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Validation of structure of supervisor and supervisee behaviors in clinical supervision

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VALIDATION OF STRUCTURE OF SUPERVISOR AND SUPERVISEE BEHAVIORS IN CLINICAL SUPERVISION

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A multiple-group factor analytic solution was employed to test the " goodness-of-fit" between questionnaires items of the Supervision Questionnaire-Revised (SQ-R) and the Index of Behaviors in Supervision (IBIS), and an hypothesized factor structure based on the developmental model of clinical supervision proposed by Littrell, Lee-Borden, and Lorenz (1979). Two hundred and sixty-seven undergraduate and 26 graduate students were asked to rate each questionnaire item on the basis of how descriptive they believed it to be of Supervision as: (a) Relationship Development and Goal-Setting, (b) Counseling or Therapy, (c) Teaching, (d) Consultation, and (e) Self-Supervision. Ratings made on a 7-point Likert scale were based on operational definitions provided for each type of supervision. Results indicate that most SQ-R and IBIS items represent their hypothesized factor. Differences between undergraduate and graduate mean ratings were less than 1.0 SD. These findings suggest that the SQ-R and IBIS do measure stage-specific supervisor and supervisee behaviors. Continuation of this research is recommended for the validation of the hypothesized factor structure.

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CHAPTER I

INTRODUCTION

For the graduate student in clinical psychology, psychotherapy supervision provides not only an opportunity for the integration of academic and clinical curricula, but presents also a unique relationship designed to support the student's growth and development as a professional therapist. The importance of the supervisory relationship has been high-lighted in the recent literature in counseling and counseling psychology with the emergence of the concept of prescriptive supervision. This notion proposes the matching of supervisor and supervisee on the basis of variables such as level of experience, personal characteristics, and theoretical orientation. The goal of this approach is the establishment of an optimal learning environment for the student at various levels of his or her professional development. Although this concept may hold promise as an educative model, research has only begun to provide empirical evidence of relationships between specific variables of the supervisory relationship and learning. The adoption of a predictive, educative model for the training of professional psychotherapists would seem premature.

Although the amount of research which is focused on various aspects of psychotherapy training has markedly increased since Carl Rogers (1957) made his oft quoted remark that the training of psychotherapists was a field "characterized by a rarity of research and a plentitude [sic] of platitudes" (p. 76); the fact remains that descriptions and opinions of the supervisory process are more abundant than are sound

empirical or experimental studies. This is especially true for graduate study in clinical psychology. The majority of studies available have examined supervision within the context of master-degree programs in counseling and counseling psychology. Limited by both the time constraints and nature of these programs, this work has rarely extended beyond the student's attainment of basic skills, such as facilitative communication, basic problem-solving, and the establishment of a therapeutic relationship. In her review of the teaching and learning of psychotherapeutic skills, Matarazzo (1971, 1978) noted the extent of this basic-skills research and concluded that the majority of studies could not be appropriately generalized to graduate programs beyond the first year of practicum training. She emphasized the need for further research in the development of psychotherapeutic expertise--"a more complex area where the desired behavioral and conceptual skill are more affected by theoretical orientation and personal idiom" (Matarazzo, 1978, p. 942).

In their critical essay of supervisory research, Holloway and Hosford (1983) also acknowledged the limited amount and scope of supervisory investigation. More specifically, however, they criticized the process by which theoretical models for supervision have emerged. Holloway and Hosford characterized current supervisory literature as a body of work which has developed increasingly complex and comprehensive supervisory models without pursuing the empirical investigations requisite for their confirmation or modification. They wrote that the "wholesale dependence of the field to use theoretical bases and intuitive preferences in the determination of supervisory strategies

rather than empirically validated interventions suggests that the clinical supervision of counselors is presently an art and not a science" (p. 73). Their essay is a blueprint for the systematic empirical study of clinical supervision.

Basic to the guidelines offered by Holloway and Hosford (1983) is their statement that the isolated, unrelated, and often irrelevant studies in supervision have occurred as the result of the failure of investigators to develop systematic, comprehensive research programs. They offered a three-step approach for programatic research and theory development:

(1) Descriptive observations and development of measurement instruments. Holloway and Hosford (1983) defined the objective of this initial stage as the observation of the phenomena of supervision in its natural setting, and the development of "precise, quantifiable descriptions of supervisory behaviors" (p. 74). They commented that one of the major short-comings in supervisory research has been the tendency of investigators to design confirmatory studies before clearly delineating supervisory variables through exploratory, descriptive techniques. The result has been the collection of data which do not accurately represent the phenomenon of clinical supervision.

(2) Inferential strategies. The focus of this stage of investigation is the development of empirical designs that examine the relationships between independent and dependent variables extrapolated from the data obtained during the initial exploratory, descriptive phase of study. Holloway and Hosford (1983) emphasized the need to determine critical variables from a knowledgeable base of information,

rather than from theoretical speculation or intuitive preference.

(3) Construction of theory based on empirically grounded evidence for observable supervisory phenomena. In a statement reminiscent of Roger's (1957) comment which was cited earlier, Holloway and Hosford (1983) remarked that supervisory literature has spawned "theories" of supervision without benefit of the first or second phases of scientific inquiry. Theoretical propositions, they emphasized, need to predict "what types of supervision techniques will result in what types of trainee outcomes for which type of trainee" (p.75). They concluded that the development and testing of such a predictive supervisory model will provide a foundation for the science of supervision.

The present study, which falls within the first of Holloway and Hosford's (1983) levels of scientific inquiry, was designed to examine the relationships between questionnaire items currently used in supervisory research and the theoretical constructs proposed by contemporary models of clinical supervision. The research questionnaire items, developed solely through intuitive, rational methods, have been used to represent supervision as a unity, as well as the sub-categories or stages of supervision delineated by currently-accepted theoretical models. Although some studies have offered exploratory factor analyses of the items, methodological problems have limited the usefulness of that work. No research has gone beyond these exploratory analyses to test the hypothesized relationships between questionnaire items and theoretical supervisory constructs. Do these research questionnaire items, in fact, represent the supervisory constructs they are being employed to measure? It was the purpose of this study to test the

"goodness-of-fit" between the hypothesized structure or grouping of questionnaire items, and the theoretical stages of supervision proposed by contemporary models of clinical supervision.

The theoretical frameworks for clinical supervision most commonly employed in current research are those described as the developmental or integrative-developmental (Bartlett, 1983) models of supervision (Bernard, 1979; Blocher, 1983; Littrell, Lee-Borden, & Lorenz, 1979; Stoltenberg, 1981). These models have in common the assumption that clinical supervision in the graduate training of psychotherapy, is a sequential process comprised of distinct stages or phases through which the supervisor and supervisee progress. These stages are conceptualized as a continuum of supervisee learning and development that range from the acquisition of basic therapeutic skills to the attainment of advanced skills and the role of a professional psychotherapist. The model used in the current study was that proposed by Littrell, Lee-Borden, and Lorenz (1979). They have delineated four developmental stages along the supervisory continuum that include: Stage I - the establishment of working relationship and development of supervisory goals, Stage II -counseling and teaching, Stage III - consulting, and Stage IV - self-supervision.

Although research has been designed within the developmental supervisory framework, no measurement instrument has yet been developed that purposefully includes stage-specific supervisory behaviors consistent with its theoretical structures. The instrument most commonly adopted for use in this research has been the Supervision Questionnaire (SQ) developed by Worthington and Roehlke (1979), or its

amended version, the Supervision Questionnaire-Revised (SQ-R) (Heppner & Roehlke, 1979; Worthington, 1984). Turow's (1982) addition of supervisee behavioral items to the supervisor behaviors of the SQ produced a second questionnaire known as the Index of Behaviors in Supervision (IBIS). These instruments were developed to include behaviors that experienced supervisors deemed to be "important" to supervision, and may, therefore, represent a more unified construct of supervision than is proposed by the developmental models. The adoption of these measures for developmental supervisory research, thus, presents a need for empirical studies to determine whether or not the behavioral items included represent the supervisory stages proposed. Such is the focus of this thesis.

The question addressed in the current study was, "Is the factorial structure of SQ-R and IBIS items consistent with the hypothesized groupings of items on the dimensions of Supervision as Relationship Development and Goal-Setting, Supervision as Counseling or Therapy, Supervision as Teaching, Supervision as Consultation, and Supervision as Self-Supervision (Littrell, et al., 1979)?"

This hypothesis-testing study was expected to contribute to supervisory research by delineating those items that are consistent with the theorized structure, and which may, therefore, be considered valid and useful measures of supervision as a developmental process; as well as by identifying those items that fail to reflect the hypothesized structure, and may best be modified or deleted from the questionnaires. The study, thus, is a step toward the redefinition of the content validity of the questionnaire items within the context of the

developmental supervisory models. In addition, because the questionnaires were developed as measures of "supervision," the confirmation of hypothesized patterns or structure of items would tend to support the usefulness of the developmental constructs as representations of the phenomenon of clinical supervision.

The delimitation of the current study occurs in the generalizability of the results because subjects available in the numbers required by this investigation were not experienced in psychotherapy or clinical supervision. A small sample of graduate students in counseling and psychology programs was included to allow some comparison of ratings between graduate and undergraduate students.

Before considering, in greater detail, the development of the SQ-R and IBIS and their use in developmental supervisory research, the theoretical antecedents of that work will be presented in a literature review. As noted earlier, the supervisory literature is largely descriptive in nature, and offers a wide range of theoretical speculation and rich commentary. The current review will focus upon the development of supervision in the clinical training of psychotherapy, the major conceptual models which have emerged, and the research that has been associated with each of those theoretical frameworks.

Supervision in Clinical Training of Psychotherapy

It has been suggested (Fleming & Benedek, 1966; Windholz, 1970) that the theory of supervision is essentially a theory of teaching. This position was certainly reflected in Wolberg's (1954) definition of supervision in psychotherapy as, "a process in which an experienced

psychotherapist helps a less experienced individual acquire a body of knowledge aimed at a more dexterious handling of the therapeutic situation" (p. 642). Although the process itself may vary with differing theoretical orientation, goals, settings, and indeed, simply with different individuals, a common objective is the supervisee's acquisition of skills and the modification of behaviors with a specific client (Lambert, 1980). Supervision may occur in individual or group sessions; and may include such methods as lectures, case-presentation, direct observation of therapy sessions, review of audio- or video-taped recordings, modeling, role-playing, or co-therapy. Excluded from designation as supervision are classroom or personal experiences (e.g. psychotherapy, sensitivity training) which are not directly related to the student's interactions with a specific client.

The supervisory relationship which underlies this process is perhaps best understood in relation to the historical development of supervision as a teaching method.

Historical Background

Although other disciplines, particularly the American schools of social work, have contributed to the supervisory process as we know it today, supervision in psychotherapy has evolved primarily from the philosophies and early practices of Sigmund Freud and his students. Freud, impressed by the experiences of his own self-analysis, and the conviction that the "analyst must be able to communicate more freely with his own unconscious" (Laplanche & Pontalis, 1973, p. 454), advised similar self-examination for his followers. By 1912, he had begun to advocate personal analysis as a part of the analyst's training; however,

it remained an optional and informal process until the 1920's. As a practical matter, personal analysis often preceded training, in that students were commonly recruited and trained by their own analysts. They were dependent upon these individuals not only for acceptance into and training in psychoanalysis; but also for referral of their first analysands, and ultimately, acceptance in the professional community. Described in terms of apprenticeship, the relationship was one of intellectual and emotional dependence upon the master.

As psychoanalytic training institutes were established, requirements for the selection and education of psychoanalysts became more formalized. Personal or training analysis for the purpose of understanding the unconscious and experiencing the therapeutic method, was adopted as a training requirement by the seventh International Psychoanalytic Congress in 1922 (Ekstein & Wallerstein, 1958; Fleming & Benedek, 1966). By 1925, Eitingon, of the Berlin Institute, recommended that in addition to the training analysis, the student be required to engage in a supervisory or "control" analysis. His objective was to increase the effectiveness of training by exposing the student to the work of more than one analyst. Eitingon, who has been credited as being the "inventor" of psychoanalytic supervision (Fleming & Benedek, 1966), did not conceptualize the supervisory (control) analysis as being different from the personal (training) analysis in terms of techniques, but rather, "in having an additional aim, that supersedes or goes hand in hand with the therapeutic aim" (Fleming & Benedek, 1966, p. 11). The supervisory relationship became one of teaching and sponsorship of the student's advancement in

training.

Although supervision was generally accepted as an essential part of professional training, the next decade saw disagreement and debate among the institutes regarding the nature and purpose of the supervisory relationship. One perspective defined supervision as an extension of the student's training analysis. It was held that the problems the student experienced with his patient were manifestations of his own conflicts, and that the best supervisor would be his own personal analyst. Others conceptualized the supervisory analysis as a teaching process which was designed to "explain, correct, and direct" (Ekstein & Wallerstein, 1958; Lambert, 1980). Under this model, the supervisor was someone other than the student's training analyst. Affective problems which developed within the course of the student's work were referred back to the training analyst. In summary, the issue was--and is--whether the supervisory analysis is an extention of a therapeutic experience, or is solely a teaching relationship. Termed a "syncretic dilemma" by Lewin and Ross (1960), this issue continues to influence theoretical statements of supervision. Specifically, this dilemma provides the conceptual roots for the parallel process model, as well as the framework for differentiation between the didactic/teaching and experiential/therapy models of supervision.

In 1937, Bibring presented a paper at the Second Four Countries Conference (Fleming & Benedek, 1966) which especially focused on the didactic goals and evaluative processes of supervision. Bibring proposed that the role of the supervisor was not only to instruct, but also to evaluate the student's ability to define problems, to seek

solutions, and to transfer learning to new situations.

In the decades following World War II, supervision remained an essential part of psychoanalytic education. In addition, it has been adopted by each of the major, non-analytic psychotherapies (Hess, 1980), and by several professional disciplines. The American Psychological Association (1947) included psychotherapy supervision in its recommended standards for doctoral education in 1947. Since that time, it has been supported by professional psychologists as a key element in training (Gerkin, 1969; Hock, Ross, & Winder, 1966).

In summary, psychotherapy supervision has evolved from a desirable, informal process in psychoanalytic training, to an essential feature of professional clinical graduate education. As a unique relationship, it has developed from a dyad in which the student was totally dependent upon the master for therapy, training, and professional sponsorship; to a complex reciprocal interaction based upon the goals of education, personal growth, and evaluation. As the supervisory relationship grew in sophistication, so too, did the theoretical models which represented supervision.

Theoretical Models and Research Review

The nature and purpose of supervision have been defined through statements of various theoretical models, the most basic of which grew out of the syncretic dilemma described by Lewin and Ross (1960); that is, the conflict between the therapeutic and educational aims of supervision. Early models tended to polarize goals, with supervision being conceptualized as either didactic or experiential, or focused upon the development of skills and techniques or personal growth.

Although research has been developed within these conceptual frameworks, there are few "pure" models of single focus remaining. Most contemporary models have integrated two or more functions of supervision, and the results have been more complex, and,it is hoped, more comprehensive, theoretical frameworks. The historical evolution of these theoretical positions has been traced in a review by Leddick and Bernard (1980), and a summary of each may be found in reviews by Goodyear and Bradley (1983) and Loganbill, Hardy, and Delworth (1982).

For the purpose of the current review, the four major models of supervision suggested by Littrell, Lee-Borden, and Lorenz (1979) will be used to identify the major focus of each category, and to organize the review of relevant research. It will be readily apparent that the boundaries between categories are easily crossed, and the need to maintain distinctions between them serves no purpose but to allow examination of individual variables which compose the whole. The developmental model of supervision (Littrell, et al., 1979) has integrated models of counseling/therapy, teaching, consulting, and self-supervision.

Supervision as Therapy: The Experiential Model

The concept of supervision as a therapeutic relationship has its origins in the training (personal) analysis of early psychoanalytic education. As noted by Fleming and Benedek (1966), psychoanalytic work required an intimate knowledge of the inner, unconscious world of both patient and therapist--knowledge which could not be obtained through lectures, books, or imitation of technique. Experiential, rather than cognitive, learning was a requisite first step. Supervision, whether

seen as an extension of the training analysis, or as separate supervisory analysis, addressed the basic issues of transference, countertransference, and resistance. Awareness and understanding of unconscious motivation and the resolution of neurotic conflict were as much a concern for supervision as they were for therapy. Although the terminology changed as supervision was adopted by other theoretical orientations, the primary objective of supervision as a therapeutic experience remained the same. The task was the supervisee's "understanding and overcoming personal and emotional concerns that prevent effective counseling [therapy]" (Littrell, et al., 1979, p. 129).

