A Comparison of Microlab Discussions of Interpersonal Competencies and Corrective Feedback on Counselor Trainees' Defensiveness Levels

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A COMPARISON OF MICROLAB DISCUSSIONS OF INTERPERSONAL COMPETENCIES AND CORRECTIVE FEEDBACK ON COUNSELOR TRAINEES’ DEFENSIVENESS LEVELS

A Dissertation

Submitted to the Graduate Faculty of the University of New Orleans in partial fulfillment of the requirements for the degree of Doctor of Philosophy in The Counselor Education Program

by

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B.A., University of New Orleans, 1998
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May 2004
DEDICATION

This dissertation is dedicated to my family who has supported me in so many ways. I hope that this document fulfills the expectations they have of me. My father, Jack L. Dean, has been a great role model for me. He has helped me develop into a hard working, ethical, and loyal person and I hope that my work will reflect my appreciation for having him as my father. My mother, Cristina Dean, has encouraged and supported me throughout my life. She always motivated me to bring my life whether personally, professionally, or in my military career, to the next level. I realize that I am an extremely lucky person to call her mother. My brothers, Francisco David Dean and Daniel Dean, have provided moral, humorous, and spiritual support. Learning to live life and experience all that I can while completing professional and military goals has helped me in becoming what I am. Finally, my nephew Jake Dean, whose birth helped me realize and experience the importance of the next generation. I wish that my work would provide him motivation and proof of his capabilities in this world.
ACKNOWLEDGEMENTS

So many people have been helpful throughout this process that I hope I am able to acknowledge them all. First of all, I would like to thank my major professor and dissertation chair, Dr. Diana Hulse-Killacky. She took time from her sabbatical to help me complete this project. Without her support, guidance, and nurturance, this document would have never existed. This dissertation is as much her work as it is mine and I pray that she is aware of my appreciation for her as a counselor educator, mentor, and friend. Dr. Park, who was my methodologist until he decided to follow another calling in his life, provided me with guidance and helped me to develop a better understanding of research design and statistics. I missed Dr. Park throughout the completion of the study and I hope he realizes how much I appreciate his help. Dr. Paradise, who came in as my methodologist post-proposal has helped me to focus on other aspects of research that I had not previously thought of. Dr. Paradise took time in the evening to help me accept the limitations of my study while supporting the results that seemed promising. I thank him for assisting me with my project while it was already half complete and for his patience and understanding.

I would also like to thank Dr. Remley, Dr. McCollum, and Dr. Christensen for being on my dissertation committee. Their thoughtful insights and questions helped guide in the development of this final document. In addition, Cathy Austin-Komiskey facilitated groups and administered many posttests to help me in completing this project.
Cathy also provided me with moral support as we both journeyed towards the completion of our doctorates. She took time from her busy schedule to assist me and for that I am deeply grateful.

I would like to thank the faculty of the counseling and/or marriage and family therapy programs at the University of New Orleans, Xavier University, and Our Lady of Holy Cross College for allowing me to work with their graduate students for my dissertation. Finally, I would like to thank some of my colleagues, including Rocky Asevedo, Roy Salgado, and Delini Fernando for their support and help throughout this process.
# TABLE OF CONTENTS

LIST OF TABLES................................................................................................................ix

LIST OF FIGURES................................................................................................................xi

ABSTRACT............................................................................................................................xii

**CHAPTER ONE: INTRODUCTION**................................................................. 1

- The Problem in Perspective.................................................................3
- Corrective Feedback........................................................................4
  - Barriers to accepting corrective feedback received..............5
  - Interpersonal Competencies......................................................... 6
- Pregroup Training and Instruction..................................................6
- Need for the Study...........................................................................8
- Conceptual Framework.................................................................10
- Research Design.............................................................................11
  - Methodology............................................................................12
  - Limitations and Delimitations..................................................12
- Definition of Terms......................................................................13
  - Microlab...............................................................................13
  - Receptivity of Corrective Feedback........................................13
  - Interpersonal Competencies...................................................13
  - Corrective Feedback...............................................................13
  - Defensiveness........................................................................14
- Organization of the Dissertation..................................................14

**CHAPTER TWO: REVIEW OF THE LITERATURE**.................................15

- Overview....................................................................................15
- Group Work and Corrective Feedback.......................................15
  - Corrective Feedback...............................................................16
  - Purpose of Corrective Feedback............................................17
- Research on Giver and Receiver Characteristics in Groups.........18
- Studies Related to the receptivity of Corrective Feedback .........22
CHAPTER THREE: METHODOLOGY ........................................... 32
Introduction ........................................................................... 32
Research Questions, Hypothesis, and Variables .................... 32
  Research Questions .......................................................... 32
  Hypotheses ........................................................................ 33
  Variables ........................................................................... 34
    Independent Variables ..................................................... 34
    Dependent Variables ....................................................... 34
Pilot Studies ......................................................................... 35
  Treatment Fidelity of Microlabs .......................................... 35
  Instrumentation ............................................................... 36
Participants .......................................................................... 38
  Treatment ......................................................................... 39
    Independent Variable ..................................................... 39
      Corrective Feedback Microlab ....................................... 39
      Interpersonal Competencies Microlab ......................... 40
    Instrumentation ............................................................ 41
    Dependent Variables ..................................................... 41
      Defensiveness ............................................................. 41
      Group Evaluation ....................................................... 42
Procedure ........................................................................... 43
Design and Analytical Strategy ............................................. 44
  Design ............................................................................ 44
    Design Validity ............................................................ 45
    Analytical Strategy ........................................................ 46
Summary ............................................................................. 47

CHAPTER FOUR: RESULTS .................................................... 48
Participants .......................................................................... 48
  Demographics .................................................................. 51
Research Questions and Tests of Hypotheses .......................... 58
  Research Question and Hypothesis 1 ................................. 59
    Research Question 1 ..................................................... 59
    Hypothesis 1 ............................................................... 60
  Research Question and Hypothesis 2 ................................. 61
    Research Question 2 ..................................................... 61
    Hypothesis 2 ............................................................... 63
  Research Question and Hypothesis 3 ................................. 64
    Research Question 3 ..................................................... 64
    Hypothesis 3 ............................................................... 65
LIST OF TABLES

Table 3.1  Self-Criticism validity score questions of the TSCS: 2  .........................42
Table 4.1  Frequencies and percentages of participants for treatment and control conditions.................................................................49
Table 4.2  Frequencies and percentages of participants for treatment and control conditions within each university.................................50
Table 4.3  Frequencies and percentages of participant ethnic/cultural affiliation..................................................................................51
Table 4.4  Frequencies and percentages of participant ages.........................53
Table 4.5  Frequencies and percentages of participant gender.........................53
Table 4.6  Frequencies and percentages of participant’s marital status.............54
Table 4.7  Frequencies and percentages of the number of courses completed in counseling or marriage and family therapy by the participants.................................................................55
Table 4.8  Frequencies and percentages of participants’ responses to whether or not they have or are currently working in a mental health setting..............................................................................56
Table 4.9  Frequencies and percentages of the amount of time participants worked in a mental health setting............................................56
Table 4.10 Frequencies and percentages of whether or not participants completed a course in group counseling.................................57
Table 4.11 Frequencies and percentages of participants currently enrolled in practicum or internship......................................................58
Table 4.12 Frequencies and percentages of changes on defensiveness scores by participants assigned to the interpersonal competencies condition..................................................................................60
Table 4.13 Means and standard deviations of posttest scores of participants within the interpersonal competencies, corrective feedback and control conditions……………………………………61
Table 4.14 Frequencies and percentages of changes on defensiveness scores by participants assigned to the corrective feedback treatment condition…………………………………………………63
Table 4.15 Means and standard deviations of change scores of participants within the interpersonal competencies and corrective feedback conditions…………………………………………..65
Table 4.16 Frequencies and percentages of responses to question 1 of the group evaluation by participants assigned to the interpersonal competencies condition……………………………………67
Table 4.17 Frequencies and percentages of responses to question 2 of the group evaluation by participants assigned to the interpersonal competencies condition…………………………………………………68
Table 4.18 Frequencies and percentages of responses to question 3 of the group evaluation by participants assigned to the interpersonal competencies condition…………………………………………………68
Table 4.19 Frequencies and percentages of responses to question 1 of the group evaluation by participants assigned to the corrective feedback condition…………………………………………………70
Table 4.20 Frequencies and percentages of responses to question 2 of the group evaluation by participants assigned to the corrective feedback condition…………………………………………………70
Table 4.21 Frequencies and percentages of responses to question 3 of the group evaluation by participants assigned to the corrective feedback condition…………………………………………………71
Table 4.22 Means and standard deviations for responses to question 1 by participants based on courses and treatment condition…………………………………………………74
Table 4.23 Responses to question 3 based on courses completed by participants and treatment conditions……………………………………………………………………………………………………………………77
Table 4.24 Frequencies and percentages of strongly agree or agree responses to group evaluation questions by participants in both treatment conditions…………………………………………………78
LIST OF FIGURES

1. Research Design .................................................................................................................. 46
ABSTRACT

This study explored the comparison of microlab discussions of interpersonal competencies and corrective feedback on counselor trainees’ defensiveness levels. Additionally, the effects of microlab discussions of interpersonal competencies or corrective feedback on counselor trainees’ beliefs about their ability to communicate more clearly, receive corrective feedback with less difficulty, and act on corrective feedback receive more easily were explored.

Participants in this study (N = 72) were counselor trainees enrolled in three different universities within the New Orleans metropolitan area. Participants completed the Tennessee Self-Concept Scale: Second Edition (TSCS: 2; Fitts & Warren, 1996) at least three weeks before taking part in a microlab discussion of interpersonal competencies or corrective feedback or not taking part in any discussion. Upon completion of the microlab discussion, participants in the treatment conditions completed the TSCS: 2 for the second time. Participants in the control condition simply met and completed the second administration of the TSCS: 2.

Analyses of covariance were conducted on the posttest scores using the pretest as a covariate. Also, interaction effects were explored between demographic characteristics and treatment condition on posttest scores as well as responses to a group evaluation. Results did not support any of the hypotheses associated with participants who engaged
in microlab discussion would have a lower defensiveness score as compared to a control
group.

Promising findings resulted from reactions to both microlabs by participants
regarding their beliefs about their abilities to communicate more clearly, receive
corrective feedback with less difficulty, and act on corrective feedback received more
easily in the future. Also, a pattern associated with the number of courses completed was
indicated due to a significant correlation with change in defensiveness course and
interaction effects with treatment condition on responses to question 1 and 3 of the group
evaluation.

Counselor education programs, counselors who work with groups, and counselor
trainees may benefit from exploring the possible benefits associated with microlab
discussions as a form of pregroup training. Future research may provide more insight into
the development of an instrument to more effectively measure defensiveness within the
context of receiving corrective feedback. Also, the development of multi-session
pregroup training may prove to be more effective in reducing defensiveness levels.
CHAPTER ONE

INTRODUCTION

Counseling and therapy groups have historically served as a means for helping individuals learn about themselves in relation to others (Yalom, 1995). The giving and receiving of feedback has been cited as an essential element in helping individuals become more interpersonally skilled (Argyris, 1968; Cohn, 1967; Myers, Myers, Goldberg, & Welch, 1969). These skills are increasingly important in contemporary settings, such as boardrooms, faculty meetings, teams, and classrooms, where one of the goals is to create environments where tasks can be accomplished in a climate of open communication (Hulse-Killacky & Page, 1994).

Therefore, skills for giving and receiving positive and corrective feedback are no longer limited to therapeutic settings. Traditionally, positive feedback was identified as feedback that is “…aimed at enhancing feelings of psychological safety and reinforcing selected behaviors…” (Schaible & Jacobs, 1975, p. 151) and negative feedback was identified as feedback that is “…aimed at shaking a group member loose from his self-satisfied concept of himself, and at stimulating him to try new behaviors…” (Schaible & Jacobs, p. 152). For the purposes of this study, negative feedback was reframed as corrective feedback. Corrective feedback, in this study, was defined as “…feedback intended to encourage thoughtful examination and/or to express the feedback giver’s
perception of the need for change on the part of the receiver” (Morran, Stockton, & Bond, 1991, p. 410). Difficulties arise, however, in how people receive corrective feedback (Stockton & Morran, 1981). For example, defensiveness level is cited as one barrier to receiving corrective feedback (Argyris, 1968; Robison, Morran, & Stockton, 1986; Stockton & Morran, 1980; Stockton, Morran, & Harris, 1991). Other potential factors influencing the reception of corrective feedback include group structure (Robison & Hardt, 1992), valence (positive or negative) of the feedback given, number of group sessions and order of delivery (Stockton & Morran, 1981), cognitive dissonance (Festinger, 1957), anxiety and self-esteem (Sullivan, 1976), and self-concept (Morran & Stockton, 1980).

Pregroup training has been identified as a method to assist group members in exploring anticipated consequences associated with giving corrective feedback (Robison, Stockton, Morran, & Uhl-Wagner, 1988). Also, Rose and Bednar (1980) explains that pretraining conducted in groups tends to be one of the most successful methods in terms of behavioral pretraining on increasing interpersonal interactions. Microlabs have been used to provide structured exercises with a specific focus and may prove to be a useful tool to deliver pregroup training events. Microlabs consist of a one to three hour engagement focused on achieving specific goals using structured exercises (Anderson, 1981). Previous research has utilized microlabs to provide an environment for individuals to develop human relations skills (Anderson, 1981). Liddle (1974) found that a 90-minute microlab resulted with immediate effects on the initiation of change with one’s attitude and behavior.
The purpose of this study was to compare microlab discussions of interpersonal competencies, as defined by Argyris (1968), and microlab discussion of corrective feedback, as defined by Morran et al. (1991), on counselor trainees’ defensiveness levels. Defensiveness was assessed by responses on the Self-Criticism (SC) Validity Score of the Tennessee Self-Concept Scale: Second Edition (TSCS: 2; Fitts & Warren, 1996). The research question was: What is the comparison of microlab discussions of interpersonal competencies and corrective feedback on counselor trainees’ defensiveness levels?

The Problem In Perspective

Group settings provide a place where individuals can feel comfortable sharing ideas and feelings (Ormont, 1992). Group work has extended beyond the traditional therapeutic setting into other settings to include task groups for businesses and other task oriented communities (Hulse-Killacky, Killacky, & Donigian, 2001). One of the benefits to members in these varied group settings includes the giving and receiving of positive and corrective feedback. Positive and corrective feedback have been referred to as significant factors associated with personal change in groups (Morran, Stockton, & Bond, 1991; Morran, Stockton, Cline, & Teed, 1998; Stockton & Morran, 1980).

Methods of delivering corrective feedback have been explored in group settings to develop a knowledge base of factors associated with the most effective delivery of and receptivity to corrective feedback. Studies have focused on giver characteristics or methods of delivering corrective feedback which include self-efficacy with giving corrective feedback (Page & Hulse-Killacky, 1999), anticipated consequences of communicating corrective feedback (Robison & Hardt, 1992; Robison, Stockton, Morran,
& Uhl-Wagner, 1988), and comfort level with giving corrective feedback (Hulse-Killacky & Page, 1994).

Research on receiver characteristics have focused on the credibility, desirability, and impact of corrective feedback received by evaluating or manipulating the valence, session, and order of the feedback delivered (Stockton & Morran, 1981). In addition, valence and receiver defensiveness level (Robison et al. 1986), delivery of corrective feedback by leader versus member, receiver defensiveness level, and group development stage (Stockton, Morran, & Harris, 1991), positive and negative structured feedback (Jacobs, Jacobs, Gatz, & Schaible, 1973), sequence and valence of feedback (Schaible & Jacobs, 1975), self-concept (Morran & Stockton, 1980), and positive, negative, emotional, and behavioral feedback (Jacobs, Jacobs, Feldman, & Cavior, 1973) have also been examined in terms of the relationship between the specified factors and corrective feedback. Only two reported studies, however, have evaluated the effects of defensiveness as a factor in the receptivity of corrective feedback (Robison et al., 1986; Stockton et al. 1991). Robison et al. identified defensiveness as a potentially compelling factor in the receptivity of corrective feedback. Stockton et al. also identified individuals’ level of defensive behaviors as a characteristic that may “…attenuate group members’ reception of corrective feedback…” (p. 246).

Corrective Feedback

Morran et al. (1991) stated, “the exchange of feedback among group members is widely considered to be an essential element in promoting interpersonal learning within the therapeutic group setting” (p. 410). Behavior change has also been identified within groups as a product of feedback exchange (Kolb et al., 1968). Although the exchange of
corrective feedback has been linked to personal change, and other groups such as task
oriented groups (Hulse-Killacky et al., 2001), there is a small body of literature exploring
the most effective method of delivering corrective feedback so that it is readily received
and utilized (Morran & Stockton, 1980). Also, counselors who work in group settings
lack enough empirically based studies to develop and implement methods to increase the
receptivity of corrective feedback.

