; Knapp & VandeCreek, 1997; Watkins, 1994). Bradley and Fiorini (1999) identified the practicum experience as a critical component in counselor education training. Ladany, Walker and Melincoff (2001) also supported the supervisory relationship as a key component of the supervisory working alliance, especially as it relates to the supervision process. One area reported to be lacking attention in existing models of supervision is the potential impact of the individual differences in personality between supervisors and counselor trainees on the supervision process (Kitzrow, 2001). Therefore, a study examining the effects of individual personality characteristics of the supervisor, and counselor trainee, supervisory workings relationship and basic counseling skill development appears justified.

This study examined the differential effects of supervisor/counselor trainees' personality type congruence based on matching/non-matching supervisor-counselor trainee introvert or extravert personality characteristics. This study specifically investigated whether the personality characteristics of introversion/extraversion congruence and non-congruence impacts the supervisors' and counselor trainees' perception of the supervisory working alliance, as well as the outcome effects on the counselor trainees' acquisition of basic counseling skills.

Review of the Literature

Counselor supervision is increasingly being identified as a profession growing into its own right (Bernard & Goodyear, 2004; McMahon & Simons, 2004; Getz, 1999). Since supervision has been previously identified as a critical factor in counselor education, it would seem prudent to consider factors pertinent to the process. The process of clinical supervision as described by Ringel (2001) is "a complex undertaking that is influenced by multiple factors, including the personalities and characteristics of the supervisory dyad, developmental considerations, social attitudes, ecological factors and the parallel process" (p. 171).

Efforts to measure the therapeutic working alliance have extended to the supervisory relationship. Efstation developed the *Supervisory Working Alliance Inventories* (*SWAI,* Efstation et al., 1990) to measure supervisor and supervisee perceptions of each other. Since counselor supervision is increasingly being identified as a profession growing into its own right (Bernard & Goodyear, 2004; McMahon & Simons, 2004; Getz, 1999), it seems prudent to consider factors pertinent to this process.

Supervision strategies which focus on the supervisory relationship and its effect on supervision process and outcomes, especially by developing an understanding of individual differences between supervisors and counselor trainees, is strongly recommended (Bernard &

Goodyear, 2004). Supervision has been identified as being both a relationship and a process (Hess, 1987). Chen & Bernstein (2000) describe the interactions of supervision participants as a process concern which focuses on the reciprocal nature in defining the relationship while the actual relationship "functions as the context within which the supervisor-supervisee interactions unfold" (p. 485). Holloway (1995) stated "Communication influences relational development, and in turn (or simultaneously), relational development influences the nature of the communication between parties in the relationship" (as cited in Miller, 1976, p. 41). Ultimately, Chen & Bernstein (2000) assert "Any supervision research that ignores this reciprocal and intimate interaction between process and relationship is likely to result in an incomplete view of how supervision facilitates counselor development" (p. 485).

A case study by Chen & Bernstein (2000) of graduate students in counseling psychology programs at three universities utilizing the *SWAI* (Efstation et al., 1990), found support for the importance of the reciprocal nature of communication in the supervisory working alliance, as well. The value of effective communication and development of a strong working alliance would seem to go hand-in-hand. However, a review of literature detailing counselor skills competency conducted by Eriksen and McAuliffe (2003) showed a dearth of reliable instruments but noted validity data is often very weak or nonexistent.

Efforts to measure the therapeutic working alliance have extended to the supervisory relationship. Efstation developed the *Supervisory Working Alliance Inventories* (*SWAI*, Efstation et al., 1990) to measure supervisor and supervisee perceptions of each other. Since counselor supervision is increasingly being identified as a profession growing into its own right (Bernard & Goodyear, 2004; McMahon & Simons, 2004; Getz, 1999), it seems prudent to consider factors pertinent to this process.

Van Kessel and Hann (as cited in Zorga, 2003) identified the ultimate goal of supervision as encompassing a "two-dimensional integration where the professional worker is capable of effectively harmonizing his/her functioning as a human being with his/her own personality characteristics (first dimension) and the characteristics of his/her professional functioning and requirements (second dimension) in such a manner that the result achieved can be referred to as the professional self" (p. 270). This definition is congruent with Hart & Nance's (2003) philosophy that interpersonal characteristics play an important part in counselor training.

One area reported to be lacking attention in existing models of supervision is the potential impact of the individual differences in personality between supervisors and counselor trainees on the supervision process (Kitzrow, 2001). In a study conducted by Craig and Sleight (1990) assessing the effect of type difference of supervisors and students, they found type differences may make it difficult for students and supervisors to relate to each other especially in understanding how students may relate to their clients.

White & Queener (2003) propose that "all supervision takes place within the context of a relationship" (p.203), and propose research of supervisor and supervisee individual characteristics may be beneficial in helping to better understand the supervisory relationship. A study by Anderson (1998) on the level of satisfaction of new nurses being oriented into their new positions indicated a statistically significant result when the orientees were matched congruently on the *Myers-Briggs Type Indicator* (*MBTI*, Myers, McCaulley, Quenk & Hammer, 1998) scale with their preceptors.

Identification of type preferences can help to identify basic motivators and values of counselor trainees which Lawrence (2009) believes is valuable information relating to learning preferences. Awareness and recognition of counselor trainee's type or preference in supervision

may be useful in enhancing learning. Attention paid to this may subsequently help counselor trainees be more sensitive to client's preferences and/or needs for taking in and understanding information. Salter, Evans and Forney (2006) conducted a longitudinal study of learning style preferences of 292 master's level students in the student affairs administration program, using the *MBTI* (Myers et al., 1998), and concluded learning styles tend to be relatively stable. They subsequently posit that these predictable tendencies identified through type can be viewed as critical components in the educational process.

Helping supervisors and supervisees to engage in a learning process which may encourage greater self-awareness and integration in identifying personal ways of thinking, feeling and functioning may affect counselor growth and development. While conducting a phenomenological study of "good" supervision events, Worthen and McNeill (1996) remarked "with the creation of a facilitative supervisory relationship, a supervisor will be attuned to opportunities to intervene strategically with trainees to meet their unique supervisory needs." (p. 33).

According to Ringel (2001), there are a myriad of factors which can influence the process of supervision, including personalities within the supervisory dyad. Campbell (2000) also identified personality characteristics as one of the components necessary for consideration when determining supervisory style. Although there has been debate over the number of characteristics which encompass "personality," most major current models of personality include the dimensions of introversion-extraversion (Zuckerman, 1992). Eysenck (1986) and Gray (1970) both proposed biological theories of personality proposing links between psychophysiology and the personality characteristics of introversion and extraversion.

Johnson, Wiebe, Gold, Andreasen, Hichwa, Watkins, & Boles (1999) conducted a study using positron emission tomography (PET) technique to describe brain regions associated with introversion and extraversion. Their study with 18 healthy individuals did show a correlation of increased cerebral blood flow in the anterior insula with introverts while there was a correlation of increased cerebral blood flow in the posterior region with extraverts. Further, according to this study, the greater activity evidenced in the two different regions of the brain also supports the notion of the inward energy focus of introverts toward more introspective activity and the outward energy focus of extraverts and the drive for sensory and emotional stimulation.

Kitzrow (2001) developed a model of supervisory style based on the *MBTI* (Myers et al., 1998) and the data obtained conducting a survey of uses of the *MBTI* (Myers et al., 1998) in clinical supervision. Although research is scarce in this particular area, Kitzrow (2001) believed the value and use of the *Myers-Briggs Type Indicator* (*MBTI,* Myers et al., 1998) and personality type theory are extremely valuable resources in counseling supervision.