In addition to the personal conflicts and emotional concerns generated within the student's therapeutic relationships, supervisors began to acknowledge the tensions and anxieties which were elicited by the learning process itself (Ekstein & Wallerstein, 1958; Kell & Mueller, 1966; Mueller & Kell, 1972). Ekstein and Wallerstein (1958) were among the first to define conflicts which occurred within the supervisory process as "learning problems," and, comparing them with the fears and resistances of the therapeutic process, proposed what has become known as the parallel process model of supervision.

The notion of supervision as a parallel process to psychotherapy essentially considers therapy and supervision as similar helping relationships, and assumes that the therapeutic qualities of the supervisory relationship will be generalized by the student to his or her therapy relationships (Doerhrman, 1976; Kirsner, 1982). Ekstein and Wallerstein (1958) wrote:

> Our purpose though is to describe supervision--that is, the supervisory process--not simply as the transmission of knowledge and skills, but rather as a complex process that goes on between the supervisor and his student. This process is a helping process in which the student is being helped to discover his problems as a psychotherapist, to resolve them with the help of the supervisor, and to develop toward higher integrations as a learner and as a psychotherapist. This process includes affective problems, interpersonal conflicts, problems in being helped, as well as in helping, and is therefore truly itself a helping process. (p. 25)

Describing features common to both therapy and supervision, they continued:

> The affective relationship to the helper, the wish to change coupled with the resistance to change, the struggle about being dependent, the unconscious repetitive ways of taking hold of a problem and of attempting to master new experiences, the link of past helping experiences with the present helping experience; all these issues seem to find their counterparts in the therapeutic process on the one hand, and in the supervisory process on the others. (p. 251-252)

Ekstein and Wallerstein (1958) concluded that although the processes were parallel, their purposes were distinctly different. In therapy, the personal problems of the client become a point of focus for the resolution of inner conflict. In supervision, the personal problems or emotional concerns of the supervisee become a point of focus in order to increase his or her skill in working with clients.

Patterson (1964) also considered the therapeutic role of supervision. He commented that "supervision, while not therapy, should be, like all good human relationships, therapeutic" (p. 48). He believed that learning in supervision more closely resembled the learning of psychotherapy than it did the learning of the classroom. Supervision, from his viewpoint, was more than a didactic, information-giving process; it was an experience for personal growth

and professional development.

Efforts were made by psychoanalytic educators to identify the components of supervision which facilitate personal growth and learning (Ekstein & Wallerstein, 1958; Fleming & Benedek, 1966). However, the subjective nature of both the process and the estimation of its out-come have limited the value of this work. Fleming and Benedek (1966) presented an empirical investigation of the psychoanalytic supervisory experience, in an effort to "tease out" those factors which contributed to the supervisee's developing himself or herself as a "therapeutic instrument." Although educational objectives were offered, their report particularly emphasized the importance of experiencing the analytic and supervisory processes. Of the supervisor's contribution to this educative process they wrote, "...what one teaches is supposed to be learned, yet the fact something is 'taught' does not guarantee it will be learned....[the analytic supervisor's] activity creates only the conditions which facilitate growth, not growth itself" (Fleming & Benedek, 1966, p. 234-235). Studies which have systematically investigated the conditions that facilitate personal growth and learning in supervision, have evolved not from this analytic work, but rather from the client-centered and experiential orientations.

Personal growth, in the context of client-centered or experiential therapies, moves beyond the concept of the resolution of neurotic conflicts to goals which include openness to one's experiences, creative problem-solving, and self-directed change (Rogers & Stevens, 1967). Within this model, Truax and Carkhuff (1973) described the role

of the supervisor as one providing a "free, safe, and secure atmosphere in which the trainee can come to experience and know himself more fully, can experiment with different approaches and finally can evolve into the most effective practitioner that he can be" (p. 219). Studies have addressed the relationship between the Rogerian facilitative conditions of empathy, genuineness, and unconditional positive regard in supervision, and the supervisee's openness for learning and change and his or her ability to provide the same facilitative conditions in therapy.

In a study published in 1964, Hansen and Barker examined the relationship between the supervisee's perception of the level of facilitative conditions offered in supervision, and his or her level of experiencing. Hansen and Barker had proposed that unconditional positive regard, empathy, and warmth were as necessary for growth in the supervisee as for the client. They hypothesized that if these conditions were offered in supervision, the student would be less defensive and more open to his or her experiences. Twenty-eight graduate students in counseling and guidance were randomly assigned to one of three practicum groups. At the end of the practicum, supervisors and students completed Barrett-Lennard Relationship Inventories (Barrett-Lennard, 1959, 1962). In addition, a final supervisory session was recorded during which the supervisee was asked to discuss the meaning or significance the practicum had had for him or her. Segments of this recording were analyzed and the student's level of experiencing determined by use of the Gendlin Experiencing Scale (Gendlin, 1961; Gendlin & Tomlinson, 1963). The results supported the

hypothesis that supervisees who perceived a supportive, facilitative supervisory relationship scored higher levels of experiencing than did those who perceived lower facilitative conditions. The findings further suggested that students who had higher experiencing scores more accurately perceived the nature of the supervisory relationship than did those with low experiencing scores.

A study by Davidson and Emmer (1966) has suggested that students who experience a non-supportive supervisory session, not only perceive supervision as negative, but also, during the session had tended to shift the focus of concern from the client to themselves more often than did students who had experienced a supportive supervisory session. Because this study measured only the immediate effects of one supervisory session, its results must be considered with caution. However, these studies do suggest that a facilitative, supportive supervisory relationship both increases the likelihood of the student's openness to the experiencing of self and others, and supports attention to client issues.

In his review, Lambert (1980) summarized a belief held by Pierce, Carkhuff, and Berenson (1967) that "effective supervisors do not as much give information to a vulnerable learner as they establish a relationship which permits them to help the student learn and grow by experiencing the depth of a therapeutic relationship" (Lambert, 1974, p. 55). One of the basic assumptions of the therapeutic model of supervision is that the therapeutic experiences of supervision will be generalized by the supervisee to his or her own therapy relationships. Again within the context of the client-centered framework, Pierce and

Schauble (1970) addressed this assumption. Their study examined the relationship between the supervisor's level of facilitative functioning and the supervisee's ability to offer the same facilitative core conditions in therapy. Supervisees, doctoral students in education and psychology, were supervised for one academic year by therapists who had been rated as providing either high or low levels of empathy, positive regard, genuineness, and concreteness during therapy sessions. Ratings of facilitative functioning on these dimensions were obtained through use of a scale developed by Carkhuff and Berenson (1967). This instrument rates five levels of functioning on each variable. Scores obtained at Level 3 or greater were defined by Pierce and Schauble as representing "high" levels of facilitative functioning; scores below this criterion were regarded as "low" functioning levels. The results of the study indicated that students supervised by high-facilitative supervisors increased their ability to offer facilitative conditions in therapy; students supervised by low-facilitative therapists showed no significant change. A follow-up study nine months later (Pierce & Schauble, 1971a) found that supervisees in both conditions had maintained their levels of empathy, genuineness, and positive regard.

Again using Level 3 of Carkhuff and Berenson's (1967) scale as criterion for high versus low levels of facilitative functioning, Pierce and Schauble (1971b), in another study, compared the supervisee's level of facilitative functioning in therapy following 20 weeks of supervision under one of the following facilitative conditions: (a) high-level practicum instructor and high-level individual

supervisor, (b) high-level practicum instructor and low-level individual supervisor, and (c) low-level practicum instructor and low-level individual supervisor. Results showed that supervisees of both the high-level instructor/high-level supervisor and high-level instructor/low-level supervisor groups improved in their ability to offer facilitative conditions in therapy, although the high-level instructor and supervisor group did so more rapidly. The low-level supervisor and instructor group showed no change in facilitative functioning. Pierce and Schauble concluded that the supervisee must be in contact with an individual who offers a high level of empathy, genuineness, positive regard, and concreteness in order to grow on these dimensions. Wedeking and Scott (1976) and Lambert (1974, 1980) raised questions about the results of these studies.

In a study with master's level counseling students, Wedeking and Scott (1976) had found that over the course of a one-semester practicum, students had shown no significant change in their level of empathy in therapy, even though their supervisors had been rated high in empathy during supervisory sessions. This result was replicated in a 1977 study by Karr and Geist, although they did find a positive relationship between supervisor levels of other facilitative conditions--respect, genuineness, and conreteness--and levels of these conditions offered by the supervisees in therapy. Wedeking and Scott's comparison of their results with those of the earlier Pierce and Schauble (1970) study lead to the question pursued by Lambert (1974, 1980), "Do supervisors who apparently offer facilitative conditions to their supervisees offer the same to clients (and vice versa)?" (Wedeking &

Scott, 1976, p. 264).

Lambert (1980) noted that Pierce and Schauble (1970, 1971a, 1971b) had determined the supervisor's level of facilitative functioning through evaluation of his or her interactions with clients in therapy, not on the basis of interactions with students in supervision. Lambert (1974) had earlier questioned the assumption that facilitative conditions offered by the supervisor were consistent across the therapy and supervisory relationships. In his 1974 study, Lambert rated the level of facilitative conditions and the nature of verbal interactions for both therapy and supervisory sessions of five professional psychotherapists. Comparisons of the data revealed equal levels of respect and genuineness across both situations, but levels of empathy and specificity were significantly lower in the supervisory sessions. Classification of the verbal interactions on the Hill Interaction Matrix indicated that supervision was less therapeutic in nature than were the therapy sessions.

Lambert (1980) suggested that trust and a belief in the supervisor's understanding are implicit in the supervisory relationship, and that this may preclude the need for moment-by-moment demonstration of the facilitative core conditions in supervision. He (Lambert, 1974) further speculated that whereas didactic approaches may meet short-term needs in supervision, the long-term effectiveness of learning may be dependent upon the level of facilitative conditions experienced in the supervisory relationship. These hypotheses have yet to be tested.

In summary, the therapeutic or experiential model of supervision places emphasis on the supervisory relationship, and identifies the

following as the primary objectives of supervision: (a) the resolution of the supervisee's personal conflicts and emotional concerns that interfere with effective therapy, (b) the reduction of anxiety that interferes with the use of supervision for learning, (c) the experience of a supportive, helping (therapeutic) relationship, and (d) the use of supervision as a model for therapy. Research which examines the relationship between supervision and the attainment of these goals is extremely limited, and the data available disproportionately represent the client-centered or experiential frameworks (Hansen, Pound, & Petro, 1976).

Studies which have been reported suggest that although supervision is not therapy, it may be therapeutic in providing a positive, supportive relationship. Students who experience a positive, facilitative supervisory relationship seem more open to their own experiencing, more facilitative in therapy, and more able to attend to client concerns. Some studies have offered evidence to suggest that supervisees tend to provide the level of facilitative conditions in therapy which they experience in supervision. Others have questioned the methodology of these studies, noting the error in assuming that supervisors offer equal levels of the facilitative core conditions in therapy and supervision. Results of these later studies have suggested that supervisors generally provide lower levels of empathy and concreteness in supervision than they do in therapy. Questions have been raised regarding the short- and long-term effects of these variables on the learning and practice of psychotherapy.

In the absence of more extensive research, what might be concluded

about the usefulness of the therapeutic model as a representation of clinical supervision? Among commentaries and theoretical speculation, there is no disagreement that the quality of the supervisory relationship influences the process of learning in supervision. The question which differentiates this from other models is, "Is the therapeutic nature of the supervisory relationship the primary goal of supervision, or does it simply provide a means by which other, more essential goals are reached?" Hutt, Scott, and King (1983), in a phenomenological study of experiences in supervision, concluded that a facilitative supervisory relationship was necessary, but not sufficient for positive, effective supervision. As had Truax, Carkhuff, and Douds (1964) before them, they suggested that effective supervision requires the integration of person-oriented (therapeutic/experiential) and task-oriented (didactic/teaching) behaviors. Supporting the same position from another perspective, Arbuckle (1965) had argued that even if the unconditional, facilitative counseling model of supervision were desirable, such a relationship would be impossible to maintain. He concluded that the evaluative role of the supervisor requires him or her to, sooner or later, move out of the supervisee's experiential frame of reference into his or her own. When this occurs, process becomes content, and the supervisor functions not as a counselor or therapist, but as a teacher.

Supervision as Teaching: The Didactic Model

Historically, the didactic model of supervision had its roots--as did the therapeutic model--in the early development of psychoanalytic education. Supervisory or control analysis was introduced by Eitingon

in 1927 as an educational requirement separate from the personal or training analysis, because he believed that the student's exposure to the work of more than one analyst would enhance his understanding of the psychoanalytic process (Fleming & Benedek, 1966). By the time Bibring formally elaborated the unique didactic and evaluative roles of supervisory analysis a decade later, this pedagogical approach was generally viewed not as an opportunity for the educative enhancement of training analysis, but rather, as a counterpoint to it. Early proponents of the various roles of supervision had become advocates of single-focused, polarized models. Extreme positions were reflected in the training analyst's claim that supervision analysts failed or were unable to help trainees resolve personal conflicts which stymied therapeutic process; and in the supervising analyst's criticism that the recommendation for personal analysis in training only reflected "the urge to cure when there is failure to teach" (Windholz, 1970, p. 396). Fleming and Benedek (1966) were among those who resolved the dilemma between the therapeutic and teaching roles of supervision in favor of the didactic model. Their description of the theory of supervision as a theory of teaching was supported also by Ekstein and Wallerstein (1958) when they defined conflicts in supervision as "learning problems," and specifically addressed the role of superviseee as student, and that of the supervisor as teacher.

The primary goals of supervision in the didactic model have been variously defined as the "intellectual understanding of the therapeutic process" (Klein, 1981, p. 7); the clarification of the dynamics of the therapeutic relationship (Wolberg, 1954); the

transmission of the supervisor's knowledge or expertise to the supervisee (Bernard, 1979); and the instruction, modeling, practice, and evaluation of specific therapeutic skills (Turow, 1982). Littrell, Lee-Borden, and Lorenz (1979) summarized the didactic model of supervision as one which "emphasizes the conceptualization and implementation of effective treatment plans" (p. 129). They described the supervisor's role as that of "an instructor who focuses on the trainee's professional concerns about assuming the counselor role, conceptualizing client's needs, and applying techniques and specific skills needed to alleviate client concerns" (p. 132). Ekstein and Wallerstein (1958) more succinctly described supervision as a teaching process designed to "explain, correct, and direct" (p. 244).

Surveys have indicated that both supervisors (Kaduskin, 1974; Walz & Roeber, 1962; Worthington & Roehlke, 1979) and supervisees, at least during the early phases of their training (Delaney & Moore, 1979; Gysbers & Johnston, 1965; Worthington & Roehlke, 1979), expect or prefer supervision to be didactic in nature. That supervisees value the didactic approach was suggested in a 1974 study by Goin and Kline. They compared the "outstanding" and "moderately good" supervisors of second-year psychiatric residents. Their results indicated that although both offered "helpful" supervisory relationships, the outstanding supervisors more commonly provided information about techniques and principles of psychotherapy than did those considered moderately good.

Research that has explored the relationship between didactic supervision and the student's development of psychotherapeutic skill

is sparse. For the most part, studies are limited to the undergraduate or pre-practicum graduate student's acquisition of basic communicative and interpersonal facilitative skills. As noted by Matarazzo (1971, 1978), these studies cannot be appropriately generalized to supervision in advanced clinical training. However, because they are frequently cited, do represent the current state of research, and do suggest the variation of learning needs across different levels of training, they will be summarized for this review.

The work which has been published, seems to be organized around two general experimental questions: "Which method of supervision--didactic or experiential--is more effective in the development of specific therapeutic skills?" and "Which teaching methods are most effective in the development of specific skills?" The former question reflects an extension of client-centered or experiential research; the latter has been more frequently approached from the behavioral and social learning orientations.

The review of studies which compare the effectiveness of didactic and experiential supervision, has commonly lead to the conclusion that didactic supervision is more effective than experiential supervision for the training of specific skills (Hansen, Pound, & Petro, 1976; Lambert, 1980; Payne, Weiss, & Kapp, 1972; Ronnestad, 1977). Studies cited in support of this conclusion have employed a common experimental paradigm which is based on a pretest-posttest control group design, and has been described by most authors as a supervision analogue. Typically, subjects were randomly assigned to experimental and control groups, and then all listened to an orientation tape which

defined empathy (the dependent variable used in all studies) and discussed the desirability of empathic communication in the therapeutic relationship. Those studies which included a "modeling" condition, included for that experimental group, examples of high and low empathic responding. Subjects were then individually presented video-taped simulated-client comments to which they were asked to respond as if they were the counselor. A series of two or three tapes were presented; each offered six or seven client comments. Between videotapes, the experimental supervisory conditions were presented during 15-20 minute sessions. Controls received no supervision. Subjects' responses to the client comments were rated on an empathy scale (Truax, 1961; Barrett-Lennard, 1962), and the difference between the subject's response to the first and last set of client comments was determined.