**Barriers to receiving corrective feedback.** Several factors have been identified as
barriers to one’s receptivity of corrective feedback. Stockton and Morran (1980)
identified defensiveness, cognitive style, self-concept, and locus of control as receiver
characteristics that are believed to “influence the acceptance and use of feedback
information” (p. 13). The valence of the feedback, more specifically corrective feedback,
has been identified as feedback that is more difficult for people to receive although it is
more effective in the termination of problematic behaviors (Jacobs, Jacobs, & Gatz et al.,
1973; Morran & Stockton, 1980; Morran et al., 1998; Robison et al., 1986; Schaible &
Jacobs, 1975; Stockton & Morran; Stockton & Morran, 1981). Among all of the possible
barriers to receiving corrective feedback, defensiveness is cited as one of the most
influential (Argyris, 1968; Morran et al.; Robison et al.; Stockton & Morran; Stockton et
al., 1991).

Robison et al. (1986) stated, “perhaps the most logical personality characteristic
to relate to the acceptance of feedback would be defensiveness” (p. 3). In a study focused
on members’ receptivity to positive and corrective feedback in relation to self-concept,
Morran and Stockton (1980) mentioned that positive feedback is less likely to elicit
defenses that people may use to distort or deny feedback. Due to the significant influence
that defensiveness has on the receptivity of corrective feedback, it would seem that methods to decrease defensiveness are needed.

**Interpersonal Competencies**

Argyris (1968) defined interpersonal competency acquisition as the ability to have awareness of self and acceptance of self, while accepting and trusting others. According to Argyris the ability to have awareness of self and acceptance of self would decrease the likelihood that individuals will be closed and defensive and increase their ability to give and receive minimally evaluative feedback. For the purpose of this study, minimally evaluative feedback will be referred to as corrective feedback. Argyris mentioned that individuals who are aware of themselves and accepting of themselves would be able to communicate clearer. As such, educators could role model and assist students in developing interpersonal competency acquisition as a skill in group settings (Argyris, 1968). However, once individuals enter a group setting, there is an unspecified amount of time that will be used for developing trust and understanding of oneself in relation to others. Pregroup training may provide an environment where individuals can increase their understanding of themselves to include developing awareness and acceptance of self in relation to others.

**Pregroup Training and Discussion**

Robison et al. (1988) suggested the possibility of the effectiveness of pregroup training and early group preparations on the exchange of feedback. They noted that pregroup training could be focused on interventions specific to the anticipated consequences of communicating corrective feedback. Such interventions would enhance group leaders’ awareness of such consequences and inform them about how to implement
interventions designed to “help members share and evaluate their expectations early in the group’s development” (p. 470). Rose and Bednar (1980) applied pretraining of group members by assigning participants to either self-disclosure or feedback exercises. Results indicated that dyadic or group interactions tend to be the most successful and appropriate forms of behavioral pretraining when considering the facilitation of interpersonal communication.

Morran et al. (1998) emphasized having instruction of methods of feedback exchange in order to establish guidelines for its facilitation. Morran et al. suggested that instructing members on principles, such as positive feedback in the early group stages, focusing on specific behavioral feedback, and giving positive feedback before corrective feedback, might be useful to group leaders. The authors mentioned that engaging the group in discussions of feelings associated with giving and receiving feedback may assist members in identifying that others share the same concerns as they do, thus increasing the comfort in giving and receiving feedback. Pregroup training exercises can range in structure and time. Microlab exercises provide a method to deliver pregroup training.

Microlabs consist of group interactions lasting from one hour to three hours. Microlabs provide a structured environment where group members can focus on a specific goal (Anderson, 1981). Through exploration of responses to questions by group members, microlabs assist individuals in sharing personal experiences and gaining understanding of the selected topic as it relates to oneself. Such exercises provide a structured setting where pregroup training can effectively occur. The efficacy of microlabs on the initiation of long-term change has been identified (Liddle, 1974). This
study further explored the effects of microlabs as a pregroup training exercise on the complex personality characteristic of defensiveness.

**Need for the Study**

Research on the relationship between defensiveness and reception of corrective feedback is limited to the studies conducted by Robison et al. (1986) and Stockton et al. (1991). The literature clearly depicts that defensiveness is a factor that influences the receptivity of corrective feedback and thus requires attention (Argyris, 1968; Robison et al.; Stockton & Morran, 1980; Stockton et al.). The study conducted by Robison et al. assessed the ratings of credibility, reliability and desirability of feedback valence (positive or corrective), the order in which the feedback was given (positive-corrective versus corrective-positive), and the level of defensiveness (low, medium, or high). However, the authors only assessed the defensiveness level by use of the Self-Criticism (SC) Validity Score of the Tennessee Self-Concept Scale (TSCS; Fitts, 1964) during the last (sixth) session of the study. Robison et al. did not determine SC Validity Scores before the initiation of the groups; therefore, it is not known if the scores after the sixth session were influenced as a result of participating in the groups.

Stockton et al. (1991) cited the Robison et al. (1986) study and identified the limitation that data collection on defensiveness levels was conducted towards the end of the group process and that further investigation was needed to investigate the relationship between defensiveness and acceptance of corrective feedback during other stages of group development. Stockton et al. used the Cognitive Defensive Style Scales of the Glough-Heilbrun Adjective Check List (Gough & Heilbrun, 1980) as an assessment of
level of defensiveness. Stockton et al. found that the relationships of defensiveness level to corrective feedback were opposite of those hypothesized where group members with lower defensiveness levels rating lower on the measures of feedback receptivity. Still, there has been no reported research exploring methods or interventions designed to reduce defensiveness levels when receiving corrective feedback.

Pregroup training has been cited as a method to increase comfort level and understanding of different factors that include feedback exchange (Morran et al., 1998; Robison et al., 1988; Rose & Bednar, 1980). Microlabs provide a method to conduct pregroup training focused on a specific goal or topic (Anderson, 1981). Since defensiveness is such an influential factor in the receptivity of corrective feedback, there is a need for designing and implementing interventions to reduce defensiveness in order to increase receptivity to corrective feedback. The development of interpersonal competencies is necessary in order to decrease defensiveness (Argyris, 1968). Research findings have also indicated support for discussions associated with corrective feedback as a means for increasing levels of group process and cohesion (Robison & Hardt, 1992).

This study combined the use of pregroup training utilizing microlab discussions of interpersonal competencies or corrective feedback in order to determine their effects on counselor trainees’ defensiveness levels. Findings from this study can inform counselor educators, counselors who work in group settings, and counselors-in-training on methods to prepare students and group members to be less defensive when receiving corrective feedback.
Conceptual Framework

The conceptual framework for this study is based on previous research and literature associated with defensiveness levels and corrective feedback (Argyris, 1968; Robison et al. 1986; Stockton & Morran, 1980; Stockton et al., 1991), research and literature associated with factors influencing the receptivity of corrective feedback (Hulse-Killacky & Page, 1994; Robison & Hardt, 1992; Schaible & Jacobs, 1975; Stockton & Morran; Stockton & Morran, 1981, Stockton et al.), and research and literature emphasizing pregroup training and microlabs (Anderson, 1981; Morran et al., 1998; Robison et al., 1988; Rose & Bednar, 1980). According to the literature, lower defensiveness level is associated with clearer communication and higher receptivity of corrective feedback. Pregroup training is associated with increased comfort levels with giving and receiving corrective feedback.

The study conducted by Robison and Hardt (1992) indicated that the groups that utilized discussion of anticipated undesired outcomes associated with communicating corrective feedback resulted in significantly greater verbal communication during the group as opposed to groups that did not participate in such discussions. Also, the Robison and Hardt study indicated that cognitive-behavioral structured groups resulted in greater attraction to the group and to corrective feedback.

Microlabs have been shown to demonstrate initialization towards behavioral and attitude changes (Liddle, 1974). Microlabs used as a method for pregroup training may provide insight into the development of techniques to introduce different concepts associated with group work to group members.
The literature clearly identifies the theorized relationship between defensiveness levels and corrective feedback. Studies have explored this relationship with results leading to the need for more research in this area. Pregroup training is a tool identified to increase comfort level with giving and receiving feedback. Microlabs provide a method to deliver different forms of pregroup training. The need for decreasing defensiveness levels in order to increase one’s reception of corrective feedback has been established. This study provided the use of microlabs as a pregroup training event to determine any effects on the reduction of defensiveness levels in counselor trainees. Findings from this study will provide more understanding of the relationship between pregroup training by means of microlab discussions of corrective feedback or interpersonal competencies on counselor trainees’ defensiveness levels.

Research design

The research question for this investigation is: What are the effects of microlab discussions of interpersonal competencies or corrective feedback on counselor trainees’ defensiveness levels? The two main hypotheses related to this question are: (a) participants who engage in discussions of interpersonal competencies by use of a microlab will have a decrease on scores on defensiveness levels as measured by the Self-Criticism (SC) Validity Score of the Tennessee Self-Concept Scale: Second Edition (TSCS: 2) (Fitts & Warren, 1996) as compared to those who do not receive training; and (b) participants who engaged in discussions of corrective feedback by use of a microlab will have a decrease on scores on defensiveness levels as measured by the SC Validity Score of the TSCS: 2 as compared to those who do not receive training.
Methodology

The research methods employed included an analysis of covariance where the pretest scores will be assigned as the covariate. All participants completed the Tennessee Self-Concept Scale: Second Edition (TSCS: 2; Fitts & Warren, 1996) at least three weeks before partaking in a microlab discussion and/or taking the posttest administration of the TSCS: 2. The current study resulted with a minimum of 24 participants in each treatment/control condition. The investigation utilized a total of 72 participants for the final analysis.

Limitations and Delimitations

Generalizability of results will be reduced because of the choice of a convenience sample. A convenience sample was selected due to the assumed difficulties associated with coordinating the schedules of multiple participants. The difficulty associated with coordinating participants’ time outside of class throughout the data collection phase of the study, more than validated the convenience sample as the sampling procedure. In addition, discussions of interpersonal competencies and corrective feedback by use of microlabs have not been empirically explored before. Therefore, the treatment fidelity of the microlabs may limit the interpretation and generalizability of the results.

Delimitations to the study include two pilot studies focused on the content and design of the microlabs and on method of administering the Tennessee Self-Concept Scale (TSCS: 2) (Fitts & Warren, 1996) Self Criticism (SC) Validity Score. Finally, the sample size of 72 is large enough to find and establish the effect size.
Definition of terms

Microlab

A one to three hour group session composed of structured experiences selected to assist groups in achieving specific goals (Anderson, 1981). For the purpose of this study, the Microlabs consisted of one of two designs: (a) a no more than 90 minute group discussion focused on thoughts, feelings, and behaviors associated with interpersonal competencies as they relate to corrective feedback; (b) a no more than 90 minute group discussion focused on thoughts, feelings, and behaviors associated with giving and receiving corrective feedback.

Receptivity of Corrective Feedback

Previous research has used the term acceptance of corrective feedback. In this study, acceptance of corrective feedback will be referred to as receptivity of corrective feedback.

Interpersonal Competencies

Interpersonal competencies, for the purpose of this proposed study, are derived from Argyris’ (1968) work and refer to the ability to be aware of self and accepting of self when receiving corrective feedback.

Corrective Feedback

Corrective feedback, for the purpose of this study, was defined as “…feedback intended to encourage thoughtful examination and/or to express the feedback giver’s perception of the need for change on the part of the receiver” (Morran et al., 1991, p. 410; as modified by Hulse-Killacky, 2001).
Defensiveness

Defensiveness is defined as “a deliberate effort to present a favorable picture of himself or herself” (Fitts & Warren, p. 15). Defensiveness was measured by the Self-Criticism (SC) Validity Score of the Tennessee Self-Concept Scale: Second Edition (TSCS: 2; Fitts & Warren, 1996). The SC Validity Score will directly reflect the defensiveness level. In other words, the lower the SC Validity Score, the lower the defensiveness level. Robison et al. (1986) used the SC Validity Score to classify participants into high, moderate, and low defensiveness levels.

Organization of the Dissertation

The present study consists of six chapters. In the first chapter, this researcher introduced all aspects of the proposed research and the conceptual framework for the study. Chapter One clarifies terms and the need for the study. Chapter Two includes a thorough review of the literature related to the conceptual context of the study. A step-by-step presentation of the research procedures and results from two pilot studies is presented in the third chapter. In Chapter Three the use of the pre-post test control/comparison group design, the sampling criteria, and selection and assignment of participants to the different intervention and control groups. Chapter Four presents results of data analysis and Chapter Five focuses on the meaning and implications of the findings for counselor educators, counselors who work in group settings, and counselors in training. The fifth chapter also includes a discussion of the results along with recommendations for future research. Finally, a manuscript for publication comprises Chapter Six.
CHAPTER TWO

REVIEW OF THE LITERATURE

Overview

The purpose of this study was to explore the comparison of microlab discussions of interpersonal competencies and corrective feedback on counselor trainees’ defensiveness levels. The current chapter presents a summary of the literature associated with group work, corrective feedback, defensiveness, interpersonal competencies, and pregroup training, including the use of microlabs.

Studies have explored the effects of receiver defensiveness on the receptivity of corrective feedback (Robison et al., 1986; Stockton et al., 1991), effects of group structure on group development (Robison & Hardt, 1992), and factors and interventions associated with group leaders (Hulse-Killacky & Page, 1994; Morran et al., 1998) to list just a few. Also, researchers have identified the benefits associated with pregroup training on influencing one’s understanding of group process and more personal discussions during group experiences (D’augellie & Chinsky, 1974; Muller & Scott, 1984).

Group Work and Corrective Feedback

Group counseling and therapy have been applied to assist individuals in developing a better understanding of themselves, especially when interacting with others.
Group work has multiple purposes and goals. A goal of group work is to provide an environment where individuals can share thoughts and feelings, feel safe, and work towards some type of goal or change (Donigian & Hulse-Killacky, 1999; Ormont, 1992; Trotzer, 1999). The goals and outcomes of groups have been identified to be essential in other settings besides counseling and therapy groups. In developing the Corrective Feedback Inventory (CFI), Hulse-Killacky and Page (1994) stated:

> Increasingly, knowledge about the self in relations to others is becoming important to work in teams, classrooms, boardrooms, faculty meetings, town meetings, and other group settings where people gather to meet the task at hand and to interact in open and honest ways with one another. (p. 197)

The exchange of feedback, specifically corrective feedback, has been cited as an essential factor associated with achieving some of the goals of group work (Kolb, Winter, & Berlow, 1968; Myers, Myers, Goldberg, & Welch, 1969).

**Corrective Feedback**

The role of feedback in therapeutic groups has been longstanding. However, before exploring the role of feedback in groups, examples of definitions of feedback are needed. For example, feedback, as defined by Schaible and Jacobs (1975), is “…the delivery to others of information describing one’s perceptions and reactions to these others…” (p.151). The two forms of feedback used in their study were positive and negative. Negative feedback has more recently been referred to as corrective feedback. Secondly, Argyris (1962) expressed that feedback should be referred to descriptive nonevaluative feedback because of its purpose to describe a situation and not to put any evaluation on it. For the purpose of this study, corrective feedback was defined as “…feedback intended to encourage thoughtful examination and/or to express the feedback giver’s perception of the need for change on the part of the receiver” (Morran et
With an understanding of corrective feedback, the purpose of corrective feedback will be explored.

*Purpose of corrective feedback.* Over the years the role of corrective feedback in groups has been examined in multiple group environments and settings. Corrective feedback has been used as a tool to encourage change in group members. Cohn (1967) made reference to the importance of feedback in groups and stated:

> When persons are placed within the context of a group they cannot continue to rely only upon their own perceptions for a view of themselves. Through the process of group interaction each person comes in contact with the group’s perception of what he or she is or what he or she purports to be. Thus it is within the context of the group that each person gains greater self-awareness. (p. 1)

Kolb et al. (1968) believed that goal setting and corrective feedback were two of the most important factors associated with change. Stoller (1968) noted that corrective feedback is essential to the changing of one’s usual behavior. Basically, the person is internally challenged and forced into a state of self-evaluation. Lin (1973) suggested that when people receive corrective feedback they enter a realm of disorganization. The disorganization assists the person in becoming more open minded due to the surroundings instead of resisting the idea of change. Myers et al. (1969) made reference to the thought of the effectiveness of communication and modifying aspects of one’s life when they wrote:

> By interacting with others in unstructured group situations in which openness and emotional frankness are encouraged, it is claimed that individuals can become aware of behavioral inadequacies and perhaps modify their feelings, attitudes, and values. (p. 176)

Feedback given in groups will help people become aware of their actions and the effect those actions have on other people. However, factors that influence the giving and
receiving of corrective feedback can inhibit the exchange of feedback, more specifically, corrective feedback.