Review of Methods and Procedures

A large university located in a metropolitan Midwest city was the setting for this study. Master-level counselor trainees enrolled in Counseling Practicum and doctoral-level or education specialist certificate students completing supervisory methods and/or advanced internship requirements who volunteered served as the participants in this study. The supervisory dyads were established by random assignment taking into consideration the research design requiring matching/non-matching of introversion/extraversion personality characteristics.

The Experimental Matched Group consisted of those supervisors and counselor trainees identified and randomly paired as having congruent introverted or extraverted personality

characteristics as identified through the *MBTI*, Form M (Myers et al., 1998). The Comparison Non-Matched Group was comprised of supervisors and counselor trainees whose introvert/extravert matches were randomly matched for incongruence. The assignment to treatment group was the independent variable for this study as determined by identification of each participant's introverted or extraverted personality characteristic.

Demographic data used in this study was collected utilizing the: 1) *Counselor Trainee Demographic Form* (Maxey, 1999), 2) and *Supervisor Demographic Form*, (Maxey, 1999). This study used results from the *MBTI*, Form M (1998) Introversion/Extraversion Scale to form the matched/non-matched supervisory dyads. The supervisors and counselor trainees completed their respective *Supervisory Working Alliance Inventory* (*SWAI-Supervisor, SWAI-Supervisee*, Efstation et al., 1990) to measure relationship dynamics between the supervisor and the counselor trainee. The supervisors and researcher measured the basic counseling skills (e.g., reflection of content and feelings, paraphrasing, open-ended questions, minimal encouragers, confrontation, goal planning, summarization) of the counselor trainees using the BSO (Ellington, 1991).

The study was a quasi-experimental pretest-posttest design (Hadley & Mitchell, 1995). Differential outcomes for two dependent variables, supervisory working alliance and basic counseling skill development were examined. A multivariate Hotelling's Trace with group membership as the fixed independent variable was used to compare level of supervisory working alliance of counselor trainees (as perceived by the supervisor and counselor trainee) and basic skill development from pre-experiment to post-experiment at the completion of the study. Pretest scores on this measure were used as covariates. Mean scores were compared to determine which group had the most increased level of supervisory working alliance (as perceived by the

supervisor and counselor trainee) and basic skill development following the experiment at the completion of the 14-week period.

Restatement of the Research Question and Associated Hypothesis

This quasi-experimental pre-test/post-test study examined differential changes in two dependent variables, supervisory working alliance and basic counseling skill development in counselor trainees. The two groups were the: (1) Experimental Group (Matched Supervisor/Counselor Trainees Personality Characteristics), and (2) Comparison Group (Non-Matched Supervisor/Counselor Trainees Personality Characteristics). The null hypothesis was tested at an alpha level of .05. Measures for each dependent variable, supervisory working alliance and basic counseling skill development, needed to be statistically significant for the null hypothesis to be rejected. The research question and hypothesis guiding this study was:

1. Does the matching of introvert/extravert personality characteristics of supervisors and counselor trainees have an effect on the supervisory working alliance (as perceived by the supervisor and counselor trainee) and on basic skill development?

   H_1: Counselor Trainees participating in either the Experimental Group (Matched Supervisor/Counselor Trainees Personality Characteristics) or Comparison Group (Non-Matched Supervisor/Counselor Trainees Personality Characteristics) will not differ in levels of supervisory working alliance (as perceived by the supervisor and counselor trainee) nor on basic skill development.

Summary of Findings

In analysis of the results, cross tabulations were used to describe the demographic data reported by participants prior to the beginning of the treatment. Initially, there were 16 master-

level counselor trainees beginning Counseling Practicum. However, one student did not complete the course. Therefore, the data were reported for 15 master-level counselor trainees. The sample consisted of 15 master-level counselor trainees, with a minimum, maximum age of 25-63. The mean age of the counselor trainees was 34.47 (*SD* = 12.57). There were eight counselor trainees in the Experimental Matched Supervisor/Counselor Trainee Personality Characteristics Group and seven counselor trainees in the Comparison Non-Matched Supervisor/Counselor Trainee Personality Characteristics Group.

Counselor trainees were randomly assigned to the two groups. There were eight counselor trainees in the Experimental Matched Supervisor/Counselor Trainee Personality Characteristics Group and seven counselor trainees in the Comparison Non-Matched Supervisor/Counselor Trainee Personality Characteristics Group ranging from 25-63 years of age.

The Experimental Matched Group consisted of one male and seven female counselor trainees. Six counselor trainees in the Experimental Matched Group were in the 25-30 years age group, one counselor trainee was in the 41-50 years age group, and one counselor trainee was in the 61 years and older age group. Seven of the counselor trainees in the Experimental Matched Group were Caucasian and one was African American. The Experimental Matched Group had six novices identified as having no counseling experience other than course work, one beginner with 1-2 years of counseling experience, and one intermediate counselor trainee with 3-5 years of counseling experience.

The Comparison Non-matched Group included one male and six female counselor trainees. Four counselor trainees in the Comparison Non-matched Group were in the 25-30 years age group, two counselor trainees were in the 31-40 years age group, and one counselor trainee

was in the 61 years and older age group. Four of the counselor trainees in the Comparison Non-matched Group were Caucasian and three were African American. The Comparison Non-matched Group had six novices identified as having no counseling experience other than course work, and one beginner counselor trainee with 1-2 years of counseling experience.

Eight advanced students who were completing the Counselor Education Doctoral Degree and/or Education Specialist Certificate programs served as supervisors for the study. The seven supervisors who reported their age ranged from 29 to 59 years of age. One supervisor did not provide her age.

The Experimental Matched Group of supervisors was comprised of four females. One supervisor in the Experimental Matched Group reported being in the 25-30 years age group, one supervisor was in the 41-50 years age group, one supervisor was in the 51-60 years of age group, and one supervisor was in the 61 years and older age group. Two of the supervisors in the Experimental Matched Group were Caucasian and two were African American. The Experimental Matched Group had two supervisors with 3-5 years of supervision experience (identified as intermediates), and two supervisors with 6 or more years of supervision experience (identified as advanced). The counseling experience of supervisors in the Experimental Matched Group consisted of one beginner with 1-2 years of experience, and three advanced supervisors with 6 or more years of counseling experience. The Experimental Matched Group had two supervisors in the 6-10 range of counselor trainees supervised, and two supervisors with experience providing supervision to 10 or more counselor trainees.

The Comparison Non-matched Group of counselor trainees included two males and two females. Two supervisors in the Comparison Non-matched Group were between 31-40 years of age, and two supervisors were in the 51-60 years of age group. One of the supervisors in the

Comparison Non-matched Group was Caucasian, two were African American, and one was Hispanic. Supervision experience for supervisors in the Comparison Non-matched Group had one beginner with 1-2 years supervision experience, and two intermediate supervisors with 3-5 years of experience and one supervisor identified as advanced with 6 or more years of supervision experience. The Comparison Non-matched Group had two supervisors identified as intermediates with 3-5 years of counseling experience and two supervisors identified as advanced with 6 or more years of counseling experience. The number of counselor trainees supervised in the Comparison Non-matched Group consisted of one supervisor the 0-5 category of counselor trainees supervised, one supervisor with 6-10 counselor trainees supervised, and two supervisors in the over 10 counselor trainees supervised category.

In order to determine whether the two treatment groups were statistically equivalent prior to the experiment, a *t*-test for independent samples was used prior to testing the research hypothesis. No significant differences were found in mean scores for the dependent variables, counselor trainees' basic skill competency (*BSO* Ellington, 1991) and supervisors' (*SWAI-Supervisor,* Efstation et al., 1990) and counselor trainees' (*SWAI-Trainee,* Efstation et al., 1990) rating of the supervisory working alliance prior to the start of the experiment.