Using this paradigm, Payne and Gralinski (1968) compared the effectiveness of counseling-oriented (experiential) and techniques-oriented (didactic) supervision in the acquisition of empathic responding by undergraduate students. Supervisors, graduate students in clinical and counseling psychology, conducted a 20-minute supervisory session between pre- and post-test presentations of client-comment videotapes. Results indicated that both the techniques-oriented and control groups had significantly greater improvement in empathic responding to client comments than did the counseling-oriented group. Payne and Gralinski speculated that the lack of significant difference between the techniques-oriented and control groups might be accounted for by modeling effects of their

orientation tape. A follow-up study by Payne, Weiss, and Kapp (1972) was designed to test this hypothesis.

Payne, Weiss, and Kapp (1972) presented orientation tapes to their undergraduate subjects which either included the demonstration of high and low empathic responses (audio-modeling) or excluded all examples of counselor response (no-modeling). Following the random assignment of subjects from each of these two conditions to experimental (didactic versus experiential supervision) and control groups, three client-comment videotapes were presented with 15-minute supervisory sessions occurring between the first and second, and second and third tapes. Improvement in empathic responding was significantly greater for the didactic supervisory group than for the experiential supervisory group, and greater for the audio-modeling group than for the no-modeling group. The effects of modeling and didactic supervision were additive.

Payne, Winter, and Bell (1972) extended the Payne and Gralinski (1968) study by using more experienced supervisors; by increasing the number of client tapes to three, and the supervisory sessions to two; and by including modeling versus no-modeling and placebo-control groups. The modeling versus no-modeling condition was a replication of that employed in the Payne, Weiss, and Kapp (1972) study. The placebo-control group received a lecture on client psychodynamics during the two 15-minute supervisory sessions. With these added conditions, the six treatment groups included: technique-oriented, counseling-oriented, placebo-modeling, placebo-no modeling, control-modeling, and control-no modeling. The results replicated those of the earlier study, with

significant improvement in empathic responding occurring only in technique-oriented and control-modeling groups. No difference was found between these two conditions.

Goldfarb (1978), also using undergraduate students as subjects, examined the effects of various combinations of didactic and experiential supervision. Counselor effectiveness and levels of congruency and empathy in counselor responses were measured after two 15-minute supervisory sessions in one of the following conditions: (a) high didactic-low experiential, (b) low didactic-high experiential, (c) high didactic-high experiential, or (d) low didactic-low experiential. All groups with the exception of the low didactic-low experiential and control groups, showed significant improvement on all measures. No between-group differences were found among the three improved groups. Goldfarb concluded that the inexperienced student could be taught basic skills in brief supervision which was either didactic or didactic and experiential in nature.

Although these studies seemed to consistently support the greater efficacy of didactic supervision, authors (Goldfarb, 1978; Payne, Weiss, & Kapp, 1972) cautioned against the over-generalization of their findings. Goldfarb suggested that the differential effects of didactic supervision might occur only among novice counselors, or only in the acquisition of basic skills. He found support for this speculation in a study by Crane (1974, cited in Goldfarb, 1978) which had shown didactic supervision to be more effective in the development of basic skills for beginning counselors, but revealed no difference between didactic and experiential supervision among students who were

experienced in both counseling and supervision. Payne, Weiss, and Kapp (1972) were among those who suggested that other supervisory approaches may be more appropriate for advanced students, or for the development of higher-level skills. They proposed the notion that didactic and experiential supervision may represent different stages in training, rather than simply offer mutually exclusive supervisory alternatives.

Research that has addressed the relationship between specific teaching methods and the supervisee's acquisition of therapeutic skills, has also revealed differences which may be accounted for by the student's level of experience. An example of this work is found in a study done by Ronnestad (1977) which was designed as an extension of the earlier research by Birk (1972); Payne and Gralinski (1968); and Payne, Weiss, and Kapp (1972). Accepting their premise that didactic supervision was more effective than experiential supervision in teaching specific skills, Ronnestad turned his attention to two isolated instructional components of the didactic mode. He measured the empathic responding of first- and second-semester students in a master's level counseling program, following two 12-15-minute supervisory sessions which offered one of the following conditions: (a) modeling, (b) feedback, or (c) experiential (counseling) intervention. Results indicated that modeling was the most effective intervention, followed by feedback. Ronnestad concluded that a structured teaching model was more effective for beginning students, and speculated that modeling may be more useful than feedback for the novice because it introduces therapeutic behaviors which are not yet

part of the supervisee's behavioral repertoire.

The further investigation of modeling and feedback has been combined with experimental comparisons of other teaching approaches including instruction, rehearsal (role-playing), and cognitive restructuring (Akamatsu, 1980; Carlson, 1974; Peters, Cormier, & Cormier, 1978; Stone & Vance, 1976; Tosi & Eshbaugh, 1978). Other work has addressed specific training models such as Interpersonal Process Recall (Kagan, 1980; Kagan & Krathwohl, 1967), microcounseling (Forsyth & Ivey, 1980; Ivey, 1971; Ivey, Normington, Miller, Merrill, & Haase, 1968), and Systematic Human Relations Training (Carkhuff, 1967, 1969a, 1969b; Stone & Vance, 1976). Still other studies have explored the usefulness of specific teaching aides such as audio- and video-taped recordings (Eisenberg & Delaney, 1970; Markey, Frederickson, Johnson, & Julius, 1970; Ward, Kagan, & Krathwohl, 1972; Yenawine & Arbuckle, 1971). Excellent reviews of these studies have been published by Matarazzo (1971, 1978) and Lambert (1980). In addition, several of the studies have been summarized in a series of reviews by Hansen and his colleagues (Hansen, Pound, & Petro, 1976; Hansen, Robins, & Grimes, 1082; Hansen & Warner, 1971).

Within this body of research, no significant differences have been reported among the various didactic approaches or teaching methods, for either the acquisition or the short-term retention of basic interpersonal skills. Differential effects that occur as a function of the student's level of experience have been suggested. However, the data are limited to the inexperienced student's acquisition of pre-practicum or beginning practicum level skills. No research has

been presented which has examined either the long-term retention of these skills, or the process by which they are integrated with more advanced learning through supervision. Further, studies have yet to consider the effectiveness of specific teaching methods for the expansion or refinement of advanced psychotherapeutic skills, such as increased observational and data-gathering skills; the integration of theoretical, research, and clinical information for appropriate assessment, diagnosis, and formulation of treatment strategies; or the evaluation and refinement of therapeutic interventions.

In summary, the didactic model of supervision emphasizes the direct teaching of psychotherapeutic skills. Supervision, which is characteristically structured, client-focused, and task-oriented, has as its objectives: (a) the development of specific therapeutic skills and techniques; (b) the conceptualization of client needs; and (c) the implementation of appropriate treatment strategies. Research has been limited to the development of basic facilitative skills among pre-practicum and beginning-practicum students.

Studies which are available suggest that for inexperienced students in brief supervision, didactic, structured approaches are more effective for the acquisition of basic skills (e.g. empathic responding) than are less structured, experiential methods. For this population, no significant differences have been found among the various teaching methods. No data are available which could be appropriately generalized to increase our understanding of the effects of didactic supervision for the advanced clinical student.

The heuristic value of these studies is found in the repeated

suggestion that either the didactic supervisory mode as a unity, or its component parts, have differential effects for learning across different levels of supervisee experience. This hypothesis has not been tested within the conceptual framework of the didactic model of supervision; but rather, has been pursued from the perspective of the developmental models which will be considered later in this review.

In both the therapeutic and didactic models of supervision, the supervisor assumes the primary responsibility for the definition of learning objectives and for the means by which they are achieved. As the supervisee gains in competence and self-confidence in the professional role, he or she becomes more able to delineate client needs, and to set his or her own supervisory goals. When this occurs, the supervisor is seen less as a teacher, and more as a consultant.

Supervision as Consultation

The adoption of a consultation model for supervision in psychotherapy training has been a relatively recent occurrence. Although the historical perspective has yet to be fully elaborated, it seems likely that the acceptance of this conceptual framework was influenced by two trends. The first was the general acceptance of consultation by mental health professionals--especially psychologists. The second was the movement away from the single-focused, polarized didactic and experiential models of supervision to more integrated, complex theoretical frameworks.

The former trend--the adoption of consultation as an essential mental health service--was spurred both by the proliferation of consultative services in business and government in the 1940's and 50's,

and by the passage of the Community Mental Health Centers Act in 1963 (Kurpius, 1978b; Kurpius & Robinson, 1978; Schulberg & Jerrell, 1983). Consultation was defined in that Act as an essential part of the community mental health services because of limited man-power within that system. It was believed that with the support of expert consultants, a greater number of less-experienced therapists could provide direct services to severely disturbed and difficult clients. In addition to extending the service component of the mental health program, these experiences provided opportunity for therapists to develop more sophisticated psychotherapeutic skills. These training effects may well have suggested consultation as a training model to those who had found that neither the experiential nor the didactic model adequately accounted for the learning and professionalization of students in advanced levels of clinical training.

Dissatisfaction with the earlier, polarized models had grown, and by the early 1960's several educators had begun to move toward the theoretical integration or "blending" of supervisory functions in order to create more comprehensive frameworks for supervision. Truax, Carkhuff, and Douds (1964) had been among the first to suggest that the didactic and experiential functions of supervision be integrated in a single supervisory model. To these functions, Bernard (1979) added consultation, so that her discrimination model of supervision incorporated the supervisory roles of teaching, counseling, and consultation. Rather than identifying consultation as an additional supervisory process, Gurk and Wicas (1978) conceptualized it as a metamodel which encompassed the didactic and experiential models of

supervision. Thus, in the movement toward a more complex, comprehensive conceptual framework for supervision, consultation was proposed as either an additional, more advanced supervisory process (Bernard, 1979; Johnston & Gysbers, 1967; Windholz, 1970) or as a metamodel for helping the helper (Gurk & Wicas, 1978).

The consultation model of supervision is most commonly defined in terms of the locus of responsibility for the learning process, with consultation being characterized by the supervisee's assumption of responsibility for the definition and ultimate solution of the problem or area of difficulty. Bernard (1979) has commented that, "the supervisor as consultant focuses on a relationship with the counselor that is explorative in nature and assumes that the counselor has the ability to express his or her own supervision needs" (p. 64). In a very direct and simple summary of the consultation system, Kurpius (1978b) wrote, "The client is the person or system with the problem, the consultee is the person trying to solve the problem, and the consultant is the person helping the consultee solve the client's problem" (p. 320). The supervisor is, thus, seen as a catalyst by which the supervisee can analyze and change his or her own behavior for the benefit of the client (Kurpius & Robinson, 1978). Littrell, et al. (1979) described the consultation model of supervision as one which "stresses meeting with the supervisee as a colleague about issues related to helping clients" (p. 129). Whereas the didactic model emphasizes teaching and evaluation, the consultation model emphasizes collaboration and inquiry. Supervisee self-evaluation is encouraged.

Although both behavior modification and social learning theories

are frequently associated with consultation, the consultative model of supervision is generally considered to be atheoretical (Blake & Mouton, 1978; Kurpius, 1978a; Kurpius & Robinson, 1978). Neither the early proposals for the use of consultation in pre-practicum skills training (Boy & Pine, 1966; Hackney, 1971; Johnston & Gysbers, 1967), nor the later descriptions of a consultative model for advanced clinical training (Bernard, 1979; Gurk & Wicas, 1978; Kurpius, 1978a) have lead to systematic inquiry or research. The limited literature remains descriptive in nature. In the absence of either theoretical formulations or empirical investigation, the consultative models which have been offered for clinical supervision will be briefly described.

The model for consultative supervision proposed by Gurk and Wicas (1979) was initally offered as a general, descriptive framework for consultation by Blake and Mouton (1978). They had conceptualized systems of human behavior, whether individual or societal, as being cyclical in nature; and defined consultation as a process by which these cycles are broken. They proposed five basic consultative interventions which included: (a) acceptance - an approach which offers the consultee a sense of security that facilitates an objective, accurate description of the problem, and supports self-reliance in determining a solution; (b) catalyst - in this intervention, the consultant assists the consultee's information-gathering processes, clarifies perceptions, and heightens awareness of the problem and options for its resolution; (c) confrontation - the consultant challenges the consultee's thoughts and belief systems, and thereby increases options for solution of the problem; (d) prescription - with

this approach, the consultant assumes responsibility for the diagnosis and formulation of a solution, and this is offered to the consultee as a recommendation for intervention; and (e) theories and principles - this intervention is didactic in nature, and is used if specific theoretical information is pertinent to the consultee's understanding the problem and/or its systematic resolution. Focal issues for intervention which were delineated by Blake and Mouton included issues of: (a) power and authority, (b) morale and cohesion, (c) standards or norms of conduct, and (d) goals and objectives. The authors concluded that consultation effectiveness was dependent upon the consultant's correct identification of the focal issue or issues, and his or her choice of the correct intervention.

As noted earlier, Gurk and Wicas (1979) adopted this conceptual framework as a metamodel for supervision, designed to encompass both the didactic and experiential supervisory modes. They defined the goal of supervision as increasing the helping effectiveness of the person supervised, and suggested that the appropriate focus of supervision was the supervisee's behaviors, skills, attitudes, and understandings. To more clearly delineate the process by which this objective might be achieved, Gurk and Wicas proposed the redefinition of Blake and Mouton's (1978) focal issues. Their points of attention for consultative supervisory intervention became process issues which included: (a) contract definition and redefinition, (b) data collection, (c) data analysis, (d) problem-solving, and (e) evaluation. The interventions proposed by Blake and Mouton were adopted without modification.

Kurpius (1978a) offered four consultative approaches which were similar to the interventions suggested by Blake and Mouton (1978). He elaborated consultation as being (a) provision - in which a referral is made by the consultee to the consultant, who provides direct service to the client; (b) prescription - the consultant, as an expert, becomes a resource person who guides the data-collecting process, diagnosis, and treatment formulation; (c) collaboration - the consultant, as a catalyst, facilitates the consultee's efforts to solve the problem; or (d) mediation - in which the consultant, as a more objective observer, identifies a problem within the consultee-client system, and works with the consultee to provide appropriate intervention. The nine consulting stages proposed by Kurpius (1978a) mirror the process variables of other models, including the definition of expectations and goals, contractual agreement for the achievement of goals, problem-solving, evaluation and redefinition of goals.

Following their proposal of the consultation metamodel of supervision, Gurk and Wicas (1979) noted that avenues for research were obvious. Indeed, the need and the possibilities for the investigation of relationships between consultative supervisory variables and supervision or treatment outcomes are self-evident. Of broader theoretical interest are research questions such as those raised in a study by Goodyear, Abadie, and Efros (1984), or those suggested by Windholz's (1970) comments.

Goodyear, Abadie, and Efros (1984) conducted a study which compared the supervisory approaches and interventions of Rudolph Ekstein, Albert Ellis, Erving Polster, and Carl Rogers. These

supervisors were chosen to represent the theoretical orientations of psychoanalysis, rational-emotive, gestalt, and client-centered therapies respectively. Video-taped supervisory sessions conducted by each of these therapists were rated on several variables by 58 independent judges, who were also experienced supervisors. The dependent variable of interest for this review was the degree to which each supervisor was perceived as functioning within the counselor, teacher, and consultant roles (Bernard, 1979). Results indicated differences among these four supervisors in their emphasis on teacher and counselor roles in directions which might be predicted by their theoretical orientations. That is, Polster and Rogers were perceived as functioning more in the counselor role; Ellis and Ekstein were perceived more as teachers. No differences were perceived among these supervisors in their use of the consultant role. Goodyear, et al. suggested two alternative explanations for this result. Either, they concluded, raters had difficulty perceiving consultation as a supervisory role and did not discriminate consultative functioning among supervisors; or, the consultative role was emphasized equally across all theoretical orientations. The latter explanation would support the assumption that the consultation model of supervision is atheoretical in terms of psychotherapeutic orientation (Blake & Mouton, 1978; Kurpius, 1978a; Kurpius & Robinson, 1978). However, these hypotheses have yet to be tested.

The developmental aspects of the consultative relationship in supervision were suggested by Windholz (1970), and his remarks inspire further questions regarding the emergence and reciprocal effects of

consultation in clinical supervision. Windholz proposed that as the student analyst gains in ability to manage analysis independently, the clinical supervisor is relieved of the necessity to teach, and thereby becomes a more objective observer of both the analysis and the supervisory process. He suggested that from this position of "safety" (less direct responsibility for the outcome), the supervisor may allow or encourage the fuller development of case conceptualization, the greater integration of theoretical knowledge and empathic understanding (didactic and experiential processes), and the exploration of the limits of psychoanalysis. Windholz perceived this increased objectivity as being as important to the supervisory process as the supervisor's clinical expertise. The combined assets of the supervisor's expertise and this more objective, observant role may contribute to the benefit of consultation which was referred to by Kurpius (1978b) when he wrote that consultation "increases the probability that the problem will be correctly defined and efficiently and effectively solved" (p. 320). Further, this objective distance may contribute to the more sophisticated learning which was referred to by Matarazzo (1971, 1978) when she spoke of the development of psychotherapeutic expertise. Consultative supervision perhaps offers greater freedom for both the supervisor and the supervisee to explore, integrate, and individualize the lessons of didactic and experiential supervision. Such freedom may be necessary for the development of psychotherapeutic expertise, including the personalization of therapeutic interventions and the refinement of conceptual models for therapy. Again, these hypotheses have not been examined.

