University of Nevada, Reno

A Process Analysis of Counselor Verbal Response Modes by Experience Levels

Using Qualitative Data Analysis Software: A Mixed Methods Study

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This study investigates the use of a specified set of the Hill Helping Skills System counselor verbal response modes by four groups of 10 counselors representing different levels of professional experience: Masters-level graduate students, counselors with 1-10 years of experience, counselors with 10-20 years of experience, and a group of peer-identified expert counselors. The comparison seeks to determine if there are significant differences in skill-set utilization between these four groups, and if so, what those differences are. The study uses session transcripts to examine individual counselor behaviors within counseling sessions. Quantitative and Qualitative data analyses are displayed using MAXQDA\textsuperscript{10} Computer Assisted Qualitative Data Analysis software. Clinical implications of the results for counselors, counselor educators, and counselor supervisors are discussed.
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CHAPTER ONE
INTRODUCTION

Socrates advises that an unexamined life is not worth living. This may easily be applied to the profession of counseling as well as the purpose and practice of counseling. As late as 1950, the examination of counseling or psychotherapy by its members yielded little fruit: “Psychotherapy is an undefined technique applied to unspecified problems with unpredictable outcome. For this we recommend rigorous training” (Raimy, 1950, p. 93). Early research explored prevailing attitudes and beliefs about counselors, counseling services, and mental health issues; counseling outcome and process research; and counselor training and education (Munley, 1974).

Since that time, focus has shifted toward examining the therapeutic alliance as a significant component of the profession, one appropriate by extension to the process of counseling education and supervision (Mallinckrodt, 2011). The therapeutic alliance is one of the “common factors” associated with client outcome (Lambert & Barley, 2001). Counseling process and outcome are still subjects of intense interest, as evidenced by growing emphasis on evidence-based psychological practices (EBPP) and the attention paid to counseling outcome in an era of managed care (Mozdzierz, Peluso, & Lisiecki, 2011). Research into EBPP has evolved and expanded to include not only empirically supported therapies (EST), but empirically supported relationships (ESR), and to blend these into evidence-based psychotherapy relationships allowing for examination of the interactive and inter-dependent relationship of research, clinical expertise, and patient characteristics (Norcross & Lambert, 2011). This paradigm of collaboration and consensus within and between disciplines may be appropriate for
the profession to examine itself and for the client to participate in counseling, what Horvath, Del Re, Flückiger, and Symonds call a “modern pan-theoretical reconceptualization of the alliance” (2011, p. 10). The interaction of the counselor and client through collaboration and consensus begins to build what has been called a “bond,” one of three components of a therapeutic alliance as described by Bordin (1979) and reiterated by Safran, Muran, and Rothman (2006). This bond grows as the client and counselor negotiate agreements about the tasks and goals of therapy (p. 38). Gelso and Carter (1985, 1994) describe the components of this bonding and negotiating process in building an effective therapeutic relationship: “the feelings and attitudes that counseling participants have toward one another, and the manner in which these are expressed” (1994, p. 297).

This study, using process research, will focus initially on one of the negotiators, the counselor, and the use of specialized counselor verbal response modes. The study reveals one technique to demonstrate how the counselor’s skill use might appear to the client or the counselor supervisor. Moreover, this technique can also reveal how the client’s side of the negotiation might appear to the counselor or counselor supervisor. The client’s role as a partner in the therapeutic alliance will allow a discussion of the profession’s emerging definition of the characteristics and components of effective counseling, counselor education and counselor supervision. Further, this examination will allow discussion of ways for less experienced counselors to acquire proficiencies characteristic of more experienced, “expert” counselors.

**Introduction to the Problem**

characteristics and behaviors that influence helping processes” (II.G.5.b), “essential interviewing and counseling skills” (II.G.5.c), “counseling supervision models, practices, and processes” (II.G.1.e), and “the use of research to inform evidence-based practice” (II.G.8.e) (CACREP, 2009).

Draft #2 of the 2016 CACREP Standards further states the need for evidence that student learning has occurred in new areas including, “technology’s impact on the counseling profession” (II.F.1.i), “strategies for personal and professional self-evaluation and implications for practice” (II.F.1.j), “empirically-based counseling strategies and techniques” (II.F.5.i), “evaluation of counseling interventions” (II.F.8.d), “qualitative, quantitative and mixed research methods” (II.F.8.e), and “analysis and use of data in counseling” (II.F.8.h) (CACREP, 2014).

While these organizations have given detailed guidance on expectations and standards of performance, there is little in the way of guidance or stipulation concerning means to achieve those ends. The current study examines procedures which incorporate performance evaluation; counselor characteristics, behaviors, practices and processes; counseling skills; supervision practices and processes, and the application of technology and research toward identifying and improving them in accordance with the guidance above.

**Background and History**

The content and nature of counseling research has changed dramatically over the last 50 years. As summarized by Pachankis and Goldfried (2007), early research was largely outcome-oriented to determine if a given intervention was effective; subsequent research was more behaviorally-oriented, with more scientifically rigorous randomized clinical trials with greater internal validity. Process research emerged in the late 1940s in the U.S., and appears to have peaked by the mid-1980s. A shift of focus in process research at this time is summarized in
Greenberg & Pinsof (1986), reflecting a transition from examining the therapy process to examining the process of change. The growing preference for evidence-based outcome research appears to have been a result of limited process research findings and a hybrid process-outcome design that included a pre-mid-post quantitative approach. More recently, growing attention has been given to studies at the macro level investigating counseling theory, the therapeutic alliance, and multicultural competence.

The quantity of published counseling research has changed as well. A series of meta-analyses of major counseling psychology publications (The Counseling Psychologist; Journal of Counseling Psychology) over the last 35 years showed an overall decrease from almost 78% in the period 1979-1983 to 37% in the period 2004-2008 (Scheel, 2011). Significantly, during this period, The Counseling Psychologist published only one article on supervision between 1979 and 1998 and only two more articles between 1999 and 2008. This decline is reflected in the area of qualitative research as reported by Woo and Heo (2013). Their study reveals that during the period 2005-2010, only 9.7% of the articles published in three major counseling publications (Journal of Counseling & Development, Counselor Education & Supervision, and Professional School Counseling) were identified as qualitative research. This decline in publication of counseling research, if indeed it reflects a diminished interest and involvement in research, is disheartening and may call for renewed emphasis on research as a counseling competency (Reisetter, et al., 2004).

It appears that there is a need for renewed application of qualitative process research in the field of counseling, counselor education, and supervision. The current study, though using a relatively small sample, offers a critical element: it allows insight into the counselors’ actions, behaviors, and techniques in context, within the “living” counseling session with all its
complexities and dynamics. This illuminates not the immediate or long-term outcome of an intervention, but a detailed examination of the immediacy of counseling skills in action. The analytical process proposed here is sufficiently flexible and robust that the process can be used by other counseling practitioners using different skill sets and different criteria than years of experience.

The proposed study also builds on the growing use of computer-assisted qualitative data analysis software (CAQDAS) (Silver, 2007) in the field of counseling and counselor education. CAQDAS is now being used more widely, notably in the areas of music therapy (Musumeci, Fidelibus, & Sorel, 2005), pastoral counseling (Townsend, 2011), family therapy (Sprenkle & Piercy, 2010), and counselor education (D’Andrea, Waters, & Rudd, 2011).

It also appears that with current electronic processing and analysis technology, as well as computer-assisted qualitative data analysis software, research in this area can be performed more rapidly and effectively. It further appears that the incorporation of these technologies into the process of counselor education and supervision may be responsive to the advent of significant growth in the areas of technology-assisted distance counseling, information technology in education, and social media.

**Statement of the Problem**

The problem facing the field of counseling, counselor education, and supervision is to find a way to incorporate the desired skills into our daily practice as counselors, counselor educators, and supervisors. This study will attempt to demonstrate, through qualitative, process research techniques, that using coding software to study in-situation counseling sessions could be useful in the education, evaluation, and practice of counseling. Analytical techniques will be used to identify counselor skills at various experience levels that may provide a means of understanding
skill development and apply that knowledge to demonstrate and satisfy the given CACREP Standards. Through this examination and analysis, the findings could add to the body of knowledge in the following five ways:

a. Demonstrate process research into essential counseling skills
b. Demonstrate qualitative and mixed-methods research related to counselor education and supervision
c. Demonstrate new ways to meet and document CACREP Standards
d. Demonstrate computer-assisted qualitative data analysis software in the study of counselor education and supervision
e. Explicate how the application of these methods are consistent with professional and ethical standards and codes related to attaining and maintaining counseling proficiency and competence

This study compares counseling session transcripts of Master’s level counseling students, counselors with up to 10 years of experience, counselors with between 10 and 20 years of experience, and peer-identified expert counselors to determine if differences exist between the groups; if so, what the differences are; if a particular pattern of skills can predict membership in a given experience level; and how the examination of skill use might be used to help attain and maintain proficiency in these skills. Computer-assisted qualitative data analysis software (CAQDAS) will be used to assist in qualitative and quantitative analysis of the data and in the display of various data elements and results.

Specific research questions for this study are:

1. Are there differences in the frequency, sequence or patterns of use of a given set of counseling skills between groups of counselors with different experience levels?
For this study, the dependent variables are the years of experience as a counselor: two of the dependent variables are interval level (years of experience of 1-10 years and of 10-20 years); two of the dependent variables are nominal level based on identified status as master’s level graduate students at the point of comprehensive examinations or as professional peer-identified “expert” counselors.

The independent variables are ratio data consisting of frequency counts and interval data of sequences or patterns for counselor verbal response skill use, by experience level, for each counseling session.

The null hypothesis, \(H_{01}\), is that there will be no differences in frequency, sequence, or patterns of use of a given skill set by counselors of differing experience levels. The alternative hypothesis, \(H_{a1}\), is that there will be one or more differences in frequency, sequence, or patterns of use of a given skill set by counselors of differing experience levels.

2. If identifiable differences exist, what are they?

Any differences which may be noted are identified using appropriate parametric and non-parametric statistical analysis using SPSS analytical software.

3. Are there differences in frequency, sequence, or patterns of use of a given skill set by expert counselors and novice counselors? If so, what are they?

The null hypothesis, \(H_{02}\), is that there are no identifiable differences in skill set use between expert and novice counselors. The alternative hypothesis, \(H_{a2}\), is that there are identifiable differences in skill set use between expert and novice counselors.

4. Can qualitative data analysis be used to identify and study counseling skills?
This study utilizes mixed methods whereby quantitative assessment of counseling skill use can be qualitatively displayed using CAQDAS techniques to permit a more comprehensive display and discussion of the process component of individual skill use in a complete counseling session, i.e., the frequency, sequence and pattern of use.

5. Can the differences, if any, in frequency, sequence or patterns of use of a particular skill set between counselors of different experience levels be categorized into levels of expertise?