A Hotelling's Trace Multivariate analyses regarding each variable showed no statistical significance between the Experimental Group (Matched Supervisor/Counselor Trainee Personality Characteristics) and the Comparison Group (Non- Matched Supervisor/Counselor Trainee Personality Characteristics). Therefore, it is concluded the two treatment groups did not differ in impact on the dependent variables of supervisory working alliance and basic skill development of counselor trainees (Hotelling's $F = 2.04$, df 3, 8, $\alpha = .19$) which means there is no statistical significance between the two groups.

The Experimental Group (Matched Supervisor/Counselor Trainee Personality Characteristics) did no better than the Comparison Group (Non- Matched Supervisor/Counselor Trainee Personality Characteristics) when measuring the supervisory working alliance in relation to the counselor trainees (F = 3.33, df 1, 10, α = .10). No statistical significance was found between the treatment groups on the supervisory working alliance in relation to the Supervisors (F = 1.61, df 1, 10, α =.23).

The Experimental Group (Matched Supervisor/Counselor Trainee Personality Characteristics) did no better than the Comparison Group (Non- Matched Supervisor/Counselor Trainee Personality Characteristics) when measuring basic skill development. The basic skill development of the counselor trainees was also not statistically significant as F = 1.33, df 1, 10, α = .28. Therefore, the null hypothesis was retained.

Although the research hypothesis was not found to be clinically statistically significant, the Tests of Between-Subjects Effects by Treatment Group for the *BSO* (Ellington, 1991) pre-and-post data showed α = .04 which indicated something of statistical significance was found. Therefore, a univariate analysis utilizing the pre data as the covariate was conducted. The mean for the Experimental Group (Matched Supervisor/Counselor Trainee Personality Characteristics) for the *BSO* (Ellington, 1991) Average Pre-test was 90.19 (N= 8, SD = 12.24) and Average Post-test was 110.69 (N= 8, SD = 9.78). The *BSO* (Ellington, 1991) resulted in a statistically significance level of α = .01 for the Experimental Group (Matched Supervisor/Counselor Trainee Personality Characteristics). The mean for the Comparison Group (Non-Matched Supervisor/Counselor Trainee Personality Characteristics) for the *BSO* (Ellington, 1991) Average Pre-test was 90.71 (N= 7, SD = 6.78) and Average Post-test was 115.50 (N= 7, SD =

9.47). The *BSO* (Ellington, 1991) resulted in a statistically significance level of $\alpha = .00$ for the Comparison Group (Non- Matched Supervisor/Counselor Trainee Personality Characteristics).

A reliability analysis was conducted on the pre-and-post measurements of basic counseling skill development in order to determine internal consistency and reliability information for the *BSO (*Ellington, 1991) scale. The *BSO (*Ellington, 1991) scale contained 16 items rated on a Likert scale of 1 "poorly attempted" to 8 "well performed". The total number of counselor trainees evaluated was 15.

The supervisors' pre- results (SPR) for the entire *BSO* (Ellington, 1991) scale for counselor trainees indicated a Cronbach alpha reliability coefficient internal consistency of .96. The supervisors' post results (SPO) results for the entire *BSO* (Ellington, 1991) scale for counselor trainees indicated a Cronbach alpha reliability coefficient internal consistency of .92. The independent rater's pre results (IPR) for the entire *BSO* scale for counselor trainees indicated a Cronbach alpha reliability coefficient internal consistency of .88. The independent rater's post results (IPO) for the entire *BSO* scale for counselor trainees indicated a Cronbach alpha reliability coefficient internal consistency of .96. This analysis is the first published reliability information on this instrument. The high measure of internal consistency reliability found for the *BSO* (Ellington, 1991) may make this an instrument worthy of further research.

Discussion of Findings

In this study the hypothesis stated the counselor trainees participating in either the Experimental Group (Matched Supervisor/Counselor Trainees Personality Characteristics) or the Comparison Group (Non-Matched Supervisor/Counselor Trainees Personality Characteristics) would not differ in levels of supervisory working alliance (as perceived by the supervisor and counselor trainee) nor on basic skill development. A multivariate Hotelling's Trace analysis with

group membership as the fixed independent variable was used to compare the two levels of supervisory working alliance of counselor trainees (as perceived by the supervisor and counselor trainee) and basic skill development from pre-experiment to post-experiment at the completion of the study.

Hotelling's Trace multivariate analyses regarding each variable showed no statistical significance. Therefore, it is concluded the two treatment groups did not differ in impact on the dependent variables of supervisory working alliance and basic skill development of counselor trainees (Hotelling's $F = 2.04$, df 3, 8, $\alpha = .19$) which means there was no significant difference between the two groups.

The Experimental Group (Matched Supervisor/Counselor Trainee Personality Characteristics) did no better than the Comparison Group (Non- Matched Supervisor/Counselor Trainee Personality Characteristics) when measuring the supervisory working alliance in relation to the Counselor Trainees ($F = 3.33$, df 1, 10, $\alpha = .10$). No statistical significance was shown between the treatment groups in the supervisory working alliance in relation to the Supervisors ($F = 1.61$, df 1, 10, $\alpha = .23$).

The Experimental Group (Matched Supervisor/Counselor Trainee Personality Characteristics) did no better than the Comparison Group (Non- Matched Supervisor/Counselor Trainee Personality Characteristics) when measuring basic skill development. The basic skill development of the counselor trainees was also not statistically significant as $F = 1.326$, df 1, 10, $\alpha = .276$. Therefore, the null hypothesis was retained.

Although the research hypothesis was not found to be statistically significant, the Tests of Between-Subjects Effects by Treatment Group for the *BSO* (Ellington, 1991) pre-and-post data showed $\alpha = .04$ which indicated something of statistical significance was found. Therefore, a

univariate paired samples analysis for both treatment groups utilizing the pre- data as the covariate was conducted. The *BSO* (Ellington, 1991) resulted in a statistically significant level of $\alpha = .01$ for the Experimental Group (Matched Supervisor/Counselor Trainee Personality Characteristics). The *BSO* (Ellington, 1991) resulted in a statistically significant level of $\alpha = .00$ for the Comparison Group (Non- Matched Supervisor/Counselor Trainee Personality Characteristics).

Limitations and Recommendations for Future Research

Assumptions considered by this study include the premise there is not just one standard style of supervision being utilized among supervisors within this particular counseling program. Theoretical style or orientation of supervision was not the focus of the study. Supervisors in an accredited counseling program are mandated to utilize ethical and professional standards as outlined by the American Counseling Association (ACA), Council for the Accreditation of Counseling Related Educational Programs (CACREP), and professional counselor licensure. The research design assumed all supervisors adhered to the guidelines for clinical supervision as dictated by the guidelines of ACA, CACREP, and professional counselor licensure and met the requirements and prerequisites for conducting individual clinical supervision and/or practicum counseling sessions.

This study also considered the following limitations:

- This study was conducted with advanced degree-level student supervisors and master-level counselor trainees from one university, with a limited number of subjects available, during only one semester, and therefore may not be representative of the entire population of counseling students.
- This study did not measure client effect over the supervisory process.

- Supervisor/counselor relationships may be affected by gender, ethnicity, racial background and/or socio-economic status differences which were not accounted for in this study.
- This study relied on the use of self-evaluative instruments that may reflect socially acceptable answers.
- Personal differences in supervisory style or theoretical orientation were not accounted for in this study.
- There may be unknown factors related to the supervisor/counselor trainee relationship not accounted for in this study.