In summary, the consultation model of supervision emphasizes a collegial supervisory relationship in which the supervisee assumes primary responsibility for the definition and solution of the problem or area of difficulty. Consultative supervision, as distinguished from a collegial or professional model for pre-practicum skills training, has most commonly been viewed as a supervisory approach to be employed with advanced students. As such, it has the following objectives: (a) the development of advanced psychotherapeutic skills, (b) the fuller development of case conceptualization, (c) the integration of theoretical and empirical data in a manner which supports the increased personalization of therapeutic interventions, and (d) the supervisee's assumption of responsibility for his or her own learning and behavioral change. Consultative interventions are generally problem-solving and process oriented, and have been variously described as provision, prescription, collaboration, mediation and confrontation. Descriptive models for consultation as supervision have been offered, but none has been elaborated or clarified through systematic research.

As the student assumes greater responsibility for therapy and his or her own learning, the supervisee role becomes increasingly professional. The ultimate supervisory goal for the independent, professional psychotherapist is a self-monitored, self-evaluative, and self-determined level of therapeutic functioning. This professional ideal is defined by Littrell, et al. (1979) as self-supervision.

Supervision as Self-Supervision

Self-supervision, as a supervisory model, seems to represent two

specific, and somewhat separate, sets of supervisory processes and objectives. The first emphasizes self-supervision as a repertoire of self-management or self-directed learning skills. From this perspective, Littrell, et al. (1979) defined self-supervision as "a set of procedures that the counselor initiates and implements in modifying self-selected professional attitudes or behavior to achieve self-determined out-comes" (p. 133). Beyond this definition, self-supervision also reflects the professional ideal of the therapist's participation in an on-going learning process that incorporates self-monitoring, self-evaluation, and self-directed behavioral change. Littrell, et al. captured this broader concept when they wrote that the self-supervision model, "concentrates on [the supervisee's] incorporating the attitudes, skills, and knowledge of the previous [supervisory] models as a self-supervisor" (p. 129). This, they concluded, requires the student's internalization of supervisory skills, and the supervisee's becoming the "principle designer of his or her learning" (p. 134). In this sense, self-supervision is the ultimate goal of the supervisory process, and its attainment marks the professionalization of the supervisee.

The development of the self-supervision model for clinical training is recent in origin (Littrell, et al., 1979), and has been influenced primarily by behavioral (Skinner, 1953) and social learning (Bandura, 1977a, 1977b, 1978) theories. Again, the literature is limited. A few studies have been presented which address the use of self-management procedures in the acquisition of basic or pre-practicum level counseling skills (Carrico, 1975, cited in Littrell, et al., 1979;

Hackney, 1975, cited in Littrell, et al., 1979; Hector, Elson, & Yager, 1977). No work is available that has either focused upon the attainment of self-supervision as a professional training goal, or considered the effects of self-supervision on treatment outcome or other measures of professional performance.

Although strategies of behavior modification have been employed for self-directed learning and skill maintenance among paraprofessionals (Meyer, 1978), the models proposed for advanced professional training more commonly adopt principles that combine behavior modification and social learning theory. An example is Bandura's (1978) cognitive model for the self-regulation of behavior.

Bandura (1978) based his self-regulation model on the premise that behavior change--or learning--was a function of the reciprocal interaction of environmental, cognitive, and behavioral factors. He argued that self-regulated influences were determined by a self-system which was comprised of "cognitive structures that provide reference mechanisms and a set of subfunctions for the perception, evaluation, and regulation of behavior" (p. 348). Thus, by his account, behavior is self-regulated through the processes of (a) self-observation, (b) self-evaluation, and (c) self-response.

Self-observation and self-evaluation are skills commonly included in early training curricula. Examples of procedures employed include process recording, assessment of verbal and non-verbal responses, and review of audio- and video-taped therapy sessions. Meyer (1978) has emphasized the need for beginning students to be taught what to attend to in these reviews, and has encouraged the use of rating scales as

standards against which therapeutic responses may be judged. As the student advances in training, guidelines provided by the professional code of ethics and standards of scientific practice for the research-clinician become a part of this internalized measure of acceptable performance. Self-response, also referred to as self-reinforcement (Meyer, 1978), includes self-prescribed contingencies for the attainment of specific goals, and may include either tangible or evaluative self-rewards (Bandura, 1978).

The adoption of Bandura's (1978) principles of self-supervision has been suggested by Lecomte and Berstein (1978, cited in Littrell, et al., 1979). A brief summary of their approach is provided by Littrell, et al.. It essentially imposes a problem-solving paradigm on the self-regulatory model.

In summary, self-supervision has been conceptualized as a set of procedures for self-directed behavior change, as well as a professional ideal for self-monitoring; self-evaluation; and on-going, self-determined behavioral change in the practice of psychotherapy. Objectives for this supervisory model include: (a) the development of self-regulatory skills, (b) the internalization of supervisory skills such as those identified by the experiential, didactic, and consultative models of supervision, (c) the development of professional attitudes and value systems which support on-going, self-directed professional growth. The achievement of these objectives, as well as the accomplishment of the goal of clinical supervision, was summarized by Littrell, et al. (1979) when they wrote:

Optimally, the self-supervising counselor is sensitive to personal-

> emotional issues, is skilled in understanding clients and effective methods of helping, and is able to step outside of counseling situations and objectively assess his or her impact as a counselor....[When this state is reached] the conceptualization, implementation, control, and management of supervision are the counselor's responsibilities as a professional. (p. 134)

Integration: The Developmental Models of Supervision

The multidimensional frameworks that were seen by Holloway and Hosford (1983) as providing the most comprehensive conceptualization of supervision for research, include the integrative-developmental (Bartlett, 1983) or developmental models of clinical supervision. The developmental models conceptualize supervision as a sequential process comprised of qualitatively and quantitatively distinct phases or stages, through which the supervisor and supervisee progress in order to reach a common goal--the professionalization of the student. Emphasis is placed upon the reciprocal interaction between supervisor and supervisee; and effectiveness of supervision is seen as a function of the interplay between the student's abilities and learning needs, and the provision of a developmentally appropriate supervisory environment. All models developed to date have envisioned a linear developmental progression from the simple to complex; however, as the processes are more closely scrutinized, other alternatives such as repeated developmental cycles (Hogan, 1964) or spirals (Worthington, 1984), have been suggested.

Some of the earlier formulations of developmental models (Ard, 1973; Fleming, 1953, cited in Ciecko, 1982; Gaoni & Newman, 1974) characterized the student's progression through the stages of supervision as being a function of reduced anxiety and increased

self-confidence in one's skills and counselor identity. Stages incorporated in these early models were summarized by Ciecko (1982) as: (a) didactic instruction, case conceptualization, and technical skills; (b) increased personal awareness in the therapeutic setting; and (c) the integration or blending of skills and personal awareness. Each of these models described a progressive increase in the professionalization of the supervisee, and a decrease in supervisor responsibility.

Among the more contemporary work, Ralph (1980) defined the process of learning psychotherapy as a developmental experience which is marked by specific milestones. These milestones, or points at which a change of perspective results in the development of new therapeutic paradigms, were identified through interviews with eight supervisors and 36 graduate students in programs in clinical psychology. Organized along a developmental continuum, they included: (a) learning the role of a non-directive psychotherapist, (b) adopting a global, client-centered and content-related therapeutic approach, (c) developing a relationship-centered therapeutic approach, and (d) developing a therapist-centered approach which refines the therapist's use of himself or herself as a therapeutic instrument, and increases his or her awareness of personal and professional limitations. Ralph saw this process as a transition from cognitively concrete, commonsense interventions, to therapeutic approaches based upon greater levels of abstraction and introspection in analysis of the relationship. In his discussion, he speculated that graduate education in psychotherapy may be best served by the provision of rich, supportive

supervisory environments that are respondent to the student's level of conceptual functioning. He contended that supervision was most advantageous for supervisee development when it was one step beyond the student's level of functioning.

A model proposed by Hogan in 1964 which matched the supervisory environment with supervisee development has become a seminal work in this area. Briefly, he delineated four stages of supervisee development which ranged from anxious, dependent, method-bound levels of functioning, to independent, creative psychotherapy. Differential supervisory approaches were advocated for each level.

Stoltenberg (1981) integrated Hogan's (1964) model of developmental supervision with a framework of cognitive development to form what he termed the Counselor Complexity Model for supervision. He described his model as one in which

> ...the trainee is viewed not just as a counselor lacking specific skills but as an individual who is embarking on a course of development that will culminate in the emergence of a counselor identity....[and] constitutes the integration of skills, theory, and a more complete awareness of oneself and others. (p. 59)

Stoltenberg's (1981) model describes counselor characteristics and the appropriate supervisory environment for each of four counselor levels. Briefly summarized, they are: (a) Level I: Dependence upon the Supervisor - The supervisee is dependent upon the supervisor for exemplification, instruction, interpretation, support, and awareness training. He or she seeks rules and models for "the right way to be a therapist." The supervisor is a teacher who provides a supportive (not counseling) relationship which will facilitate reduction of the supervisee's anxiety. The appropriate supervisory

environment is a normative, structured environment which encourages autonomy. (b) Level 2: Dependency-Autonomy Conflict - The supervisee experiences conflict between confidence in newly acquired skills and anxiety over increasing responsibility. He or she may experience fluctuation in motivation, and may have conflicts with his or her supervisor over the "right" way to do things. The supervisor becomes more a resource person than an advisor and the role of non-directive counselor may be appropriate. Supervisory approaches include support, ambivalence clarification, and exemplification. The appropriate environment is less structured, less instructive, and highly autonomous. (c) Level 3: Conditional Dependency - The supervisee is more tolerant of differences, is more able to work with difficult clients, and has gained in professional identity and self-confidence. The supervisory relationship becomes collegial, and there is a mutual sharing, exemplification, and confrontation. The appropriate environment is autonomous, with structure for the supervisory session being the responsibility of the supervisee. (d) Master Counselor - The supervisee is able to function as an independent clinician in most settings, and has integrated professional standards with his or her own personal values and beliefs. Supervision, if continued, is collegial.

In summary, Stoltenberg's (1981) Counselor Complexity Model provides a continuum from supervisee dependence to professional independence. Within this framework, effective supervision is seen as being dependent upon the skills and attributes of the student, and the provision of an appropriate supervisory environment. What specific

supervisory behaviors, then, define an appropriate environment?

A study done by Worthington and Roehlke (1979) prior to the publication of the Stoltenberg (1981) model, investigated the relationship between specific supervisor behaviors and the supervisee's perception of the effectiveness of supervision. Sixteen supervisors rated each of 42 supervisor behaviors in terms of its importance to good supervision. Thirty-one beginning-level counseling students rated the same behaviors to indicate how descriptive each was of their supervisor's actual behavior in supervision. In addition, the supervisees completed scales which rated their satisfaction, how competent their supervisor was in providing good supervision, and how much supervisory interaction contributed to the student's improvement in counseling ability. Results indicated that supervisors considered giving accurate feedback about the supervisee's counseling ability essential for good supervision. Further, they believed that confrontation and a supportive role were important. Supervisors did not identify didactic-instructional behaviors as being important to good supervision. Supervisees, on the other hand, rated instruction, evaluation, and a supportive supervisory relationship as being requisite to good supervision. Supervisee satisfaction with supervision was best predicted by a good relationship and direct help with counseling skills. Supervisor competency in providing good supervision was seen as a function of greater experience and self-assurance of the supervisor, and the supervisor's encouraging the student to develop his or her own skills. Supervisee improvement was best predicted by receiving direct help with counseling skills, supervisor support for

risk-taking, and a good relationship with the supervisor. In summary, good supervision was defined by supervisors as feedback, and by beginning-level counseling students as being taught skills and a supportive relationship. Several studies (Heppner & Roehlke, 1984; Miars, et al., 1983; Turow, 1982; Worthington, 1984) have extended this work.

Turow (1982) modified the statement of supervisor behaviors proposed by Worthington and Roehlke (1979) and added to her questionnaire supervisee behaviors that she believed contributed to active learning. Her subjects, 326 graduate students in a professional psychology program, rated the frequency of occurrence of these supervisory behaviors during their individual supervision sessions. Also rated were their perceived increase in therapeutic effectiveness, knowledge of theoretical and technical issues, and personal self-knowledge; and their degree of satisfaction with supervision. Through factor analysis of her data, she determined that three groups of behaviors were predictive of perceived learning and satisfaction. Broadly described, they included supervisee risk-taking, didactic and experiential supervisory styles, and supportive supervisory interactons. She reported no significant differences across levels of student experience.

Using Stoltenberg's (1981) model as their conceptual base, Miars, et al. (1983) investigated supervisor's perceived differences in supervisory approach with supervisees at various levels of experience. Further, they examined demographic variables which they believed might be related to developmental variation in the supervisory process.

Thirty-seven experienced supervisors, who supervised graduate students in either clinical or counseling psychology, were asked to complete a questionnaire made up of the items proposed by Worthington and Roehlke (1979) which had been modified to allow ratings of the supervisor's perception of the importance of different aspects of supervision, the frequency of specific supervisory behaviors, the supervisor's perception of time spent on various supervisory functions, and the presence of different supervisory roles and types of behavior across four levels of supervisee experience. Supervisee experience levels included Practica 1,2, and Advanced (more that two semesters of practicum, but prior to internship), and Pre-doctoral Internship. Supervisor responses were elicited for demographic variables including sex, amount of supervision experience, primary job function, and therapeutic orientation. The results indicated that significant differences in supervisory approach were perceived as occurring between the second and advanced-level practica students, but no significant differences were perceived between the first and second, or between the advanced and internship levels. Differences between supervision with the inexperienced and experienced student groups were found in amounts of direct teaching, support, and monitoring, all of which were higher for the inexperienced students; and in the degree of collegial interacton which was higher with the experienced students. Among the demographic variables, only theoretical orientation was found significantly related to the variation of supervisory approach across levels of student experience. Supervisors who were psychoanalytically oriented appeared to be more sensitive to the supervisee's developmental

progression in training than were supervisors from other orientations. No significant differences were found across supervisee experience levels for either supervisor perceptions of behavioral styles (supportive, instructional, directive, confrontational, interpretive) or roles (teacher, expert advisor, colleague/consultant, therapist/ counselor).

Worthington (1984) extended his earlier work (Worthington & Roehlke, 1979) by exploring the relationships between specific supervisor behaviors and effective supervision across levels of supervisee experience and across training programs through-out the United States. His subjects, 237 graduate students from 11 counseling psychology programs, were classified as being in Practicum 1, 2, 3, 4, or internship. At the end of the semester, each rated the frequency of supervisor behaviors as measured by a modified Supervision Questionnaire, as well as his or her perceptions of satisfaction with supervision, supervisor competency, and supervisor impact on their improvement of counseling abilities. Results indicated differences in each of these measures of supervisory effectiveness across settings, but not across levels of supervisee experience. A principle components factor analysis of their data on frequency of supervisor behaviors suggested 12 factors, four of which--independence with direction, infrequently taught skills, direct monitoring, and established goals--were found to be related to the level of student experience, with the trend being toward increased independence with increased experience. In general, supervisor behaviors of support and encouragement were related to effective supervision by both first-practicum students and

interns. Both groups were especially sensitive to evaluative supervisor behaviors. Development of skills, including case conceptualizations and new interventions, were related to effective supervision across all levels.

Differences in supervision across levels of experience for counselors-in-training were also examined in a series of three studies by Heppner and Roehlke (1984). They investigated the interpersonal influence process between supervisor and supervisee, the supervisee's perceptions of specific supervisor behaviors and the effectiveness of supervision, and the supervisee's perceptions of important or critical incidents during supervision. Most relevant to the current review is their second study which addressed the research question posed earlier by Worthington and Roehlke (1979), "Do supervisees at different trainee levels perceive the same or different supervisory behaviors as contributing to supervisory effectiveness?" (Heppner & Roehlke, 1984, p. 81). Using the Supervision Questionnaire-Revised, 49 graduate students in counseling psychology representing beginning and advanced practica and internship levels, rated the frequency of occurrence of supervisor behaviors in individual supervision. They also rated their perceptions of satisfaction with supervision, supervisor competence, and contribution of the supervisor to improvement of their counseling abilities. Results of this study showed that although more of the supervisor behaviors that were included in the Supervision Questionnaire-Revised, correlated with effective supervision for the beginning and advanced practica students than for those in internships, differences among the groups did emerge. Beginning-practicum students

related positive supervisory relationships to effective supervision, whereas advanced students emphasized supervisory facilitation of their development of counseling skills. Interns rated both acquisition of new skills and support in dealing with personal issues and/or defenses which interferred with their counseling as important to effective supervision. A supportive supervisory relationship was valued at all levels. Heppner and Roehlke concluded that their data supported the concept of a developmental progression in supervision from skills acquisition to the development of alternative case conceptualizations and interventions to examining personal issues which influence therapy. They suggested that this progression was most consistent with the developmental model proposed by Littrell, et al. (1979).