Research on Giver and Receiver Characteristics in Groups

Corrective feedback is still being used as a method of assisting individuals to become aware of themselves and change behaviors, which is one of the main goals of therapeutic groups. Also, in other group settings where the focus is concentrated on accomplishing a task members can use the exchange of corrective feedback as a tool to help them express their views and opinions to one another (Hulse-Killacky et al., 2001). One of the main concerns with the role of corrective feedback in groups when considering sender characteristics is identifying factors that inhibit group members from giving corrective feedback. When referring to receiver characteristics, one of the main areas of focus has been on identifying factors that may increase the receptivity and use of corrective feedback. Receptivity of corrective feedback has been measured by the credibility, desirability, impact, and helpfulness of the corrective feedback received (Jacobs, Jacobs, Gatz et al., 1973; Jacobs, Jacobs, Feldman et al., 1973; Morran & Stockton, 1980; Robison et al., 1986; Schaible & Jacobs, 1975; Stockton et al., 1991; Stockton & Morran, 1981). The search for these characteristics has become of interest to many researchers.

Hulse-Killacky and Page (1994) developed the Corrective Feedback Instrument (CFI) to further explore factors associated with group members’ concerns with giving and receiving corrective feedback. Hulse-Killacky and Page identified six conceptually meaningful factors that can be explored to understand group members’ comfort levels with giving and receiving corrective feedback. These factors are Evaluative, Leader,
Feelings, Childhood Memories, Group Role, and Written Feedback. The factors identified serve as a starting point in identifying the complexity associated with giving, receiving, and exchanging corrective feedback in group settings. The authors posited that being aware of and exploring these six factors can assist group members in the journey towards being more comfortable and proficient with giving and receiving corrective feedback.

Page and Hulse-Killacky (1999) developed the Corrective Feedback Self-Efficacy Instrument (CFSI). The CFSI resulted with 16 items exploring both the feelings of confidence associated with how one’s corrective feedback will help the receiver and how confident one is with giving corrective feedback. Page and Hulse-Killacky indicated that one of the possible uses of the CFSI could be to assist counselors in training in becoming aware of their self-efficacy when considering how to give corrective feedback. They also mentioned that individuals who rate their self-efficacy low may benefit from training by use of the CFSI to demystify the act of offering corrective feedback.

Robison et al. (1988) conducted a study evaluating the anticipated consequences of communicating corrective feedback. The authors specifically focused on early counseling group development and experiences. They presented the concept that during early group development individuals see feedback as a high-risk activity in which the results are unpredictable. During the groups that participants where assigned to, they wrote down feedback statements that they would have liked to communicate to another group member or to the group leader but were unwilling to do so. Participants then responded to 52 statements describing negative consequences that the participants
believed might occur if the specific feedback were delivered. Factor analysis was conducted on the 52 statements to determine any similarities among the statements.

Robison et al. (1988) found seven factors that were associated with anticipated consequences of delivering corrective feedback which include effects on communicators relationship (Factor 1), effects on receiver/receiver’s reactions (Factor 2), effects on communicator’s self-control (Factor 3), effects on communicator’s self-esteem (Factor 4), effects on communicator’s status/influence (Factor 5), effects on other’s understanding/acceptance (Factor 6), and effects on others/group progress (Factor 7). The authors suggested that the group leader, through interventions, can address attitudes towards corrective feedback exchange. Interventions can be directed at the specific anticipated consequences with group processes associated with specific expectations. Although the study addressed the anticipation of delivering corrective feedback, no measures of anticipation or consequences associated with receiving corrective feedback were gathered.

Morran et al. (1991) examined the ratings of delivering positive or corrective feedback. A total of 55 participants volunteered for a six-week personal growth group ran by advanced-level doctoral students. Participants wrote two positive feedback statements and two corrective feedback statements. They then rated each statement on a set of reactions to delivering the feedback. The researchers identified four dependent variables associated with the feedback delivered and the statements were rated according to the dependent variable. The four categories and ratings were anticipated recipient perception of helpfulness (very harmful/very helpful), anticipated group perception of helpfulness
(very harmful/very helpful), anticipated reaction of the group (very negative/very positive), and anticipated difficulty of delivering feedback (very difficult/very easy).

Results indicated that group members rated positive feedback as less difficult to deliver than corrective feedback. Morran et al. (1991) identified that the dependent variable associated with anticipation of the reaction by the group was the most influential factor contributing to the results. Anticipated difficulty of delivering feedback also contributed to the results. These findings indicated that group members have concerns associated with how other members will react and perceive them when delivering corrective feedback.

Robison and Hardt (1992) conducted a study in which they explored the effects of behavioral and cognitive-behavioral group structure, alone and also combined with structured discussion of anticipation of undesired outcomes of communicating corrective feedback. The researchers also explored the differences among participants with low and high risk taking characteristics in the different treatment combinations during different intervals of the groups. There were four possible group combinations in the Robison and Hardt study: (a) behavioral group structure with discussion, (b) behavioral group structure without discussion, (c) cognitive-behavioral group structure with discussion, and (d) cognitive-behavioral group structure without discussion.

Robison and Hardt identified participant interaction units (PIUs) as the main measure of participation and contribution to corrective feedback exchange in the groups. Three different group periods, session 2 – 4, were used to assess the frequency of PIUs. During the third session, researchers were able to identify significant differences in the proportions of corrective feedback PIUs. The cognitive-behavioral structure with
discussion activity and the behavioral structure/discussion activity conditions were the two conditions that resulted with more corrective feedback PIUs as opposed to the behavioral structure with no discussion activity. Also, during session 4, the researchers mentioned that the cognitive-behavioral structure with discussion activity condition resulted with significantly higher mean proportions of corrective feedback PIUs than the other three conditions. Results indicated that the exchange or frequency of corrective feedback in groups will most likely be at its highest when using a cognitive-behavioral structured group with a discussion of the anticipated undesired outcomes of communicating corrective feedback.

Robison et al. (1986) noted that further research is needed to determine what aspects of feedback and members’ reaction to corrective feedback will increase the likelihood of an individual accepting and using it. Stockton and Morran (1980) listed defensiveness, cognitive style, self-concept, and locus of control as factors influencing the receptivity, use, and/or impact of feedback received.

Studies Related to the receptivity of Corrective Feedback

*Self-concept and self-esteem.* Morran and Stockton (1980) explored how the order of the valence (positive or corrective) of the feedback given affected the receiver’s rating on the credibility, desirability, and impact of the feedback given while also exploring the relationship with the receiver’s self-concept. Results indicated that positive feedback was rated more favorable across the three levels of self-concept (low, medium, and high), which was a prediction of the study. However, the evaluation of the hypothesis indicating that the higher the level of self-concept the higher the rating of the impact, desirability and credibility for negative feedback was only partially supported.
Morran and Stockton (1980) noted that the high ratings on desirability were related to higher levels of self-concept, but the results were not significant among all three self-concept groups. Morran and Stockton mentioned that the participants with lower self-concepts might have become defensive due to the negative feedback being charged with emotional factors. The previously mentioned study indicates that group leaders can benefit from being aware of the levels of self-concept associated with the group members and how to tailor the giving of corrective feedback to a degree as to not inhibit its receptivity by group members with lower levels of self-concept.

Defensiveness. Robinson et al. (1986) conducted a study focusing on how group members’ defensiveness towards receiving feedback and the valence of the feedback affected the receptivity of the feedback. Group members took the Tennessee Self-Concept Scale (TSCS) (Fitts, 1964). The Self-Criticism (SC) Validity Score was specifically used as a measure of low, moderate, and high defensiveness level. The authors directly related defensiveness level to SC Validity Score. In other words, the lower the SC Validity Score the lower the defensiveness level. Group members’ reaction to the feedback given would be evaluated on the credibility, desirability, and impact of the feedback as a measure of the receptivity of the feedback.

The five groups were randomly assigned feedback valence in which three groups were given the positive-corrective sequence of feedback exchange and two groups were given the corrective-positive sequence. During the sixth and last session, co-leaders of the groups were instructed to conduct exercises in which group members completed and delivered forms containing positive or corrective feedback to the other group members. Thereafter, the group members were assigned to complete the same task, this time with
the other valence sequence. Results indicated, “rating of feedback credibility, desirability, and impact were not significantly influenced by group members’ levels of overt defensiveness” (p. 6). The authors noted that further investigation into the variables is needed due to the collections of data during the last sessions of the group process. In other words, defensiveness levels were measured during the final group session. The authors explained that participation in the group might have diminished any pre-existing effects due to defensiveness.

Stockton et al. (1991) explored the relationship between the level of defensiveness and the receptivity of corrective feedback, the receptivity of corrective feedback and the deliverer (group member or leader), and the receptivity of corrective feedback during different sessions. The participants’ level of defensiveness was evaluated by use of the Gough-Heilbrun Adjective Check List (Gough & Heilbrun, 1980), which measures defensiveness on three dimensions. The dimensions of defensiveness measured by the Gough-Heilbrun Adjectives Check List are projection, rationalization, and repression.

The authors found that 29 of the 36 participant’s defensiveness scale measured towards the rationalizing style. Stockton et al. (1991) used only the rationalizing scores as a means to standardize scores and participants into low, medium and high defensiveness levels. The results indicated that defensiveness level only significantly related to and affected ratings on the desirability of the corrective feedback received. However, results were not in the hypothesized direction. For example, the authors hypothesized that participants with low defensiveness levels would rate their reception of corrective feedback higher. Still, the results indicated a significant relationship between lower defensiveness level and the direction in which the relationship resulted was in the
opposite direction as that hypothesized with lower defensiveness levels being less 
receiving of the corrective feedback messages. The authors discussed that the results may 
be due to the rationalizing defensive style used to measure the defensiveness level.

Although studies exploring the relationship between defensiveness levels and 
receiving corrective feedback it is still not clear how one reduces defensiveness levels. 
The Robison et al. (1986) study indicated no significant differences in the rating of 
factors associated with receiving corrective feedback; however, the authors did not 
account for the treatment effect of the group participation on defensiveness levels and on 
receptivity towards corrective feedback. Stockton et al. (1991) used an instrument that 
limited the measurement of defensiveness to a particular defensiveness style and found 
result opposite the hypothesized direction due to the rationalizing defensiveness style 
chosen. These studies do, however, offer two learning points for future research on 
defensiveness: (a) collection of data associated with defensiveness should occur at the 
beginning and end of the group experience to determine any change; and (b) an overall 
measure of defensiveness should be used. Also, the Robison et al. and Stockton et al. 
studies help identify the need for more proactive interventions to reduce defensiveness.

Interpersonal Competencies

Argyris (1968) proposed the importance of interpersonal competencies 
acquisition. He mentioned that individuals distort information that is given to them. 
Argyris’ concept of distorted information coupled with other theories of interpersonal 
interaction lays a road map to the impact of defensiveness on corrective feedback. The 
distortion that Argyris wrote about implies some kind of filtering activity occurring at the 
receiving and giving transaction of information. Argyris (1962) made reference to this
when he stated, “As the individual develops a somewhat stable self, it becomes the ‘filter mechanism’ through which he perceives himself and his world and by which he evaluates his and others’ effectiveness” (p. 18). The model can be visually conceptualized as two individuals giving each other feedback with a filter at the giving and receiving site that may distort the information.

Argyris (1968) made reference to the concept that a person’s level of self-awareness and self-acceptance would cause minimal distortion of feedback that is given or received. He also mentioned that when minimally distorted feedback is given, it is more likely to be reciprocated by the receiver. The filter then will be dependent on one’s level of awareness and acceptance of self and others. In other words, these variables are some of the major distorting or non-distorting mechanisms in the filter. Awareness, according to Miller (1982), is “…the capacity to introspect and accurately and fully report on one’s internal cognitive and emotional process” (p. 47). The feedback given would help individuals become aware of their actions and the effect those actions have on other people. Individuals may not always be aware of how their behaviors affect those with whom they interact. Lovell, Reid, and Richey (1992) established an experiment to assist mothers who were abusive. They found that the participants were not aware of the fact that others found their remarks to be hurtful and offensive. The feedback, therefore, helped participants become aware of how others felt when they talked to them.

For the purpose of this study, interpersonal competencies was referred to as awareness and acceptance of self. Stockton et al. (1991) mentioned that if future research indicates aspects of defensive styles, in particular rationalizing defensive styles, that leaders can take steps “to assist the accurate reception of corrective messages for such
group members” (p. 253). Although this study focused on overt defensiveness instead of just the rationalizing style, the need for such research is clearly indicated. The current study assessed the effects of microlab discussions of interpersonal competencies or corrective feedback on counselor trainees’ defensiveness levels. A promising tool to decrease defensiveness has been identified; however, a method of delivery still needs to be explored.

*Pregroup Training and Discussions*

Pregroup training and discussions have been identified as tools to establish guidelines for the exchange of feedback (Morran et al., 1998; Robison et al., 1988). Pregroup training and discussions have been introduced to group leaders to be implemented in order to assist group members in sharing and assessing expectations of feedback exchange, especially during early group development (Robison et al). Morran et al. mentioned that group members sharing of expectations with giving and receiving feedback would provide an environment where group members can hear how others have similar concerns. The intervention will increase comfort with the feedback exchange process. The benefits of pregroup training have been identified in reported studies.

Muller and Scott (1984) conducted a study evaluating the effects of pregroup training in the form of either a film presentation (F), equivalent written material (W) associated with the film presentation, a combination of both film and written material (FW), a minimum treatment condition control group (TC) composed of written material about a group of volunteers, and a control group (C) with no intervention on group member’s understanding of the group process, identification of changes attributable to therapy, individual mental health, and behavioral style. A total of 77 participants were
divided into the different treatment conditions and control groups. Treatment groups met for at least three sessions and focused on personal growth for one and a half hours a week. A parallel group, pretest-posttest design was implemented with the pregroup treatments and control conditions.

Muller and Scott (1984) used three instruments to evaluate the effectiveness of the pregroup training treatment conditions: (a) the Pre-Group Experience Checklist (PGEC), which indicates one’s understanding of the group process to include knowledge of group process and concerns, (b) the Reaction to Group Situation Test (RGST), which assesses one’s preferred behavioral style, and (c) the Personal Orientation Inventory (POI), which measures one’s mental health and also reflects any changes attributable to therapy. Participants completed the pretest administration of the PGEC, RGST, and POI. They then completed the first posttest upon completion of the first group session and the second posttest at the completion of the third session.

Results indicated that pregroup training in the treatment conditions “suggest that written material that is relevant to the forthcoming group experience can be an effective preparatory method for participants” (p. 124). Participants in F, W, and FW groups demonstrated less concerns, as measured by the PGEC, than participants in the TC or C groups. Results of the RGST indicated that Work Mode and Fight Mode, two of the scales of the RGST, had a significant main effect for participants in the W group. Overall, the benefits of pregroup training for participants in the W group resulted with a reduction of the number of concerns about the group experience. Also, participants in the W group displayed tendencies to use their time in the group appropriately and they gravitated
towards an increase of feelings of self-acceptance and independence while demonstrated less need to respond with hostility.

D’Augelli and Chinsky (1974) examined the relationship and effects of interpersonal skills of group members and the type of pregroup training received by group members. The two forms of pretraining were focused on receiving instructions and then practicing self-disclosure, discussions of “here and now,” and interpersonal feedback, or a cognitive condition where the instructions were similar to those of the practice group, but participants did not practice any of the items. A control group, which received a lecture on the development of sensitivity training and its history, was also implemented. Each group consisted of a minimum of six members and a maximum of eight members.

A total of 22 groups with a total sample size of 138 participants were involved in the experiment. Results indicated that participants receiving pretraining in the practice or cognitive condition engaged in significantly more overall personal discussions ($p < .001$), less impersonal discussions ($p < .001$), and more feedback ($p < .001$).

The two previously mentioned studies demonstrate the effectiveness of pregroup training. Still, different forms of pregroup training may be implemented depending on the focus of the treatment or intervention. Microlab exercises are one of the possible pregroup training events that may be utilized.

Anderson (1981) identified microlab exercises to consist of a group session lasting between one to three hours. Liddle (1974) found that participation in a 90-minute microlab exercise led to the initiation of long-term change associated with one’s attitude and behavior. Microlabs provide an environment where group members can share and
discuss thoughts, feelings, and behaviors associated with multiple factors. Although microlabs have been examined in the past to explore their influence on group cohesion and self-disclosure (Crews & Melnick, 1976), a small amount of published studies have focused on the efficacy of microlabs on treatment outcomes. Therefore, the efficacy of microlabs as a form of treatment intervention still needs to be explored. Also, many of the published studies on the efficacy of microlabs on treatment outcomes are more than 20 years old.

One particular study focused on the impact of several different treatment approaches on heterosexual dating anxiety (Bander, Steinke, Allen, & Mosher, 1975). Bander, Steinke, et al. used microlabs to explore their comparison to other treatment approaches. The authors indicated that the microlab treatment approach did not result with any significant findings; however, the authors indicated that the males in the sample may have “lacked sufficient skills to benefit from peer feedback.” (p. 264) Also, Bander, Steinke, et al. identified that the exposure of males to females in the microlab without prior training of social skills indicated an assumption that the males had adequate social skills. With the exception of anxiety, exploratory evaluations of the influence of microlabs on different factors have not fully been developed. The present study aimed to use microlabs as a method to deliver pregroup training focused on interpersonal competencies or corrective feedback.