According to Leddick & Dye (1987), research is limited on the effects of supervisory working relationships and counselor trainee basic counseling skill development. There may be other variables that affect the supervisory relationship. Maxey (2001) found there was no statistically significant effect of matching/non-matching of theoretical orientation on the supervisory working relationship or basic skill competency. Perhaps, a study designed to examine the effects of matching/non-matching of personality characteristics and theoretical orientation may reveal results important to counselor education. Supervisors and supervisees could be matched for their learning and instructional styles (Mekani-Tatone, 2002) and personality characteristics. This could determine if a relationship exists between personality characteristics, learning and instructional styles, and basic counseling skill development.

Counselors deal with client's emotional characteristics (i.e., self-efficacy, anxiety, depression) during each session. Ellington (1991) used Bandura's (1977) definition of self-efficacy as the "perceived ability to perform a specific behavior to gain a desired result in a given situation (p. 9). Ellington (1991) proposed evaluation anticipation is the major cause of anxiety

in counselor training. Counselor trainees are observed, taped, and video-taped during counseling practicum. This evaluative nature of college courses resulting in a grade may have also affected the scoring process in portraying the perception of the supervisory working alliance. "Regardless of the area of practice, many sources of measurement error can impact on an individual's results, especially the testing environment" (Salter, Evans & Forney, 2006, p. 182).

Lastly, since a review of literature detailing counselor skills competency conducted by Eriksen and McAuliffe (2003) showed a dearth of reliable instruments (noting validity data is often very weak or nonexistent), the high measure of internal consistency reliability found for the *BSO* (Ellington, 1991) may make this an instrument worthy of further research.

Summary

The matching/non-matching of counselor trainees' personality characteristics of introversion/extraversion and differential effects of the supervisory working alliance and counselor trainees' skill development in counseling practicum were of interest to this researcher and the focus of this study. Improving ability to understand one another, and communicate more optimally and effectively would seem highly relevant, especially in relation to the art of counseling. According to Carey & Williams (1986), communication is an important component in developing a better supervisory relationship and promoting greater learning for counselor trainees. Investigating and discovering new ways of improving and enhancing counselor education and supervision is a salient factor for the continuing development of the profession of counseling. Overall, the findings of this study may provide a seed for future investigations in the area the supervisory process, basic counseling skill development, and counselor training.

APPENDIX A

HIC APPROVAL FORM

WAYNE STATE UNIVERSITY

HUMAN INVESTIGATION COMMITTEE
87 East Canfield, Second Floor
Detroit, Michigan 48201
Phone: (313) 577-1628
FAX: (313) 993-7122
http://hic.wayne.edu

NOTICE OF EXPEDITED APPROVAL

To: Michelle Corbin
College of Education

From: Ellen Barton, Ph.D. S. Millis for ES
Chairperson, Behavioral Institutional Review Board (B3)

Date: August 24, 2010

RE: HIC #: 083710B3E

Protocol Title: Introversion-Extraversion Effects on Supervisory Working Alliance and Counselor Trainees' Skill Development

Funding Source:

Protocol #: 1008008642

Expiration Date: August 23, 2011

Risk Level / Category: Research not involving greater than minimal risk

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The above-referenced protocol and items listed below (if applicable) were **APPROVED** following *Expedited Review* (Category 7*) by the Chairperson/designee *for* the Wayne State University Behavioral Institutional Review Board (B3) for the period of 08/24/2010 through 08/23/2011. This approval does not replace any departmental or other approvals that may be required.

- Recruitment Script
- Consent Form (dated 8/19/10)

° Federal regulations require that all research be reviewed at least annually. You *may* receive a *"Continuation Renewal Reminder"* approximately two months prior to the expiration date; however, it is the Principal Investigator's responsibility to obtain review and continued approval ***before*** the expiration date. Data collected during a period of lapsed approval is unapproved research and can ***never*** be reported or published as research data.

° All changes or amendments to the above-referenced protocol require review and approval by the HIC **BEFORE** implementation.

° Adverse Reactions/Unexpected Events (AR/UE) must be submitted on the appropriate form within the timeframe specified in the HIC Policy (http://www.hic.wayne.edu/hicpol.html).

NOTE:

1. Upon notification of an impending regulatory site visit, hold notification, and/or external audit the HIC office must be contacted immediately.
2. Forms should be downloaded from the HIC website at ***each*** use.

*Based on the Expedited Review List, revised November 1998

APPENDIX B

INFORMED CONSENT FORM

INTROVERSION-EXTRAVERSION EFFECTS ON SUPERVISORY WORKING ALLIANCE AND COUNSELOR TRAINEES' SKILL DEVELOPMENT

Research Informed Consent

Title of Study: INTROVERSION-EXTRAVERSION EFFECTS ON SUPERVISORY WORKING ALLIANCE AND COUNSELOR TRAINEES' SKILL DEVELOPMENT

Principal Investigator (PI): Michelle M. Corbin, Doctoral Candidate
College of Education
Department of Theoretical and Behavioral Foundations
519-436-1646

Purpose

You are being asked to be in a research study of the effects of introversion-extraversion on supervisory working alliance and counselor trainees' skill development. Your enrollment in CED 7150/CED9120/CED9020 entitles you to participate in this study. This study is being conducted at Wayne State University, College of Education, Counseling and Testing Center. The estimated number of study participants will be 30. **Please read this form and ask any questions you may have before agreeing to be in the study.**

The purpose of this study is to determine the outcome effects on the supervisory working alliance, and ultimately the development basic skill competency of counselor trainees by matching/non-matching supervisors and counselor trainees' personality characteristics.

Study Procedures

If you agree to take part in this research study:

- You will meet with the researcher at a ninety minute pre-study informational session prior to beginning the study. The researcher will provide an overview of the methods and procedures of the study. In addition, you will also be informed of the guidelines, purpose, and expectations of the study. Included will be issues of confidentiality, potential risks as well as overall benefits. You will be allowed the opportunity to ask questions concerning the study.

- Volunteers who agree to participate in the research study will be asked to read and sign the informed consent document. Assistance will be provided to you if requested. You will receive a copy of the signed informed consent form.

- You will be asked to choose a personal four digit identifying number such as a four digits of a phone number, family birth date, etc. This number will be used throughout the study for purposes of data identification. You will be instructed to remember and record this number on all of the pre-and-post-instruments. There will be no cross listing of name and numbers. This will provide anonymity and maintain confidentiality.

- Following completion of the informed consent form, you will complete the the *Supervisor Demographic Form* or *Counselor Trainee Demographic Form* and *MBTI*, Form M.

- The research time commitment for supervisors will include one 90-minute initial information and pre-testing group session, one-hour initial evaluation of counselor trainee's basic counseling skill competency, and at the conclusion of the final individual supervision session, supervisors will have 1 1/2 hours to evaluate counselor trainee's basic skill competency and complete the Supervisory Working Alliance Inventory to provide outcome data. Supervisors' research time commitment will be a total of three hours for the semester.

- The research time commitment for counselor trainees will include one 90-minute initial information and pre-testing group session, and at the conclusion of the final individual supervision session, counselor trainees will have 30-minutes to complete the Supervisory Working Alliance Inventory to provide outcome data. Counselor trainees' research time commitment will be a total of two hours for the semester.

Benefits

Although there may be no direct benefits to individual participants, information garnered from this study may ultimately benefit counselor education and training programs, either now or in the future. Matched participants may benefit indirectly by being provided the opportunity to be assigned to a supervisor based on their shared personality characteristic. Consequently, benefits such as counselor trainees' basic skill competency may be enhanced by a more compatible supervisory working relationship.