The identified skills, initially determined by quantitative data analysis of the independent variables, will be reported as both quantitative statistical results and as qualitative analytic displays of differing frequency, sequence, or patterns of use. The results are compared to current models of expertise.

**Summary and Organization of the Study**

This study is arranged in five chapters. Chapter One is the introduction to the study, the statement of research needs, statement of research questions and hypotheses, and identification of data elements. Chapter Two review the pertinent literature in process research; quantitative, qualitative, and mixed-methods research; counselor competencies and skills; counselor verbal response modes; the Hill Helping Skills System; transcript analysis in counselor education and supervision; coding technology; and the construct of expertise and competence. Chapter Three explains the methodology for the study. Chapter Four describes results of the study. Chapter Five discusses the results, implications, and limitations of the study as well as areas of promise and future study resulting from the study.
CHAPTER TWO

LITERATURE REVIEW

Process Research

Process research may be generally defined as “any research investigation that, totally or in part, contains as its data some direct or indirect measurement of patient, therapist or dyadic (patient-therapist interaction) behavior in the therapy interview” (Kiesler, 1973, p. 2). In the field of counseling, counselor education and supervision, process research looks at what happens during a therapeutic encounter, i.e., counselor and client behaviors and their immediate, observable effect. Rather than quantify client change, it uncovers the ingredients contributing to that change (Pachankis & Goldfried, 2007; Scheel et al., 2011b). Process research can be more pragmatic in its approach and focus, yet can provide substantial insights into the therapeutic and theoretical world of counseling. Process research, then, concerns intra-treatment phenomena rather than differentiating between pre-treatment and post-treatment states. It can extend from single-case studies to longitudinal group studies and can be involve what Hays and Wood (2011) identify as the six qualitative research traditions: grounded theory, phenomenology, consensual qualitative research (CQR), ethnography, narratology, and participatory action research (PAR).

Process research has a significant history within the counseling field, notably the work of Francis P. Robinson, Ph.D. at the Ohio State University as early as 1938. Robinson’s work, and that of his first doctoral student, Elias Hull Porter, Jr., developed schemes of categorizing counselor and client behavior such that it could be observed and studied. Porter’s work (1943) derived from the first instances of recording therapeutic sessions by Earl Zinn in 1929 and the endorsement of Carl Rogers (1942).

As reviewed by Hill (1992), early empirical process research (e.g., Bergman, 1951; Robinson, 1950; Seeman, 1949; Snyder, 1945, 1963; and Strupp, 1955, 1957, 1973) examined
observable behaviors of clinicians and clients and primarily produced catalogs of behavior/response in therapeutic sessions. No apparent effort was made to determine what skills were most widely used and what, if any, effect was beneficial to the client. By 1957, Rogers had begun research into verbal and nonverbal “facilitative conditions” and how they were communicated to the client by the counselor. Subsequent process research (e.g., Carkhuff, 1969; Egan, 1975; Ivey, 1971) began to consider counselor interventions as skills that could be categorized, taught, and rated. This categorization fostered the growth of analogue process research to quantitatively evaluate the effect of particular counselor response modes. The emphasis gradually became a hybridized process-outcome approach that has become more generalized in the recent era of managed care.

Sadly, the early, prolific, and promising beginnings of process research in counseling, counselor education, and supervision appear to have peaked in the early 1980s (Murdock, 2011) and subsequently have suffered from a progressive decline in counseling research in general and a specific decrease in process research relative to outcome research (Bublotz, Miller & Williams, 1999; Mallinckrodt, 2011; Munley, 1974; Murdoch, 2011; Orlinsky, Rønnestad & Willutzki, 2004; Pachankis & Goldfried, 2007; Scheel et al., 2011b; Wampold & White, 1985). Dagley and Salter (2004) make a particularly strong summation for research in the field of career counseling, decrying the lack of detailed process descriptions of interventions and related outcomes that might permit replication, the lack of formative process evaluation for intervention quality, and the pressing need for forward-thinking research on process in cyber-counseling. Niles (2003) makes a similar argument favoring process research on current practice that might inform future practice and outcomes. Whiston et al. (1998) made a very pragmatic call for the profession to
identify which interventions work and with whom, a call that continues to be made (Norcross, 2010; Norcross & Lambert, 2011).

Given the exigencies of mandated care and a flux in medical insurance and funding, the priority of investigating the process of change has given way to the priority of documenting treatment efficacy or outcome (Laurenceau, Hayes & Feldman, 2007). From this outcome perspective, items of interest are generally seen to include input variables, such as client variables, counselor/therapist variables, and setting variables; process variables, such as the therapeutic relationship/alliance; counselor empathy, genuineness, and concreteness; and output variables, such as immediate outcome, outcome of a counseling event, session outcome, and treatment outcome (Hill, 1982). Process variables (e.g., client expectations, self-exploration, and insight) exhibit what is occurring within sessions or over the treatment period and how change comes about. Process variables such as counseling techniques may be measured both cross-sectionally and longitudinally. Outcome variables, i.e., what happened in the near-term or long-term as a result of the intervention, may require complex longitudinal study and are often so idiosyncratically distinct as to limit practical or useful generalizability to other areas of practice.

**Qualitative Research and Analysis**

Qualitative research and analysis differ in important ways from quantitative research and analysis. Zhang and Wildemuth (2009) simplify the distinctions that may pertain to the field of investigation in counselor education and supervision: (a) quantitative analysis can be used to measure; qualitative analysis can be used to evaluate meaning and context, (b) quantitative analysis is generally deductive; qualitative analysis is generally inductive, (c) the sampling techniques are different, i.e., quantitative analysis uses random sampling for inferential statistics and hypothesis testing; qualitative analysis often uses purposive, non-random samples to explore
or inform research questions, and (d) the analytic products are different, i.e., quantitative product can be manipulated with statistical methods; qualitative product is often descriptive of unique themes.

Qualitative research and analysis involves “languaged data” (Polkinghorne, 2005). Its collection and analysis methods have grown over time, primarily in the fields of sociology, education, nursing, and more recently, psychology. Qualitative research makes use of terminology borrowed from quantitative research, but the terms must be customized to the approach, the participants, the analysis, and the results. Participants in qualitative studies generally are not randomly selected so as to represent a statistically valid sample of a population; rather, they are selected in a way that their experience represents the experience being studied. The “participants” in the current study were not randomly selected; they were purposively selected based on their years of experience in the field of counseling.

Because of its sometimes demanding nature, it appears that, in general, research in the field of counseling, is on the decline, as evidenced by recent meta-analyses of published articles in the Journal of Counseling Psychology and The Counseling Psychologist (Mallinckrodt, 2011). Mallinckrodt’s analyses show that, during a 35 year period, for example, research concerning “psychotherapeutic processes” declined from 35% of all articles published from 1975 to 1979 by these journals to approximately 5% of articles published during the period 2005-2009. Further analyses suggest the decline is associated with the emergence of dominant themes in research concerning therapeutic alliance, well-being, and attachment behavior from both theoretical and outcome, rather than process, research perspectives. One notable example of trying to bridge the gap, specifically addressing counselor verbal response modes and the working alliance, comes from Multon, Ellis-Kalton, Heppner, and Gysbers (2003). The results identified statistically
significant correlations between counselor experience level and certain counselor response modes used by counselors in training. While this is encouraging as an example to the field at large, the authors note that there had been to that point only one other study of career counselor response modes (Nagel, Hoffman, & Hill, 1995).

The preferences and publishing criteria of major journals may influence what is published, when, and by whom. Yet, journals can only publish research that is performed. Ponterotto (2005) suggests that one reason for the paucity of published qualitative research may be that only about 10% of counseling psychology programs contain a required qualitative research course for doctoral students and only about 10% on average of dissertations are based on qualitative research. Surely, given the spectrum of theory/application, content/process, and multicultural dimensions of counseling, counselor education, and supervision, the opportunities for qualitative research would seem to be endless. Several recent rallying calls have gone out to encourage qualitative research in its various forms: grounded theory (Fassinger, 2005), phenomenology (Wertz, 2005), ethnographic (Suzuki, Ahluwalia, Mattis, & Quizon, 2005), narratological (Hoshmand, 2005), action-oriented (Young, Valach, & Domene, 2005), and case-study (Morrow, Allen, & Campbell, 1997).

Hill et al. (2005) make a persuasive argument in favor of the most recent addition to the field, consensual qualitative research (CQR; Hill, Thompson, & Williams, 1997), a composite of phenomenological (Giorgi, 1985), grounded theory (Strauss & Corbin, 1998), and comprehensive process analysis (Elliott, 1989). CQR has five components: semi-structured data collection techniques, multiple judges for data analysis; judging by consensus; an auditor of the judging; and the use of domains, core ideas, and cross-analysis. This proposed study will make use of these components in its examination of counselor verbal responses. The semi-structured
approach is defined by the 15 elements of the Hill Counselor Verbal Response Category System. In the Hill CVRCS model, the verbal responses are coded using multiple judges who categorize by consensus. Coding is refereed by an auditor. The categories are separated into the three domains of exploration, insight and action. The data are then cross-analyzed with quantitative and qualitative comparisons within and between the components that make up the sample.

Despite the availability of these qualitative approaches and the growing opportunity and relevance of qualitative research, Mallinckrodt (2011), Murdock (2011), and Scheel, et al. (2011a, 2011b) all assert that the observed trend away from both qualitative research in general and process research in particular within the field of counseling psychology is producing an ever increasing gap or discontinuity in the body of knowledge and the pursuit of CACREP Standards concerning “ethical and culturally relevant strategies for conducting research as it applies to counseling, counselor education, and supervision” (CACREP, 2014). The need is clear for greater inclusion of qualitative research methods in counselor education curricula and for innovative methods to demonstrate student knowledge or application of these skills.

**Counseling Competencies and Skills**

As with education in general, and most recently K-12 education, professional educators and professional organizations (e.g., CACREP, ACA, AAMFT) are now focusing on counselor “core competencies” and consequently see the need for “measures to assess the attitudes, knowledge, and clinical skills of students during and at the completion of training” (Hill & Lent, 2006; Hill, et al., 2008; Meichenbaum, 2010; Perosa & Perosa, 2010; Schaefle, Smaby, Maddux, & Cates, 2005; Swank, Lambie, & Witta, 2012; Urbani, et al., 2002). Instruments to assess these competencies include the Counseling Competencies Scale (CCS), the Counselor Skills and Professional Behavior Scale (CSPBSS), the Counseling Skills Scale (CSS), and the Skilled
Counseling Scale (SCS). These instruments are seen as ways in which students, educators, and clinical supervisors can assess fundamental, transtheoretical counseling competencies. Additional efforts have been made toward more specific examination of specific individual, higher order skills such as counselor interpretations (Auletta & Salvatore, Metroangolo, Monteforte, Pace, and Puglisi, 2012) and immediacy (Hill, et al., 2014).