**Summary**

The literature clearly depicts the importance of corrective feedback to enhance interpersonal communication. However, the literature on barriers to receiving and
accepting corrective feedback lacks substantial empirical data to suggest what types of interventions may increase the receptivity and use of corrective feedback. The type of corrective feedback (emotional, behavioral, or a combination) has been explored with favorable results. The method and order in which to best deliver corrective feedback has been established. Still, one of the most influential factors, defensiveness, has received limited exploration. The literature review, however, has identified the effectiveness of cognitive-behavioral structured groups (Robison & Hardt, 1992), along with the possible benefits of pregroup training (Robison et al., 1988; Morran et al., 1998), and the possible effectiveness of discussing different topics such as corrective feedback and interpersonal competencies. A combination of these efforts may reduce defensiveness and increase one’s comfort level with receiving corrective feedback (Argyris, 1968; Robison & Hardt). The current study attempted to provide direction in addressing the topic of defensiveness.
CHAPTER THREE

METHODOLOGY

Introduction

This study examined the comparison of discussions of interpersonal competencies by use of a microlab on counselor trainees’ defensiveness levels and discussions of corrective feedback by use of a microlab on counselor trainees’ defensiveness levels. This chapter presents the research questions, hypotheses, and variables followed by a discussion of pilot studies conducted and participant selection. Instrumentation selection is described followed by a discussion of the characteristics, validity, and reliability of instruments used. This chapter concludes with an explanation of experimental procedures, methodological design, and analytical strategies of this study.

Research Questions, Hypotheses, and Variables

Research Questions

The study consisted of five research questions.

1. What is the effect of discussions of interpersonal competencies by use of a microlab on counselor trainees’ defensiveness level?
2. What is the effect of discussions of corrective feedback by use of a microlab on counselor trainees’ defensiveness level?

3. What are the differences of defensiveness levels between participants who engage in discussions of interpersonal competencies by use of a microlab or discussions of corrective feedback by use of a microlab?

4. What are the participants’ beliefs about their ability to communicate more clearly, receive corrective feedback with less difficulty and use corrective feedback more easily in the future based on their experiences in an interpersonal competencies group?

5. What are the participants’ beliefs about their ability to communicate more clearly, receive corrective feedback with less difficulty and use corrective feedback easier in the future based on their experiences in a corrective feedback group?

**Hypotheses**

This study consisted of three hypotheses:

Hypothesis #1: Participants who take part in discussions of interpersonal competencies by use of a microlab will have lower defensiveness scores as measured by the Self-Criticism (SC) Validity Score of the Tennessee Self-Concept Scale: Second Edition (TSCS: 2; Fitts & Warren, 1996) as compared to those who do not receive training.

Hypothesis #2: Participants who take part in discussions of corrective feedback by use of a microlab will have lower defensiveness scores as
measured by the SC Validity Score of the TSCS: 2 as compared to those who do not receive training.

Hypothesis #3: There will be a difference in defensiveness levels of participants as measured by the SC Validity Score of the TSCS: 2 between participants in the interpersonal competency treatment condition and participants in the corrective feedback treatment condition.

Variables

Independent Variables. The current study incorporated one independent variable represented as two treatment conditions and a control group. Treatment condition one was composed of participation in discussions of interpersonal competencies during a no longer than 90 minute group exercise using a microlab designed to generate conversations associated with feelings, thoughts, and behaviors related to interpersonal competencies (see Appendix B). Treatment condition two consisted of participants discussing corrective feedback during a no longer than 90 minute group exercise using a microlab designed to generate conversations associated with feelings, thoughts, and behaviors related to corrective feedback (see Appendix C). Participants in the control group simply completed the pretest and posttest of the TSCS: 2.

Dependent variables. There are two dependent variables. One is the change in defensiveness level scores as measured by the Self-Criticism (SC) Validity Score of the Tennessee Self-Concept Scale: Second Edition (TSCS: 2) (Fitts & Warren, 1996). The second dependent variable is an evaluation of the effects of the treatment conditions on participants’ perceptions of future experiences with the exchange of corrective feedback (see Appendix E).
Pilot Studies

Two studies were conducted as precursors to this study. One study measured the treatment fidelity of the microlabs since they have never been used in a study of similar design. A second study was conducted to determine the best method of administering the instrument that measured defensiveness level.

Treatment Fidelity of Microlabs

A pilot study was conducted to ensure ease of use and understanding of the interpersonal competencies microlab and the corrective feedback microlab. Also, the pilot study evaluated whether the interpersonal competencies and corrective feedback microlabs were similar in structure and design but different in terms of content and focus. Thirty-one graduate students enrolled at two local universities, referred to as institution A and institution B, reviewed both microlabs and responded to the survey (Appendix F). Participants ranged in age from 22 years old to 52 years old and were approximately 80% female. The cultural/ethnic makeup of the participants was predominantly African-American (67%) and Caucasian (29%) with one respondent being of Asian American decent.

Responses to all of the questions on the survey revealed that at least 71% of the participants responded within the “slightly agree” to “strongly agree” range. In other words, among all of the questions, the minimum percentage of participants that responded within the “slightly agree” to “strongly agree” range was 71%. Results indicated that the majority of participants understood the definitions of corrective feedback, interpersonal competencies, awareness of self, and acceptance of self. Also, results revealed that participants would be able to participate in both microlabs based on
the definitions and the instructions. Responses to the survey support the premise that the two microlabs are similar enough in terms of structure and design but different enough in terms of focus and content to be considered as two different interventions.

A pattern of differences in responses between participants who classified themselves as Caucasians and African-Americans appeared after further examination. On 13 out of 15 questions, participants identifying themselves as Caucasians answered with a mean between the “agree” and “strongly agree” responses while those identifying themselves as African-American answered with a mean between the “slightly agree” and “agree” responses. Also, the same trend appeared for the two institutions where participants from institution A answered with a mean between the “agree” and “strongly agree” responses while those in institution B answered with a mean between the “slightly agree” and “agree” responses. There were no significant differences in the response patterns associated with gender or age. These results provided enough support for the use of both microlabs. However, additional streamlining, to include clarification of instructions and increased similarity in design were implemented to address the differences in response patterns as described earlier. Also, group facilitators will encourage participants to ask for clarification if needed.

Instrumentation

Since the Self-Criticism (SC) Validity Score of the Tennessee Self-Concept Scale: Second Edition (TSCS: 2; Fitts & Warren, 1996) measures defensiveness, this study simply evaluated the changes in that score. The SC Validity Score is comprised of eight questions. A concern associated with the low number of questions that makes up the SC Validity Score is whether the memory of how participants answered the eight questions
would influence their response to the eight questions during the posttest administration. The purpose of this pilot study was to determine if (a) participants would answer the same to the SC Validity Score questions if they only answered the eight questions during the pretest and posttest and if (b) participants would answer the same to the SC Validity Score questions if they completed the entire TSCS: 2 (Fitts & Warren, 1996) during the pretest and posttest.

Five doctoral students in counselor education completed the entire TSCS: 2. Only two were able to attend three weeks later to participate in the interpersonal competencies treatment condition and take the posttest administration of the TSCS: 2. Another five doctoral students in counselor education from the same university completed the eight questions that comprise the SC Validity Score. Four of the five met three weeks later and participated in the corrective feedback microlab treatment condition and completed the posttest administration of the SC Validity Score.

After reviewing the response patterns on the SC Validity Score questions, a significant difference in the response patterns per question from pretest-posttest based on whether participants completed the entire TSCS: 2 (Fitts & Warren, 1996) or the SC Validity Score questions was determined. A repeated measures analysis of variance (ANOVA) was conducted on the data which revealed that participants who completed the entire TSCS: 2 had a significant decrease in defensiveness levels compared to those who only completed the eight SC Validity Score questions, $F (1, 4) = 11.154, p < .05$. Results indicated an effect size of 73.6%, partial Eta squared = .736. Also, results indicated that participants who completed the entire TSCS: 2 had an average reduction of 1.5 points in
their SC Validity Score as opposed to an increase of 4.75 points in the group who completed only the SC Validity Score questions.

Therefore, the group who completed the entire TSCS: 2 and participated in the interpersonal competencies microlab, resulted with a decrease in defensiveness level. On the other hand, the group who completed only the eight SC Validity Score questions and participated in the corrective feedback group had an increase in defensiveness level. Although the differences in SC Validity Scores may be attributed to the treatment condition and the fact that there were a limited number of participants, the pilot study provided enough support to administer the TSCS: 2 in its entirety.

The two pilot studies addressed the concerns associated with using the microlabs and how to administer the SC Validity Score questions. This study incorporated both the interpersonal competencies microlab and the corrective feedback microlab. Also, participants completed the SC Validity Score questions as part of the TSCS: 2 (Fitts & Warren, 1996).

**Participants**

A total of 118 participants enrolled in counseling graduate classes at three local universities volunteered for the study. This study sought to include a minimum of 96 participants based on a power analysis from Aron and Aron (1999). The power analysis data indicated the approximate sample size per group based on effect size in order to achieve approximately 80% power for a one way analysis of variance testing hypothesis at the .05 significance level. A study including three different groups with an approximate effect size of .25 or more (considered moderate) would require 52
participants per cell. Initially, this study contained a minimum of 31 volunteers per cell, which did not meet the recommended number of participants for an approximate power level of 80%; however, out of the 118 participants who volunteered, only 91 completed the study. In order to maintain an equal number of participants per treatment condition, 19 out of the 43 participants in the control condition were randomly selected and removed. Therefore, each treatment/control condition contained 24 participants. The number of participants used for the data analyses is less than half of that recommended, which would include another limitation.

A convenience sample was used due to the estimated difficulty of attempting any other kind of sampling. In other words, it would be extremely difficult to coordinate any number of participants who may be attending different universities to come together for the time needed to conduct the pretraining groups. Demographic characteristics (see Appendix G) of participants were examined to identify to what extent the sample represents the population or a substantial portion of the population in order to determine the possibility of generalizing the results. Participation in the study was voluntary. Participants were informed of the procedures, risks, benefits, and rationale associated with the study. Participants were read and signed a consent form approved by the University of New Orleans Human Subjects Review Board (see Appendix A).

**Treatment**

*Independent Variable*

*Corrective feedback microlab.* The corrective feedback microlab is a microlab designed by Hulse-Killacky (2000). The microlab was developed based on results from a
factor analysis of the Corrective Feedback Instrument (CFI) (Hulse-Killacky & Page, 1994). The CFI indicated several factors associated with giving and receiving corrective feedback. Hulse-Killacky (2000) integrated the leader, feelings, group role, and childhood memories factors into the development of questions on the microlab to facilitate discussions associated with giving and receiving corrective feedback. The microlab consists of instructions, definitions and examples associated with the exercise. The first section of the microlab identifies the purpose of the microlab followed by a definition and examples of corrective feedback. The second section of the microlab consists of instructions and items for discussions during parts one and two. The third section consists of reflections and a discussion associated with the phrase “receiving feedback as a child meant for me….” The fourth section focuses on exploring what would help the participants in the process of feedback exchange. Finally, participants were asked what they learned and what they will take with them as a result of taking part in the microlab.

**Interpersonal competencies microlab.** The interpersonal competencies microlab consists of a group exercise lasting an hour and a half. The microlab incorporates a handout containing instructions, definitions, and examples associated with the exercise. This researcher designed the interpersonal microlab by adapting the corrective feedback microlab (Hulse-Killacky, 2000) as a model. The first section of the microlab incorporates an explanation of the purpose of the microlab, and a definition and examples of corrective feedback. The second section of the microlab consists of instructions and a definition of awareness of self to be used when discussing part one and two of the microlab. The third section is composed of instructions and a definition of acceptance of
self to be used when discussing part three and four of the microlab. Finally, a question focused on what participants learned and what they will take with them, completes the microlab.

**Instrumentation**

*Dependent Variables*

*Defensiveness.* The Tennessee Self-Concept Scale: Second Edition (TSCS: 2; Fitts & Warren, 1996) was the instrument used in the collection and scoring of the dependent variable. The Self-Criticism (SC) Validity Scale in particular was the main focus. Fitts (1964), when referring to the first edition of the TSCS, identified the SC Validity Score as a measure of overt defensiveness due to the need of individuals to describe themselves in a positive manner.

The TSCS: 2 (Fitts & Warren, 1996) can be acquired and administered in either the Child Form or the Adult Form. The Child Form has 76 items and the Adult Form consists of 82 items with two summary scores of Total Self-Concept and Conflict. This study used the Adult Form of the TSCS: 2. Items are questions evaluating self-concept on different factors and answered by means of a Likert scale ranging from 1 to 5. The Likert scale is composed of answers that reflect Always False (1), Mostly False (2), Partly False and Partly True (3), Mostly True (4), and Always True (5).

The instrument contains six self-concept scales exploring one’s self-concept on a number of factors, which include Physical, Moral, Personal, Family, Social, and Academic/Work. The TSCS: 2 also contains four validity scales formulated to explore possible response bias. The validity scales are Inconsistent Responding, Faking Good,
Response Distribution, and Self-Criticism. A nationwide restandardization was conducted on the TSCS: 2, which consisted of a sample of 3,000 individuals with an age range from 7 to 90 years of age.

Reliability of the TSCS: 2 (Fitts & Warren, 1996) was assessed through internal consistency and test-retest reliability. Internal consistency for the Total Self-Concept score of the Adult Form was .95 and the Validity Scale of Self-Criticism resulted with a Test-retest reliability of .67. The Self-Criticism scale is composed of 8 questions, which are listed on Table 3.1. Although the questions themselves may not appear to measure defensiveness, the manner in which one responds to the questions will measure this construct. Again, the authors of the TSCS: 2 indicated that the SC Validity Score evaluates one’s need to describe oneself in a positive manner.

Table 3.1

*Self-Criticism validity score questions of the TSCS: 2*

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td>I get angry sometimes</td>
</tr>
<tr>
<td>40</td>
<td>Once in a while I think of things too bad to talk about.</td>
</tr>
<tr>
<td>41</td>
<td>Sometimes when I am not feeling well, I am cross.</td>
</tr>
<tr>
<td>47</td>
<td>Once in a while I laugh at a dirty joke.</td>
</tr>
<tr>
<td>56</td>
<td>I gossip a little at times.</td>
</tr>
<tr>
<td>57</td>
<td>Sometimes I feel like swearing.</td>
</tr>
<tr>
<td>67</td>
<td>I’d rather win a game than loose one.</td>
</tr>
<tr>
<td>80</td>
<td>Sometimes I put off until tomorrow what I ought to do today.</td>
</tr>
</tbody>
</table>
*Group evaluation.* The group evaluation form consisted of three questions assessing whether the participants believe they can express themselves more clearly, receive corrective feedback more easily, and use corrective feedback more easily based on their experiences in the group discussion (see Appendix E).

**Procedure**

The study began with an introduction to graduate counseling students enrolled in beginning courses at three local universities. Students were informed of the time and dates of all of the events associated with the study in order to ensure availability by all possible participants. Students who decided to participate were read the consent form approved by the University of New Orleans Human Subjects Committee (see Appendix A). Participants were allowed to be in the same groups as their classmates in order to make the procedure more convenient and increase the likelihood of participation. Upon the establishment of the groups, each group was assigned a condition. Initially, random assignment of treatment/control condition as well as random assignment of group facilitator occurred. Thereafter, due to scheduling demands by both facilitators, groups were conveniently assigned to each facilitator. Also, due to the need to balance the number of treatment/control conditions within each university and between each facilitator, treatment/control conditions were conveniently assigned.

Demographic characteristics and Tennessee Self-Concept Scale: Second Edition (TSCS: 2; Fitts & Warren, 1996) forms were coded as they related to participants’ university and their perspective treatment or control condition. Due to the complexity of coordinating schedules and the overlap of students enrolled in different classes, each
treatment condition group and control group did not contain the same amount of participants. Also, in order to meet the minimum set number of participant per treatment/control condition, the number of groups conducted per treatment/control condition differed.

This researcher facilitated the microlab discussions with 4 out of 5 groups in the interpersonal competencies condition, 4 out of 5 groups in the corrective feedback condition, and gave the posttest administration of the TSCS: 2 to 1 out of 4 groups of the control condition. A female doctoral candidate enrolled in counselor education at the University of New Orleans, facilitated the microlab discussions with 1 out of 5 groups in the interpersonal competencies condition, 1 out of 5 groups in the corrective feedback condition, and gave the posttest administration of the TSCS: 2 to 2 out of 4 groups of the control condition.