Although there may be no direct benefits to individual participants, information garnered from this study may ultimately benefit counselor education and training programs, either now or in the future.

Risks

By taking part in this study, you may experience:

- *Psychological/Emotional risks:* Typically, some amount of anxiety, negative emotions, or embarrassment may occur during Counseling Practicum due to the nature of the evaluation procedures required to determine a student's readiness to move forward to the internship requirement of their counseling program.

There may also be risks involved from taking part in this study that are not known to researchers at this time.

Alternatives

The only alternative offered to this study is your choice not to participate.

Study Costs

Participation in this study will be of no cost to you.

Compensation

You will not be paid for taking part in this study.

Research Related Injuries

In the event this research related activity results in an injury, treatment will be made available including first aid, emergency treatment, and follow-up care, as needed. Care for such will be billed in the ordinary manner to you or your insurance company. No reimbursement, compensation, or free medical care is offered by Wayne State University. At any time during the study, if you think that you have suffered a research related injury, please contact the PI (Principal Investigator) at 519-436-1646.

Confidentiality

All information collected about you during the course of this study will be kept confidential to the extent permitted by law. You will be identified in the research records by a code number selected by you. Information that identifies you personally will not be released without your written permission. However, the study sponsor, the Human Investigation Committee (HIC) at Wayne State University, or federal agencies with appropriate regulatory oversight [e.g., Food and Drug Administration (FDA), Office for Human Research Protections (OHRP), Office of Civil Rights (OCR), etc.) may review your records.

When the results of this research are published or discussed in conferences, no information will be included that would reveal your identity.

Voluntary Participation/Withdrawal

Taking part in this study is voluntary. You have the right to choose not to take part in this study. If you decide to take part in the study you can later change your mind and withdraw from the study. You are free to only answer questions that you want to answer. You are free to withdraw from participation in this study at any time. Your decisions will not change any present or future relationship with Wayne State University or its affiliates, or other services you are entitled to receive.

The PI may stop your participation in this study without your consent. The PI will make the decision and let you know if it is not possible for you to continue. The decision that is made is to protect your health and safety, or because you did not follow the instructions to take part in the study.

Questions

If you have any questions about this study, now or in the future, please contact Michelle M. Corbin, M.A., L.P.C. at (519) 436-1646 or Dr. Arnold B. Coven at (313) 577-1655. If you have questions or concerns about your rights as a research participant, the Chair of the Human Investigation Committee can be contacted at (313) 577-1628. If you are unable to contact the research staff, or if you want to talk to someone other than the research staff, you may also call (313) 577-1628 to ask questions or voice concerns or complaints.

Consent to Participate in a Research Study

INTROVERSION-EXTRAVERSION EFFECTS ON SUPERVISORY WORKING ALLIANCE AND COUNSELOR TRAINEES' SKILL DEVELOPMENT

To voluntarily agree to take part in this study, you must sign on the line below. If you choose to take part in this study you may withdraw at any time. You are not giving up any of your legal rights by signing this form. Your signature below indicates that you have read, or had read to you, this entire consent form, including the risks and benefits, and have had all of your questions answered. You will be given a copy of this consent form.

Signature of participant	Date
Printed name of participant	Time
Signature of witness**	Date
Printed of witness**	Time
Signature of person obtaining consent	Date
Printed name of person obtaining consent	Time

APPROVAL PERIOD

AUG 24 '10 AUG 23 '11

HUMAN INVESTIGATION COMMITTEE

APPENDIX C

CRITERION INSTRUMENTS

Participant Identification Number _____

Demographic Information – Counselor Trainee

Please provide the following demographic information by completing the blank space or checking the appropriate box next to each category. This information remains confidential and will be used confidentially in the written report. Thank you for your cooperation with this project.

ACTUAL AGE: _____YEARS (0) SEX: [ ] 1. Male [ ] 2. Female [ ]

AGE GROUP: 3. 19 – 24 [ ] 4. 25 - 30 [ ]5. 31 – 40 [ ]

6. 41 – 50 [ ] 7. 51 – 60 [ ]8. 61 – over [ ]

RACE/ETHNIC CODES AND DEFINITIONS:

[ ] 9. White (not of Hispanic origin): All persons having origins in any of the original peoples of Europe, North Africa, or the Middle East.

[ ] 10. Black (not of Hispanic origin): All persons having origins in any of the peoples American Africa, Islands of the Caribbean, or any of the Black racial groups.

[ ] 11. Hispanic: All persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.

[ ] 12. Asian or Pacific Islanders: All persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes, for example, China, Japan, Korea, the Philippine Islands, and Samoa.

Demographic Information – Counselor Trainee (cont.)

[ ] 13. American Indian or Alaskan Native: All persons having origins in any of the original peoples of North America, and who maintain cultural identification through tribal affiliation or community recognition.

ACTUAL COUNSELING EXPERIENCE

[ ] Novice (no experience other than course work) [ ] Beginner (1 –2 years)

[ ] Intermediate 3 –5 years [ ] Advanced (6 + years)

Participant Identification Number _____

Demographic Information – Supervisor

Please provide the following demographic information by completing the blank space or checking the appropriate box under each category. This information remains confidential and will be used confidentially in the written report. Thank you for your cooperation with this project.

ACTUAL AGE: _____YEARS (0) SEX: [ ] 1. Male [ ] 2. Female [ ]

AGE GROUP: 3. 19 – 24 [ ]4. 25 – 30 [ ]5. 31 – 40 [ ]

6. 41 – 50 [ ]7. 51 – 60 [ ]8. 61 over [ ]

RACE/ETHNIC CODES AND DEFINITIONS:

[ ] 9. White (not of Hispanic origin): All persons having origins in any of the original peoples of Europe, North Africa, or the Middle East.

[ ] 10. Black (not of Hispanic origin): All persons having origins in any of the peoples American Africa, Islands of the Caribbean, or any of the Black racial groups.

[ ] 11. Hispanic: All persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.

[ ] 12. Asian or Pacific Islanders: All persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes, for example, China, Japan, Korea, the Philippine Islands, and Samoa.

[ ] 13. American Indian or Alaskan Native: All persons having origins in any of

Demographic Information – Supervisor (cont.)

the original peoples of North America, and who maintain cultural identification through tribal affiliation or community recognition.

ACTUAL SUPERVISION EXPERIENCE

[ ] Novice (no experience other than course work) [ ] Beginner (1 –2 years)

[ ] Intermediate 3 –5 years [ ] Advanced (6 years)

ACTUAL COUNSELING EXPERIENCE

[ ] Novice (no experience other than course work) [ ] Beginner (1 –2 years)

[ ] Intermediate 3 –5 years [ ] Advanced (6 + years)

ACTUAL NUMBER OF TRAINEES SUPERVISED

[ ] 0 – 5 [ ] 6 – 10 [ ] over 10

Counselor Trainee Identification Number _____
Supervisor Identification Number_____

Rater category (please specify): [ ] Supervisor [ ] Researcher

Basic Skills Observation Form

Counseling Technique	Poorly Attempted			Minimally Acceptable			Well Performed	
Voice tone, rate of speech, eye contact, body posture, facial gestures (Active Listening Skills)	1	2	3	4	5	6	7	8
Demonstrating acceptance, positive regard, genuineness	1	2	3	4	5	6	7	8
Reflection of content, paraphrasing, concretizing, clarification	1	2	3	4	5	6	7	8
Open-ended questions, probing	1	2	3	4	5	6	7	8
Minimal verbal response, minimal encouragers	1	2	3	4	5	6	7	8
Silence (wait time)	1	2	3	4	5	6	7	8
Reflection of feeling, empathic understanding, cultural empathy	1	2	3	4	5	6	7	8
Confrontation	1	2	3	4	5	6	7	8
Interpretation	1	2	3	4	5	6	7	8
Eliciting responsibility for change	1	2	3	4	5	6	7	8
Establishing concern statement, supportive, providing encouragement	1	2	3	4	5	6	7	8
Eliciting alternatives	1	2	3	4	5	6	7	8
Goal planning	1	2	3	4	5	6	7	8
Evaluation of goals	1	2	3	4	5	6	7	8
Summary	1	2	3	4	5	6	7	8
Counseling relationship and atmosphere	1	2	3	4	5	6	7	8

Tests of Statistical Significance for the BSO (Ellington, 1991)

Although the research hypothesis was not found to be clinically statistically significant, the Tests of Between-Subjects Effects by Treatment Group for the *BSO* (Ellington, 1991) pre-and-post data showed $\alpha = .04$ which indicated something of statistical significance was found and further analysis was warranted. Table 9 presents the Between-Subjects Effects by Treatment Group.