Most recent counseling research, as might be imagined, appears to be driven by an emphasis on evidence-based therapies and outcome based treatment planning, which may be further motivated by the demands of managed health care. Research in counselor education certainly ought to include both quantitative and qualitative measures to capture both process and outcome.

Research in counselor supervision is becoming more quantitative in nature and outcome-oriented (Lewis, Scott, & Hendricks, 2014). Several recent studies have shown an emerging trend in clinical supervision toward competency-based approaches driven by specific knowledge, skills, and values associated with evidence-based treatment (Falender & Shafranske, 2007; Martino, 2010). This approach itself is based on competency-based supervision (Baer et al., 2007) which has been shown to improve counselor delivery of evidence-based treatments (Miller, Yahne, Moyers, Martinez, & Pirritano, 2004).

Emerging awareness of the need for cross-cultural counseling competencies, multicultural counseling competencies, and culturally appropriate intervention strategies (Worthington, R.L. & Dillon, F.R., 2011; Worthington, Mobley, Franks, & Tan, 2000; Worthington, Soth-McNett, & Moreno, 2007) presents new challenges for counselor education and supervision. These challenges include identifying the skills or competencies themselves, finding ways they might be evaluated, and finding ways to incorporate skills training into
counselor education and supervision. The Hill Counselor Verbal Response Category System (HCVRCS; Hill, et al., 1981), described below, has shown initial utility in exploring the nature and content of multicultural competence. Worthington, Mobley, Franks, & Tan (2000) used the HCVRCS in comparing the Multicultural Counseling Inventory (MCI; Sodowsky et al., 1994), the Cross-Cultural Counseling Inventory-Revised (CCCI-R; LaFromboise, Coleman, & Hernandez, 1991), the Causal Dimension Scale (CDS; Russell, 1982), the Etiology Attribution Scale (EAS; Worthington, 1995), and the Marlowe-Crowne Social Desirability Scale (SDS; Crowne & Marlowe, 1960).

Aggregating the assessments of skill utilization leads educators and supervisors toward the construct of counselor competency. More comprehensive assessments of competence, such as the Competency Evaluation Rating Forms (Kaslow, et al., 2009), a four-level “matrix model” (Snyder & Elliott, 2005), a “cube model” (Fouad, et al., 2009; Rodolfa et al., 2005) and a revised benchmarks design (Hatcher, et al., 2013) seek to quantify a skills-in-context or skills-plus evaluation of competence in professional practice (Pachana, Sofronoff, Scott, & Helmes, 2011). It appears that the time is at hand to incorporate both a reinvestigation of counselor skills and the development of procedures to incorporate those skills into practical measures of proficiency and competence, mastery, and expertise (Skovholt and Jennings, 2005).

Some research has shown that a skills-based training approach not only improves counseling student skills acquisition, but can improve counseling performance and provide a more solid structure for supervisory assessment and research analysis. (Crews, et al., 2005; Downing, Smaby and Maddux, 2001; Little, Packman, Smaby, and Maddux, 2005; Smaby and Maddux, 2011; Smaby, Maddux, Torres-Rivera and Zimmick, 1999; Urbani, Smith, Smaby, Maddux, Torres-Rivera, and Crews, 2002; Zimmick, Smaby, and Maddux, 2000). It may well
be that the process of skills acquisition leads to a persistent awareness of, and attention to, the skills in subsequent practice.

This study will be an attempt to revive interest in, and study of, a skills-based approach to counseling process research and the application of qualitative data analysis technology to that endeavor. It is likely that efforts in this area regarding current practice and technology may well inform future counselor education, supervision, and research with the advent of technology-assisted distance counseling and/or “cyber-counseling” (Fang, et al., 2013).

**Counselor Verbal Response Modes**

Since the days of Porter, numerous skill sets and appraisal tools have been developed for counselor education (Alberts & Edelstein, 1990; Ford, 1979; Hill & Lent, 2006; Porter, 1943; Smaby & Maddux, 2011). All of these are useful in the development and assessment of counselor education, counseling, and counselor supervision. An early evaluation of these tools (Elliott, et al., 1987) identified six primary therapist verbal response modes systems and measures: Hill’s Counselor Verbal Response Mode Category System (HCVRCS; Hill, 1978); Friedlander’s (1982) refinement of Hill’s rating system; Stiles’ Verbal Response Mode System (Stiles, 1978, 1979); Elliott’s Response Mode Rating System (Elliott, 1985); The Conversational Therapy Rating System (Goldberg, et al., 1984); and Mahrer’s Taxonomy of Procedures and Operations in Psychotherapy (Mahrer, 1983). Of these six systems, the system most consistently re-examined, expanded, and revised is the Hill system, most currently the Hill Helping Skills System (2014), and its precursors (1999, 2004, 2009).

While Elliott (1987) was able to claim the primacy of therapist response modes among therapist process variables, such is sadly no longer the case. As earlier noted, process research in general has declined over the last 35 years, favoring instead theoretical and outcome research.
One recent exception is a 2010 study involving observational analysis using a system of behavioral skills and qualitative data analysis software (Froján, M. X., Montaño, & Calero, 2010), deriving generally from Day’s “Reno Methodology” of analyzing verbal behavior (Day, 1976, 1983). This analysis used Catania’s taxonomy of verbal behavior (Catania 1998), from which the authors selected eight response categories (reinforcement, punishment, discriminative stimulus, elicitation, information, motivation, instruction, and other) in four stages (assessment, explanation of functional analysis and treatment, treatment, and consolidation of therapeutic change). The authors studied 16 transcripts of four participants. The authors posited their study on the assumption that a descriptive approach to the clinical phenomenon of counseling lays the groundwork for formulating a theoretical account of therapeutic change. That is, observing what happens in counseling can lead to understanding the how and why of change.

Process research can provide the descriptive building blocks for a theoretical model of change. The Hill Helping Skills System appears to have survived as a touchstone of counselor education and as a reliable tool for assessing counselor proficiency using an operationally defined set of observable counselor behaviors. It is particularly useful for the objectives of the current study because it incorporates detailed definitions of its categories and the categories are mutually-exclusive and exhaustive, that is, the units of speech are clearly defined.

The Hill Helping Skills System

The Hill Helping Skills System (2009) consists of 15 operationally-defined, mutually-exclusive verbal response modes, in 3 domains (exploration, insight, action), in 12 distinct categories. A complete description appears in Appendix A. The categories and skills are:

1. Approval and Reassurance
2. Closed Questions
3. Open Questions
4. Restatement
5. Reflection of Feelings
6. Challenge
7. Interpretation
8. Self-Disclosure
9. Immediacy
10. Information
   10a. Information about the process of helping
   10b. Facts, data, or opinions
   10c. Feedback about the client
11. Direct Guidance
   11a. Process advisement
   11b. Directives
12. Other

This categorization system only identifies the presence or absence of a particular skill; it does not provide any valuation of the quality, intensity, intent or appropriateness of the response. Hill has developed other tools and criteria based on counselor intention and client response that give expanded insight into the tone and dynamic of a therapeutic interaction. Video or in vivo observation, for example, can also add important non-verbal elements of counselor-client interactions (Luedke, 2013). While these are illuminating, their categorizing, coding, and analysis are increasingly more complex and are beyond the scope of this study.
Hill includes with the Helping Skills System an extensive array of related web forms including *Using the Helping Skills System for Research* (Web Form F) which explains collecting data, unitizing transcripts, selecting and training judges for consensual qualitative research, and determining agreement levels among judges as well as a practice transcript. This provides a comprehensive resource for counselor educators and supervisors as well as a tool kit for student/counselor self-assessment. The Hill system, as a method of consensual qualitative research, strengthens the reliability and validity of the research (Stemler, 2001).

**Transcript Analysis in Counselor Education and Supervision**

Transcript analysis is an exploratory, qualitative methodology (Garrison, 2006). Transcript analysis is often used in counselor education and lends itself quite well to counselor supervision. It can provide immediate or near-term feedback (formative) and a longer term (summative) basis for assessment and/or remediation in the attainment of student/counselor/client goals. However, audio and video recordings can contribute nettlesome confounding elements to an already subtle and complex research task (Merganthaler & Stinson, 1992). These problems, however, may be seen as problems of abundance given the alternative of having no means to observe, record, or analyze the dynamic process of counseling; of not being able to watch the game, but only being able to see the scoreboard after the game. In quantitative terms, it may be enough to know who won the game and/or what the score was. For the athletes and coaches to examine, understand, and learn from the game, to learn from the experience, they need to review the game tape (i.e., process analysis).

Zhang & Wildemuth (2009) briefly describe the process of transcript analysis: (a) prepare the data, (b) define the unit of analysis, (c) develop categories and a coding scheme, (d) test the coding scheme on a sample text, (e) code all text, (f) assess coding consistence, (g) draw
conclusions for the coded data, and (h) report methods and findings. The Hill Helping Skills System described above provides guidance on the first six elements; the application of computer-assisted qualitative data analysis software can assist in the last two elements. These last two elements are crucial if the data and results are to meet rigorous academic standards, particularly in the area of qualitative analysis. Lincoln and Guba (1985) provide four criteria for evaluating this kind of research: credibility, transferability, dependability, and confirmability. The inclusion of computer-assisted qualitative data analysis software can contribute to satisfying these four criteria.

Comprehensive transcription of counseling sessions facilitates reliability and validity in examining the overall content of the session. Note-taking and replaying of audio/video media may refresh recollection of specific events in session, and procedures such as Interpersonal Process Recall (Kagan, 1976, 1980, 1997) may invoke selective, subjective impressions of the session. With appropriate release from the client permitting recording, transcription, and research analysis of counseling sessions, the archival media can illuminate in-session, between-session, and course-of-treatment process and content. This may be of great value to the counselor, client, and researcher. While the transcript itself provides an objective, fixed record, it, too, may be susceptible to subjective impression or interpretation in the absence of an amplifying record of non-verbal behaviors, tone, and pacing.

Still, transcripts of counseling sessions, as a primary data source, can provide additional data of interest which might be useful to the counselor, counselor educator, or supervisor, since it may be more complete and less subjective than self-report information from the counselor or the client, whether gathered by survey or interview. Kim, Odallo, Thuo, and Kols (1999) identify two elements of client-provider interaction that may give additional quantitative/qualitative
information of interest. The first is interaction style, or the communication pattern, specifically: who contributed more to the conversation, who controlled the direction of the transaction, and whether the counselor and client listen to one another and respond appropriately. The second element concerned balance of talk, as a percentage of total number of verbal responses. The present study provides information on these elements qualitatively, specifically by using a variety of qualitative data displays which may provide a more immediate and intuitive grasp of the meaning of the data rather than by direct qualitative report. Using a “text portrait,” for example, an entire counseling session can be displayed, showing the aggregate total and proportion of counselor verbal responses made during the session, and also comparing them in context with the client’s contribution to the session.