Due to scheduling conflicts, one of the control groups was given the pretest and posttest by the professor of the class. Participants in each subgroup completed the pretest administration of the TSCS: 2 (Fitts & Warren, 1996) during their respective class time. At least three weeks after completion of the TSCS: 2, participants in both treatment conditions engaged in a maximum of a 90 minute microlab exercise and completed the post-test administering of the TSCS: 2 and the group evaluation with their perspective groups. Participants in the control group took the posttest administration of TSCS: 2 at least three weeks after completing the pre-test.
Design and Analytical Strategy

Design

The current study was modeled after the Muller and Scott (1984) study where the authors evaluated the difference in scores on several factors using a repeated measures design. The authors also recommended using the pretest as a covariate because it is considered as more powerful than a repeated measures analysis. This current study employed the use of analysis of covariance. The pretest-posttest control/comparison group design was selected in order to evaluate the differences of effects on defensiveness levels between the two treatment conditions and a control group. A control group was included in order to compare the treatment conditions effects with possible natural changes in defensiveness levels that would occur over time.

Design validity. McMillan and Schumacher (2001) identified the pretest-posttest control/comparison group design to control for selection, maturation, statistical regression, and pretesting. The design of this current study is visually represented in Figure 1. Selection could not be controlled due to the inability to randomly assign all groups to treatment/control conditions. Attempts to control for ecological external validity by having all participants take the pretest at approximately the same time of day was implemented with this study. All participants completed the pretest during the late afternoon/early evening hours. Also, all treatment condition exercises were conducted approximately during the same time of day as the completion of the pretest. Participants in the control group also took the posttest administration of the TSCS: 2 during the same time of day.
Participants were asked not to converse with others about their experience or any topic associated with their participation in the study to control for diffusion of treatment. In order to control for experimenter effects in relation to experimenter bias, a doctoral candidate was trained to administer the TSCS: 2 and facilitate the microlab discussions in both treatment conditions.

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Group</th>
<th>Pretest</th>
<th>Method</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Treatment 1</td>
<td>O</td>
<td>T1</td>
<td>O</td>
</tr>
<tr>
<td>A</td>
<td>Treatment 2</td>
<td>O</td>
<td>T2</td>
<td>O</td>
</tr>
<tr>
<td>A</td>
<td>Control</td>
<td>O</td>
<td>O</td>
<td></td>
</tr>
</tbody>
</table>

*Time*

Figure 1. Research Design.

**Analytical Strategy**

A 1 (posttest score) x 3 (treatment/control condition) analysis of covariance (ANCOVA) was implemented in order to determine any significant differences on defensiveness levels as measured by scores on the SC subscale of the TSCS: 2 (Fitts & Warren, 1996). Pretest scores were assigned as the covariate to control for any preexisting differences between treatment/control conditions. The alpha level was set at .05.

The defensiveness level X treatment condition interaction was examined to determine any significant differential treatment effects between treatment conditions and the control condition on posttest scores. Interaction effects between the treatment condition and other post hoc factors provided by participants were examined as well.
These other factors included participants’ ethnic/cultural affiliation, age, gender, marital status, courses completed, work experience, years working, completion of a group counseling class, and enrollment in either practicum or internship. Because of the nine analyses a more conservative alpha level was set at .005 (0.05/9) using Bonferroni’s procedure. An analysis of covariance (ANCOVA) was also conducted using the posttest scores as the dependent variable, the pretest scores as the covariate, and the treatment conditions as the independent variables. Interaction effects between the treatment condition and other factors provided by participants were also examined. Scores or responses on the group evaluation were individually evaluated using analysis of variance to explore the group evaluation responses to the three questions (independently) X treatment condition interaction.

**Summary**

The comparison of discussion of interpersonal competencies and discussions of corrective feedback by use of microlabs on counselor trainees’ defensiveness levels were measured using the procedures, instruments, participants, design and statistical strategies outlined in this chapter. Concerns associated with construct validity of the interventions and how to administer the SC Validity Score questions were addressed by the pilot studies. The design validity of the study was addressed and controlled to the extent possible using ANCOVA procedures.
CHAPTER FOUR

RESULTS

This study explored the comparison of microlab discussion of interpersonal competencies and corrective feedback on counselor trainees’ defensiveness levels. The current chapter presents data on participants along with descriptive and inferential statistics associated with the results of the study. Tables are used to present frequencies of descriptive statistics and results of statistical analyses.

Participants

A total of 118 participants volunteered for the study; however only 91 (77.2%) participants completed the study. Out of the 91 participants, 24 took part in interpersonal competencies microlab discussions; 24 took part in corrective feedback microlab discussions; and 43 did not take part in discussions. Out of the 43 who did not participate in any discussions, 19 were randomly selected and removed in order to have an equal number of participants per treatment/control condition. Table 4.1 includes the frequencies and percentages of participants for treatment and control conditions.
Participants were recruited from three different universities within the New Orleans metropolitan area. The three universities will be referred to as University A, University B, and University C. University A is a public university with a history of having a diverse student population. University B is a historically black Catholic university. University C is a Catholic university. Out of the 72 participants, 28 (38.9%) came from University A, 24 (33.3%) from University B, and 20 (27.8%) from University C. Of the 28 participants from University A, 7 (25.0%) were assigned to the interpersonal competencies treatment condition, 10 (35.7%) were assigned to the corrective feedback treatment condition, and 11 (39.3%) were assigned to the control condition. From the 24 participants from University B, 8 (33.3%) were assigned to the interpersonal competencies treatment condition, 13 (54.2%) were assigned to the corrective feedback treatment condition, and 3 (12.5%) were assigned to the control condition. The 20 participants from University C were divided among the conditions where 9 (45.0%) were
assigned to the interpersonal competencies treatment condition, 1 (5.0%) was assigned to
the corrective feedback treatment condition, and 10 (50.0%) were assigned to the control
condition. Table 2 provides the frequencies and percentages of the number of participants
per university and their assignment to treatment and control conditions.

Table 4.2

*Frequencies and percentages of participants for treatment and control conditions within each
university*

<table>
<thead>
<tr>
<th>University</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>University A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal Competencies</td>
<td>7</td>
<td>25.0</td>
</tr>
<tr>
<td>Corrective Feedback</td>
<td>10</td>
<td>35.7</td>
</tr>
<tr>
<td>Control</td>
<td>11</td>
<td>39.3</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>100.0</td>
</tr>
<tr>
<td>University B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal Competencies</td>
<td>8</td>
<td>33.3</td>
</tr>
<tr>
<td>Corrective Feedback</td>
<td>13</td>
<td>54.2</td>
</tr>
<tr>
<td>Control</td>
<td>3</td>
<td>12.5</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100.0</td>
</tr>
<tr>
<td>University C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal Competencies</td>
<td>9</td>
<td>45.0</td>
</tr>
<tr>
<td>Corrective Feedback</td>
<td>1</td>
<td>5.0</td>
</tr>
<tr>
<td>Control</td>
<td>10</td>
<td>50.0</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Demographics

Participants were asked to provide demographic information on a number of different categories (Appendix G). Participants were asked to state their ethnic/cultural affiliation. Out of the 72 participants, 29 (40.3%) identified themselves as Caucasians, 36 (50.0%) as African-American/Black, 5 (6.9%) as Asian, and 2 (2.8%) as Hispanic. Table 4.3 includes the frequencies and percentages of participants’ ethnic/cultural affiliation.

Table 4.3
Frequencies and percentages of participant ethnic/cultural affiliation

<table>
<thead>
<tr>
<th>Ethnic/Culture</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian</td>
<td>29</td>
<td>40.3</td>
</tr>
<tr>
<td>African American</td>
<td>36</td>
<td>50.0</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2</td>
<td>2.8</td>
</tr>
<tr>
<td>Asian</td>
<td>5</td>
<td>6.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>72</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Ethnic/cultural affiliation responses indicated African-Americans as the majority ethnic/cultural affiliation comprising half of the sample. Caucasians were second comprising 40.3% of the sample followed by Asians (6.9%), and Hispanics (2.8%). A comparison with the 2002 Census (ACS: 2002 ACS Narrative Profile for New Orleans City) indicates that based on reports the percentage of race within the city was divided as 68% African-Americans, 28% Caucasian, 3% Asian, and 3% Hispanic. The sample used
in this study indicates that minority groups were well represented based on the
ethnic/cultural make-up of the city of New Orleans.

Participants ages ranged from 22 to 58 with a mean age of 32.63. Table 4.4 provides the frequencies and percentages of participants’ ages.

Table 4.4

Frequencies and percentages of participant ages

<table>
<thead>
<tr>
<th>Ages</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-25</td>
<td>18</td>
<td>25.0</td>
</tr>
<tr>
<td>26-30</td>
<td>24</td>
<td>33.3</td>
</tr>
<tr>
<td>31-40</td>
<td>15</td>
<td>20.8</td>
</tr>
<tr>
<td>41-60</td>
<td>15</td>
<td>20.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>72</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Participants were asked to identify their gender from the choices of (a) Female or (b) Male. Overall, of the 72 participants who completed the study, 58 (80.6%) identified themselves as female and 14 (19.4%) as males. Table 4.5 provides the frequencies and percentages of participants’ gender.
Table 4.5

_Frequencies and percentages of participant gender_

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>58</td>
<td>80.6</td>
</tr>
<tr>
<td>Male</td>
<td>14</td>
<td>19.4</td>
</tr>
</tbody>
</table>

Total 72 100.0

Participants were asked to report their current marital status. Out of the 72 participants, 50 percent reported being single, 44.4% being married, 4.2% being divorced, and 1.4% did not respond. Table 4.6 provides the frequencies and percentages of participants’ marital status.

Table 4.6

_Frequencies and percentages of participants’ marital status_

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>36</td>
<td>50.0</td>
</tr>
<tr>
<td>Married</td>
<td>32</td>
<td>44.4</td>
</tr>
<tr>
<td>Divorced</td>
<td>3</td>
<td>4.2</td>
</tr>
<tr>
<td>No Response</td>
<td>1</td>
<td>1.4</td>
</tr>
</tbody>
</table>

Total 72 100.0
Participants were asked to provide information regarding the number of courses in counseling or marriage and family therapy they had completed. Number of courses ranged from 0 to 20 with 5.3 courses as the mean number of courses being completed. There were 2 (3%) participants who already had graduate degrees. Table 4.7 contains the frequencies and percentages of the number of courses completed in counseling or marriage and family therapy by the participants.

Table 4.7

*Frequencies and percentages of the number of courses completed in counseling or marriage and family therapy by the participants*

<table>
<thead>
<tr>
<th>Number of Courses</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td>45</td>
<td>61.1</td>
</tr>
<tr>
<td>6-10</td>
<td>16</td>
<td>22.2</td>
</tr>
<tr>
<td>11-15</td>
<td>6</td>
<td>8.3</td>
</tr>
<tr>
<td>15-20</td>
<td>5</td>
<td>6.9</td>
</tr>
<tr>
<td>No Response</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>Total</td>
<td>72</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Participants were asked to identify if they had worked or are currently working in a mental health setting. If participants had or are currently working in a mental health setting, they were also asked to indicate the duration of such experiences. Of the 72 participants, 21 (29.2%) indicated that they have or are currently working in a mental
health setting. The range of time working in such a setting was from 3 months to 25 years with a mean time of 4 years and 1 month for those with a work history. Table 4.8 presents the frequencies and percentages of the participants’ response to whether or not they have or are currently working in a mental health setting. Table 4.9 presents the frequencies and percentages of the amount of time working in a mental health setting for participants with such histories.

Table 4.8

*Frequencies and percentages of participant responses to whether or not they have or are currently working in a mental health setting*

<table>
<thead>
<tr>
<th>Work Experience</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>21</td>
<td>29.2</td>
</tr>
<tr>
<td>No</td>
<td>51</td>
<td>70.8</td>
</tr>
<tr>
<td>Total</td>
<td>72</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 4.9

*Frequencies and percentages of the amount of time participants worked in a mental health setting*

<table>
<thead>
<tr>
<th>Years</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1-3</td>
<td>15</td>
<td>71.4</td>
</tr>
<tr>
<td>4-7</td>
<td>2</td>
<td>9.5</td>
</tr>
<tr>
<td>8-11</td>
<td>3</td>
<td>14.3</td>
</tr>
<tr>
<td>24-27</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>21</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Participants were asked to respond to whether or not they had completed a course in group counseling. Out of the 72 participants, 24 (33.3%) indicated that they have completed a course in group counseling and 48 (66.7%) did not complete such a course. Table 4.10 presents the frequencies and percentages of whether or not participants completed a course in group counseling.
Table 4.10

Frequencies and percentages of whether or not participants completed a course in group counseling

<table>
<thead>
<tr>
<th>Completed Course in Group Counseling</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>24</td>
<td>33.3</td>
</tr>
<tr>
<td>No</td>
<td>48</td>
<td>66.7</td>
</tr>
<tr>
<td>Total</td>
<td>72</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Participants were asked to indicate if they were currently enrolled in practicum or internship. Out of the 72 participants, 6 (8.3%) indicated that they were enrolled in practicum or internship and 66 (91.7%) were not enrolled in such courses. Frequencies and percentages for participants currently enrolled in practicum or internship are found in Table 4.11.
Table 4.11

Frequencies and percentages of participants currently enrolled in practicum or internship

<table>
<thead>
<tr>
<th>Practicum/Internship</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>6</td>
<td>8.3</td>
</tr>
<tr>
<td>No</td>
<td>66</td>
<td>91.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>72</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Research Questions and Tests of Hypotheses

This study consisted of five research questions and three research hypotheses. The research questions were focused on examining the effects of participating in the treatment conditions on counselor trainees’ defensiveness levels and exploring the differences of changes on defensiveness levels between the two treatment conditions. The research hypotheses were all focused on determining if counselor trainees’ had lower defensiveness scores after participating in either the interpersonal competencies or corrective feedback conditions as compared to the control condition. Also, one of the hypotheses focused on exploring differences on counselor trainee defensiveness scores between the interpersonal competencies and corrective feedback conditions. The following sections will review the research questions along with their related hypothesis and provide a description of the analytical strategy used along with the results.
Research Question 1 and Hypothesis 1

Research question 1. What is the effect of discussions of interpersonal competencies by use of a microlab on counselor trainee defensiveness levels? This effect was determined based on changes on defensiveness levels from pretest to posttest determined by the Self Criticism (SC) Validity Score from the Tennessee Self-Concept Scale: Second Edition’s (TSCS: 2; Fitts & Warren, 1996). Of the 24 participants who engaged in microlab discussion of interpersonal competencies, 12 (50.0%) had a decrease on defensiveness levels, 2 (8.3%) had no change, and 10 (41.7%) had an increase. Participant changes on defensiveness level scores from pretest to posttest ranged from +7 to -7 with a mean change of -.21. Table 4.12 provides the frequencies and percentages of changes on defensiveness scores by participants assigned to the interpersonal competencies condition.
Table 4.12

*Frequencies and percentages of changes on defensiveness scores by participants assigned to the interpersonal competencies condition*

<table>
<thead>
<tr>
<th>Change on Defensiveness Scores*</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>-7</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>-5</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>-4</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>-3</td>
<td>2</td>
<td>8.3</td>
</tr>
<tr>
<td>-2</td>
<td>5</td>
<td>20.8</td>
</tr>
<tr>
<td>-1</td>
<td>2</td>
<td>8.3</td>
</tr>
<tr>
<td>0</td>
<td>2</td>
<td>8.3</td>
</tr>
<tr>
<td>1</td>
<td>5</td>
<td>20.8</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>12.5</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>4.2</td>
</tr>
</tbody>
</table>

Total 24 100.0

* A negative change on defensiveness score indicates a decrease in defensiveness score.

_Hypothesis 1._ Participants who take part in discussions of interpersonal competencies by use of a microlab will have lower defensiveness scores as measured by the Self-Criticism (SC) Validity Score of the Tennessee Self-Concept Scale: Second Edition (TSCS: 2; Fitts & Warren, 1996) as compared to those who do not engage in such
discussions. Results indicate that participants within the interpersonal competencies condition had a lower score ($M = 26.92$) as compared to the control group ($M = 27.92$). The difference in mean score is equal to one point lower on the SC Validity Score. Table 4.13 shows the means and standard deviations of posttest scores of participants within the interpersonal competencies, corrective feedback and control condition.

Table 4.13

Means and standard deviations of posttest scores of participants within the interpersonal competencies, corrective feedback and control conditions

<table>
<thead>
<tr>
<th>Treatment</th>
<th>$n$</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal competencies</td>
<td>24</td>
<td>26.92</td>
<td>5.32</td>
</tr>
<tr>
<td>Corrective Feedback</td>
<td>24</td>
<td>27.71</td>
<td>5.47</td>
</tr>
<tr>
<td>Control</td>
<td>24</td>
<td>27.92</td>
<td>4.00</td>
</tr>
</tbody>
</table>

*Note:* Possible range of scores was from 8 – 40.

Assigning participants’ pretest score as a covariate, their posttest score as the dependent variable, and treatment and control conditions as the independent variable tested hypothesis 1. Results indicate no significant differences ($F(2, 68) = .035, p > .05$) in counselor trainees’ defensiveness levels between the interpersonal competencies condition and the control condition.