Table 9

Tests of Between-Subjects Effects by Treatment Group

Source	Dependent Variable	Type III Sum of Squares	*df*	Mean Square	*F*	Sig.
Corrected Model	Basic Skills Observation (Average Post-test)	730.33[a]	4	182.58	3.24	.06
	Supervisory Working Alliance (Counselor Trainee Post-test)	153.90[b]	4	38.48	1.16	.38
	Supervisory Working Alliance (Supervisor Post-test)	275.28[c]	4	68.82	1.13	.40
Intercept	Basic Skills Observation (Average Post-test)	177.73	1	177.73	3.15	.11
	Supervisory Working Alliance (Counselor Trainee Post-test)	257.94	1	257.94	7.81	.02
	Supervisory Working Alliance (Supervisor Post-test)	876.10	1	876.10	14.37	.00
Bsoavepr	Basic Skills Observation (Average Post-test)	56.76	1	56.76	1.01	.34
	Supervisory Working Alliance (Counselor Trainee Post-test)	16.84	1	16.84	.51	.49
	Supervisory Working Alliance (Supervisor Post-test)	149.52	1	149.52	2.45	.15
Cslswpr	Basic Skills Observation (Average Post-test)	91.79	1	91.79	1.63	.23
	Supervisory Working Alliance (Counselor Trainee Post-test)	1.13	1	1.13	.03	.86
	Supervisory Working Alliance (Supervisor Post-test)	65.34	1	65.34	1.07	.33

Table 9 (cont.)

Tests of Between-Subjects Effects by Treatment Group

Source	Dependent Variable	Type III Sum of Squares	*df*	Mean Square	*F*	Sig.
Supswpr	Basic Skills Observation (Average Post-test)	311.64	1	311.64	5.53	.04
	Supervisory Working Alliance (Counselor Trainee Post-test)	.47	1	.47	.01	.91
	Supervisory Working Alliance (Supervisor Post-test)	.02	1	.02	.00	.99
expgrp_#	Basic Skills Observation (Average Post-test)	74.75	1	74.75	1.33	.28
	Supervisory Working Alliance (Counselor Trainee Post-test)	109.96	1	109.96	3.33	.10
	Supervisory Working Alliance (Supervisor Post-test)	98.36	1	98.36	1.61	.23
Error	Basic Skills Observation (Average Post-test)	563.60	10	56.36		
	Supervisory Working Alliance (Counselor Trainee Post-test)	330.50	10	33.05		
	Supervisory Working Alliance (Supervisor Post-test)	609.65	10	60.97		
Total	Basic Skills Observation (Average Post-test)	192603.00	15			
	Supervisory Working Alliance (Counselor Trainee Post-test)	253205.00	15			
	Supervisory Working Alliance (Supervisor Post-test)	332709.00	15			
Corrected Total	Basic Skills Observation (Average Post-test)	1293.93	14			
	Supervisory Working Alliance (Counselor Trainee Post-test)	484.40	14			

a. R Squared = .56 (Adjusted R Squared = .39)

b. R Squared = .32 (Adjusted R Squared = .05)

c. R Squared = .311 (Adjusted R Squared = .036)

Therefore, because The Tests of Between Subjects Effects by Treatment Group showed an $\alpha = .04$, a univariate paired samples analysis for both treatment groups utilizing the pre- data as the covariate was conducted. Table 10 shows the descriptive statistics for the Experimental Group (Matched Supervisor/Counselor Trainee Personality Characteristics).

Table 10

Paired Samples Descriptive Statistics[a-] *- Experimental Matched Group Matched Supervisor/Counselor Trainee Personality Characteristics*

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Basic Skills Observation (Average Pre-test)	90.19	8	12.24	4.33
	Basic Skills Observation (Average Post-test)	110.69	8	9.78	3.46

a. Counselor Trainee Treatment Experimental Group Matched Supervisor/Counselor Trainee Personality Characteristics

The mean for the Experimental Group (Matched Supervisor/Counselor Trainee Personality Characteristics) for the *BSO* (Ellington, 1991) Average Pre-test was 90.19 (*N*= 8, *SD* = 12.24) and Average Post-test was 110.69 (*N*= 8, *SD* = 9.78).

Table 11 presents the results of the Univariate Paired Samples Test for the Experimental Group (Matched Supervisor/Counselor Trainee Personality Characteristics).

Table 11

Univariate Paired Samples Test[a] *- Experimental Matched Group*

Matched Supervisor/Counselor Trainee Personality Characteristics

		Paired Differences							
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	T	df	Sig. (2-tailed)
Pair 1	Basic Skills Observation (Average Pre-test) - Basic Skills Observation (Average Post-test)	-20.50	17.52	6.19	-35.14	-5.86	-3.31	7	.01

a. Counselor Trainee Treatment Group α = Experimental Group Matched Supervisor/Counselor Trainee Personality Characteristics

The *BSO* (Ellington, 1991) resulted in a statistically significant level of α = .01 for the Experimental Group (Matched Supervisor/Counselor Trainee Personality Characteristics).

Table 12 shows the descriptive statistics for the Comparison Group (Non-Matched Supervisor/Counselor Trainee Personality Characteristics).

Table 12

Paired Samples Descriptive Statistics[a] *- Comparison Non-Matched Group*

Non-Matched Supervisor/Counselor Trainee Personality Characteristics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Basic Skills Observation (Average Pre-test)	90.71	7	6.78	2.56
	Basic Skills Observation (Average Post-test)	115.50	7	9.47	3.58

a. Counselor Trainee Treatment Grouα = Comparison Group Non-Matched Supervisor/Counselor Trainee Personality Characteristics

The mean for the Comparison Group (Non-Matched Supervisor/Counselor Trainee Personality Characteristics) for the *BSO* (Ellington, 1991) Average Pre-test was 90.71 (*N*= 7, *SD* = 6.78) and Average Post-test was 115.50 (*N*= 7, *SD* = 9.47).

Table 13 presents the results of the Univariate Paired Samples Test for the Comparison Group (Non-Matched Supervisor/Counselor Trainee Personality Characteristics).

Table 13

Univariate Paired Samples Test[a-] Comparison Non-Matched Group

Non-Matched Supervisor/Counselor Trainee Personality Characteristics

		Paired Differences							
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	Basic Skills Observation (Average Pre-test) - Basic Skills Observation (Average Post-test)	-24.79	13.61	5.14	-37.37	-12.20	-4.82	6	.00

a. Counselor Trainee Treatment Grouα = Comparison Group Non-Matched Supervisor/Counselor Trainee Personality Characteristics

The *BSO* (Ellington, 1991) resulted in a statistically significant level of α = .00 for the Comparison Group (Non- Matched Supervisor/Counselor Trainee Personality Characteristics).