**Coding Technology**

Qualitative research and analysis depends on a process of coding the collected data. The structure and use of the code must be rigorously operationalized in order to achieve and maintain validity and reliability. According to MacQueen (1998), a code includes six basic components: the code, a brief definition, a full definition, guidelines for when to use the code, guidelines for when not to use the code, and examples. Hill’s Helping Skills System, described above, includes these elements in the textbook and associated web forms.

The coding system is applied to the transcript using any of a variety of qualitative data analysis and word processing software. Several of these software packages allow the transcriptionist to simultaneously control the audio/video recording and produce the written text. This is an arduous, demanding, and error-prone process, even with the advent of higher quality and capacity digital data processing capabilities. The transcription/editing/review process can take hours or days before a final transcript is available for coding using extant CAQDA software
such as ATLAS.ti, NUD*IST, NVivo, Transana, XSight, or MAXQDA and various transcription, statistical analysis, coding and display technologies. Even though these technologies exist and are improving, they still do not appear to be widely used in research or practice, at least in the field of family therapy (Humble, 2012). Humble reports that in a survey of five mainstream family journals over the period 1991 to 2010, 11.2% of the journal articles involved qualitative research. Of those articles, approximately 23.2% reported using qualitative data analysis software, although the percentage increased from 19.4% in the 2001-2005 period to 26% in the 2006-2010 period.

Newman and Abney (2005) demonstrated an improvement in the application of technology to the study of counselor skills and its application in counselor education and supervision. In this study, the supervisor’s review of student counselor videotapes was augmented by digital video editing to provide feedback to the student. While this was certainly innovative, it still tends to focus on sequential examination of instants of application of a microskill, what might be called the “trees,” without allowing for comprehensive examination and display of the utilization of all skills in a session, i.e., the “forest.”

Recent technologies allow for direct audio-to-text transcription using voice recognition software such as Dragon NaturallySpeaking, and more recently wireless applications such as Evernote for Android, Voice Assistant, and SpeechExec, that convert audio input to Word/Mac text. In the future, this may allow for more rapid and reliable transcription of counselor verbal responses for subsequent qualitative, process analysis. This “hands-off” transcribing process might encourage more frequent formal and/or informal review of skill utilization in counseling sessions. As mentioned above, this would provide another means to show where skills training is covered in the counselor education curriculum and to provide evidence of student knowledge
or application of these skills for self-monitoring and/or evaluation by counselor educators or supervisors.

Unfortunately, for the present, no qualitative data analysis software technologies currently allow for speech-to-transcript with auto-coding for qualitative/quantitative analysis purposes. Future challenges in the conversion of speech to coded data will involve items identified by Roter (2002), including dyadic (e.g., counselor/client) verbal exchanges, triadic (e.g., counselor/adolescent/parent) exchanges, unitizing non-coded expressions (e.g., minimal verbal encouragers, crying), and separating or sequencing speakers by speaker turn and dealing with cases of interruption.

In the proposed study, coding is done without use of this improved or advanced technology and is applied to only one speaker (i.e., the counselor) using an existing valid and reliable transcript, and coding the verbal responses defined by the Hill Counselor Verbal Response Category System. Coding is applied to an archive of 30 existing session transcripts. The remaining 10 transcripts were produced using traditional playback transcription of the counseling video recordings prior to coding. As mentioned above, future research may be able to employ and benefit from improved technology to produce transcripts in vivo for more near-term feedback or analysis.

**The Construct of Expertise or Competence**

Expert performance has been defined as a combination and a function of talent, instruction and practice (Lichtenberg, 1997). Counselor educators and counselor supervisors see this every day. The findings from this study add to the body of knowledge regarding the acquisition and application of counseling skills, the attainment and maintenance of proficiency in counseling and counselor supervision, and the expanding exploration of what constitutes
counselor/supervisor competence. As counselor educators, we certainly expect a certain core of competence with recognized and accepted counseling and supervision skills. More recently, the need for practitioners who are technologically competent, multiculturally competent, and ethically competent has received well-deserved attention and emphasis. This stated need speaks to professional self-awareness, but also provides a substantial challenge since competence itself is a widely disparate, multivariate, multi-dimensional, and multi-method construct. Any attempt to quantify, describe or define competency demands dynamic input across a range of perspectives at all levels of the profession (Roberts, Borden, Christiansen, & Lopez, 2005). Key here, perhaps, is the notion of continuity of assessment. If professional competence exists on a continuum, the need for a continuum of professional development and assessment is clear. One of the goals of this study is to suggest a model of career-long assessment and self-monitoring of proficiency. Dr. Paul Nelson of the American Psychological Association (Nelson, 2007), suggests, “If competence is a developmental construct, … our system for the assessment of competence across professional careers needs to be dynamic and continuous” (p. 10).

The objectives of professional competence extend to the field of counselor education as well. The proposed 2016 CACREP standards reflect broader expectations in the development of competence and identity for the institution, the academic unit, faculty and staff, the classroom student, the practicum student, the supervisor, and the doctoral student. Similarly, these standards speak to assessment/evaluation protocols. Again, this current study may offer suggestions that could be of use in anticipating and meeting the expectations of CACREP related to all aspects of counselor education and supervision.

Competence, mastery, and expertise are results of both training and experience. Counselor educators and professional associations focus intently on the content and duration of
training. Experience, of course, takes time and deliberate practice. As a general rule, recognized competence or expertise takes about ten years in any given domain (Bryan & Harter, 1899; Ericsson, 2006; Ericsson, Krampe, & Tesch-Römer, 1993).

While the focus of the current study is on counselor verbal response modes, i.e., counselor skills, little has been done in terms of supervisor skills. As Goodyear and Guzzardo (2000) point out, supervision models tend not to be prescriptive to a level comparable to counselor verbal response skills. Neither is the supervision process manualized, nor is it necessarily well-suited to outcome studies. Findings from this study provide rich opportunities for the next generation of qualitative process research studies in counselor supervision.

**Summary**

This study is a process analysis of counselor verbal response modes across experience levels using qualitative data analysis software. The literature review has summarized the areas of process research, qualitative research and analysis, counseling competencies and skills, counselor verbal response modes, the Hill Helping Skills System, transcript analysis, coding technology, and the construct of expertise or competence in counseling.

The present study, using archival transcripts, describes counselor verbal response modes in a more naturalistic or quasi-naturalistic setting, devoid of external constraints which might alter or confound the observations or results. Using qualitative data analysis software, the analysis discovers, reveals, and documents individual skills used and also distinctive patterns of skill use. Using a mixed-methods approach, the quantitative data includes total number of verbal responses and the sub-totals for the individual verbal response mode categories. Those totals are aggregated for each experience level and used in quantitative statistical analysis. The qualitative data analysis tools graphically display not only the amount of responses, but also the amount,
proportion and pattern of skill use. This procedure identifies, differentiates, and compares skill use among and between experience levels. A comparison of these individual skills and patterns is an essential part of this study and permits greater generalizability of the results of the study to other settings.

An additional result of the current study is to revive the application of process research methods in the field of counseling, counselor education and supervision, with an emphasis on qualitative data analysis of fundamental therapeutic skills that can be a basis for training, evaluation, and self-monitoring.

In the field of counseling, counselor education and supervision, the future is now. What we do today has immediate and lasting impact. The changes we make as counselors, counselor educators and supervisors will ripple and echo through our clients, students, interns and colleagues. As evidenced by the proposed changes to CACREP Standards, the profession will be expected to acquire and maintain more rigorous and diverse proficiency in the areas of professional counseling orientation and ethical practice, social and cultural diversity, human growth and development, career development, helping relationships, group work, assessment and testing, and research and program evaluation (CACREP, 2014). Moreover, this proficiency will have to be employed in a more dynamic and demanding environment, whether it be the classroom, the group room, or the chat room.
CHAPTER THREE

METHODOLOGY

The procedure is a cross-sectional, mixed methods, prospective, process research study to discover, determine, and document differences and similarities in counselor verbal response usage by groups of counselors with varying years of experience in the field. The study explores four experience levels cross-sectionally using existing archival transcripts for three experience levels and transcripts of recent Master’s level candidates’ Comprehensive Examination counseling sessions for the fourth experience cohort. The sessions produced transcripts for qualitative data analysis and computer-assisted qualitative data analysis software to aggregate and display quantitative and qualitative data outputs. The research design is descriptive and passive-observational, that is, the investigation does not seek to intervene, manipulate, or control the setting or behavior nor does it manipulate or control the observed process variables.

Investigating counselor behaviors in this way permits addressing two important questions. First, in the presence of statistically significant quantitative differences in counselor behaviors in experience-level cohorts, can these differences be used to inform counselor education and supervision? Second, can the type, frequency, and/or pattern of counselor verbal responses be captured qualitatively using available technologies to facilitate the application of pattern-usage awareness in counselor education and supervision? These two questions, provide the basis for subsequent discussion, and point the way to future research.

Data

The data consists of forty (40) transcripts of individual counseling sessions divided into four categories of ascending experience, experience level EL1 through experience level EL4: EL1 consists of Master’s degree candidates as observed in comprehensive examination recorded
counseling sessions; EL2 consists of early practitioners, i.e., 1 to 10 years of experience; EL3 consists of experienced practitioners, i.e., 10 to 20 years of experience; and EL4 consists of peer-identified expert counselors. These selections broadly include and represent a diversity of age, gender, and theoretical foundation for the counselors. The 10-year increments were reflective of existing studies of competence and expertise (Bryan & Harter, 1899; Ericsson, 2006; Ericsson, Krampe, & Tesch-Römer, 1993). Selections were made based on suitability of the counseling encounter, duration of the session, quality and duration of the recording, and determination of the representative nature of the selection. The counselors all provided additional information regarding education level and preferred or intended theoretical orientation/foundation used in the session. The relevant metadata is displayed in Table 1.

The data include existing counseling session transcripts from publicly available sources in the case of the Alexander Street Press transcripts of Experience Level 2, Level 3, and Level 4 counseling sessions. The data from the existing EL1 transcripts have been recorded in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects. All of the data, documents, records or specimens were in existence prior to the beginning of this research project. Consequently, this research project has been approved for Exemption Category 4 by the researcher’s University Research Integrity Office. The researcher has completed the Collaborative Institutional Training Initiative course.

Experience Level 1, EL1, transcripts were selected by convenience sampling from recent Master’s degree candidate comprehensive examination video submissions by students enrolled at a major Western U.S. land grant university in a CACREP-accredited Counseling & Educational Psychology program. The sample includes 5 female and 5 male counselors (2 per semester) in
sessions from Fall, 2009 to Spring, 2012. These transcriptions will be in accordance with the
procedures described below.