The model for supervision that was proposed by Littrell, Lee-Borden, and Lorenz (1979) is the framework which has been adopted for the current study, and hence, has been presented through-out this paper. In summary, Littrell, et al. conceptualized supervision as a sequence of developmental stages through which both supervisee and supervisor progress. The ultimate goal is professionalization of the student. They have identified four phases or stages of development including: Stage I - Relationship Development and Goal-Setting, Stage II - Counseling and Teaching, Stage III - Consultation, and Stage IV - Self-Supervision. Progression through these stages is a function of the reciprocal interaction of supervisor and supervisee, with the student assuming greater responsibility for his or her learning at each stage. Assumptions of the model include the trainee's possessing basic attending skills and the "potential" for facilitative

interaction. Also assumed are the supervisor's willingness and ability to allow and assist the student's progressive development. No studies have yet demonstrated the relationships between the supervisory behaviors commonly measured in developmental research and these supervisory stages.

In summary, the developmental models of psychotherapy supervision represent integrative frameworks which incorporate the earlier conceptualizations of supervision. They are, for the most part, the bases for contemporary supervisory research. These models describe supervision in clinical training as a progression of the supervisor and supervisee through distinct phases or stages of supervision. Although each model identifies these stages in slightly different ways, they share the trend of a developmental progression of increasing supervisee responsibility and independence. The goal of each is the professionalization and independent practice of the student. The research has also suggested that effective supervision moves from attention to the student's anxiety and need for support and confirmation of counselor/therapist identity, to his or her acquisition of skills, new case conceptualizations and interventions, to focus on personal issues and/or defenses which may interfere with therapy. The supervisory relationship moves from one of teaching and counseling to one of collegial interaction.

Although the development of these more comprehensive models offers a broader perspective for supervisory research than did the earlier conceptualizations, most of the work has been narrowly focused by the measurement instruments which have been employed. The following section

will consider the development of a commonly used measure, the Supervision Questionnaire (Worthington & Roehlke, 1979), and its elaboration through the addition of supervisee behavioral items in the Index of Behaviors in Supervision (Turow, 1982). The limitations of these instruments for developmental supervisory research, and the issues addressed by the current study will be presented.

Development of Measures of Supervisory Behaviors: The Supervision Questionnaire and Index of Behaviors in Supervision

The original version of the Supervision Questionnaire (SQ) was published by Worthington and Roehlke in 1979, as a part of their study which examined relationships between supervisor behaviors and the effectiveness of supervision. In advance of that work, they interviewed 16 experienced supervisors and from their data compiled a list of 42 supervisor behaviors deemed to be "important" to supervision. In subsequent studies, six additional items were used. Three of those items were added by Heppner and Roehlke (1984) because they believed the items "seemed to merit attention." Three items, added by Worthington (1984), had been suggested by responses to an open-ended question on the original SQ. The resultant 48-item questionnaire has become known as the Supervision Questionnaire-Revised (SQ-R).

Worthington (1984) wrote that although no reliability or validity data were originally given, their (Worthington & Roehlke, 1979) factor structure had been duplicated by Heppner and Handley (1982), and face validity could be assumed from the frequent use of the questionnaire items. Indeed, several studies (Heppner & Handley, 1982; Miars, et al.,

1983; Reising & Daniels, 1983; Stenack & Dye, 1982; Turow, 1982) have used items of the SQ, in either their original or modified form, and many (Reising & Daniels, 1983; Stenack & Dye, 1982; Turow, 1982; Worthington, 1984) have offered exploratory factor analyses of the questionnaire. The failure of these investigators to use a standardized form of the instrument, however, has greatly limited the value of that work.

Several problems may be identified that have limited both the progressive development of the SQ, and its usefulness for research based on the developmental models of supervision. Two have already been mentioned, namely, the failure of researchers to adopt a standardized form of the questionnaire, and the lack of reliability and validity data. Investigators have commonly altered the order and wording of items, so that comparison between or across studies is difficult, and, in some cases, impossible. Data which are comparable across studies have not been sufficient to determine either the reliability of the instrument or its validity as a measure of the constructs proposed by the developmental supervisory models. Other limitations are defined by the basic theoretical assumptions of the models themselves.

As noted earlier, the developmental models assume the sequential progression of the supervisor and supervisee through distinct, increasingly advanced phases or stages of supervision. Further, it is presumed that this developmental progression is a function of reciprocal interaction between supervisor and supervisee behaviors. These assumptions are clearly not reflected by the SQ which contains

only supervisor behavioral items developed as measures of supervision as a unified construct. Recent studies (Heppner & Roehlke, 1984; Stenack & Dye, 1982; Worthington, 1984), which have used the questionnaire in research across levels of supervisee experience, have shown progressively fewer significant correlations between supervisory behaviors and measures of effectiveness of supervision as the student advances in training. This suggests that the questionnaire items may reflect behaviors of the earlier stages of supervision, a proposition consistent with the fact that the SQ was developed for use with beginning-level practicum students.

One study, that done by Stenack and Dye in 1982, did attempt to define developmental stages of supervision in terms of supervisor behaviors commonly included in research questionnaires. Using selected items from the SQ, in combination with several other lists of supervisor behaviors, they proposed behavioral definitions for each of the supervisor roles delineated by Bernard's (1979) developmental framework. No study has extended this work to other conceptualizations of supervisory stages. No work has examined the SQ in its entireity to determine the extent to which its items represent behaviors specific to each developmental stage of supervision.

The contribution made by Turow (1982) to the development of a more comprehensive measure of supervisory behaviors, came with her expansion of the original SQ to include supervisee, as well as supervisor, behaviors. For her dissertation, which examined supervisor and supervisee behaviors as predictors of learning in supervision, Turow developed a questionnaire identified as the Index of Behaviors in

Supervision (IBIS). This instrument was composed of 37 modified SQ items of supervisor behaviors, and 29 items of supervisee behaviors which were empirically derived in a pilot study. Thirty-five doctoral students and graduates from a professional psychology program had been asked to list supervisory experiences they had had that contributed to risk-taking behaviors in therapy and supervision. This criterion was perceived by Turow as a factor which contributed to learning. Approximately 350 statements were generated. Common responses were grouped, and items with the highest frequency were retained. Transposed from descriptive to behavioral statements, these items became the supervisee behaviors included in the IBIS. As with items of the SQ and SQ-R, these items have been used in research without benefit of reliability or validity data.

The scaling technique used with both of these questionnaires has been a 5- or 7-point Likert scale that has allowed the rating of variables such as the importance of the supervisory behavior to good supervision, the supervisee's perceived need for specific supervisor behaviors in supervision, and frequency of occurrence of specific behaviors in individual supervision. These ratings have been correlated with dependent variables such as supervisee satisfaction with supervision and measures of perceived learning.

The current status, then, of these instruments may be characterized as a beginning stage in the development of a measure of supervisory behaviors for developmental supervisory research. Items for both supervisor and supervisee behaviors have been rationally-derived through "professional or expert nomination" (Golden, Sawicki,

& Franzen, 1984), and their frequent use in research has implied face validity. Although some exploratory factor analyses have been offered, no hypothesis-testing study has been done to test the "goodness-of-fit" between the factorial structure of SQ and IBIS items and the structure theorized by the developmental models of supervision. Such was the purpose of this study.

Hypotheses

Exploratory factor analyses (e.g. principle component analysis) allow the investigator to examine relationships among a collection of variables to determine whether or not common groupings or factors exist. These procedures do not require a priori theoretical assumptions about variable organization or structure, and are typically used to generate hypotheses for further research or theory development (Horst, 1965; Nunnally, 1978). In other cases, it is possible, on the basis of theoretical postulates, to specify factors prior to analysis, and to then employ a hypothesis-testing or confirmatory factor analytic solution to determine whether or not variables that are expected to have loadings on those factors actually do. The expected factorial structure of variables, in this case questionnaire items, is indicated by the assignment of hypothesis vectors. One ("1") is assigned to those items that are expected to represent or load highest on a theorized factor; "0" indicates those items that are not expected to represent the factor. The hypothesis vectors assigned to SQ-R and IBIS items for this study may be found in Appendix E, page 122. In summary:

1. Seven items of the SQ-R and three IBIS items were hypothesized as loading highest on the factor defined by Littrell, et al. (1979)

as Supervision as Relationship Development and Goal-Setting.

2. Nine SQ-R items and seven items of the IBIS were hypothesized as loading highest on a factor defined by Littrell, et al. as Supervision as Counseling or Therapy.

3. Nineteen SQ-R items and thirteen items of the IBIS were hypothesized as loading highest on a factor defined by Littrell, et al. as Supervision as Teaching.

4. Eight SQ-R items and nine items of the IBIS were hypothesized as loading highest on a factor defined by Littrell, et al. as Supervision as Consultation.

5. No item of the SQ-R or IBIS was hypothesized as loading highest on the factor defined by Littrell, et al. as Supervision as Self-Supervision.

6. One item of the SQ-R and one IBIS item were hypothesized as loading highest on factors representing both Supervision as Counseling and Consultation.

7. Three SQ-R items were hypothesized as loading highest on factors representing both Supervision as Teaching and Consultation.

CHAPTER II

METHOD

Subjects

Subjects included 267 undergraduate and 26 graduate students enrolled at the University of Montana. Undergraduate participants, students in either psychology or human relations classes, were recruited through classroom announcements of the study. They received research credits applicable to their course requirements. Graduate students, representing doctoral students in clinical psychology (24) and master-level students in school psychology (1) and counseling and guidance (1), were invited to participate either through individual memos or classroom announcements. Graduate student participation was not compensated.

Questionnaires which were not completed or reflected non-compliant response-sets (e.g. students indicated that they had used other response strategies for ratings, inconsistent reversal of the rating scale, visual designs or patterns created by rating selections) were discarded. In addition, 25 questionnaires for Supervision as Teaching were erroneously compiled and their data were excluded. Remaining undergraduate subjects for each group included: Supervision as Relationship Development and Goal-Setting, 256; Supervision as Counseling or Therapy, 255; Supervision as Teaching, 231; Supervision as Consultation, 256; and Supervision as Self-Supervision, 258. Graduate subjects numbered 26, 26, 26, 26, and 25, respectively, for the five supervisory categories.

This study complied with ethical guidelines set forth by APA (1973)

for the use of college students as research participants in connection with their course enrollment.

Materials

Questionnaire. The questionnaire (See Appendix B, p. 104) used in this study to elicit ratings of the descriptiveness of supervisory behaviors for each developmental stage of supervision (Littrell, et al., 1979) included 48 supervisor behavioral items from the Supervision Questionnaire-Revised (SQ-R) (Heppner & Roehlke, 1984; Worthington, 1984; Worthington & Roehlke, 1979) and 33 supervisee behavioral items from the Index of Behaviors in Supervision (IBIS) (Turow, 1982). The wording of items was changed only to allow consistent use of present-tense verbs. Synonyms or brief definitions were included in parentheses immediately following terms that may have been unfamiliar to some undergraduate students. Numbering of items was as follows: Items 1-45 were supervisor items published by Heppner and Roehlke (1984). Items 46-48 were those added by Worthington (1984). Supervisee items developed by Turow (1982) were numbered 52-84, and are equivalent to her items numbered 58-92, with the exclusion of IBIS items 88 and 89. The omitted items are duplicates of SQ-R items numbered 38 and 39, respectively. Unique to the current questionnaire were items 49-51 and 85-87. These true-false items were designed to elicit sociably-desirable responses as a check for random-response sets.

The rating scale was a 7-point Likert scale which allowed subjects to rate how descriptive (7 = very descriptive, 4 = somewhat descriptive, 1 = not at all descriptive) they believed each item was of supervision

as (a) relationship development and goal-setting, (b) counseling or therapy, (c) teaching, (d) consultation, and (e) self-supervision.

Operational definitions. Attached to each of the questionnaires was an operational definition for the type of supervision being rated. For the purpose of the current study, the operational definitions of supervision, which served as the basis for rating, were elaborations of the behavioral descriptors of supervisory roles formulated by Stenack and Dye (1982). Their descriptive statements for Supervision as Counseling, Teaching, and Consultation were based on supervisory behaviors that were found to discriminate among those three roles. Definitions for Supervision as Relationship Development and Goal-Setting and Self-Supervision were based on the descriptions of Littrell, et al. (1979). The operational definitions are as follows:

(A) Supervision as RELATIONSHIP DEVELOPMENT and GOAL-SETTING is defined as individual supervision in which:

1. The focus of the interaction is on the supervisee (student) as a person in a new, yet undefined, situation.
2. The intention or goal of the supervisor is to become acquainted with the supervisee as a person; to provide supportive, non-judgemental relationship which will facilitate the reduction of the supervisee's anxiety; and to define goals and expectations for supervision.

(B) Supervision as COUNSELING or THERAPY is defined as individual supervision in which:

1. The "focus of the interaction is on the supervisee [student] as a person" (Stenack & Dye, 1982, p. 302).

2. The intention or goal of the supervisor is to facilitate (aid or help) supervisee self-growth as a psychotherapist.

3. The supervisor as a counselor or therapist may:

(a) Explore supervisee feelings during the therapy and/or supervision session.
(b) Explore supervisee feelings concerning specific techniques and/or interventions.
(c) Facilitate supervisee self-exploration of confidences and/or worries in the therapy session.
(d) Help the supervisee define personal strengths and abilities and limitations.
(e) Provide opportunities for supervisee to process their feelings and/or defenses. (p. 302)

4. The supervisor guides and directs the interaction, and may utilize counseling skills and behaviors.

(C) Supervision as TEACHING is defined as individual supervision in which:

1. The "focus of the interaction is on the supervisee [student] as a therapist" (p. 302).

2. The intention or goal of the supervisor is to instruct.

3. The supervisor as a teacher may:

(a) Evaluate observed [therapy] session interactions.
(b) Identify appropriate interventions.
(c) Teach, demonstrate and/or model intervention techniques.
(d) Explain the rationale behind specific strategies and/or interventions.
(e) Interpret significant events in the therapy session. (p. 320)

4. The supervisor remains in charge, determines the direction of interaction and functions as an advisor/expert.

(D) Supervision as CONSULTATION is defined as individual supervision in which:

1. The "focus of the interaction is on the client of the supervisee" (p. 302).

2. The intention or goal of the supervisor is to generate data.

3. The supervisor as consultant may:

   (a) Provide alternative interventions and/or conceptualizations for the suprvisee to use.
   (b) Encourages supervisee brainstorming of strategies and/or interventions.
   (c) Encourage supervisee discussion of client problems, motivations, etc.
   (d) Solicit and attempt to satisfy supervisee needs during the supervision sessions.
   (e) Allow the supervisee to structure the supervision sessions. (p. 302)

4. The supervisor allows the supervisee to exert overt control of the interaction. The supervisor provides alternatives and options instead of answers as in the teacher role. The supervisor also encourages supervisee choice and responsibility.

(E) Supervision as SELF-SUPERVISION is defined as:

The supervisee's (student's) being responsible for self-monitoring, self-evaluation, and self-determined behavioral change within his or her professional role as a therapist.

A summary of these supervisory stages is presented in Table 1.