Supervisor Identification Number _____

Counselor Trainee Identification Number _____

SWAI-Supervisor Form

Instructions:

Please indicate the frequency with which the behavior described in each of the following items seems characteristic of your work with your counselor trainee. Beside each item, circle the number corresponding to the appropriate point on the following seven-point scale.

Item	Almost Never						Almost Always
1. I help my trainee work within a specific treatment plan with his/her client.	1	2	3	4	5	6	7
2. I help my trainee stay on track during our meetings.	1	2	3	4	5	6	7
3. My style is to carefully and systematically consider the material that my trainee brings to supervision.	1	2	3	4	5	6	7
4. My trainee works with me on specific goals in the supervisory session.	1	2	3	4	5	6	7
5. In supervision, I expect my trainee to think about or reflect on my comments to him or her.	1	2	3	4	5	6	7
6. I teach my trainee through direct suggestion.	1	2	3	4	5	6	7
7. In supervision, I place a high priority on our understanding the client's perspective.	1	2	3	4	5	6	7
8. I encourage my trainee to take time to understand what the client is saying and doing.	1	2	3	4	5	6	7
9. When correcting my trainee's errors with a client, I offer alternative ways of intervening.	1	2	3	4	5	6	7
10. I encourage my trainee to formulate his/her own interventions with his/her client.	1	2	3	4	5	6	7
11. I encourage my trainee to talk about the work in ways that are comfortable for him/her	1	2	3	4	5	6	7

SWAI-Supervisor Form (cont.)

Item	Almost Never						Almost Always
12. I welcome my trainee's explanations about his/her client's behavior.	1	2	3	4	5	6	7
13. During supervision, my trainee talks more than I do.	1	2	3	4	5	6	7
14. I make an effort to understand my trainee.	1	2	3	4	5	6	7
15. I am tactful when commenting about my trainee's performance.	1	2	3	4	5	6	7
16. I facilitate my trainee's talking in our session.	1	2	3	4	5	6	7
17. In supervision, my trainee is more curious than anxious when discussing his/her difficulties with me.	1	2	3	4	5	6	7
18. My trainee appears to be comfortable working with me.	1	2	3	4	5	6	7
19. My trainee understands client behavior and treatment techniques similar to the way I do.	1	2	3	4	5	6	7
20. During supervision, my trainee seems able to stand back and reflect on what I am saying to him/her.	1	2	3	4	5	6	7
21. I stay in tune with my trainee during supervision.	1	2	3	4	5	6	7
22. My trainee identifies with me in the way he/she thinks and talks about his/her clients.	1	2	3	4	5	6	7
23. My trainee consistently implements suggestions made in supervision.	1	2	3	4	5	6	7

Counselor Trainee Identification Number_____

Supervisor Identification Number _____

SWAI- Supervisee Form

Instructions

Please indicate the frequency with which the behavior described in each of the following items seems characteristic of your supervisor. Beside each item, circle the number corresponding to the appropriate point on the following seven-point scale.

Item	Almost Never						Almost Always
1. I feel comfortable with my supervisor.	1	2	3	4	5	6	7
2. My supervisor welcomes my explanations about the client's behavior.	1	2	3	4	5	6	7
3. My supervisor makes the effort to understand me.	1	2	3	4	5	6	7
4. My supervisor encourages me to talk about my work with clients in ways that are comfortable for me.	1	2	3	4	5	6	7
5. My supervisor is tactful when commenting about my performance.	1	2	3	4	5	6	7
6. My supervisor encourages me to formulate my own interventions with the client.	1	2	3	4	5	6	7
7. My supervisor helps me talk freely in our sessions.	1	2	3	4	5	6	7
8. My supervisor stays in tune with me during supervision	1	2	3	4	5	6	7
9. I understand client behavior and treatment technique similar to the way my supervisor does.	1	2	3	4	5	6	7
10. I feel free to mention to my supervisor any troublesome feelings I might have about him/her.	1	2	3	4	5	6	7

SWAI – Supervisee Form (cont.)

Item	Almost Never						Almost Always
11. My supervisor treats me like a colleague in our supervisory sessions.	1	2	3	4	5	6	7
12. In supervision, I am more curious than anxious when discussing my difficulties with clients.	1	2	3	4	5	6	7
13. In supervision, my supervisor places a high priority on our understanding the client's perspective.	1	2	3	4	5	6	7
14. My supervisor encourages me to take time to understand what the client is saying and doing.	1	2	3	4	5	6	7
15. My supervisor's style is to carefully and systematically consider the material I bring to supervision.	1	2	3	4	5	6	7
16. When correcting my errors with a client, my supervisor offers alternative ways of intervening with that client.	1	2	3	4	5	6	7
17. My supervisor helps me work within a specific treatment plan with my clients	1	2	3	4	5	6	7
18. My supervisor helps me stay on track during our meetings.	1	2	3	4	5	6	7
19. I work with my supervisor on specific goals in the supervisory session.	1	2	3	4	5	6	7

APPENDIX D

CORRESPONDENCE

WAYNE STATE UNIVERSITY

August 19, 2010

Michelle Corbin
99 Sussex Street
Chatham, Ontario N7L 1M2

Dear Ms. Corbin:

This letter confirms the verbal authorization granted for the recruitment of Counseling Education students in the CED7150/CED9120/CED9020 Counseling Practicum and/or Counseling Supervision/Internship courses for Fall 2010. As discussed, the students will be minimally infringed upon; their participation is voluntary; will have no direct effect on the students' course grading/participation; their participation or lack thereof is completely voluntary and anonymous; and the information gathered is intended to assist in your dissertation process only.

As discussed, students who choose to participate will be randomly assigned to either matched or nonmatched supervisory dyads. Participants will not be informed which group (matched or nonmatched) they are randomly assigned to until the conclusion of the study. At the conclusion of the study, participants will be informed via a listing of their individual selected coded numbers (no names) to which group they were randomly assigned (matched or unmatched).

As discussed, students in Practicum and/or Supervision/Internship will not be asked to attend any meetings outside of their normally scheduled course hours. You have been authorized an initial meeting with the students and supervisors on September 7, 2010 at 7:00 p.m. in room 300 of the Education Building to detail the process of your dissertation and ask for voluntary participation.

Should you need any clarification or have further questions, please contact me directly at (313 577-2435) or email wrightt@wayne.edu.

Sincerely,

Tami Wright

Tami Wright, Ph.D., LPC,SCL
Clinical Director

Title of Study: INTROVERSION-EXTRAVERSION EFFECTS ON SUPERVISORY WORKING ALLIANCE AND COUNSELOR TRAINEES' SKILL DEVELOPMENT

Principal Investigator (PI): Michelle M. Corbin, Doctoral Candidate

College of Education

Department of Theoretical and Behavioral Foundations

Recruitment Script

Hello, my name is Michelle Corbin. I am a doctoral candidate in the Counselor Education program. I am in the process of completing my dissertation. I would like to thank you for your time and attention to my request. I will be asking you to consider participating in my dissertation research study. In order to avoid any potential of manipulation, I am telling you about the procedures concerning the study without the faculty instructor of the courses present. Therefore, the instructor will not know your individual decisions concerning participation.

I am interested in examining the effects of two personality characteristics (introversion/extraversion) on practicum students' and supervisors' supervisory working relationship and counselor trainees' basic skill competency. I feel determining whether a relationship exists between these personality characteristics, the supervisory working relationship, and counselor trainees' basic skill competency may provide a more effective way of making supervisory dyad assignments. Currently, supervisory dyads are made by random assignment.