Table 1.  
*Experience Level, Theoretical Approach, and Counselor Education Level.*

<table>
<thead>
<tr>
<th>Experience Level, Theoretical Approach, Counselor Education Level</th>
<th>Level</th>
<th>No.</th>
<th>Theory</th>
<th>Ed. Level</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>EL 1</em></td>
<td></td>
<td>1</td>
<td>Existential/Humanistic</td>
<td>MA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>ACT</td>
<td>MA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>Reality Therapy</td>
<td>MA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>Person-Centered</td>
<td>MA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>REBT</td>
<td>MA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>Reality Therapy</td>
<td>MA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7</td>
<td>Person-Centered</td>
<td>MA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8</td>
<td>REBT</td>
<td>MA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
<td>Existential (TA)</td>
<td>MA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
<td>Choice/Reality</td>
<td>MA</td>
</tr>
<tr>
<td><em>EL 2</em></td>
<td></td>
<td>1</td>
<td>BRT/CBT</td>
<td>PhD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>BRT</td>
<td>PhD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>BRT</td>
<td>PhD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>CBT</td>
<td>PhD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>BRT/Pharm</td>
<td>PhD</td>
</tr>
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<td>6</td>
<td>BRT</td>
<td>PhD</td>
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<tr>
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<td></td>
<td>7</td>
<td>CBT</td>
<td>PhD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8</td>
<td>BRT</td>
<td>MA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
<td>BRT</td>
<td>MA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
<td>BRT/CBT</td>
<td>PhD</td>
</tr>
<tr>
<td><em>EL 3</em></td>
<td></td>
<td>1</td>
<td>12Step</td>
<td>MA</td>
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<tr>
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<td>3</td>
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<tr>
<td></td>
<td></td>
<td>5</td>
<td>BRT/Behavioral</td>
<td>MA</td>
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<td></td>
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<td>6</td>
<td>Behavioral</td>
<td>MA</td>
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<tr>
<td></td>
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<td>7</td>
<td>Pharmacotherapy</td>
<td>MD</td>
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<tr>
<td></td>
<td></td>
<td>8</td>
<td>Pharmacotherapy</td>
<td>MD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
<td>Pharmacotherapy</td>
<td>MD</td>
</tr>
<tr>
<td></td>
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<td>10</td>
<td>Pharmacotherapy</td>
<td>MD</td>
</tr>
<tr>
<td><em>EL 4</em></td>
<td></td>
<td>1</td>
<td>Integrative</td>
<td>PhD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>Person-Centered</td>
<td>PhD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>Family System</td>
<td>PhD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>Integrative</td>
<td>PhD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>Solution-Focused</td>
<td>MSSW</td>
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<tr>
<td></td>
<td></td>
<td>6</td>
<td>CBT</td>
<td>PhD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7</td>
<td>Narrative</td>
<td>PhD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8</td>
<td>Transactional Analysis</td>
<td>MD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
<td>Existential-Humanistic</td>
<td>PhD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
<td>Mind-Body</td>
<td>PhD</td>
</tr>
</tbody>
</table>

ACT-Acceptance and Commitment Therapy, REBT-Rational/Emotive Behavioral Therapy, TA-Transactional Analysis, BRT-Brief Relational Therapy, CBT-Cognitive Behavioral Therapy, Pharm-Pharmacotherapy, Behavioral Therapy
Experience Level 2, EL2, transcripts were selected from an existing, publicly available electronic database, the Alexander Street Press collection, Counseling and Psychotherapy Transcripts, Client Narratives, and Reference Works (retrieved from http://asp6new.alexanderstreet.com/psyc/psyc.index.map.aspx), further described below. EL2 practitioners have fewer than 10 years of experience, graduate or other advanced degrees, and appropriate credentials.

Experience Level 3, EL3, transcripts were selected from the same open source, commercial database as above. EL3 denotes experienced practitioners with between 10 and 20 years of experience, appropriately credentialed, with graduate or advanced degrees.

Experience Level 4, EL4, transcripts were selected from the same open source transcript database as above. Counselors have been classified as peer-identified subject-matter experts using snowball sampling, and are included in a collection, *Psychotherapy with the Experts* (Kottler, 1997).

The 30 EL2, EL3, and EL4 transcripts, drawn from the Alexander Street Press archives, were professionally transcribed and include counselor and client verbal responses. The 10 EL1 transcripts were transcribed by the researcher, validated by one of the judges in an earlier pilot study, and entered into a database.

Individual session transcripts were “unitized,” i.e., broken down into verbal response units following the guidelines of the Hill Helping Skills System, as described below. These units are generally grammatical sentences. The unitized transcripts are “coded” in accordance with an identified skill set, allowing comparison of counseling skill usage within and between levels.
The unitization and coding of the transcripts by the researcher were validated by one of the judges from the earlier pilot study to avoid “rating drift.”

The Counseling Skill Set

The current study categorizes counselor verbal responses using the Hill Helping Skills System (HSS; Hill, 2009). The HSS has 12 categories and 15 distinct skills (see Figure 1), and was selected for its inclusive and representative model, its carefully researched and documented development, and its apparent reliability, validity and generalizability in counseling psychology research. This version of the Hill Helping Skills System (HSS) includes a series of downloadable web forms and tools, specifically the “Helping Skills System” itself (Web Form E, retrieved from http://forms.apa.org/books/supp/hill3/pdf/student/webformE.pdf), a listing of 12 mutually exclusive skills, a short definition of the skill’s characteristics, and several notional examples of the skills as they would appear in a counseling session transcript. This form is used by the rater/judge while coding the verbatim transcripts and while processing the coded transcript using qualitative data analysis software. Another web form tool component of the Helping Skills System, “Using the Helping Skills System for Research” (Web Form F, retrieved from http://forms.apa.org/books/supp/hill3/pdf/student/webformF.pdf), provides specific and detailed descriptions of the procedures involved: data collection, unitizing transcripts, training judges, and determining inter-rater agreement. The Helping Skills System includes additional forms for use by the client, helper, or supervisor, some designed specifically for evaluating process in counseling. The Hill Helping Skills System operationalizes the construct of identifiable, quantifiable counselor skills and the component skills. The skills are listed in Table 2. The procedure used in the present study conforms to the HSS.
### Table 2

*Helping Skills System (Hill, 1999)*

<table>
<thead>
<tr>
<th>Skill</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Approval and</td>
<td>Provides emotional support, reassurance, encouragement, reinforcement.</td>
</tr>
<tr>
<td>Reassurance</td>
<td></td>
</tr>
<tr>
<td>2. Closed Questions</td>
<td>Requests limited or specific information or data, usually a one- or two-word answer, a “yes” or “no,” or a confirmation.</td>
</tr>
<tr>
<td>3. Open Questions</td>
<td>Asks the client to clarify or to explore thoughts or feelings.</td>
</tr>
<tr>
<td>4. Restatement</td>
<td>A <em>simple</em> repeating or rephrasing of the content or meaning of the client’s statement(s) that typically contains fewer but similar words and usually is more concrete and clear than the client’s statement.</td>
</tr>
<tr>
<td>5. Reflection of Feelings</td>
<td>A <em>repeating</em> or rephrasing of the client’s statements, including an explicit identification of the client’s feelings.</td>
</tr>
<tr>
<td>6. Challenge</td>
<td>Points out <em>discrepancies</em>, contradictions, defenses, or irrational beliefs of which the client is unaware, unable to deal with, or unwilling to change.</td>
</tr>
<tr>
<td>7. Interpretation</td>
<td>Goes <em>beyond</em> what the client has overtly stated or recognized and gives a new meaning, reason, or explanation for behaviors, thoughts, or feelings so the client can see problems in a new way.</td>
</tr>
<tr>
<td>8. Self-Disclosure</td>
<td><em>Reveals</em> something personal about the helper’s non-immediate experiences or feelings.</td>
</tr>
<tr>
<td>9. Immediacy</td>
<td>Discloses helper’s immediate feelings about self in relation to the client, about the client, or about the therapeutic relationship.</td>
</tr>
<tr>
<td>10. Information</td>
<td></td>
</tr>
<tr>
<td>a. Information about</td>
<td>Procedural guidance.</td>
</tr>
<tr>
<td>the process of helping</td>
<td></td>
</tr>
<tr>
<td>b. Facts, data, or</td>
<td>Helper’s information.</td>
</tr>
<tr>
<td>opinions</td>
<td></td>
</tr>
<tr>
<td>c. Feedback about the</td>
<td>Generally regarding affect or behavior.</td>
</tr>
<tr>
<td>client</td>
<td></td>
</tr>
<tr>
<td>11. Direct Guidance</td>
<td></td>
</tr>
<tr>
<td>a. Process advisement</td>
<td>Suggestions, directives, instructions or advice about what the client should do (generally internal and/or in the present).</td>
</tr>
<tr>
<td>b. Directives</td>
<td>Suggestions, directives, instructions or advice about what the client should do to change (generally external and/or in the future).</td>
</tr>
<tr>
<td>12. Other</td>
<td>Includes helper statements that are unrelated to the client’s problems.</td>
</tr>
</tbody>
</table>
Data Representation

The data are represented using MAXQDA$^{10}$, a proprietary, professional software package for qualitative and mixed methods data management and analysis ("MAXQDA, The Art of Data Analysis," 2014). The software records frequency counts for unitized or quantized data and provides visual displays of individual and overall data elements, specifically “text portraits,” a graphic representation or visual map of all skills used during an entire counseling session. The combined displays show not just “how many” skills were used, but “how and when,” that is, in what combination, order and duration the skills were used. This permits rapid comparison within and between levels of experience. The software also allows for subsequent automated searches in the transcripts for specific words, phrases, or themes of interest. An example of the MAXQDA$^{10}$ dashboard displays with coded units is shown in Figure 1.

Figure 1. MAXQDA Code Bar, Code System, Document Browser, and Retrieved Segments.

The top left window of the MAXQDA$^{10}$ display identifies which documents and code sets are in use. The top right window is a line-by-line coded transcription of the text document.
The lower left window displays the code system and individual code elements with cumulative totals of coded units. The lower right window displays individual retrieved coded segments. These segments may be catalogued or sorted to assist in content analysis and display of significant areas of interest in the transcript. These may also be aggregated and displayed with similar segments from other transcripts within or between experience cohorts.

MAXQDA\textsuperscript{10} is fully interoperable with Microsoft Office and Apple word processing packages as well as common quantitative analysis tools such as SPSS and Excel. It consists of both quantitative and qualitative toolsets. Perhaps most strikingly, MAXQDA permits powerful and effective visual displays of data and analytic comparisons.