Research Question and Hypothesis 2

Research question 2. What is the effect of discussions of corrective feedback by use of a microlab on counselor trainees’ defensiveness levels? This effect was determined
based on changes on defensiveness levels from pretest to posttest. Participant
defensiveness levels were measured by their scores on the Self Criticism (SC) Validity
Score from the Tennessee Self-Concept Scale: Second Edition’s (TSCS: 2; Fitts &
Warren, 1996). Of the 24 participants who engaged in microlab discussions of corrective
feedback, 11 (45.8%) had a decrease on defensiveness levels, 4 (16.7%) had no change,
and 9 (37.5%) had an increase. Participant changes on defensiveness level scores from
pretest to posttest ranged from +5 to -7 with a mean change of -.63. Frequencies and
percentages of changes on defensiveness scores by participants assigned to the corrective
feedback treatment condition are found in Table 4.14.
Table 4.14

*Frequencies and percentages of changes on defensiveness scores by participants assigned to the corrective feedback treatment condition*

<table>
<thead>
<tr>
<th>Change on Defensiveness Scores*</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>-7</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>-5</td>
<td>3</td>
<td>12.5</td>
</tr>
<tr>
<td>-4</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>-3</td>
<td>2</td>
<td>8.3</td>
</tr>
<tr>
<td>-2</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>-1</td>
<td>3</td>
<td>12.5</td>
</tr>
<tr>
<td>0</td>
<td>4</td>
<td>16.7</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>12.5</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>12.5</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>8.3</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100.0</td>
</tr>
</tbody>
</table>

* A negative change on defensiveness score indicates a decrease in defensiveness score.

**Hypothesis 2.** Participants who take part in discussions of corrective feedback by use of a microlab will have lower defensiveness scores as measured by the Self-Criticism (SC) Validity Score of the Tennessee Self-Concept Scale: Second Edition (TSCS: 2; Fitts & Warren, 1996) when compared to those who do not engage in such discussions.
Results indicate that participants within the corrective feedback condition had a lower score \((M = 27.21)\) as compared to the control group \((M = 27.92)\). Table 4.13 presents the means and standard deviations of posttest scores of participants within the interpersonal competencies, corrective feedback and control condition.

Assigning participants’ pretest score as a covariate, their posttest score as the dependent variable, and treatment and control conditions as the independent variable tested hypothesis two. Results indicate no significant differences \(F(2, 68) = .035, p > .05\) in counselor trainees’ defensiveness levels between the corrective feedback condition and the control condition.

*Research Question and Hypothesis 3*

*Research question 3.* What are the differential effects on defensiveness levels between participants who take part in discussions of interpersonal competencies by use of a microlab and participants who take part in discussions of corrective feedback by use of a microlab? The mean change in defensiveness for participants assigned to the interpersonal competencies condition was -0.21, resulting in decrease in defensiveness. Participants assigned to the corrective feedback condition also tended to have a decrease in defensiveness levels \((M = -0.62)\). Table 4.15 provides the means and standard deviations of change scores on defensiveness levels within the treatment conditions.
Table 4.15

Means and standard deviations of change scores of participants within the interpersonal competencies and corrective feedback conditions

<table>
<thead>
<tr>
<th>Treatment</th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal competencies</td>
<td>24</td>
<td>-0.21</td>
<td>3.37</td>
</tr>
<tr>
<td>Corrective feedback</td>
<td>24</td>
<td>-0.62</td>
<td>3.15</td>
</tr>
</tbody>
</table>

Hypothesis 3. There will be a difference in defensiveness levels of participants as measured by the Self-Criticism (SC) Validity Score of the Tennessee Self-Concept Scale: Second Edition (TSCS: 2; Fitts & Warren, 1996) between participants from the interpersonal competencies condition and participants from the corrective feedback condition. Results indicated that participants within the interpersonal competencies condition had a lower score ($M = 26.92$) as compared to the corrective feedback condition ($M = 27.71$). Means and standard deviations of posttest scores of participants within the interpersonal competencies, corrective feedback, and control conditions are found in Table 4.13.

Assigning participants’ pretest score as a covariate, their posttest score as the dependent variable, and treatment and control conditions as the independent variable tested hypothesis two. Results indicated no significant differences ($F (2, 68) = .035, p > .05$) in counselor trainee defensiveness levels between the interpersonal treatment condition and the corrective feedback condition.
Research Question 4

What are the participant beliefs about their ability to communicate more clearly, receive corrective feedback with less difficulty and use corrective feedback more easily in the future based on their experiences in the interpersonal competencies group? Of the 24 participants who were assigned to the interpersonal competencies condition, 7 (29.2%) strongly agreed, 14 (58.3%) agreed, 2 (8.3%) slightly agreed, and 1 (4.2%) strongly disagreed that they would be able to communicate more clearly in the future based on their experience in the group discussion (Question 1). Therefore, 87.5% of the participants within the interpersonal competencies condition either strongly agreed or agreed to question 1.

Participants in the interpersonal competencies condition also strongly agreed ($n = 4; 16.7\%)$, agreed ($n = 14; 58.3\%$), slightly agreed ($n = 5; 20.8\%$), and slightly disagreed ($n = 1; 4.2\%$) with the statement (question 2): “I will be able to receive corrective feedback with less difficulty in the future based on my experiences in this group discussion.” Results indicate that 75% of participants within the interpersonal competencies condition either strongly agreed or agreed with question 2. The third and final statement of the group evaluation (question 3): “I will be able to act on the corrective feedback I receive more easily in the future based on my experiences in this group discussion,” resulted with the following responses: strongly agree ($n = 6; 25.0\%)$, agree ($n = 13; 54.2\%$), slightly agree ($n = 4; 16.7\%$), and disagree ($n = 1; 4.2\%$). Therefore, 79.2% of participants within the interpersonal competencies condition either strongly agreed or agreed with question 3. Table 4.16, 4.17, and 4.18 provide frequencies
and percentages of the responses to questions 1, 2, and 3, respectively, of the group evaluation by participants assigned to the interpersonal competencies condition.

Table 4.16

*Frequencies and percentages of responses to question 1 of the group evaluation by participants assigned to the interpersonal competencies condition*

<table>
<thead>
<tr>
<th>Question and Response</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question One</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>7</td>
<td>29.2</td>
</tr>
<tr>
<td>Agree</td>
<td>14</td>
<td>58.3</td>
</tr>
<tr>
<td>Slightly Agree</td>
<td>2</td>
<td>8.3</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 4.17

*Frequencies and percentages of responses to question 2 of the group evaluation by participants assigned to the interpersonal competencies condition*

<table>
<thead>
<tr>
<th>Question and Response</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question Two</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>4</td>
<td>16.7</td>
</tr>
<tr>
<td>Agree</td>
<td>14</td>
<td>58.3</td>
</tr>
<tr>
<td>Slightly Agree</td>
<td>5</td>
<td>20.8</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 4.18

*Frequencies and percentages of responses to question 3 of the group evaluation by participants assigned to the interpersonal competencies condition*

<table>
<thead>
<tr>
<th>Question and Response</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question Three</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>6</td>
<td>25.0</td>
</tr>
<tr>
<td>Agree</td>
<td>13</td>
<td>54.2</td>
</tr>
<tr>
<td>Slightly Agree</td>
<td>4</td>
<td>16.7</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
Research Question 5

What are the participants’ beliefs about their ability to communicate more clearly, receive corrective feedback with less difficulty and use corrective feedback more easily in the future based on their experiences in the corrective feedback group? Of the 24 participants who were assigned to the corrective feedback condition, 7 (29.2%) strongly agreed, 15 (62.5%) agreed, 1 (4.2%) slightly agreed, and 1 (4.2%) disagreed that they would be able to communicate more clearly in the future based on their experience in the group discussion (question 1). Results indicated that 91.7% of the participants within the corrective feedback condition either strongly agreed or agreed with question 1.

Participants in the corrective feedback condition also strongly agreed \((n = 6; 25.0\%)\), agreed \((n = 15; 62.5\%)\), slightly agreed \((n = 2; 8.3\%)\), and slightly disagreed \((n = 1; 4.2\%)\) with the statement (question 2): “I will be able to receive corrective feedback with less difficulty in the future based on my experiences in this group discussion.” Therefore, 87.5% of the participants either strongly agreed or agreed with question 2. The third and final statement of the group evaluation (question 3): “I will be able to act on the corrective feedback I receive more easily in the future based on my experiences in this group discussion,” resulted with the following responses: strongly agree \((n = 7; 29.2\%)\), agree \((n = 16; 66.7\%)\), and strongly disagree \((n = 1; 4.2\%)\). Therefore, 95.8% of participants within the corrective feedback condition either strongly agreed or agreed with question 3. Table 4.19, 4.20, and 4.21 provide frequencies and percentages of the responses to questions 1, 2, and 3, respectively, of the group evaluation by participants assigned to the interpersonal competencies condition.
Table 4.19

*Frequencies and percentages of responses to question 1 of the group evaluation by participants assigned to the corrective feedback condition*

<table>
<thead>
<tr>
<th>Question and Response</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question One</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>7</td>
<td>29.2</td>
</tr>
<tr>
<td>Agree</td>
<td>15</td>
<td>62.5</td>
</tr>
<tr>
<td>Slightly Agree</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>Disagree</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.20

*Frequencies and percentages of responses to question 2 of the group evaluation by participants assigned to the corrective feedback condition*

<table>
<thead>
<tr>
<th>Question and Response</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question Two</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>6</td>
<td>25.0</td>
</tr>
<tr>
<td>Agree</td>
<td>15</td>
<td>62.5</td>
</tr>
<tr>
<td>Slightly Agree</td>
<td>2</td>
<td>8.3</td>
</tr>
<tr>
<td>Slightly Disagree</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 4.21

*Frequencies and percentages of responses to question 3 of the group evaluation by participants assigned to the corrective feedback condition*

<table>
<thead>
<tr>
<th>Question and Response</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>7</td>
<td>29.2</td>
</tr>
<tr>
<td>Agree</td>
<td>16</td>
<td>66.7</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

**Post Hoc Analyses**

Additional statistical procedures were conducted in order to explore possible interaction effects. The interaction effects section provides information on results from two-factor analyses of covariance (ANCOVA) performed on variables not initially tested as part of the research hypotheses. The group evaluation questions were individually examined to determine if any significant differences on scores existed between the responses by participants in the interpersonal competencies and corrective feedback conditions. One way analysis of variance was conducted along with additional two way analysis of variance to explore possible interaction effects between treatment conditions and information on the demographic questionnaire on participants’ responses to the group evaluation. The facilitator factor (who facilitated the group discussion) was also explored
for any interaction effects. Also, exploration of the differences of responses to the group evaluation between the two treatment conditions was explored. Finally, correlations were conducted between Self-Criticism (SC) Validity Score gains from pretest to posttest and participants’ ages and courses completed.

Interaction Effects

In order to determine possible interaction effects between the treatment conditions and other factors presented by the participants, nine 2 x 3 analysis of covariance (ANCOVA) tests were conducted. Because of the nine analyses a conservative alpha level was set at .005 (.05/9) using Bonferroni’s procedure. The ANCOVA tests evaluated the interaction effect on posttest scores of the Self-Criticism (SC) Validity Score between the treatment and control conditions. The independent variables of ethnic/cultural affiliation, age, gender, marital status, courses completed, history of work experience in a mental health setting, years working in a mental health setting, completion of group counseling course, and enrollment in practicum or internship were individually paired with treatment condition and evaluated with an ANCOVA test using the pretest as the covariate. None of the nine ANCOVA tests resulted with any significant results.

Correlations

Correlations were analyzed between participants’ gain score from pretest to posttest on the Self-Criticism (SC) Validity Score and participant’s ages and courses completed. Results indicate a significant relationship between the number of courses completed by participants and SC gain score ($r = .271, p = .022$).
Group Evaluation Questions and Responses

*Question 1.* A one way analysis of variance (ANOVA) was conducted to explore any differences between the interpersonal competencies and corrective feedback conditions on responses to question 1. Results indicated no significant differences ($F(1, 46) = .092, p > .05$) on responses to question 1 between the two treatment conditions.

Interaction effects between treatment condition (interpersonal competencies or corrective feedback) and the information provided by participants on the demographic questionnaire on responses to question 1 were independently explored by means of a two way analysis of variance (ANOVA). The demographic information included ethnic/cultural affiliation, age, gender, marital status, courses completed, history of work experience in a mental health setting, years working in a mental health setting, whether or not participants completed a course in group counseling, and whether or not participants were enrolled in practicum or internship. Because the nine analyses inflates the error rate, a more conservative alpha level was set at .005 (.05/9) using Bonferroni’s procedure. An interaction effects existed between facilitator x treatment condition ($F(3, 40) = 3.404, p = .027, \text{Eta Sq} = .203$), age x treatment condition ($F(2, 40) = 3.348, p = .045, \text{Eta Sq} = .143$), and number of courses x treatment condition ($F(1, 44) = 7.32, p = .010, \text{Eta Sq} = .143$) on group evaluation question 1. However, these findings did not meet the conservative alpha level of .005. Due to the significant correlation between number of courses completed and change on defensiveness level, the interaction effects with courses are being included.

After reviewing the results, the interaction effect between courses completed and treatment condition accounted for 14.3% (partial Eta squared $= .143$) of the variance in
responses to question 1. Examination of the mean scores indicates that the greatest
difference on responses between treatment conditions was for participants who completed
between 11-15 courses. Table 4.22 provides the means, standard deviations, and totals for
the participants’ responses to question 1 based on courses completed by participants and
treatment conditions.

Table 4.22

Means and standard deviations for responses to question 1 by participants based on
courses and treatment condition

<table>
<thead>
<tr>
<th>Treatment Conditions</th>
<th>IC</th>
<th>CF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses</td>
<td>n</td>
<td>M</td>
</tr>
<tr>
<td>0-5</td>
<td>12</td>
<td>1.67</td>
</tr>
<tr>
<td>6 -10</td>
<td>6</td>
<td>2.00</td>
</tr>
<tr>
<td>11-15</td>
<td>2</td>
<td>4.00</td>
</tr>
<tr>
<td>16-20</td>
<td>4</td>
<td>1.75</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>1.96</td>
</tr>
</tbody>
</table>

Note: IC and CF represent the interpersonal competencies condition and the corrective
feedback condition, respectively.

Question 2. A one way analysis of variance (ANOVA) was conducted to explore
any differences between the interpersonal competencies and corrective feedback
conditions on responses to question 2. Results indicated no significant differences \( F(1, 46) = .98, p > .05 \) on responses to question 2 between the two treatment conditions.

Interaction effects between treatment condition (interpersonal competencies or corrective feedback) and the information provided by participants on the demographic questionnaire on responses to question 2 were independently explored by means of a two way analysis of variance (ANOVA). The demographic information included ethnic/cultural affiliation, age, gender, marital status, courses completed, history of work experience in a mental health setting, years working in a mental health setting, whether or not participants completed a course in group counseling, and whether or not participants were enrolled in practicum or internship. Results indicated no significant interaction effects.

**Question 3.** A one way analysis of variance (ANOVA) was conducted to explore any differences between the interpersonal competencies and corrective feedback conditions on responses to question 3. Results indicated no significant differences \( F(1, 46) = .369, p > .05 \) on responses to question 3 between the two treatment conditions.

Interaction effects between treatment condition (interpersonal competencies or corrective feedback) and the information provided by participants on the demographic questionnaire on responses to question 3 were independently explored by means of a two way analysis of variance (ANOVA). The demographic information included ethnic/cultural affiliation, age, gender, marital status, courses completed, history of work experience in a mental health setting, years working in a mental health setting, whether or not participants completed a course in group counseling, and whether or not participants were enrolled in practicum or internship. Because of the nine analyses a more
The conservative alpha level was set at .005 (.05/9) using Bonferroni’s procedure. The interaction effect resulted between number of courses participants had completed and treatment condition on responses to question 3 (F (2, 40) = 4.405, p = .019, Eta Sq = .18). Although the interaction effect did not meet the conservative alpha level of .005, it is being included due to the pattern associated with number of courses and the influence on defensiveness level and responses to group evaluation questions.

After reviewing the results, the interaction effect between courses completed and treatment condition accounts for 18.0% (partial Eta squared = .180) of the variance in responses to question 3. Examination of the mean scores indicates that the greatest difference on responses between treatment conditions was for participants who completed between 11-15 courses. Table 4.23 provides the means, standard deviations, and totals for the participants’ responses to question 1 based on courses completed by participants and treatment conditions.
Table 4.23

*Responses to question 3 based on courses completed by participants and treatment conditions*

<table>
<thead>
<tr>
<th>Treatment Conditions</th>
<th>IC</th>
<th></th>
<th></th>
<th>CF</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses</td>
<td>n</td>
<td>M</td>
<td>SD</td>
<td>n</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>0-5</td>
<td>12</td>
<td>1.75</td>
<td>.62</td>
<td>15</td>
<td>2.00</td>
<td>1.20</td>
</tr>
<tr>
<td>6 -10</td>
<td>6</td>
<td>2.17</td>
<td>.75</td>
<td>6</td>
<td>1.67</td>
<td>.52</td>
</tr>
<tr>
<td>11-15</td>
<td>2</td>
<td>4.00</td>
<td>1.41</td>
<td>3</td>
<td>1.67</td>
<td>.58</td>
</tr>
<tr>
<td>16-20</td>
<td>4</td>
<td>1.75</td>
<td>.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>2.04</td>
<td>.91</td>
<td>24</td>
<td>1.87</td>
<td>.99</td>
</tr>
</tbody>
</table>

*Note*: IC and CF represent the interpersonal competencies condition and the corrective feedback condition, respectively.