The research time commitment for supervisors is this 90-minute initial information and pre-testing group session, an one-hour initial evaluation of counselor trainee's basic counseling skill competency, and at the conclusion of the final individual supervision session, supervisors will have 1 1/2 hours to evaluate counselor trainee's basic skill competency and complete the

Supervisory Working Alliance Inventory to provide outcome data. Supervisors' research time commitment is a total of three hours for the semester.

The research time commitment for counselor trainees is this 90-minute initial information and pre-testing group session, and at the conclusion of the final individual supervision session, counselor trainees will have 30-minutes to complete the Supervisory Working Alliance Inventory to provide outcome data. Counselor trainees' research time commitment is a total of two hours for the semester.

If you agree to take part in this research study:

- You are asked to read and sign the informed consent document. Assistance will be provided to you if requested. You will receive a copy of the signed informed consent form. This form is the only document which contains your name and signature. The informed consent documents will be collected separately from the other instruments and enclosed in a sealed envelope and kept securely at my home until the conclusion of the study.

    - You are asked to choose a personal four digit identifying number such as a four digits of a phone number, family birth date, etc. This number will be used throughout the study for purposes of anonymous data identification. You are instructed to remember and record this number on all of the pre-and-post-instruments. There will be no cross listing of name and numbers. This will provide anonymity and maintain confidentiality.

    - Following completion of the informed consent form, you will complete the *Supervisor Demographic Form* or *Counselor Trainee Demographic Form.* This demographic form asks you to answer questions concerning your age, gender, race/ethnic category, and actual level of counseling experience. In addition, the supervisor's form asks the supervisors to provide their actual level of supervision experience, and actual number of trainees supervised during his/her career to date. The information collected by these forms will be cross-tabulated and used to describe anonymously the participants in my study document.

    - You will complete the *Myers-Briggs Type Indicator* which will be used to determine whether you are introverted or extraverted.

    - You will be randomly assigned to either a matched or nonmatched supervisory dyad. You will not be informed which group (matched or nonmatched) you are randomly assigned to until the conclusion of the study. At the conclusion of the

study, I will post a list of the supervisory dyad assignments (matched or nonmatched) using your individual selected coded numbers (no names).

- At the conclusion of each counselor trainee's first counseling session, their supervisor will complete the *Basic Skills Observation* form to provide baseline data on their counselor trainee's basic skill competency.

- At the conclusion of each counselor trainee's first individual supervision session, the counselor trainee and supervisor will complete the *Supervisory Working Alliance Inventory* to determine baseline data on their supervisory relationship.

- At the conclusion of your final individual supervision session, you and your supervisor will complete the *Supervisory Working Alliance Inventory* to provide outcome data for this research. Following completion of their counselor trainee's final counseling session, supervisors will complete the *Basic Skills Observation* form to provide outcome data on their counselor trainee's basic skill competency.

Although there may be no direct benefits to individual participants, information garnered from this study may ultimately benefit counselor education and training programs, either now or in the future. Matched participants may benefit indirectly by being provided the opportunity to be assigned to a supervisor based on their shared personality characteristic. Subsequently, benefits such as counselor trainees' basic skill competency may be enhanced by a more compatible supervisory working relationship.

Typically, some amount of anxiety, negative emotions, or embarrassment may occur during Counseling Practicum due to the nature of the evaluation procedures required to determine a your readiness to move forward to the internship requirement of your counseling program. Again, in order to provide anonymity and confidentiality, all research documents except the signed informed consent statement will be marked by you with a number of your choosing. There will not be a cross-list of numbers and names, so please write down your number somewhere so when you complete the post-study instruments you will use the correct form.

Your decision to participate is entirely voluntary. If you should choose not to participate, you will not be penalized. Additionally, students, supervisors, faculty, and the researcher are bound by the American Counseling Association's ethical and professional standards and CACREP (2009) requirements to maintain program accreditation.

Thank you for your time and attention. Now, I will give you some time to read the informed consent statement and sign it if you choose to participate. After, you have finished, I will collect the informed consent statements and seal them in this envelope until the completion of the study. After I collect the informed consent statements, I will distribute the pre-and-post study documents for you to record the number of your choosing on them. Thanks, again.

APPROVAL PERIOD

AUG 24 '10 AUG 23 '11

HUMAN INVESTIGATION COMMITTEE

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ABSTRACT

PERSONALITY CHARACTERISTICS EFFECTS ON SUPERVISORY WORKING ALLIANCE AND COUNSELOR TRAINEES' SKILL DEVELOPMENT

by

MICHELLE M. CORBIN

May 2011

Advisor: Dr. Arnold Coven

Major: Counseling

Degree: Doctor of Philosophy

The purpose of this study was to examine the effects of matching supervisors and counselor trainees personality characteristics of introversion/extraversion on supervisory working alliance and basic counseling skill development. The quasi-experimental two-treatment group study was conducted at a large mid-western urban university with master-level counselor trainees and advanced degree supervisors from a CACREP accredited Counselor Education Program during one semester. Fifteen practicum counselor trainees and eight advanced degree supervisors participated in the study. The data included pre-and-post measurements of the dependent variables, supervisory working alliance and basic counseling skill development, measured by the *Supervisory Working Alliance Inventory* (*SWAI*) and *Basic Skills Observation* (*BSO*) scales respectively. Pre-testing was conducted to determine supervisors and counselor trainees' personality characteristics of introversion/extraversion using the *Myers-Briggs Type Indicator* (*MBTI*) to create the matched/non-matched supervisory dyads. The independent variable was group assignment based on matched/non-matched personality characteristics. A Hotelling's Trace Multivariate Analysis with group membership as the fixed, independent variable and pretest scores serving as the covariates was used to examine the hypothesis. There

were no significant differences found for the dependent variables between the two treatment groups. Although the research hypothesis was not found to be statistically significant, the Tests of Between-Subjects Effects by Treatment Group for the *BSO* pre-and-post data showed $\alpha = .04$ which indicated something of significance was found. Therefore, a univariate paired samples analysis for both treatment groups utilizing the pre- data as the covariate was conducted. The *BSO* resulted in a statistically significant level of $\alpha = .01$ for the Experimental Group (Matched Supervisor/Counselor Trainee Personality Characteristics). The *BSO* resulted in a statistically significant level of $\alpha = .00$ for the Comparison Group (Non- Matched Supervisor/Counselor Trainee Personality Characteristics). Reliability was also determined for the BSO.

AUTOBIOGRAPHICAL STATEMENT

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EDUCATION

2011 **WAYNE STATE UNIVERSITY**, Detroit, Michigan

Doctorate of Philosophy in Counseling

Cognate in Educational Psychology

2001 **WAYNE STATE UNIVERSITY**, Detroit, Michigan

Master of Arts in Counseling

Focus in Psychological Trauma Studies

1990 **MADONNA UNIVERSITY**, Livonia Michigan

Bachelor of Arts in Humanities with Honors

Major in Sign Language Studies and Minor in Psychology

PROFESSIONAL EXPERIENCE

2004-Present **Adult Individual Counselor**

Private Practice, Chatham, Ontario, Canada

2007 **Graduate Teaching Assistant**

Wayne State University, Counselor Education Program, Detroit, Michigan

2003-2004 **Community/Agency Counselor**,

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2001-2004 **Outreach Counselor**

Professional Outreach Counseling Service, Taylor, Michigan

2001-2002 **Psychology Counselor**

Lambton-Kent District School Board, Chatham, Ontario, Canada

1991-2000 **Residential Counselor II**,

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1990-1992 **American Sign Language Facilitator**,

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