MAXQDA\textsuperscript{10} was selected mainly because of the visual tools available in the program. Specifically, the document portrait function creates a picture of all the coded segments, or skills, based on the order and colors of the codes. Since a different color is assigned to each skill category, one can clearly and easily see which skills are used in each session and in what sequence. Figure 2 shows the color assignments for the Helping Skills displayed in the MAXQDA\textsuperscript{10} Code Bar.

\begin{figure}[ht]
\centering
\includegraphics[width=0.5\textwidth]{maxqda_code_bar.png}
\caption{MAXQDA10 Code Bar color assignments.}
\end{figure}
For example, if a counselor asks an open question (Skill 3, coded red), and then immediately after asks a closed question (Skill 2, coded aqua blue), one can easily identify this sequence in the portrait. If the counselor provides facts, data or opinion (Skill 10b, coded gray) for most of the session, the portrait will be dominated by the color gray. The immediate skill pattern recognition is valuable because no recalling or rewinding was needed—the entire session is viewable in one glance. In this view the colors are displayed in a matrix with 1,200 squares arranged in 30 rows of 40 squares each. All 1,200 squares are divided proportionately among coded segments. For example, if there were only two coded skills, 600 squares would be one color and 600 would be the other color. Seeing the picture of the entire counseling session allows side-by-side comparisons in order to compare the skill type and frequency of counselors at different experience levels. MAXQDA\textsuperscript{10} does this by creating a picture of all the coded segments based on the order and colors of the codes.

Figure 3 shows a side-by-side comparison of a line-by-line coded script and the associated text portrait in a 30x40 matrix.

![Color-coded Script and Document Portrait](image)

*Figure 3.* Color-coded transcript with associated text portrait.
Figure 4 shows counselor-speaking units only compared with counselor-speaking and counselor-listening (client-speaking) units in the same session.

*Figure 4.* Counselor-Speaking portrait and Counselor-Speaking & Listening.
Figure 5 shows a comparison of text portraits from a session by a novice counselor-in-training and a session by an expert counselor.

![Comparison of EL1 and EL4 text portraits.](image)

**Figure 5.** Comparison of EL1 and EL4 text portraits.

**Data Analysis**

The data in the study consists of raw frequency counts for individual use of 15 counselor verbal response modes during a complete counseling session, i.e., SK1 through SK9, SK10a, SK10b, SK10c, SK11a, SK11b, and SK12. Frequencies were aggregated, by skill, for each Experience Level. Additional data were drawn from the individual text portraits produced by MAXQDA\textsuperscript{10}. Each text portrait depicts the counseling session displayed across a 30x40 element matrix. The resultant 1200 elements represent approximately 3 seconds of a 60 minute session.
The counselor-speaking portrait yields the proportion of the session in which the counselor used a given skill moment by moment. The counselor-listening/client-speaking portrait yields the amount of time the counselor used a given skill as a proportion of the overall counselor/client interaction.

Data analysis in this study includes standard quantitative descriptive statistics for the aggregated data, principally to address Research Questions 1 and 2. Analysis of the counselor verbal responses required non-parametric analysis since preliminary examination reveals unequal \( n \) for 15 response categories in the individual session transcripts. Some counselors used more or less verbal responses and verbal response modes than others and some sessions were of longer or shorter duration than others. The aggregated total responses for each Experience Level also demonstrated non-normal distribution and lacked homogeneity of variance.

The four Experience Levels were compared using visual frequency, sequence and pattern examination of the associated text portraits produced using the MAXQDA\(^1\) data analysis software, principally to address Research Questions 3 and 4. This analysis revealed non-normal distribution and lack of homogeneity of variance for counselor-speaking counts and the counselor-listening/client-speaking counts and ratios for each 1200-element portrait.

Quantitative and qualitative examination of the data results for the EL1 and EL4 categories was directed to address Research Question 5 for consideration of significant differences between the Masters-level students and the peer-identified expert group.
CHAPTER FOUR

RESULTS, DATA ANALYSIS AND INTERPRETATION

The purpose of this study was to examine whether differences exist in the frequency, sequence, or patterns of use of a given set of counseling skills by counselors with different levels of experience. The analysis was performed on 40 transcripts of counseling sessions conducted by counselors separated into four experience levels: sessions by 10 Master’s level graduate students (Experience Level 1, EL1), sessions by 10 practicing counselors with between 1 and 10 years’ experience (Experience Level 2, EL2), sessions by 10 practicing counselors with between 10 and 20 years’ experience (Experience Level 3, EL3), and sessions by 10 counselors categorized as peer-identified expert counselors (Experience Level 4, EL4). The results of hypotheses testing are presented first, followed by post hoc analyses and interpretations of the data.

Hypothesis Test Results

Hypothesis 1 considered whether there are differences in frequency, sequence, or patterns of use of a given skill set by counselors of differing experience levels. Hypothesis 2 considered whether there are identifiable differences in skill set use between expert and novice counselors.

Hypothesis One

Hypothesis 1 and Research Questions 1 and 2 concerned differences in frequency, sequence, or patterns of skill set use by counselors with differing experience levels. Through purposive sampling, groups of counselors were selected into four categories: Master’s Level graduate students, counselors with 1-10 years’ experience, counselors
with 10-20 years’ experience, and a group of peer-identified expert counselors. These independent groups did not meet necessary assumptions for parametric or inferential statistical analysis, specifically, coded skill use by the four groups were of unequal \( n \), were not normally distributed, and did not exhibit homogeneity of variance. Subsequent nonparametric analysis of the data for Hypothesis 1 is shown in Table 3. Results in which the probability of error level, \( p \), is less than or equal to .05 are shown in bold font.

Table 3.

<table>
<thead>
<tr>
<th></th>
<th>SK1</th>
<th>SK2</th>
<th>SK3</th>
<th>SK4</th>
<th>SK5</th>
<th>SK6</th>
<th>SK7</th>
<th>SK8</th>
<th>SK9</th>
<th>SK10a</th>
<th>SK10b</th>
<th>SK10c</th>
<th>SK11a</th>
<th>SK11b</th>
<th>SK12</th>
</tr>
</thead>
<tbody>
<tr>
<td>df</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.055</td>
<td>.482</td>
<td><strong>.001</strong></td>
<td>.003</td>
<td>.629</td>
<td>.225</td>
<td><strong>.000</strong></td>
<td>.561</td>
<td>.191</td>
<td>.048</td>
<td>.594</td>
<td><strong>.022</strong></td>
<td><strong>.000</strong></td>
<td>.079</td>
<td>.921</td>
</tr>
</tbody>
</table>

a. Kruskal Wallis Test  
b. Grouping Variable: Tier

Significant differences exist between the four Experience Levels in mean scores for six skills in the Hill Helping Skills System (HSS): Skill 3, Open Questions; Skill 4, Restatement; Skill 7, Interpretation; Skill 10a, Information about the Process of Helping; Skill 10c, Feedback about the Client; and Skill 11a, Process Advisement. The null hypothesis, \( H_0 \), is rejected and the alternative hypothesis, \( H_a \), is supported for these comparisons.

**Hypothesis Two**

Hypothesis 2 and Research Question 3 concerned identifiable differences in skill set use between the least experienced and the most experienced counselors. As above, the data did not meet necessary assumptions; these data are of unequal \( n \), are not
normally distributed, and are heteroscedastic. Subsequent nonparametric analysis of the data for Hypothesis 2 is shown in Table 4. Results in which the probability of error level, \(p\), is less than or equal to .05 are shown in bold font.

Table 4. 
*Nonparametric ANOVA of Skill Set use by Experience Levels 1 and 4.*

<table>
<thead>
<tr>
<th>SK1</th>
<th>SK2</th>
<th>SK3</th>
<th>SK4</th>
<th>SK5</th>
<th>SK6</th>
<th>SK7</th>
<th>SK8</th>
<th>SK9</th>
<th>SK10a</th>
<th>SK10b</th>
<th>SK10c</th>
<th>SK11a</th>
<th>SK11b</th>
<th>SK12</th>
</tr>
</thead>
</table>

Significant differences exist between Experience Levels 1 and 4 in mean scores for five skills in the Hill Helping Skills System (HSS): Skill 1, Approval and Reassurance; Skill 3, Open Questions; Skill 4, Restatement; Skill 7, Interpretation; and Skill 11a, Process Advisement. The null hypothesis, \(H_0\), is rejected and the alternative hypothesis, \(H_a\), is supported for these comparisons.

**Summary of Significant Quantitative Analysis Results**

The frequency data was compiled and entered into the IBM SPSS statistical package for analysis. The initial analysis across all four Experience Levels revealed significant differences in the mean frequency of use of six of the skills in Hill’s (2009) Helping Skills System: Skill 3, Open Questions; Skill 4, Restatement; Skill 7, Interpretation; Skill 10a, Information about the Process of Helping; Skill 10c, Feedback.
about the Client; and Skill 11a, Process Advisement. The differences for each skill are shown in Figures 6 through 11 and are aggregated in Figure 12.

**Figure 6.** Use of Skill 3 by all Experience Levels. Differences between levels is significant \( (p \leq .001) \)

**Figure 7.** Use of Skill 4 by all Experience Levels. Differences between levels is significant \( (p \leq .003) \)
Figure 8. Use of Skill 7 by all Experience Levels. Differences between levels is significant ($p \leq .001$)

Figure 1. Use of Skill 10a by all Experience Levels. Differences between levels is significant ($p \leq .048$)
Figure 10. Use of Skill 10c by all Experience Levels. Differences between levels is significant ($p \leq .022$)

Figure 2. Use of Skill 11a by all Experience Levels. Differences between levels is significant ($p \leq .001$)
Figure 12. Use of all Significant Skills by all Experience Levels.

When comparing only the significantly differing skills across Experience Levels and when comparing only Experience Levels 1 and 4, more similarities may be noted. Figures 13 and 14 show the differences in significant skills by Experience Level.
Figure 33. Use of Significant Skills - All Experience Levels.

Figure 44. Use of Significant Skills - EL 1 & EL 4 only
Research Question 3 concerned analysis across only Experience Levels 1 and 4 to compare the least-experienced and most-experienced counselors. This analysis showed significant differences in the mean frequency of use of five of the skills in Hill’s (2009) Helping Skills System: Skill 1, Approval and Reassurance; Skill 3, Open Questions; Skill 4, Restatement; Skill 7, Interpretation; and Skill 11a, Process Advisement. The differences are aggregated in Figure 15.

**EL 1 & 4 Significant Skills**

![Bar chart showing significant skills for Experience Levels 1 and 4.](image)

*Figure 55. Significant Skills for Experience Levels 1 and 4.*

As previously discussed, the path or pattern of skill use may be as informative as the display of frequency data in suggesting similarities and trends in skill use by differing Experience Levels. A different comparison of Experience Levels 1 and 4 is shown in Figure 16.
The six skills identified by Hypothesis 1 and Research Questions 1 and 2 (SK3, Sk4, SK7, SK10a, SK10b, and SK11A) were found to be significant when comparing all four Experience Levels and fall into the three stages (Exploration, Insight, Action) of the Hill Helping Skills System (HSS): Skill 3, Open Question, is used in the Exploration, Insight, and Action stages; Skill 4, Restatement, is used in the Exploration stage; Skill 7, Interpretation, is used in the Insight stage; Skill 10a, Information about the Process of Healing, is used in Action stage; Skill 10c, Feedback about the Client, is used in the Exploration stage; and Skill 11a, Process Advisement, is used in the Action stage.