Procedure

Undergraduate subjects met in a classroom in groups which ranged in size from 2-28 students. Groups of 2-5 students were the most common. Packets containing a consent form, a course credit card, and one copy of the questionnaire for each operational definition of supervision were distributed. To allow its use in demonstration during the instructional period, "Supervision as Relationship Development and Goal-Setting" was the first questionnaire in each packet. The remaining four questionnaires were presented in random

Table 1

Characteristics of Supervision Across Developmental Levels

	Stage 1	Stage 2		Stage 5	Stage 4
	Relationship Development and Goal Setting	Counseling/Therapy	Teaching	Consultation	Self-Supervision
Focus of Interaction	Supervise as person in new, undefined situation	Supervisee as a person	Supervisee as a therapist	Client of the supervisee	Supervisee-client relationship
Goal of Supervisor	To establish a supportive, non-judgemental relationship To establish goals for supervision	To facilitate self-exploration and growth of supervisee in therapist role	To instruct	To generate data	To encourage supervisee self-monitoring, self-evaluation, and behavioral change
Person Responsible For Interaction	Supervisor	Supervisor	Supervisor	Supervisee	Supervisee
Supervisory Behaviors	Develop relationship Acceptance and support Confirmation of therapist identity Identification of goals and expectations	Explore supervisee feelings Facilitate self-exploration Define strengths and limitations Process defenses and resistances	Identify appropriate interventions Teach, demonstrate, model techniques Explain strategies Interpret Evaluate	Brainstorm Discuss alternative approaches, client needs Solicit supervisee needs	Self-monitoring, evaluation and behavioral change Student determines need for consultation

order. This was achieved by distributing an approximately equal number of packets arranged in each of the 24 possible orders. The consent form (See Appendix A, p. 102) which included a brief description of supervision in the clinical training of psychologists was read. Subjects were asked to read the operational definition for supervision that was attached to the first page of the questionnaire and then, on the basis of that definition, to mark how descriptive (7 = very descriptive, 4 = somewhat descriptive, 1 = not at all descriptive) each item was of that type of supervision. This process was repeated for each of the five questionnaires. Students were asked to turn their questionnaires face down on the desk as they were finished, and to refrain from returning to a completed questionnaire either to change ratings or to compare responses for the different types of supervision.

Following completion of the questionnaires, questions were answered; and for those interested, a summary of the purpose of the current study, its significance for supervisory research, and the value of the student's participation were discussed.

Packets including instructions (See Appendix D, p. 118), operational definitions, and questionnaire forms were distributed to graduate students individually through the departmental mail system. Completed forms were returned to the investigator's mailbox. Questions were answered or clarification provided at the subject's request.

Data recorded for each subject included ratings for the 81 supervisory behavioral items for each of the five types of supervision.

CHAPTER III

RESULTS

An hypothesis factor analytic solution was employed to test the structure theorized for the dimensionality of supervisor and supervisee behaviors in clinical supervision. Because it was assumed that the factors would not be orthogonal to one another, and that some items would be included in more than one of the factors, an oblique hypothesis solution using the multiple-group method was chosen (Horst, 1965; Nunnally, 1978). The multiple-group method is a group-centroid method of factor analysis which allows the testing of hypotheses regarding the existence of factors. The oblique solution solves for all factors simultaneously, obtaining factor loadings directly from the correlational matrix. This differs from an orthogonal solution which would obtain loadings for the second and subsequent centroids from a residual matrix after the influence of previously obtained factors was removed. This statistical procedure allows the identification of items which may have significant loadings on more than one factor and is consistent with the theoretical framework which postulates some overlap between supervisory stages (Littrell, et al., 1979).

Analysis of the difference between undergraduate and graduate data was based on the calculation of units of standard deviation from the mean for the difference between the undergraduate and graduate mean rating on each item. A pooled unbiased estimate of variance was used. Those items for which the difference between the undergraduate and graduate mean ratings was greater than 0.5 standard deviation were recorded.

The true-false items (Items 49-51 and 85-87), included as a check for random-response sets, failed to discriminate random response patterns. Many subjects who completed questionnaires in a compliant manner, marked these items in the non-sociably desirable direction with comments that "it was a matter of opinion." These data were not used.

Results of the hypothesis solution and the comparison between undergraduate and graduate data will be reported separately.

Multiple Group Method of Factor Analysis

A complete list of the factor loading vectors for each of the five supervisory types--Supervision as Relationship Development and Goal-Setting, Supervision as Counseling or Therapy, Supervision as Teaching, Supervision as Consultation, and Supervision as Self-Supervision--may be found in Appendix F, page 128. Results will be summarized for each category.

On questionnaires rated for Supervision as Relationship Development and Goal-Setting, 71 of the 81 supervisory items had their highest loading on the hypothesized factor. Nine items loaded highest on a factor other than that which had been hypothesized. Table 2 lists those items that were hypothesized to load highest on each factor, and did; as well as those that did not. No hypothesis vector was assigned to Item 38; its factor loading was greatest on Supervision as Teaching. Seven items (Items 11, 15, 27, 48, 72, 80, 81) had differences between the highest and next highest loading of 0.02 or less. One item's (Item 81) highest loading fell below 0.30. The greatest percentage of variance was accounted for by the Supervision

Table 2

Summary of Items in Relation to Hypothesized Factors for Questionnaires Rated for Supervision as Relationship Development and Goal Setting

Relationship To Hypothesized Factor	I. Relationship Development	II. Counseling	III. Teaching	IV. Consultation	V. Self-Supervision[α]
Items hypothesized to load highest on factor that did	1, 2, 17, 25, 26, 37, 43, 81, 82, 83	9, 19*, 20, 21, 22, 23, 30, 32, 34, 40, 54, 55*, 56, 57, 63, 75, 76	3, 4, 5, 6, 7, 8, 10, 12, 14, 18, 24, 28*, 29, 33, 41, 44, 46, 47, 48, 59, 60, 62, 68, 69, 70, 71, 77, 79, 80, 84	13, 15, 16, 27*, 35, 36, 42*, 53, 64, 66, 67, 73, 74, 48,	
Items hypothesized to load highest on factor that did		52 (IV)+	11 (II) 65 (IV) 72 (I)	31 (II) 39 (III) 45 (III) 58 (II) 61 (III)	

NOTE. α - No hypothesis vectors assigned to self-supervision.

* - Item loaded highest on one of two hypothesized factors.

\+ - Factor of highest loading indicated in parenthesis.

as Teaching factor with 20.43%; followed in descending order by Supervision as Consultation (19.70%), Counseling or Therapy (13.91%), and Relationship Development and Goal-Setting (12.20%). No items were hypothesized as being representative of Supervision as Self-Supervision, hence there were no factor loadings on this dimension.

For questionnaires rated on Supervision as Counseling or Therapy, 70 of the 81 items had the highest loading on the hypothesized factor; 10 items loaded highest on a factor other than that hypothesized. A summary is presented in Table 3. Item 38 had the highest loading on Supervision as Relationship Development and Goal-Setting. Twelve items (Items 3, 13, 15, 24, 31, 42, 45, 52, 61, 71, 72, 83) had differences between the highest and second-highest loading of 0.02 or less. Again, Item 81 had a high loading below 0.30. The percentage of variance accounted for by each factor was: Supervision as Teaching, 26.60%; Consultation, 25.83%; Relationship Development and Goal-Setting, 21.12%; and Counseling, 15.95%.

Seventy-one of the items on questionnaires rated for Supervision as Teaching had their highest loading on the hypothesized factor; nine did not. These items are listed on Table 4. Item 38 had its highest loading on Supervision as Relationship Development and Goal-Setting. A total of 6 items (Items 13, 37, 39, 44, 55, 71) had a difference between their highest and next-highest loading of 0.02 or less. No item had a high loading which fell below 0.30. The greater percentage of variance was accounted for by the factor of Supervision as Consultation (23.47%); followed by Teaching (21.81%), Counseling (19.74%), and Relationship Development and Goal-Setting (19.62%).

Table 3

Summary of Items in Relation to Hypothesized Factors for Questionnaires Rated for Supervision as Counseling or Therapy

Relationship To Hypothesized Factor	I. Relationship Development	II. Counseling	III. Teaching	IV. Consultation	V. Self-Supervision[α]
Items hypothesized to load highest on factor that did	1, 2, 17, 25, 26, 37, 43, 81, 82, 83	9, 19*, 20, 22, 23, 30, 32, 34, 52, 54, 55*, 56, 57, 75, 76	3, 4, 5, 6, 7, 8, 10, 11, 12, 14, 18, 24, 27*, 28*, 29, 33, 41, 42*, 44, 46, 47, 48, 59, 60, 62, 68, 69, 70, 71, 77, 79, 84	13, 15, 16, 35, 36, 53, 61, 64, 66, 67, 73, 74, 78	
Items hypothesized to load highest on factor that did not		21 (III)+ 40 (I) 63 (IV)	65 (IV) 72 (IV) 80 (IV)	31 (II) 39 (III) 45 (III) 58 (II)	

NOTE. α - No hypothesis vectors assigned to self-supervision.

* - Item loaded highest on one of two hypothesized factors.

\+ - Factor of highest loading indicated in parenthesis.

Table 4

Summary of Items in Relation to Hypothesized Factors for Questionnaires Rated for Supervision as Teaching

Relationship To Hypothesized Factor	I. Relationship Development	II. Counseling	III. Teaching	IV. Consultation	V. Self-Supervision[a]
Items hypothesized to load highest on factor that did	1, 2, 17, 25, 26, 37, 43, 81, 82, 83	9, 19*, 20, 22, 23, 30, 32, 34, 40, 52, 54, 55*, 56, 57, 63, 75, 76	3, 4, 5, 6, 7, 8, 10, 11, 12, 14, 18, 24, 27*, 28*, 29, 33, 41, 42*, 44, 46, 47, 48, 59, 60, 62, 68, 69, 70, 72, 77, 79, 80	13, 15, 16, 35, 36, 39, 42*, 45, 53, 64, 66, 67, 73, 74, 78	
Items hypothesized to load highest on factor that did not		21 (III)+	14 (IV) 44 (IV) 65 (IV) 71 (IV) 84 (I)	31 (II) 58 (II) 61 (III)	

NOTE. a - No hypothesis vectors assigned to self-supervision.

* - Item loaded highest on one of two hypothesized factors.

\+ - Factor of highest loading indicated in parenthesis.

On questionnaires rated for Supervision as Consultation, 67 items loaded highest on the hypothesized factor; 13 items had their highest loading on a factor other than that hypothesized. A summary may be found in Table 5. Item 38 again had its highest loading on Relationship Development and Goal-Setting. Nine items (Items 3, 13, 16, 20, 24, 41, 43, 47, 72) had differences of 0.02 or less between their highest and second-highest loadings. No item had a loading of 0.30 or below. The amount of variance accounted for by each factor was: Teaching, 23.52%; Consultation, 20.43%; Relationship Development and Goal-Setting, 20.01%; and Counseling, 19.91%.

For questionnaires rated on Supervision as Self-Supervision, 71 of the 81 supervisory items had their highest loading on the hypothesized factor. Nine items did not. Items are listed in relation to the hypothesized factor in Table 6. Item 38 had the highest loading on Supervision as Relationship Development and Goal-Setting. Seven items (Items 9, 25, 35, 38, 45, 52, 63) had a difference between the two highest loadings of 0.02 or less. No item had a high loading below 0.30. The percentage of variance accounted for by each of the factors includes: Supervision as Teaching, 39.21%; Consultation, 37.49%; Counseling, 35.55%; and Relationship Development and Goal-Setting, 34.40%.

In combining the data, it is found that 55 items (68%) had their highest loading on the hypothesized factor across all five questionnaire groups. Table 7 summarizes the highest loaded factor for each item across questionnaire groups. Indicated are those items that had the highest loading on the hypothesized factor, as well as the

Table 5

Summary of Items in Relation to Hypothesized Factors for Questionnaires Rated for Supervision as Consultation

Relationship To Hypothesized Factor	I. Relationship Development	II. Counseling	III. Teaching	IV. Consultation	V. Self-Supervision[α]
Items hypothesized to load highest on factor that did	1, 2, 17, 25, 26, 37, 81, 82, 83,	9, 19*, 20, 21, 22, 23, 30, 32, 34, 40, 52, 54, 56, 57, 63, 75, 76	4, 5, 6, 7, 8, 10, 11, 12, 14, 18, 29, 33, 41, 44, 46, 48, 59, 60, 62, 68, 69, 70, 77, 79, 84	15, 27*, 28*, 35, 36, 42*, 53, 55*, 58, 61, 64, 66, 67, 73, 74, 78	
Items hypothesized to load highest on factor that did not	43 (II)+		3 (I) 24 (I) 47 (IV) 65 (IV) 71 (I) 72 (II) 80 (IV)	13 (III) 16 (II) 31 (II) 39 (III) 45 (III)	

NOTE. α - No hypothesis vectors assigned to self-supervision.

* - Item loaded highest on one of two hypothesized factors.

\+ - Factor of highest loading indicated in parenthesis.

Table 6

Summary of Items in Relation to Hypothesized Factors for Questionnaires Rated for Supervision as Self-Supervision

Relationship To Hypothesized Factor	I. Relationship Development	II. Counseling	III. Teaching	IV. Consultation	V. Self-Supervision[α]
Items hypothesized to load highest on factor that did	1, 2, 17, 26, 43, 81, 82, 83	9, 19*, 20, 22, 23, 30, 32, 34, 52, 54, 55*, 56, 57, 75, 76	3, 4, 5, 6, 7, 8, 10, 11, 12, 14, 18, 24, 27*, 28*, 29, 33, 41, 42*, 44, 46, 47, 48, 59, 60, 62, 68, 69, 70, 71, 72, 77, 79, 84	13, 16, 31, 35, 36, 37, 39, 53, 61, 64, 66, 67, 73, 74, 78	
Items hypothesized to load highest on factor that did not	25 (III)+	21 (III) 40 (III) 63 (I)	65 (IV) 80 (IV)	15 (III) 45 (III) 58 (II)	

NOTE. α - No hypothesis vectors assigned to self-supervision.

* - Item loaded highest on one of two hypothesized factors.

\+ - Factor of highest loading indicated in parenthesis.

Table 7

Summary of Factors of Highest Loading

	Questionnaire Rated for Supervision As:					
Item	Hypothesized factor	Relationship	Counseling	Teaching	Consultation	Supervision
1	I	*	*	*	*	*
2	I	*	*	*	*	*
3	III	*	*	*	I	*
4	III	*	*	*	*	*
5	III	*	*	*	*	*
6	III	*	*	*	*	*
7	III	*	*	*	*	*
8	III	*	*	*	*	*
9	II	*	*	*	*	*
10	III	*	*	*	*	*
11	III	II	*	*	*	*

Note. Factor: I. Relationship Development and Goal-Setting
II. Counseling or Therapy
III. Teaching
IV. Consultation
V. Self-Supervision

*Highest loading on hypothesized factor.

Table 7 (continued)

Summary of Factors of Highest Loading

Item	Questionnaire Rated for Supervision As: Hypothesized factor	Relationship	Counseling	Teaching	Consultation	Supervision
12	III	*	*	*	*	*
13	IV	*	*	*	III	*
14	III	*	*	IV	*	*
15	IV	*	*	*	*	III
16	IV	*	*	*	II	*
17	I	*	*	*	*	*
18	III	*	*	*	*	*
19	II & IV	II	II	II	II	II
20	II	*	*	*	*	*
21	II	*	III	III	*	III
22	II	*	*	*	*	*
23	II	*	*	*	*	*
24	III	*	*	*	I	*
25	I	*	*	*	*	III
26	I	*	*	*	*	*
27	III & IV	IV	III	III	IV	III
28	III & IV	III	III	III	IV	III
29	III	*	*	*	*	*

Table 7 (continued)

Summary of Factors of Highest Loading

Item	Questionnaire Rated for Supervision As: Hypothesized factor	Relationship	Counseling	Teaching	Consultation	Supervision
30	II	*	*	*	*	*
31	IV	II	II	II	II	*
32	II	*	*	*	*	*
33	III	*	*	*	*	*
34	II	*	*	*	*	*
35	IV	*	*	*	*	*
36	IV	*	*	*	*	*
37	I	*	*	*	*	*
38	-	II	I	I	I	I
39	IV	III	III	*	III	*
40	II	*	I	*	*	III
41	III	*	*	*	*	*
42	III & IV	IV	III	IV	IV	III
43	I	*	*	*	II	*
44	III	*	*	IV	*	*
45	IV	III	III	*	III	III
46	III	*	*	*	*	*
47	III	*	*	*	IV	*

Table 7 (continued)

Summary of Factors of Highest Loading

Item	Questionnaire Rated for Supervision As: Hypothesized factor	Relationship	Counseling	Teaching	Consultation	Supervision
48	III	*	*	*	*	*
52	II	IV	*	*	*	*
53	IV	*	*	*	*	*
54	II	*	*	*	*	*
55	II & IV	II	II	II	IV	II
56	II	*	*	*	*	*
57	II	*	*	*	*	*
58	IV	II	II	II	*	*
59	III	*	*	*	*	*
60	III	*	*	*	*	*
61	IV	III	*	III	*	*
62	III	*	*	*	*	*
63	II	*	IV	*	*	I
64	IV	*	*	*	*	*
65	III	*	*	*	*	*
66	IV	*	*	*	*	*
67	IV	*	*	*	*	*
68	III	*	*	*	*	*

Table 7 (continued)

Summary of Factors of Highest Loading

	Questionnaire Rated for Supervision As:					
Item	Hypothesized factor	Relationship	Counseling	Teaching	Consultation	Supervision
69	III	*	*	*	*	*
70	III	*	*	*	*	*
71	III	*	*	IV	I	*
72	III	I	IV	*	II	*
73	IV	*	*	*	*	*
74	IV	*	*	*	*	*
75	II	*	*	*	*	*
76	II	*	*	*	*	*
77	III	*	*	*	*	*
78	IV	*	*	*	*	*
79	III	*	*	*	*	*
80	III	*	IV	*	IV	IV
81	I	*	*	*	*	*
82	I	*	*	*	*	*
83	I	*	*	*	*	*
84	III	*	*	I	*	*

factor of highest loading for those that did not. The greatest frequency of non-hypothesized factor loadings occurred for items hypothesized to be Supervision as Teaching, that, in fact, had higher loadings on Consultation; and those hypothesized to be Consultation, that loaded higher on Teaching.