*Comparison on Group Evaluation Between Treatment Conditions*

After further reviewing the percentages of participants, within the interpersonal competencies and corrective feedback conditions, who responded with either strongly agree or agree to the three questions, it was determined a more comparative exploration was needed. On all three questions, higher percentages of participants within the corrective feedback condition responded with either strongly agree or agree to all three questions when compared to those within the interpersonal competencies condition.
Table 4.24 provides the frequencies and percentages of responses to the group evaluation by participants in both treatment conditions.

Table 4.24

*Frequencies and percentages of strongly agree or agree responses to group evaluation questions by participants in both treatment conditions*

<table>
<thead>
<tr>
<th>Treatment Conditions</th>
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<th>CF</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>Q2</td>
</tr>
<tr>
<td>n/%</td>
<td>n/%</td>
<td>n/%</td>
</tr>
<tr>
<td>Strongly Agreed or Agreed</td>
<td>21/87.5</td>
<td>18/75.0</td>
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</tbody>
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*Note:* IC and CF represent the interpersonal competencies condition and the corrective feedback condition, respectively. Q1, Q2, and Q3 represent questions 1, 2, and 3 of the group evaluation, respectively.

Table 4.26 shows that participants within the corrective feedback condition responded more favorably to the questions on the group evaluation than did participants in the interpersonal competencies condition.

**Summary**

This chapter provided the results of the study. No significant differences existed between the two treatment conditions and the control condition. Therefore, research
hypotheses, 1, 2, and 3, were all not supported. Significant results were revealed in the following analysis: (a) interaction effect between the number of courses completed by participants and treatment condition on responses to question 1 of the group evaluation; (b) interaction effect between the number of courses completed by participants and treatment condition on responses to question 3 of the group evaluation; and (c) correlation between the number of courses completed by participants and participants’ Self-Criticism (SC) Validity Score gains from pretest to posttest. Descriptive statistics associated with responses to the three questions from the group evaluation indicate that for the most part, participants in the interpersonal competencies and corrective feedback conditions either strongly agreed or agreed with the statements. Furthermore, participants in the corrective feedback condition responded more favorably to the group experience than did participants within the interpersonal competencies condition as indicated by the higher percentages of participants strongly agreeing or agreeing with the group evaluation questions.

Exploration of research question 1 revealed that participants in the interpersonal competencies condition had lower scores, by one point, on the posttest Self-Criticism (SC) Validity Score when compared to participants SC posttest scores in the control condition. Research question 2 provided results indicating that participants in the corrective feedback condition had lower posttest SC scores when compared to participants in the control condition. Research question 3 resulted with participants in the interpersonal competencies condition having a lower posttest SC score than participants in the corrective feedback condition. However, no significant differences were determined between the treatment conditions and the control condition.
CHAPTER FIVE

DISCUSSION

This study explored the comparison of microlab discussions of interpersonal competencies and corrective feedback on counselor trainees’ defensiveness levels. This study also explored counselor trainees’ beliefs about their ability to communicate more clearly, receive corrective feedback with less difficulty, and use corrective feedback easier in the future based on their experiences in the interpersonal competencies or corrective feedback groups.

This chapter will review the purpose of this study along with a summary and interpretation of findings. Also, patterns associated with the findings will be emphasized. In addition, this chapter explores limitations of the study and evaluates the implications for counselor educators, counselors in training, and counselors who work with groups. Recommendations for future research are provided to assist in furthering the knowledge base associated with defensiveness and corrective feedback. Finally, a summary and concluding observations of the study are provided.
Purpose of The Study

The purpose of the study was to explore the comparison of pregroup training by use of microlab discussions of interpersonal competencies and corrective feedback on counselor trainees’ defensiveness levels. The literature supports the concept that defensiveness is a barrier to receiving corrective feedback (Argyris, 1968; Robison et al., 1986; Stockton & Morran, 1980; Stockton et al., 1991). Previous studies attempting to empirically support the connection between levels of defensiveness and receptivity to corrective feedback resulted with inconclusive results or results that indicated that participants with lower defensiveness levels rated corrective feedback as less desirable, credible, and having less impact (Robison, et al., 1986; Morran, et al., 1991). The current study attempted to explore methods to decrease defensiveness levels.

Summary and Interpretations of Findings

Findings from this study did not support any of the hypotheses predicting lower defensiveness levels by participants who engaged in microlab discussions of interpersonal competencies or corrective feedback when compared to a control group. Still, the direction of the decrease in defensiveness levels was as hypothesized where participants who engaged in such discussions had lower defensiveness levels when compared to a control group. The microlab discussions lasted no more than 90 minutes. Robison and Hardt (1992) explained that the significant effectiveness of the cognitive-behavioral groups might be contributed to the additional time participants had to reflect on the topics discussed when compared to earlier analogue studies. Conducting more than
one microlab exercise or a combination of the interpersonal competencies and corrective feedback microlabs on more than one occasion may produce greater treatment effects.

Based on responses to the group evaluation, the majority of participants in both treatment conditions indicated that they believed that they would be able to communicate more clearly, receive corrective feedback with less difficulty, and act on corrective feedback received more easily based on their experiences in the groups. The corrective feedback microlab, in particular, appeared to have more favorable reactions by participants to such beliefs. Both microlabs used a cognitive-behavioral approach during the discussions to assist participants in understanding how their thoughts influenced their feelings, which then influenced their behaviors.

D’Augelli and Chinsky (1974) identified that the cognitive focused group generated more personal discussions and exchange of feedback. Robison and Hardt (1992) found that a cognitive-behavioral group resulted with higher participant interaction units (PIUs) when discussing anticipated undesired outcomes associated with communicating corrective feedback. The findings from the current study provide a slight indication of the effectiveness of cognitive and cognitive-behavioral group structure in the exchange of communications in groups associated with corrective feedback when considering the responses to the group evaluation.

Comments made by participants during the microlab discussions of corrective feedback and interpersonal competencies indicated that many of the participants had not considered the cognitive-behavioral implications of their reactions to corrective feedback. Many of the participants mentioned that they were more aware of their feelings before being aware of their thoughts. Given the nature of cognitive-behavioral interventions, one
would focus on changing thoughts first. Such awareness may have contributed to the positive reactions by participants to both microlab exercises in terms of responses to the group evaluation questions. In other words, participants developed an awareness or better understanding of such concepts discussed and therefore may have had a slightly greater sense of self-efficacy in terms of communicating more clearly, receiving corrective feedback with less difficulty, and acting on corrective feedback received more easily.

A possible explanation for the slightly more favorable reactions to the corrective feedback microlab discussions may be the confusion associated with understanding the concepts of the interpersonal competencies microlab discussion. Observations from the groups where participants engaged in microlab discussions of interpersonal competencies included participants struggling with understanding the concepts of “awareness of self” and “acceptance of self” in relation to receiving corrective feedback. After further explanations, participants were able to understand the concepts and apply them to the conversation. Further explanations usually identified how awareness of self included awareness of thoughts, feelings and behaviors. As an example, the following scenario was given to the counselor trainees “awareness of thoughts when receiving corrective feedback would appear to individuals as thinking that the feedback given to them was meant to upset them, however, individuals then realize that they are not thinking rationally and that the feedback was meant to help them improve.

Another possible explanation of why the corrective feedback microlab discussion resulted with slightly higher responses in terms of ability to communicate more clearly and act on corrective feedback received may be due to the development of the corrective feedback microlab. Hulse-Killacky (2001) modified the microlab and used it during
classes on group work. Hulse-Killacky was able to continually develop the corrective feedback microlab based on experiences in discussions within her classes. The interpersonal competencies microlab was used for the first time in this current study. As a result of the experiences gathered during conducting the microlab discussions of interpersonal competencies, this researcher now has additional information to present these concepts in a way to help participants to understand awareness of self and acceptance of self.

*Pattern Associated with Number of Courses Completed*

The correlation between the number of courses completed and participants’ change in defensiveness levels was significant. Also, the number of courses completed x treatment condition interaction effect on responses to questions 1 and 3 were also significant at the .05 level. There appears to be a slight pattern associated with the number of courses completed by counselor trainees with changes in defensiveness levels and beliefs about their ability to communicate more clearly and act on corrective feedback received more easily.

Results of the correlation may be similar to the Stockton et al. (1991) study where participants with lower defensiveness levels had lower ratings of credibility, desirability, and impact of corrective feedback received. The research explained that the Gough-Heilbrun Adjective Check List (Gough & Heilbrun, 1980), the instrument used to measure defensiveness, had three possible defensiveness scales. The defensiveness scales were the rationalization, projection, and repression scales. Stockton et al. only used the rationalization scale because 29 of the 36 participants demonstrated such a style based on their scores. The authors explained that the reason participants with lower defensiveness
levels had lower ratings of desirability, credibility and impact of corrective feedback
received may be due to the choosing of the rationalizing defensiveness type to classify
participants into low, medium, and high defensiveness level. Also, Robison et al. (1986)
found no significant results when examining the relationship between level of
defensiveness and receptivity to corrective feedback. Robison et al. used the Tennessee
Self-Concept Scale (TSCS; Fitts, 1964) to measure defensiveness level. However,
Robison et al. administered the Self-Criticism (SC) Validity Score of the TSCS during
the last group and there was no indication of defensiveness levels before group
participation.

This current study measured defensiveness levels before and after group
participation using the Self-Criticism (SC) Validity Score of the Tennessee Self-Concept
Scale: Second Edition (TSCS: 2; Fitts & Warren, 1996). Findings indicate that
defensiveness levels were non-significantly lower for participants in the treatment
conditions as compared to the control condition. However, the pretest-posttest design
now provides a slight indication that the TSCS: 2 may not measure defensiveness in the
context of corrective feedback to the degree needed for the focus of such research. The
Stockton et al. (1991) study found that the rationalizing style of the Gough-Heilbrun
Adjective Check List (Gough & Heilbrun, 1980) might not be the best measure of
defensiveness either. Future research may explore the effectiveness of using the other
scales of the Gough-Heilbrun Adjective Check List to measure defensiveness within the
context of corrective feedback. Still, results of this current study along with the Stockton
et al. and Robison et al. studies indicate the need for further exploration of or the
development of an instrument that will more effectively measure defensiveness when studying it’s relationship with corrective feedback.

Findings indicate that the more courses a counselor trainee completed the greater the increase in defensiveness levels. Perhaps participation in the microlab discussions increased the defensiveness of counselor trainees who completed more courses. The increase in defensiveness may be due to an increase in self-awareness indicating that they may not have been as open to feedback as they thought. Therefore, such participants may have entered a state of cognitive dissonance (Festinger, 1957) and may have rejected such self-awareness instead of working through it. Also, counselor trainees who completed between 11-15 courses tended to react more favorably to the corrective feedback microlab discussion. The developmental process of completing a graduate program in counseling may contribute to these findings. This result provides a slight indication that counselor trainees who have completed more courses may become more receptive to feedback or open towards personal struggles with receiving feedback than those who have not completed as many courses.

Limitations

Generalizability of results may be difficult due to the limited amount of random assignment that occurred. However, the sample’s ethnic/cultural make up appeared to be relatively near the ethnic/cultural make up of the New Orleans Metro area. The limitation of self-reporting data from participants existed in this study. Participants were not only asked to self-report defensiveness levels by completing the Tennessee Self-Concept Scale: Second Edition (TSCS: 2; Fitts & Warren, 1996), which included the Self
Criticism (SC) Validity Score, but also their beliefs about their ability to communicate more clearly, receive corrective feedback with less difficulty, and use corrective feedback received more easily based on their experiences in the treatment conditions. This researcher made no attempts to validate participants’ responses by means of observational and behavioral measures. Therefore, the validity of the self-reporting information is solely dependent on participants’ perceptions. Including process observers’ observations of actual behaviors during a course in group work may provide additional information in terms of behavioral measures when considering the effectiveness of microlab discussions of corrective feedback and interpersonal competencies on participants reactions to corrective feedback.

During the pretest administration of the TSCS: 2, approximately 10 (8.5 %) participants out of the 118, had questions about some of the items. Participants’ questions appeared to be focused on making sure that they would not get perceived in a negative fashion. For example, one item (item #49) asked participants to respond to the question from a Likert scale ranging from always true to always false. The question was “I shouldn’t tell so many lies.” Participants expressed concern because if they responded within the “true” options, they would be admitting that they lie a lot and if they respond within the “false” options, they would be indicating that they tell many lies. Participants may have become more guarded in their answering based on such questions. This observation supports the need of an instrument that will measure defensiveness as it relates to corrective feedback. Such observations also support Bednar and Kaul (1994) when they expressed the lack of precise measurement in group research and stated “good measurement technology usually evolves from well-developed and fertile conceptual soil.
It is these conceptual and theoretical elements that tell us what phenomena need to be measured” (p. 639).

The problem with certain analyses of variance surfaced in this study as well. The fact that a couple of significant interactions were deemed inconclusive or inappropriate to identify as significant due to the low representation of other independent variables supports the difficulty inherent in group research. Bednar and Kaul (1994) emphasized the difficulties associated with group research when they stated “experimental control and manipulation, essential for determining causation, are difficult, if not impossible, to achieve in group research right now” (p. 659). Also, in this study, the inability to randomly assign all groups to treatment or control conditions and the inability to randomly assign participants separately from their class continues to support the difficulty associated with group research.

Given the diverse cultural make-up of the sample, having two Caucasian facilitators may have been a limitation. The majority of participants identified their ethnic/cultural affiliation to be African-American. Future research may include facilitators of different ethnic/cultural groups to explore the effectiveness of microlab discussions on defensiveness levels.

Finally, the sample size may have not been large enough to find the effect size. According to a power analysis (Aron & Aron, 1999), it was recommended that each treatment/control condition contain 52 participants based on an approximate power level of 80%. This current study only contained 24 participants per treatment/control condition, which is slightly less than 50% of the recommended sample size.
Implications for Counselors

Counselor Education Programs

Findings from this study may provide some limited guidance for counselor education programs in terms of developing and implementing microlab discussions of corrective feedback. Counselor educators can also develop and implement other forms of pregroup training incorporating other topics. Page and Hulse-Killacky (1999) suggested that training by use of the Corrective Feedback Self-Efficacy Instrument (CFSI) might demystify the process of giving corrective feedback. Robison et al. (1988) found seven factors that were associated with anticipated consequences of delivering corrective feedback. Interventions can be developed to focus on specific anticipated consequences with group processes associated with specific expectations. The results of this study might provide counselor education programs with an idea of how to implement programs that may increase awareness of the process of giving and receiving corrective feedback.

Counselors Who Work With Groups

Findings from this study may assist counselors who work with groups in developing pregroup training exercises with their perspective groups. Exploring feelings and thoughts associated with giving and receiving corrective feedback and/or awareness and acceptance of self up front may increase the exchange and use of corrective feedback. Also, this intervention may inform the clients that such interactions are important to the group process and that others may have similar or different feelings associated with feedback exchanges. Bednar and Kaul (1994) mentioned that although pregroup training has been proven to be effective, it has not been determined what type of training to offer and when to offer it. Microlab discussions of corrective feedback, in
particular, show promise in contributing to counselor trainees’ beliefs associated with communicating more clearly and acting on corrective feedback received. Implementing such microlab exercises early in the group process may be beneficial to group members in terms of the exchange and use of corrective feedback. Also, the universality (Yalom, 1995) component of group may be realized earlier by incorporating such pregroup training into practice. Participating in such pregroup trainings may provide clients with insight into how others feel and think when it comes to giving or receiving corrective feedback.

Counselor Trainees

Discussions and statements throughout all of the pregroup training events included comments on the fact that not many of the counselor trainees had thought about such topics before. Most participants commented on the insight developed and the usefulness of the microlab discussions. Counselor trainees are encouraged to ask questions about feedback and to suggest or recommend such pregroup training events within their training program. Hulse-Killacky (1996) identified how discussions about responses to the Corrective Feedback Instrument (CFI) assisted students to be aware that not everyone had similar reactions to the same items. In other words, students realized that everyone did not respond in the same fashion. This realization may increase awareness of differences and diversity and the need to consider diversity when giving corrective feedback.
Recommendations for Future Research

First, additional methods of determining defensiveness should be used. For example, observational data or reports from group process observers in group counseling classes can inform participants and researchers of the effectiveness of pregroup training. Also, the other items of the Tennessee Self-Concept Scale: Second Edition (TSCS: 2; Fitts & Warren, 1996) may have contributed to the defensiveness levels by means of influencing counselor trainees to be self-conscious of their responses. The development of an instrument that incorporates defensiveness in the context of receiving corrective feedback may increase the reliability and practicality of such a measure.