The five skills identified by Hypothesis 2 and Research Question 3 (SK1, SK3, SK4, SK7, and SK11a) were found to be significant when comparing Experience Levels
1 and 4 and fall into Hill’s three stages as noted above. Experience Level 4 consistently uses these five skills at significantly higher frequency.

Skill 1, Approval and Reassurance, or empathic collaboration, is seen by Hill to be a major and necessary feature of all stages of the model. The other significant skills appear in stages consistent with Hill’s model and others, e.g., the Smaby & Maddux Skilled Counselor Training Model (2011).

A Discriminant Analysis to see if group membership (EL) could be predicted from skill use showed Open Questions (SK3), Reflection of Feelings (SK5), and Interpretation (SK7) appeared to have the most predictive power. Using only these as the Independent Variables, and Experience Level as the Grouping Variable, subsequent discriminant analysis revealed that these three skills were responsible for correctly classifying 72.5% of the sample by experience level ($\Lambda=.202$, $\eta^2=56.771$). The results are shown in Table 5.

Table 5. Discriminant Analysis of Counselor Verbal Response Modes.

<table>
<thead>
<tr>
<th>Tier</th>
<th>Comps</th>
<th>Early</th>
<th>Mid</th>
<th>Expert</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Count</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comps</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Early</td>
<td>0</td>
<td>7</td>
<td>3</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Mid</td>
<td>0</td>
<td>2</td>
<td>8</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Expert</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comps</td>
<td>.0</td>
<td>20.0</td>
<td>20.0</td>
<td>.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Early</td>
<td>.0</td>
<td>.0</td>
<td>70.0</td>
<td>.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Mid</td>
<td>.0</td>
<td>20.0</td>
<td>.0</td>
<td>80.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Expert</td>
<td>.0</td>
<td>20.0</td>
<td>.0</td>
<td>80.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

a. 72.5% of original grouped cases correctly classified.
Summary of Qualitative Analysis Results

Research Question 4 concerned the use of Qualitative Data analysis in this study. Data for this study were compiled using the outputs of the MAXQDA\textsuperscript{10} computer-assisted qualitative data analysis software (CAQDAS) package. The 40 transcripts were entered into MAXQDA\textsuperscript{10} and coded in accordance with the Hill Helping Skills System (HSS). The qualitative analysis was performed using a variety of outputs from MAXQDA\textsuperscript{10}, notably a visual display or “Text Portrait”. This portrait allows the display of the cumulative occurrence of coded elements in an entire counseling session. MAXQDA\textsuperscript{10} transforms a literal transcript into a visual transcript of the entire session displayed on one page consisting of a 30-by-40 unit matrix. Each coded unit of the counselor’s verbal responses is color-coded to represent one of the specified counselor skills. The resulting 1200-element matrix displays the quantized coded elements as a proportion of the counseling session. In a 60-minute session, for example, each color-coded element represents approximately three seconds of time.

The color-coded text portraits can be displayed and examined in two different formats. The first format is a representation of only the counselor’s verbal responses for the entire session. This display, or perspective, represents how the session might have been experienced by the counselor and perceived by the client.

The second format represents the color-coded elements of the counselor’s verbal responses, but also includes as blank, uncoded units the units of time in the session when the counselor is not speaking, but listening, i.e., when the client is speaking. This display or perspective represents how the session might have been experienced or perceived by an outside observer, for example, by the counselor educator or counselor supervisor reviewing the session. Rather than listening or watching the session, or reading the transcript, the observer is able to see
the repertoire of counselor skills used in a session. A representative portrait pair for a single complete counseling session is shown in Figure 17.

![MAXQDA Text Portraits](image)

**Figure 77.** Representative text portrait pair for one session.

These displays allow for an observer or evaluator to consider whether significant sequences or patterns of skill use occur during a given counseling session or whether these sequences or patterns might be characteristic of an individual counselor, theoretical orientation, or Experience Level. Samples for the current study included four groups of 10 counselors arranged by Experience Level. Metadata for each transcript identifies the theoretical foundation declared by the counselor. Theoretical orientations declared by the counselors in the transcribed
sessions included the following: Existential/Humanistic, Acceptance and Commitment Therapy (ACT), Reality Therapy, Person-centered counseling, Rational Emotive Behavior Therapy (REBT), Existential, Transactional Analysis (TA), Brief Relational Therapy (BRT), Cognitive Behavioral Therapy (CBT), a 12-step cognitive behavioral therapy, Pharmacotherapy, Integrative counseling, Family Systems therapy, Solution Focused therapy, and Narrative therapy.

Each of these therapeutic orientations can exhibit some foreseeable characteristics in text portraits. Person-centered counseling would be expected to exhibit more instances of SK3 Open Questions, SK4 Restatement, SK5 Reflection of Feelings, SK9 Immediacy and perhaps SK10c Feedback about the Client. These are consistent with the theoretical foundation and contribute strongly to the development of a therapeutic bond. Cognitive Behavioral therapy, for example, might be expected to exhibit more instances of SK2 Closed Questions, SK6 Challenge, SK 10b Facts, Data, or Opinion, and SK11b Directives.

An extensive analysis of sequences, patterns, or time of occurrence within a stage of the session did not yield significant results. No particular sequence or duration of skills was consistent between or within Experience Levels. Neither was the relative time of occurrence within a session found to be consistent, specifically whether a sequence or pattern of skills appearing in the first half, third, or quarter of a session or whether patterns were repeated within or between sessions and Experience Levels. No discernible sequence or patterns appeared to be characteristic. Transcript comparisons were facilitated using the Document Comparison Chart utility in MAXQDA\textsuperscript{10} as well as side-by-side comparison of text portraits. The Document Comparison Chart for Experience Levels 1 through 4 is shown in Figure 18. The Document Comparison Chart for Experience Levels 1 and 4 is shown in Figure 19.
Figure 88. Document Comparison Chart for EL 1 through EL 4.

Figure 19. Document Comparison Chart for EL 1 and EL 4 only.

There did appear to be two observable characteristics in the comparison of EL 1 and 4. The most experienced counselors, EL4, appear to use more than one skill per turn (doublets, triplets, etc.) more often than do counselors in EL1. The least experienced counselors, EL1, appear to use consecutive turns of SK10, Information about the Process of Healing than do counselors in EL4. An example of these observations is presented in the Document Comparison Chart in Figure 20. Representative multiple skills per turn by EL4 in the bottom 10 code lines and consecutive instances of SK10 by EL1 in the top 10 code lines are circled in black.
Additionally, it appears that more experienced counselors, EL4, rarely use SK3 Open Question followed immediately by SK2 Closed Question. Less experienced counselors, EL1, tend to do this more often. EL4 counselors also tend to follow SK2 Closed Question with SK3 Open Question. EL1 counselors tend to do this less often.

While no objective measure of differences can be made from qualitative analysis of these data, certain subjective observations may be made. There are distinctly different presentations in text portraits representing two sessions by counselors in different experience levels, both of whom are operating from a given theoretical orientation. These differing portraits may not show differing levels of expertise, however, but may show differing application of a similar skill set. As an example, text portraits from this study for a session by counselors stating their theoretical orientation as “Person-centered” in Experience Level 1 and Experience Level 4 are shown in Figures 21 and 22.
Figure 101. Experience Level 1 Person-centered counselor.

Figure 112. Experience Level 4 Person-centered counselor.
The contribution of this qualitative comparison of observable behaviors in counseling is to note the relative presence or absence of particular helping skills, the most dominant or lacking skills, or perhaps an ineffective use of particular skills as the counselor and client move through the Exploration, Insight and Action stages described by Hill.

Research Question 5 concerned identification of helping skills that might be comparable to defined concepts of expertise. It is clear already that experience does not necessarily equate to or translate into expertise. Comparisons of skill use and experience levels in the present study did not reveal useful characteristics that could be applied to models of counseling mastery or expertise such as those developed by other researchers in the area of expertise, including Ericsson (2006), Eriksen & McAuliffe (2003, 2006), Jennings, et al. (2003), Kaslow, et al. (2009), Kottler & Carlson (2014), Nelson (2007), Norcross (2011), Perosa & Perosa (2010), Skovholt & Jennings (2005), and Sperry & Carlson (2013).

**Summary of Aggregated Results**

Research Questions 1 and 2 concerned differences in the frequency, sequence or patterns of use of a given set of counselor skills by counselors with different levels of experience. Significant differences were observed. Research Question 3 concerned differences in the frequency, sequence or patterns of use of a given set of counselor skills by the least experienced (Experience Level 1) and most experienced (Experience Level 4) counselors. Significant differences were observed. Research Question 4 concerned the application of computer-assisted qualitative data analysis software (CAQDAS) in identifying and studying counselor skill. These analytical tools were shown to be effective in identifying skill utilization for entire counseling sessions in ways that added to the understanding gained from current evaluations of audio, video, or transcribed media. CAQDAS also seems to permit effective examination of frequency,
sequence and patterns of use of counselor skills in ways that might not be possible with traditional means. Research Question 5 concerned the categorization of skill use in experience levels in accordance with current models of counseling competence, mastery or expertise. While no significant results were realized, the application of the techniques used in the current study may be invaluable in subsequent studies of larger sample size and scope.
CHAPTER FIVE

DISCUSSION

The learning and application of counseling skills is a necessary and essential component of counselor education. The means by which this learning and application can be evaluated is also a necessary and essential component. This current study has demonstrated a practical and informative procedure for assessing the practice of commonly identified counselor skills in a way that can identify, assess, and document one measure of counseling competence, mastery, or expertise. By demonstrating what more experienced or peer-identified expert counselors do in counseling sessions, counseling students, counselor educators and counselor supervisors can identify specific, measurable, attainable, and realistic performance goals to better inform, improve, or remediate counselor practice. Thereby, counselor educators can evaluate the effectiveness of counselor training, while accrediting bodies and professional associations can more objectively assess the attainment of stated professional standards and goals. This procedure is not limited to the quantitative assessment of frequency data on a particular skill set. The procedure is easily adaptable to any quantifiable paradigm of counselor skill or practice within specific counseling domains (career counseling, school counseling, or marriage, couple, and family therapy). This paradigm can include theoretical orientation, themes of treatment, considerations of specific symptoms of identified disorders, or any other counseling application or rubric.