Comparison of Graduate and Undergraduate Data

A complete list of the mean ratings of undergraduate and graduate subjects, difference between the mean ratings, and unit of standard deviation of that difference from the mean for each questionnaire group may be found in Appendix G, page 139. Those items for which a difference between the means is greater than 0.5 standard deviation are listed in Table 8. No item had a difference which reached 1.0 SD.

Table 8

Differences Between Undergraduate and Graduate Mean Ratings: Units of Standard Deviations Greater Than 0.5

	Questionnaires Rated for Supervision As:				
Item	Relationship	Counseling	Teaching	Consultation	Supervision
1	0.538	0.577	--	--	--
3	--	--	--	--	--
4	--	--	0.559	--	--
6	--	0.704	0.603	--	--
9	--	-0.714	--	--	--
10	--	--	--	--	0.554
11	0.793	0.639	--	--	--
12	--	--	--	0.562	--
14	--	-0.895	0.844	0.788	--
16	--	--	0.711	--	--
17	--	-0.687	--	--	--
18	--	0.534	--	0.545	--
19	-0.587	--	--	--	--
20	-0.656	--	--	--	--
24	--	--	--	0.553	0.504
25	--	--	--	--	0.549
26	-0.506	--	--	--	--
28	--	0.533	--	--	--
29	--	--	0.528	0.504	--

Table 8 (continued)

Differences Between Undergraduate and Graduate Mean Ratings: Units of Standard Deviations Greater Than 0.5

	Questionnaires Rated for Supervision As:				
Item	Relationship	Counseling	Teaching	Consultation	Supervision
30	-0.504	--	--	--	--
32	--	-0.683	--	0.614	--
34	--	-0.525	0.655	0.797	--
38	-0.559	-0.629	--	--	--
40	-0.765	--	0.913	0.741	0.537
42	0.674	--	--	--	--
43	--	--	0.575	0.590	--
44	0.569	0.659	-0.534	0.509	0.674
45	--	0.680	--	--	--
47	--	0.804	--	--	--
48	0.526	0.684	--	--	--
52	--	--	0.523	0.602	--
54	--	-0.710	--	0.640	--
55	--	-0.623	--	--	--
56	-0.857	-0.726	--	--	--
57	-0.838	-0.714	--	--	0.536
58	-0.610	-0.552	--	--	--
59	0.635	--	--	--	--
61	0.599	0.555	--	--	--

Table 8 (continued)

Differences Between Undergraduate and Graduate Mean Ratings: Units of Standard Deviations Greater Than 0.5

	Questionnaires Rated for Supervision As:				
Item	Relationship	Counseling	Teaching	Consultation	Supervision
68	--	--	--	0.668	--
69	--	--	-0.661	--	--
71	--	--	-0.574	--	--
72	--	--	--	--	0.715
75	--	-0.501	--	--	--
76	--	-0.642	--	--	--
77	--	--	-0.645	-0.572	--
82	-0.634	--	--	--	--
83	--	0.566	--	--	--
84	--	--	--	--	0.523

CHAPTER IV

DISCUSSION

The results of this study generally support the hypothesized structure of SQ-R and IBIS items, and suggest that those measurement instruments do incorporate supervisory behavioral items that represent the first three stages of clinical supervision delineated by Littrell, Lee-Borden, and Lorenz (1979). These include behaviors for Supervision as Relationship Development and Goal-Setting, Supervision as Counseling or Therapy, Supervision as Teaching, and Supervision as Consultation. No items were hypothesized to represent the more advanced level of Self-Supervision.

Questionnaire items that were not found to be representative of the hypothesized factor, most commonly included those items expected to measure Supervision as Teaching, which grouped instead with behaviors of Supervision as Consultation, and vice versa. This finding is consistent with the teacher-consultant overlap reported by Stenack and Dye (1982). In their study which attempted to identify supervisory questionnaire items that clearly discriminated between the roles of supervisor as counselor, teacher, and consultant; they found that items assigned to consultation heavily overlapped with the other roles, especially with teaching. Behavioral items identified as teaching that were also considered consultation included the supervisor's "providing structure, reviewing tapes, monitoring compliance to regulations, teaching skills, and describing theory" (p. 303). Supervisory behaviors classified as consultation which were also described as teaching included "eliciting supervisee perceptions of thought, goals,

and feelings of self and client in counseling sessions" (p. 303). Stenack and Dye concluded that more than any specific behavior, the discriminating factor between teacher and consultant roles seems to be extent of supervisor control in the interaction. This suggests that the modification of questionnaire items, to include a statement indicating either supervisor or supervisee control of, or responsibility for, the interaction, would increase the discriminatory power of the items as measures of supervisory level.

Other modifications of items or their deletion from the SQ-R and IBIS as measures of developmental stages of supervision are suggested by the data. The non-hypothesized factor assignments for Supervisee Items 58 ("Discusses a client who feels sexually attracted to him/her.") and 65 ("Voices disagreement with supervisor's evaluation of him/her.") imply the need for enhancement of discriminatory information, such as function, focus of attention or locus of control. It seems likely that students rated Item 58 as being descriptive of Counseling, rather than Consultation, because of its sexual content, without regard to the fact that the client, and not the student as a person, was the focus of supervisory interaction. Likewise, for Item 65, which was assigned to Consultation rather than Teaching, it may be surmised that ratings were more influenced by "disagreement with supervisor" than by the content of evaluation and the focus on the supervisee. Clearer statement of goals, focus, and supervisor control (Stenack & Dye, 1982) may result in these items' reassignment to hypothesized factors.

For other questionnaire items, including Supervisor Items 21

("Confronts supervisee when appropriate."), 31 ("Encourages supervisee to find his/her own style."), 39 ("At least 45 minutes of each supervisory sessions are spent discussing counseling and/or clients."), 45 ("Helps prepare for consultation and case disposition after intake.") and Supervisee Item 80 ("Initiates discussion of supervisee's therapeutic strengths with a particular client.") rejection of the hypothesized factor may be appropriate. Each of these items was grouped on a singular, non-hypothesized factor across the majority of questionnaire groups (See Table 7, p. 77-81). In addition, differences between undergraduate and graduate mean ratings for these items was generally smaller than 0.5 SD.

Only one item, Supervisee Item 81 ("Misses a supervision session which is not made up.") showed so little commonality with other items in its highest loading factor, that it could not be considered to be representative of any of the supervisory stages. Deletion of this item from the questionnaire would seem appropriate.

This study was a step in psychometric research, more of which is needed to determine the reliability and validity of these instruments. The validation of the hypothesized structure would extent current information about the factorial composition of the questionnaires, and would provide limited support for the content validity of the SQ-R and IBIS as measures of the early developmental stages of supervision (Littrell, et al., 1979). The extent to which these questionnaires measure supervision as a developmental process, however, is clearly limited by the lack of advanced supervisory behavioral items, and perhaps, also, of some early behaviors which have not yet been

delineated. Studies of content validity are needed which move beyond the analysis of factorial composition of items to include the direct observation of behaviors in supervision. Heppner and Roehlke (1984) and Worthington (1984) have been among the most recent to call for longitudinal studies, as well as research across levels of supervisor and supervisee experience, to identify behaviors that are specific and important to each supervisory level. Longitudinal studies, in addition to providing information for the elaboration or refinement of the measurement instruments, would provide opportunity for the determination of test-retest reliability for the questionnaires.

Wallace (1982) noted that all information derived from content validity studies was "grist for the construct validity mill" (p. 95). In this broad sense, the acceptance or rejection of the factorial structure hypothesized for the current study, could be expected to have heuristic value in the development of construct validity research. Such research will require the specification of items which define each supervisory stage, as well as the confirmation or disaffirmation of relationships between the items and other supervisory constructs. Given the progressive, integrative nature of theory development in clinical supervision, it seems likely that data generated by studies based on Littrell, et al.'s (1979) supervisory model will eventually be incorporated in more complex constructs of reciprocal supervisory developmental progression.

Delimitations of this study included the small sample size in relation to the large number of items considered, and the participation of subjects inexperienced in psychotherapy and clinical supervision.

The former, sample size, precludes acceptance of the hypothesized structure of SQ-R and IBIS items, and necessitates the continuation of this research until data of at least 500 subjects are obtained.

The generalizability of the data obtained is restricted by the inexperience of subjects; however, it is noted that there was no difference between undergraduate and graduate mean ratings which reached the level of 1.0 SD. This suggests that when ratings are made on the basis of behavioral definitions, undergraduate students are able to distinguish stage-specific supervisory behaviors. These data are insufficient to support firm conclusions.

In summary, this investigation may be described as a preliminary study which has developed a procedure for testing the structure of dimensionality of supervisor (SQ-R) and supervisee (IBIS) behaviors as theorized by Littrell, Lee-Borden, and Lorenz (1979). No previous work in clinical supervisory research has addressed this issue. Results, which are based on a relatively small sample, suggest that most items of the SQ-R and IBIS represent their hypothesized factor. This would support the premise that the SQ-R and IBIS do measure stage-specific supervisory behaviors identified as representing Supervision as Relationship Development and Goal-Setting, Supervision as Counseling or Therapy, Supervision as Teaching, and Supervision as Consultation. Items that were assigned to non-hypothesized factors most commonly were those expected to represent Supervision as Teaching which were identified as Consultation, and vice versa. The modification of some items and the deletion of one were proposed to increase the discriminatory power of the SQ-R and IBIS as measures of the early

stages of supervision. Validation of the hypothesized factor structure awaits the continuation of this research.

References

Akamatsu, T.J. (1980). The use of role-play and simulation technique in the training of psychotherapy. In Hess, A.K. (Ed.), Psychotherapy supervision: Theory, research, and practice, New York: John Wiley and Sons.

American Psychological Association, Committee on Training in Clinical Psychology. (1947). Recommended graduate training program in clinical psychology. American Psychologist, 2, 539-558.

American Psychological Association. (1973). Ethical principles in the conduct of research with human participants. Washington, DC: APA.

Arbuckle, D.S. (1965). Supervision: Learning, not counseling. Journal of Counseling Psychology, 12, 90-94.

Ard, B.N. (1973). Providing clinical supervision for marriage counselors: A model for supervisor and supervisee. The Family Co-ordinator, 22, 91-97.

Bandura, A. (1977a). Self-efficacy: Toward a unifying theory of behavior change. Psychological Review, 84, 191-215.

Bandura, A. (1977b). Social learning theory. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (1978). The self system in reciprocal determinism. American Psychologist, 33, 344-358.

Barrett-Lennard, G.T. (1959). Dimensions of perceived therapist response related to therapeutic change. Doctoral dissertation, University of Chicago.

Barrett-Lennard, G.T. (1962). Dimensions of therapist response as causal factors in therapeutic change. Psychological Monographs, 76, (43, Whole Number 562).

Bartlett, W.E. (1983). A multidimensional framework for the analysis of supervision of counseling. The Counseling Psychologist, 11 (1), 9-17.

Bernard, J.M. (1979). Supervisor training: A discrimination model. Counselor Education and Supervision, 19 (1), 60-68.

Birk, J.M. (1972). Effects of counseling supervision method and preference on empathic understanding. Journal of Counseling Psychology, 19, 542-546.

Blake, R.R., & Mouton, J.S. (1978). Toward a general theory of consultation. The Personnel and Guidance Journal, 56, 328-330.

Blocher, D.H. (1983). Toward a cognitive developmental approach to counseling supervision. The Counseling Psychologist, 11, 27-34.

Boy, A.V., & Pine, G.J. (1966). Strengthening the off-campus practicum. Counselor Education and Supervision, 6, 40-43.

Carkhuff, R.R. (1967). Toward a comprehensive model of facilitative inter-personal processes. Journal of Counseling Psychology, 14, 67-72.

Carkhuff, R.R. (1969a). Helping and human relations: A primer for lay and professional helpers. New York, NY: Holt, Rinehart, and Winston.

Carkhuff, R.R. (1969b). The development of systematic human resource development models. Counseling Psychologist, 3, 4-11.

Carkhuff, R.R., & Berenson, B.G. (1967). Beyond counseling and therapy. New York, NY: Holt, Rinehart, and Winston.

Carlson, K.W. (1974). Increasing verbal empathy as a function of feedback and instruction. Counselor Education and Supervision, 13, 208-213.

Ciecko, W. (1982). Supervisor variables and their influence on supervisory behavior and choice of supervisory model. (Doctoral dissertation, Temple University, 1981). Dissertation Abstracts International, 42/12B, 4926.

Davidson, T.N., & Emmer, E.T. (1966). Immediate effect of supportive and non-supportive supervisor behavior on counselor candidate's focus of concern. Counselor Education and Supervision, 6, 27-31.

Delaney, D.J., & Moore, J.C. (1966). Student expectation of the role of practicum supervision. Counselor Education and Supervision, 6, 11-17.

Doerhrman, M. (1976). Parallel process in supervision and psychotherapy. Bulletin of the Menninger Clinic, 40 (1), 3-104.

Eisenberg, S.,& Delaney, D.J. (1970). Using video simulation of counseling for training counselors. Journal of Counseling Psychology, 17, 15-19.

Ekstein, R., & Wallerstein, R.S. (1958). The teaching and learning of psychotherapy. New York, NY: Basic Books, Inc..

Fleming, J., & Benedek, T. (1966). Psychoanalytic supervision: A method of clinical teaching. New York, NY: Grune and Stratton.

Forsyth, D.R., & Ivey, A.E. (1980). Microtraining: An approach to differential supervision. In Hess, A.K. (Ed.), Psychotherapy supervision: Theory, research, and practice, New York, NY: John Wiley and Sons.

Gaoni, B., & Newman, M. (1974). Supervision from the point-of-view of the supervisee. American Journal of Psychotherapy, 24, 108-114.

Gendlin, E. (1961). Experiencing: A variable in the process of therapeutic change. American Journal of Psychotherapy, 15, 233-245.

Gendlin, E.T., & Tomlinson, T.M. (1963). The experiencing scale (Mathieu-Klein revision), Unpublished manual.

Gerkin, C. (1969). An objective method for evaluating training programs in counseling psychology. Journal of Counseling Psychology, 16, 227-237.

Golden, C.J., Sawicki, R.F., & Franzen, M.D. (1984). Test construction. In Goldstein, G., & Hersen, M. (Eds.), Handbook of psychological assessment, New York, NY: Pergamon Press.

Goldfarb, N. (1978). Effects of supervisory style on counselor effectiveness and facilitative responding. Journal of Counseling Psychology, 25, 454-460.

Goin, M.K., & Kline, F.M. (1974). Supervision observed. The Journal of Nervous and Mental Disease, 158, 208-213.

Goodyear, R.K., Abadies, P.D., & Efros, F. (1984). Supervisory theory into practice: Differential perception of supervision by Ekstein, Ellis, Polster, and Rogers. Journal of Counseling Psychology, 31, 228-237.

Goodyear, R.K., & Bradley, F.O. (1983). Theories of counselor supervision: Points of convergence and divergence. The Counseling Psychologist, 11, 59-67.

Gurk, M.D., & Wicas, E.A. (1979). Generic models of counseling/ instruction dichotomy and consultation metamodel. The Personnel and Guidance Journal, 57, 402-407.

Gysbers, N.C., & Johnston, J.A. (1965). Expectation of a practicum supervisor's role. Counselor Education and Supervision, 4, 68-74.

Hackney, H.L. (1971). Development of a pre-practicum counseling skills model. Counselor Education and Supervision, 11, 102-109.

Hansen, J.C., & Barker, E.N. (1964). Experiencing in the supervisory relationship. Journal of Counseling Psychology, 11, 107-111.

Hansen, J.C., Pound, R., & Petro, C. (1976). Review of research on practicum supervision. Counselor Education and Supervision, 16, 107-116.

Hansen, J.C., Robins, T.H., & Grimes, T. (1982). Review of research on practicum supervision. Counselor Education and Supervision, 22, 15-24.

Hansen, J.C., & Warner, R.W. (1971). Review of research on practicum supervision. Counselor Education and Supervision, 10, 261-272.