An instrument to consider for future use may include questions that are not focused on measuring any personality characteristic mixed with defensiveness measuring questions from several defensiveness scales of different instruments. For example, taking the questions of the Self-Criticism (SC) Validity Score of the Tennessee Self-Concept Scale: Second Edition (TSCS: 2; Fitts & Warren, 1996) along with questions from defensiveness scales within other instruments and combining all of those defensiveness questions with random non-related questions may be a useful next step. The random non-related questions may include questions such as: (a) I enjoy swimming, or (b) I like to watch television. Instruments such as the Corrective Feedback Instrument (CFI; Hulse-Killackey & Page, 1994) and the Corrective Feedback Self-Efficacy Instrument (CFSI; Page & Hulse-Killacky, 1999) may provide guidance in the development of questions to be used in such an instrument. The CFI and the CFSI do not contain scales to measure defensiveness when receiving corrective feedback. However, many of the questions and
scales of both instruments may provide insight into the development of questions in terms of structure and wording.

A qualitative component is also encouraged due to the similar themes identified throughout the pregroup training exercises. Participants continually mentioned anxiety and fear when receiving or giving corrective feedback. Also, when giving corrective feedback, many participants indicated that they would give positive feedback first because that is how they like to receive corrective feedback. In terms of the interpersonal competencies microlab discussion, the majority of participants identified that they are aware of their feelings first before being aware of their thoughts.

From a cognitive-behavioral concept, future interventions may focus on helping individuals develop their awareness of thoughts, which in turn will influence their feelings and behaviors. Taping such microlab discussions and conducting a qualitative analysis of themes may provide more insight into the development of interventions or more effective microlab exercises.

In addition, increasing the questions of the group evaluation would provide more information associated with participants’ experiences. Participants can be asked to evaluate the experience in terms of helpful, not helpful, what worked and what did not work. Asking participants to explain reactions to such questions may assist in the development of a more effective microlab to be used for pregroup training.

Future research may include facilitators from different ethnic/cultural groups in order to account for multicultural differences. In this present study the two facilitators where Caucasian while the majority of participants identified themselves to be African-American. Participants may have responded better to facilitators of their own
ethnic/cultural group. Okonji, Ososkie, and Pulos (1996) found that African-American males “…had a more positive perception of African American counselors than they did of European American counselors…” (p. 335). Therefore, having group facilitators of the same ethnic/cultural affiliation for microlab discussions of interpersonal competencies and corrective feedback may prove to be more beneficial to participants of the same ethnic/cultural group.

Researchers interested in conducting quantitative quasi-experimental or experimental research with counselor trainees are encouraged to receive permission to call students to remind them of their group times. Such reminders may increase the percentage of participants that complete the study. Also, additional longitudinal measures perhaps at one month and three months after participating in the study can be used to evaluate any long-term effects. Finally, researchers can expand on studies focused on the significant interaction effects between treatment conditions and specific demographic characteristics of participants to explore such relationships.

**Summary and Conclusion**

The exploratory nature of this study provided insightful information for future studies in the area of defensiveness, corrective feedback, and pregroup training. The number of participants (72) provided enough data to develop guidance when measuring and exploring the interactions between such factors. Results of this study may assist counselor educators in deciding to develop and implement pregroup training events in their programs. Also, counselors who work with groups can develop pregroup training exercises to assist group members in exploring feelings and thoughts associated with corrective feedback and/or interpersonal competencies. Counselor trainees may enhance
their level of self-awareness and self-acceptance while also exploring thoughts and feelings associated with giving and receiving corrective feedback.
REFERENCES


APPENDIX A

Consent From
Consent Form

1. Title of Research Study

The comparison of microlab discussions of interpersonal competencies and corrective feedback on counselor trainee’s defensiveness levels.

2. Project Director

Christian J. Dean, M.Ed., NCC
Doctoral Candidate, Counselor Education
Department of Educational Leadership, Counseling and Foundations
Education Building, Room 348
University of New Orleans
New Orleans, LA. 70148
(504) 280-6661

I am under the supervision of Dr. Diana Hulse-Killacky, Professor and Coordinator of the Counselor Education Graduate Program, (504) 280-6662.

3. Purpose of the Research

The purpose of the research is to explore the effects of pregroup training of interpersonal competencies or corrective feedback on defensiveness levels. The findings of this study will enhance the knowledge and understanding of methods to assist group members in being more accepting of corrective feedback received. Also, findings will assist counselor educators to enhance the development of courses focused on group work to better equip counselor trainees who work with groups.

4. Procedures for this Research

This study will involve ninety-six participants. All participants will meet for approximately 25 minutes to complete an instrument, which measures defensiveness and a demographic questionnaire. Thereafter, participants will be assigned to their perspective groups and undergo a pregroup training that will last no more than an hour and a half. Upon completion of the pregroup training, participants will complete the same instrument again, lasting approximately another 20 minutes and complete a group evaluation form. Participants may be asked to explore and share different events in their lives where they gave and/or received corrective feedback. Participants will be graduate students in a masters level counseling program from three different universities.
5. Potential Risks or Discomfort

Participants may experience slight emotional distress in recalling situations in which they gave and/or received corrective feedback. All participants will be asked to use aliases during the reporting of events. You are also advised that should an issue arise that you would like to explore further, a counseling referral list will be given to you upon request. Because of the nature of the pregroup training, you are advised against sharing information that you deem to be harmful to you. Please keep in mind that all aspects of your participation in this study are voluntary and you may withdraw consent and terminate participation at any time without consequence. If you wish to discuss these or any other discomforts you may experience, you may call the Program Director listed in #2 of this form.

6. Potential Benefits to You or Others

This research may provide you with increased awareness of your feelings, thoughts, and behaviors associated with giving and/or receiving corrective feedback in groups or other interpersonal interactions. The results of this study could be used to enhance the group training of counselor trainees and the use of pregroup training by other professionals who work with groups.

7. Alternative Procedures

There are no alternative procedures. Your participation is entirely voluntary, and you may withdraw consent and terminate participation at any time without consequences.

8. Protection of Confidentiality

The names of all participants and their affiliation will be kept confidential at all times by the Program Director and the doctoral student assisting the Program Director. Participants will be asked to keep confidential the information shared during their group interactions; however, it is impossible for the Program Director to guarantee complete confidentiality by all participants. Participants’ information will be coded and any tables, figures, or graphs will contain numbers corresponding to the participants and not the participants’ names. All of the data with participants’ names will be secured by the Project Director in a locked file cabinet.

9. Signatures and Consent to Participate

Federal and University of New Orleans guidelines require that we obtain signed consent for the conduct of research and for participation in research projects that involve human subjects. Please indicate, by signing below, that I have explained the contents of this form to you, that you have read and understand the form, and that you agree to participate this study under said conditions.
I have been fully informed of the above-described procedure with its possible benefits and risks, and I have given my permission to participate in this study.

Signature of Project Director                Name of Project Director                Date

Signature of Participant                    Name of Participant (Print)              Date
APPENDIX B

Letter From Human Subjects Committee
UNIVERSITY OF NEW ORLEANS
COMMITTEE ON THE USE OF HUMAN SUBJECTS

Form Number: 2DEC03 (please refer to this number in all future correspondence concerning this protocol)

Principal Investigator: Christian Dean  Title: Graduate Student

Department: Ed. Leadership, Counseling & Foundations  College: Ed. & Human Development

Name of Faculty Supervisor: Diana Hulse-Killacky (if PI is a student)

Project Title: The effects of microlab discussions of interpersonal competencies and microlab discussions of corrective feedback on defensiveness level

Date Reviewed: December 8, 2003

Dates of Proposed Project Period: From 12/03 to 12/04
*approval is for one year from approval date only and may be renewed yearly.

Note: Consent forms and related materials are to be kept by the PI for a period of three years following the completion of the study.

☐ Full Committee Approval
☒ Expedited Approval
☐ Continuation
☐ Rejected
☐ The protocol will be approved following receipt of satisfactory response(s) to the following question(s) within 15 days:

__________________________
__________________________
__________________________
__________________________

Committee Signatures:

Scott C. Bauer, Ph.D. (Chair)

Gary Granata, Ph.D.

Betty Lo, M.D.

Hae-Seong Park, Ph.D.

Jayaraman Rao, M.D. (NBDL protocols only)

Laura Scaramella, Ph.D.

Richard B. Speaker, Ph.D.

Gary Talarchek, Ph.D.
APPENDIX C

Interpersonal Competencies Microlab
Microlab:
Learning about Interpersonal Competencies

Purpose: This microlab is designed to help you reflect on your awareness and acceptance of self, which includes awareness and acceptance of your thoughts, feelings, and behaviors when receiving corrective feedback.

Use the following definition in your reflections and discussions throughout the entire microlab: **Corrective feedback is intended to encourage thoughtful self-examination or to express the feedback giver’s perception of the need for change on the part of the receiver.**

For Example:
(a) I hear you complaining about the grade you received on your exam. However, you only come to 1 out of 3 classes a week.
(b) Before class you mentioned that you were going to put 110% effort into your classes, and then I noticed you drawing during the lecture. I’m confused by your actions. Please explain what that means.

Use the following definition, along with the definition of corrective feedback, in your reflections and discussions of parts 1 and 2: **Awareness of self is the ability to identify thoughts, feelings, and behaviors on a conscious level.**

1. Awareness of self.
   (a) How aware are you of your thoughts when receiving corrective feedback?
   (b) How aware are you of your feelings when receiving corrective feedback?
   (c) How aware are you of your behaviors when receiving corrective feedback?

   Share your responses with others, giving specific examples of the corrective feedback received and your reaction.

2. Think about a time when you received corrective feedback and had a negative reaction to what you heard.

   Think about how you might have had a more favorable reaction to the corrective feedback if you had been more aware of yourself.

   Share your response with others.

Use the following definition, along with the definition of corrective feedback, in your reflections and discussions of parts 3 and 4: **Acceptance of self is the identification and acceptance of your thoughts, feelings, and behaviors.**

3. Acceptance of Self.
   (a) How accepting of your thoughts are you when receiving corrective feedback?
(b) How accepting of your feelings are you when receiving corrective feedback?
(c) How accepting of your behaviors are you when receiving corrective feedback?

Share your responses with your group members, giving specific examples of the corrective feedback received and your reaction.

4. Think about a time when you received corrective feedback and had a negative reaction to what you heard.

Think about how you might have had a more favorable reaction to the corrective feedback if you had been more accepting of yourself.

Share your response with your group members.

5. Reflect on your reactions to the microlab, what you learned today, and what you will take with you.

Share your responses giving specific examples.
APPENDIX D

Corrective Feedback Microlab
Microlab: Learning About Giving and Receiving Corrective Feedback

Purpose: The following questions are designed to help you reflect on your feelings and thoughts on the topic of giving and receiving corrective feedback and learn your fellow group members’ feelings and thoughts about this topic.

Use the following definition in your reflection and discussion: Corrective feedback is intended to encourage thoughtful self-examination or to express the feedback giver’s perception of the need for change on the part of the receiver.

For Example:
(a) I hear you complaining about the grade you received on your exam. However, you only come to 1 out of 3 classes a week.
(b) Before class you mentioned that you were going to put 110% effort into your classes, and then I noticed you drawing during the lecture. I’m confused by your actions. Please explain what that means.

1. When someone says to you, “I’d like to give you some feedback:”
   (a) What do you think?
   (b) What do you feel?
   (c) What do you do?
   (d) What is your greatest concern?

   Share your responses giving specific examples.

2. When you think of giving someone corrective feedback:
   (a) What do you think?
   (b) What do you feel?
   (c) What do you do?
   (d) What is your greatest concern?

   Share your responses giving specific examples.

3. Reflect for a moment on the phrase, “receiving feedback as a child meant for me…” and then discuss your childhood memories with others.

   Share your responses giving specific examples.

4. What do you think would help you give and receive corrective feedback easier?

   Share your responses giving specific examples.

5. Reflect on your reactions to the microlab, what you learned today, and what you will take with you.

   Share your responses giving specific examples.
APPENDIX E

Counseling Referral List
Counseling Referral List

Family Services of Greater New Orleans
2515 Canal Street, Suite 210
New Orleans, Louisiana 70119
(504) 822-0800

Trinity Counseling Center
2108 Coliseum
New Orleans, Louisiana 70130
(504) 522-7557

Thomas E. Chambers Counseling and Training Center
3321 Woodland Drive
New Orleans, Louisiana
(504) 398-2168
APPENDIX F

Group Evaluation
Group Evaluation

Please circle the number corresponding to the answer that best represents your response.

<table>
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<tr>
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<td>Strongly Agree</td>
<td>Agree</td>
<td>Slightly Agree</td>
<td>Slightly Disagree</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
</tbody>
</table>

1. I will be able to communicate more clearly in the future based on my experiences in this group discussion. 1 2 3 4 5 6

2. I will be able to receive corrective feedback with less difficulty in the future based on my experiences in this group discussion. 1 2 3 4 5 6

3. I will be able to act on the corrective feedback I receive more easily in the future based on my experiences in this group discussion. 1 2 3 4 5 6
APPENDIX G

Pilot Study on Microlabs
Pilot Study on Microlabs

Please circling the number corresponding to the answer which best represents your response.

1- Strongly Agree    2- Agree    3- Slightly Agree    4-Slightly Disagree    5- Disagree    6- Strongly Disagree

1. The directions on the corrective feedback microlab are easy to follow. 1 2 3 4 5 6

2. The directions on the interpersonal competencies microlab are easy to follow. 1 2 3 4 5 6

3. The definitions on the interpersonal competencies microlab are easy to understand. 1 2 3 4 5 6

4. The definitions of corrective feedback on both microlabs are easy to understand. 1 2 3 4 5 6

5. I would be able to easily participate in the corrective feedback microlab based on how the microlab is designed. 1 2 3 4 5 6

6. I would be able to easily participate in the corrective feedback microlab based on its content. 1 2 3 4 5 6

7. The examples of corrective feedback on both microlabs are sufficient to understand what corrective feedback is. 1 2 3 4 5 6

8. The examples of corrective feedback on both microlabs give me an understanding of how corrective feedback may be used. 1 2 3 4 5 6

9. I would be able to participate on both microlabs based on the examples of corrective feedback. 1 2 3 4 5 6

10. The definition of awareness of self is easy to understand. 1 2 3 4 5 6

11. I would be able to easily participate in the section on awareness of self based on the definition provided. 1 2 3 4 5 6

12. The definition of acceptance of self is easy to understand. 1 2 3 4 5 6

13. I would be able to easily participate in the section on acceptance of self based on the definition provided. 1 2 3 4 5 6

14. The two microlabs are similar in design and structure. 1 2 3 4 5 6

15. The two microlabs are different in terms of content and focus. 1 2 3 4 5 6
Please respond to the questions by writing your answer on the space provided.

1. Is any part of the corrective feedback microlab confusing? ________________
   If yes, please specify which part(s) and how it could be worded differently.
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

2. Is any part of the interpersonal competencies microlab confusing? ___________
   If yes, please specify which part(s) and how it could be worded differently.
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

3. Are more examples needed? _______________
   If yes, please specify in which microlab(s), which part(s), and what kinds of examples.
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

4. Provide any other thoughts or feelings associated with how the corrective feedback
   microlab could be improved.
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

5. Provide any other thoughts or feelings associated with how the interpersonal
   competencies microlab could be improved.
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

Age: _______________  Gender: _______________  Ethnicity: _______________

University: ______________________________________________________________
APPENDIX H

Demographic Questionnaire
Demographic Questionnaire

Please complete the following information. This personal data will be kept confidential and will be used for the purpose of descriptive data analysis only. This data will not in any way be used to identify you after the collection of the data. Your name and number will be cut off from the rest of the information after your data collection.

Name__________________________ Phone Number_______________________

1. Ethnic/Cultural Affiliation: ____________________________________________

2. Age: _____________

3. Gender (circle one): Female / Male

4. Marital Status: ________________________________________________________

5. Current University:____________________________________________________

6. Number of Courses Completed in Counseling or Marriage and Family Therapy: ____

7. Have you worked or are you currently working in a mental health setting? (circle one): Yes / No

8. If yes, how many years? ____________

9. Have you completed a class on group counseling? (circle one): Yes / No

10. Are you currently enrolled in practicum or internship? (circle one): Yes / No
VITA

Christian J. Dean received a Bachelor of Arts degree in psychology from the University of New Orleans in 1998. He then received his Master of Education in Counselor Education from the University of New Orleans in December of 2000 while also completing the Louisiana Military Academy’s Officer Candidate School and receiving his commission as a Second Lieutenant in the Louisiana Army National Guard. Mr. Dean then completed Officers Basic Course in Field Artillery during the spring and summer of 2001 before enrolling in the University of New Orleans’ doctoral program in counselor education and supervision. Upon graduation, First Lieutenant Christian J. Dean will mobilize with his battalion, 1/141 Field Artillery, and his brigade, the 256th Mechanized Infantry Brigade, in support of Operation Iraqi Freedom.