Contributions

This study was designed to demonstrate the elements and application of process research and the use of qualitative and mixed-methods research in counselor education and supervision.
This study’s method, to examine what goes on in entire counseling sessions using quantitative and qualitative analysis and CAQDAS-generated visual displays has not been done before – it is unique in that one can “see” the session and literally “see” what the counselor is saying. The research methods and goals of this study can be enhanced further by the use of existing and emerging computer-assisted qualitative data analysis software (CAQDAS) applications. The larger aim of the study was to demonstrate how the application of the above research methods can contribute to attaining and maintaining counseling proficiency and competence. The achievement and maintenance of informed counselor skill and competence is of vital interest to the counselor, the client, the counselor educator and supervisor, education accreditation bodies, and the profession of counseling (Fouad, et al., 2009; Hatcher, et al., 2013).

This study did not reveal classifiable elements of expertise. This shortfall may be a result of the very limited sample size or the evaluative skill set. Perhaps more significantly, this small cross-section does not permit the insights that could result from a longitudinal study of skills acquisition and application by a larger sample. The present study does not explore the changing perspectives of emergent expert counselors nor the acquisition and application of insights and changing orientation toward self and others. These characteristics, theorized and modeled by the authors above, may give greater meaning to the issues identified in Research Questions 4 and 5 involving characteristic patterns of thought and action and how they evolve and mature over the professional lifetime of the counselor.

The results of this study do show, however, ways in which counselor proficiency or “expertness” can be identified and modeled, and which may then be used for proficiency improvement or remediation for less experienced counselors. These improvements can be in individual skill use, identifiable effective patterns of skill use, or skill use in particular stages of
counseling or stages of change, e.g., Hill’s Exploration, Insight, Action stages. Individual counselors can be shown ways in which identifiable and measurable performance indicators differ from those of more experienced or proficient exemplars and thereby can begin to shape their performance accordingly. Attention to behaviors may then begin to inform cognition and awareness in counseling.

This study demonstrates a procedure to extract elements of expertise from levels of experience. This can thereby inform counselor education and supervision. Indeed, the application of this procedure with additional technological enhancements, such as voice recognition and transcription software, can extend to the emerging field of distance counseling and/or telemedicine. Moreover, these procedures can easily be applied for practitioner “self-supervision” to periodically monitor one’s own practice for areas of proficiency, areas of needed growth, or perhaps even early indicators of counselor compassion fatigue or vicarious trauma.

**Implications**

One area of interest from the review of literature in Chapter One is the observation of a recent decrease in process research in the profession coupled with a rising awareness that randomized clinical testing of outcomes may not be fully responsive to the needs and goals of the profession. Emerging trends in research are aimed at finding ways to improve not only client self-efficacy, but also to improve the efficacy of counselors, counseling students and counselor educators. By extension, the procedures documented in this study can be applied to more effective counselor supervision and more effective supervision-related research.

**Implications for Counselor Education**

Process analysis of counseling skill acquisition and practice can be a powerful learning experience throughout graduate counseling education, particularly during the practicum phase. It
can assist in the identification of performance meeting agreed performance objectives and goals for program completion. Ongoing process analysis can facilitate learning and can also allow for the early identification and remediation of potential deficiencies. The techniques discussed in the present study may provide more objective measures of efforts in remediation, a potentially troublesome area of counselor education given recent lawsuits and ethical concerns arising during remediation disputes (McAdams & Foster, 2007).

**Implications for Counselor Supervision**

One ongoing task during counselor supervision is monitoring of counselor intern performance during *in vivo* counseling sessions. This is particularly demanding in the case of distance supervision, where the only available resource is audio or video recordings of counseling sessions. The use of process analysis and CAQDAS techniques can enhance the supervisor’s monitoring of counselor growth. A text portrait, for example, can give a comprehensive view of the entirety of a counseling encounter at a macro level, unencumbered by listening to, viewing, or reading bits and pieces of the counseling transaction. The “white space” in a portrait, that is the amount of time a counselor listens rather than speaks, may be a significant indicator of counselor effectiveness.

**Future Directions**

Future directions in the field of counseling research will doubtless shift from process research to outcome research and back again. Perhaps the way of the future will involve a growth toward process-outcome research geared not only toward counselor performance or client outcome, but a synthesis of process-outcome blending the findings of external observers with the subjective/objective input of both counselor and client using a variety of *post hoc* assessment inventories. The focus here might be not just a correlational examination of what particular skill
a counselor used, but how it was perceived by the counselor, the client, and an external observer, and how it may have contributed to the formation or maintenance of a therapeutic bond or working alliance. This study could easily serve as a pilot for a broader, more diverse longitudinal study. Innovative investigations such as this can document conversations in counseling sessions and can initiate conversations in the field of counselor education and supervision. CAQDAS technology and the procedures used in this study can provide an additional layer or degree of objectivity, or at least confidence, in the evaluation of counselor competencies. With a credible skills model, such as Hill’s, trained judges attaining highly reliable inter-rater reliability, and an intuitively obvious documentation and display technology, more detailed and more comprehensive examinations of the process of counseling are possible.

While the initial encounter in counseling may be a critical area of interest in skills development and therapeutic alliance, subsequent sessions and termination may be just as rewarding areas of study (Tryon, 2003). Moreover, video or in vivo observation of non-verbal components of the counselor-client interchange could add dimensional depth to assessment of the counseling process (Luedke, 2013). Similarly, counselor and client evaluations could give particular insight into what intervention or skill was perceived to be the most significant or helpful and how it was perceived by the participants. Research along these lines could become a more dynamic and immediate blend of the triad of counselor, client, and external observer. Perhaps, too, areas of future research may begin to examine less categorical data such as skill use, and examine “softer” or more ephemeral areas such as empathy, alliance or rapport.

Another research area of great potential in a larger study is isolating skills that might be predictive of Experience Level membership. Skills which might be predictive of membership in the most-experienced level could then be examined through the lens of “expertise” to pursue
some characteristics of expertise that might occur at any experience level and might become an area of emphasis in counselor education and supervision. Expertise may extend beyond currently identifiable skills and may extend to emerging concepts of expertise seen in terms of personal or interpersonal qualities or patterns of cognition. These patterns could easily be accommodated within the procedures demonstrated in this study.

Counselor educators and supervisors would do well to identify current and best practices in their particular fields, to begin a focus on critical or effective elements of the therapeutic alliance, and ways in which to foster growth along those lines. Counselor education programs would do well to investigate and implement training programs based on not only on empirically-supported or evidence-based practices, but evidence-based relationships (Norcoss & Lambert, 2011). Norcross and Wampold (2011) also encourage accreditation and certification organizations to appraise programs based on evidence-based therapy relationships and competency-based training.

**Limitations of the Study**

The current study reveals areas of great promise, but was limited by a number of significant considerations. A study of 40 participants in four groups of 10 produces a very small overall sample size, characteristic of many qualitative studies. One of the sample groups, Experience Level 1, was drawn from a convenience sample of graduate students at only one university, but these students were enrolled in a CACREP-accredited counseling program. The study examination was cross-sectional, but was focused on counselor competencies which may best be examined longitudinally. The measurements were made using only one skill set, the Hill Helping Skills System. This rubric is written only in English, and the counseling sessions were conducted only in English, which limits multicultural considerations of the study. The 40
counselors included used a wide but perhaps not representative variety of theoretical orientations. Several of the transcripts reflected brief sessions conducted for demonstration or teaching purposes, rather than actual ongoing treatment. Many, but not all, of the sessions were of the initial session. All of these shortfalls may significantly limit the generalizability of the results, but may also pinpoint considerations to be made in designing and conducting future studies along these lines. The limitations are only in the study’s current scope; the potential areas of promise are unlimited.

Conclusion

This study used process research and computer-assisted qualitative data analysis software to determine differences in frequency, sequence and patterns of use of a counseling skill set by counselors with different levels of experience. The study identified six significant differences across four experience levels and five significant differences between the least experienced and most experienced levels. While the study was small in scope, this combined approach of process research and qualitative data analysis appears to hold great promise for subsequent research in the field of counselor education and supervision.
References


*Psychotherapy, 48*(1), 4-8.


Cummings (Eds.), *Clinical strategies for becoming a master psychotherapist* (pp. 37-54). New York: Elsevier.


Appendix A

Hill Helping Skills System

1. **Approval and Reassurance**: Provides emotional support, reassurance, encouragement, and reinforcement. It might indicate that the helper empathizes with or understands the client. It might suggest that what the client is feeling is normal or to be expected. It might imply sympathy or attempt to alleviate anxiety by minimizing the client’s problems. It might imply approval of the client’s behavior.

2. **Closed Question**: Requests limited or specific information or data, usually a one- or two-word answer, a “yes” or “no,” or a confirmation. Closed questions can be used to gain information, to ask a client to repeat, or to ask if the helper’s intervention was accurate.

3. **Open Question**: Asks the client to clarify or to explore thoughts or feelings. The helper does not ask for specific information and does not purposely limit the nature of the client’s response to a “yes” or “no” or a one- or two-word response, even though the client may respond that way. Note that open questions can be phrased as directives as long as the intent is to facilitate clarification or exploration.

4. **Restatement**: A simple repeating or rephrasing of the content or meaning of the client’s statement(s) that typically contains fewer but similar words and is usually more concrete and clear than the client’s statement. The restatement may be phrased either tentatively or as a direct statement. The restatement may be a paraphrase of either immediately preceding material or material from earlier in session or treatment.

5. **Reflection of Feelings**: A repeating or rephrasing of the client’s statements, including an explicit identification of the client’s feelings. The feelings may have been stated by the client (in either exactly the same words or in similar words) or the helper may infer the feelings
from the client’s nonverbal behavior, the context, or the content of the client’s message. The reflection may be phrased either tentatively or as a statement.

6. **Challenge:** Points out discrepancies, contradictions, defenses, or irrational beliefs the client is unaware of, unable to deal with, or unwilling to change. Challenges can be said with either a tentative or confrontational tone.

7. **Interpretation:** Goes beyond what the client has overtly stated or recognized and gives a new meaning, reason, or explanation for behaviors, thoughts, or feelings so the client can see problems in a new way. Makes connections between seemingly isolated statements or events; points out themes or patterns in the client’s behavior or feelings; explicates defenses, resistances, or transferences; gives a new framework to behaviors, thoughts, feelings, or problems.

8. **Disclosure:** Reveals something personal about the helper’s nonimmediate experiences or feelings. These statements typically start with an “I.” However, not all helper statements that start with an “I” are self-disclosures (e.g., “I can understand that” or “I don’t know” are not self-disclosures).

9. **Immediacy:** Discloses helper’s immediate feelings about self in relation to the client, about the client, or about the therapeutic relationship.

10. **Information:** Supplies information in the form of data, facts, opinions, resources, or answers to questions.

11. **Direct Guidance:** Provides suggestions, directives, instructions, or advice about what the client should do to change (goes beyond directing the client to explore thoughts or feelings in session).

12. **Other:** Includes helper statements that are unrelated to the client’s problems, such as small
talk, salutations, and comments about the weather or events.