Haynes, S.N. (1983). Behavioral assessment. In Hersen, M., Kazdin, A.E., & Bellack, A.S. (Eds.), The clinical psychology handbook, New York, NY: Pergamon Press, 397-425.

Hector, M.A., Elson, S.E., & Yager, G.G. (1977). Teaching counseling skills through self-management procedures. Counselor Education and Supervision, 17, 12-22.

Heppner, P.P., & Handley, P. (1982). The relationship between supervisory behaviors and perceived supervisor expertness, attractiveness, or trustworthiness. Counselor Education and Supervision, 22, 37-46.

Heppner, P.P., & Roehlke, H.J. (1984). Differences among supervisees at different levels of training: Implications for the developmental model of supervision. Journal of Counseling Psychology, 31, 76-90.

Hess, A.K. (Ed.) (1980). Psychotherapy supervision: Theory, research, and practice. New York, NY: John Wiley and Sons.

Hoch, E.C., Ross, A.D., & Winder, C.G. (1966). Conference on the professional preparation of clinical psychologists: A summary. American Psychologist, 21, 42-52.

Hogan, R.A. (1964). Issues and approaches in supervision. Psychotherapy: Theory, Research, and Practice, 1, 139-141.

Holloway, E.L., & Hosford, R.E. (1983). Towards developing a prescriptive technology of counselor supervision. The Counseling Psychologist, 11, 73-77.

Horst, P. (1965). Factor analysis of data matrices. New York, NY: Holt, Rinehart, and Winston, Inc..

Hutt, C.H., Scott, J., & King, M. (1983). A phenomenological study of supervisee's positive and negative experiences in supervision. Psychotherapy: Theory, Research, and Practice, 20, 118-123.

Ivey, A.E. (1971). Microcounseling and innovation in interview training. Springfield, IL: Charles C. Thomas.

Ivey, A.E., Normington, C.J., Miller, D.C., Merrill, W.H., & Haase, R. (1968). Microcounseling and attending behavior: An approach to prepracticum counselor training. Journal of Counseling Psychology, (Monograph Supplement 5), 15, 1-12.

Johnston, J.A., & Gysbers, N.C. (1967). Essential characteristics of a supervisory relationship in counseling practicum. Counselor Education and Supervision, 6, 335-340.

Kadushin, A. (1974). Supervisor-supervisee: A survey. Social Work, 19, 288-298.

Kagan, N. (1980). Influencing human interaction--Eighteen years with IRP. In Hess, A.K. (Ed.), Psychotherapy supervision: Theory, research, and practice, New York, NY: John Wiley and Sons.

Kagan, N., & Krathwohl, D.R. (1967). Studies in human interaction: Interpersonal process recall stimulated by videotape. East Lansing, MI: Educational Publishing Services.

Karr, J.T., & Geist, G.O. (1977). Facilitation in supervision as related to facilitation in therapy. Counselor Education and Supervision, 17, 263-267.

Kell, B.L., & Mueller, W.J. (1966). Impact and change: A study of counseling relationships. Englewood Cliffs, NJ: Prentice-Hall.

Kirsner, N.S. (1982). Parallel process: Supervision methods and supervisory relationship quality as related to counselor therapeutic work. (Doctoral dissertation, University of Miami, 1981). Dissertation Abstracts International, 43/04B, 1257.

Klein, E.S. (1982). Relating supervisor style and supervisee maturity to supervision outcome. (Doctoral dissertation, Illinois Institute of Technology, 1981). Dissertation Abstracts International, 42/07B, 2989.

Kurpius, D. (1978a). Consultation theory and process: An integrated model. The Personnel and Guidance Journal, 56, 335-338.

Kurpius, D. (1978b). Introduction to the special issue. The Personnel and Guidance Journal, 56, 320.

Kurpius, D., & Robinson, S.E. (1978). An overview of consultation. The Personnel and Guidance Journal, 56, 321-323.

Lambert, M.J. (1974). Supervisory and counseling process: A comparative study. Counselor Education and Supervision, 14, 54-60.

Lambert, M.J. (1980). Research and the supervisory process. In Hess, A.K. (Ed.), Psychotherapy supervision: Theory, research and practice, New York, NY: John Wiley and Sons, 423-450.

Laplanche, J., & Pontalis, J.B. (1973). The language of psychoanalysis. New York, NY: W.W. Norton and Company, 89-90, 453-455.

Leddick, G.R., & Bernard, J.M. (1980). The history of supervision: A critical review. Counselor Education and Supervision, 19, 186-196.

Lewin, B.D., & Ross, H. (1960). Psychoanalytic education in the United States. New York, NY: Norton.

Littrell, J.M., Lee-Borden, N., Lorenz, J. (1979). Developmental frameowrk for counseling supervision. Counselor Education and Supervision, 19, 129-136.

Loganbill, C., Hardy, E., & Delworth, U. (1982). Supervision: A conceptual model. The Counseling Psychologist, 10, 3-42.

Markey, M.J., Frederickson, R.H., Johnson, R.W., & Julius, M.A. (1970). Influence of playback techniques on counselor performance. Counselor Education and Supervision, 9, 178-182.

Matarazzo, R. (1971). Research on the teaching and learning of psychotherapeutic skills. In Garfield, S.L., & Bergin, A.E. (Eds.), Handbook of psychotherapy and behavior change (First Ed.), New York, NY: John Wiley and Sons, 895-924.

Matarazzo, R. (1978). Research on the teaching and learning of psychotherapeutic skills. In Garfield, S.L., & Bergin, A.E. (Eds.), Handbook of psychotherapy and behavior change (Second Ed.), New York, NY: John Wiley and Sons, 941-966.

Meyer, R.J. (1978). Using self-supervision to maintain counseling skills: A review. The Personnel and Guidance Journal, 57, 95-98.

Miars, R.D., Tracey, T.J., Ray, P.B., Cornfeld, J.L., O'Farrell, M., & Gelso, C.J. (1983). Variation in supervision process across trainee experience levels. Journal of Counseling Psychology, 30, 403-412.

Mueller, W.J., & Kell, B.L. (1972). Coping with conflict: Supervising counselors and psychotherapists. Englewood Cliffs, NJ: Prentice-Hall.

Nunnally, J.C. (1978). Psychometric theory. New York, NY: McGraw-Hill Book Co..

Patterson, C.H. (1964). Supervising students in the counseling practicum. Journal of Counseling Psychology, 11, 47-53.

Payne, P.A., & Gralinski, D.M. (1968). Effects of supervisor style and empathy on counselor learning. Journal of Counseling Psychology, 15, 517-521.

Payne, P.A., Weiss, S.D., & Kapp, R.A. (1972). Didactic, experiential, and modeling factors in the learning of empathy. Journal of Counseling Psychology, 19, 425-429.

Payne, P.A., Winter, D.E., & Bell, G.E. (1972). Effects of supervisor style on the learning of empathy in a supervision analogue. Counselor Education and Supervision, 11, 262-269.

Peters, G.A., Cormier, L.S., & Cormier, W.H. (1978). Effects of modeling, rehearsal, feedback, and remediation on acquisition of a counseling strategy. Journal of Counseling Psychology, 25, 231-237.

Pierce, R.M., Carkhuff, R.R., & Berenson, B.G. (1967). The effects of high and low functioning counselors upon counselors in training. Journal of Clinical Psychology, 23, 212-215.

Pierce, R.M., & Schauble, P.G. (1970). Graduate training of facilitative counselors: The effects of individual supervision. Journal of Counseling Psychology, 17, 210-215.

Pierce, R.M., & Schauble, P.G. (1971a). Follow-up study on the effects of individual supervision in graduate school training. Journal of Counseling Psychology, 18, 186-187.

Pierce, R.M., & Schauble, P.G. (1971b). Toward the development of facilitative counselors: The effects of practicum instruction and individual supervision. Counselor Education and Supervision, 11, 83-89.

Ralph, N.B. (1980). Learning psychotherapy: A developmental perspective. Psychiatry, 43, 243-250.

Reising, G.N., & Daniels, M.H. (1983). A study of Hogan's model of counselor development and supervision. Journal of Counseling Psychology, 30, 235-244.

Rogers, C.R. (1957). Training individuals to engage in therapeutic practice. In Strother, C.R. (Ed.), Psychology and mental health, Washington, DC: American Psychological Association.

Rogers, C.R., & Stevens, B. (1967). Person to person: The problems of being human. Layfayette, CA: Real People Press.

Ronnestad, M.H. (1977). The effects of modeling, feedback, and experiential methods on counselor empathy. Counselor Education and Supervision, 16, 194-201.

Schulberg, H.C., & Jerrell, J.M. (1983). Consultation. In Hersen, M., Kazdin, A.E., & Bellack, A.S. (Eds.), The clinical psychology handbook, New York, NY: Pergamon Press, 783-798.

Skinner, B.F. (1953). Science and human behavior. New York, NY: MacMillan.

Stenack, R.J., & Dye, H.A. (1982). Behavioral descriptions of counseling supervision roles. Counselor Education and Supervision, 22, 292-304.

Stoltenberg, C. (1981). Approaching supervision from a developmental perspective: The counselor complexity model. Journal of Counseling Psychology, 28, 59-65.

Stone, G.L., & Vance, A. (1976). Instructions, modeling, and rehearsal: Implication for training. Journal of Counseling Psychology, 23, 271-279.

Tosi, D.J., & Eshbaugh, D.M. (1978). A cognitive-experiential approach to the interpersonal and intrapersonal development of counselors and therapists. Journal of Clinical Psychology, 34, 494-500.

Truax, C.B. (1961). A scale for the measurement of accurate empathy. Psychiatric Institute Bulletin, 1, 12.

Truax, C.B., & Carkhuff, R.R. (1973). Toward effective counseling and psychotherapy: Training and practice. Chicago, IL: Aldine Publishing Co..

Truax, C.B., Carkhuff, R.R., & Douds, J. (1964). Toward an integration of the didactic and experiential approaches to training in counseling and psychotherapy. Journal of Counseling Psychology, 11, 240-247.

Turow, V.K. (1982). Supervisor and supervisee behaviors as predictors of perceived learning in psychotherapy supervision. (Doctoral dissertation, California School of Professional Psychology, San Diego, 1981). Dissertation Abstracts International, 42/10B, 4215.

Wallace, C. (1982). Test construction. Berkeley, CA: Association for Advanced Training in the Behavioral Sciences, 76-106.

Walz, G.W., & Roeber, E.C. (1962). Supervisors' reactions to a counseling interview. Counselor Education and Supervision, 1, 2-7.

Ward, G.R., Kagan, N. & Krathwohl, D.R. (1972). An attempt to measure and facilitate counselor effectiveness. Counselor Education and Supervision, 11, 179-186.

Wedeking, D.F. & Scott, T.B. (1976). A study of the relationship between supervisor and trainee behaviors in counseling practicum. Counselor Education and Supervision, 15, 259-266.

Windholz, E. (1970). The theory of supervision in psychoanalytic education. International Journal of Psychoanalysis, 51, 393-406.

Wolberg, L.R. (1954). The technique of psychotherapy. New York, NY: Grune and Stratton.

Worthington, E.L. (1984). Empirical investigation of supervision of counselors as they gain experience. Journal of Counseling Psychology, 31, 63-75.

Worthington, E.L., & Roehlke, H.J. (1979). Effective supervision as perceived by beginning counselors in training. Journal of Counseling Psychology, 26, 64-73.

Yenawine, G., & Arbuckle, D.S. (1971). Study of the use of videotape and audiotape as techniques in counselor education. Journal of Counseling Psychology, 18, 1-6.

APPENDICES

APPENDIX A

CONSENT FORM

CONSENT FORM

As a research participant in this study, you will be asked to fill out a series of questionnaires--a task which will take 1-1½ hours of your time. You will be asked to read an operational definition for one type of clinical supervision, and to then rate questionnaire items on the basis of how descriptive each is of that type of supervision. There are, all together, five types of supervision to be rated.

It is not expected that this study will offer you direct benefits, however, you will have the opportunity to discuss its purpose at the end of the questionnaire session, and copies of the purpose and results will be available to you at the Department of Psychology office when the study is completed (probably Fall Quarter, 1985).

Confidentiality of your responses will be assured by your placing no name or identifying mark on the questionnaire forms and by separating your consent form from the questionnaire packet when you turn them in. Data of this study will include the compliation of responses of all research participants; no individual response will be reported.

If you decide to participate, you may withdraw your consent and discontinue participation at any time without penalty or prejudice.

YOUR SIGNATURE BELOW INDICATES THAT YOU HAVE READ THE INFORMATION ABOVE AND THAT YOU HAVE DECIDED TO PARTICIPATE IN THIS STUDY.

_____ _____

Date Signature

Thank you for your assistance,

Bonnie M. Brekke
Graduate Student, Clinical Psychology
University of Montana

APPENDIX B

OPERATIONAL DEFINITIONS

AND

QUESTIONNAIRE

Supervision as RELATIONSHIP DEVELOPMENT and GOAL-SETTING is defined as individual supervision in which:

1. The focus of the interaction is on the supervisee (student) as a person in a new, yet undefined situation.

2. The intention or goal of the supervisor is be become acquainted with the supervisee as a person; to provide a supportive, nonjudgemental relationship which will facilitate the reduction of the supervisee's anxiety; and to define goals and expectations for supervision.

Supervision as COUNSELING OR THERAPY is defined as individual supervision in which:

1. The focus of the interaction is on the supervisee (student) as a person.

2. The intention or goal of the supervisor is to facilitate (aid or help)supervisee self-growth as a psychotherapist.

3. The supervisor as a counselor or therapist may:

   (a) Explore supervisee feelings during the therapy and/or supervision session.

   (b) Explore supervisee feelings concerning specific techniques and/or interventions.

   (c) Facilitate supervisee self-exploration of confidences and/or worries in the therapy session.

   (d) Help the supervisee define personal strengths and abilities and limitations.

   (e) Provide opportunities for supervisees to process their feelings and/or defenses.

4. The supervisor guides and directs the interaction, and may utilize counseling skills and behaviors.

Supervision as TEACHING is defined as individual supervision in which:

1. The focus of the interaction is on the supervisee (student) as a therapist.

2. The intention or goal of the supervisor is to instruct.

3. The supervisor as a teacher may:

   (a) Evaluate observed therapy session interactions.

   (b) Identify appropriate interventions.

   (c) Teach, demonstrate and/or model intervention techniques.

   (d) Explain the rationale behind specific strategies and/or interventions.

   (e) Interpret significant events in the therapy session.

4. The supervisor remains in charge, determines the direction of interaction and functions as an adviser/expert.

Supervision as CONSULTATION is defined as individual supervision in which:

1. The focus of the interaction is on the client of the supervisee.

2. The intention or goal of the supervisor is to generate data.

3. The supervisor as consultant may:

   (a) Provide alternative interventions and/or conceptualizations for the supervisee to use.

   (b) Encourage supervisee brainstorming of strategies and/or interventions.

   (c) Encourage supervisee discussion of client problems, motivations, etc.

   (d) Solicit and attempt to satisfy supervisee needs during the supervision sessions.

   (e) Allow the supervisee to structure the supervision session.

4. The supervisor allows the supervisee to exert the overt control of the interaction. The supervisor provides alternatives and options instead of answers as in the teacher role. The supervisor also encourages supervisee choices and responsibility.

Supervision as SELF-SUPERVISION is defined as:

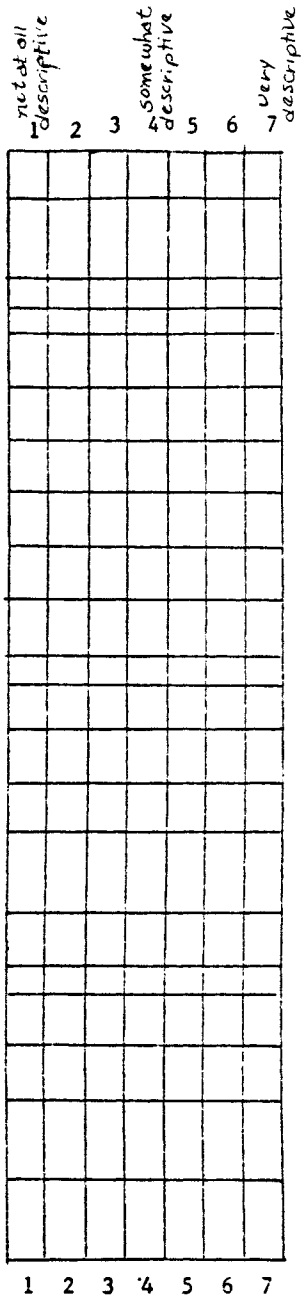
The supervisee's (student's) being responsible for self-monitoring, self-evaluation, and self-determined behavioral change within his or her professional role as a therapist.

Please rate each of the following supervisor behaviors on the basis of how well they describe supervision as_____.

The SUPERVISOR:

		1 Not at all descriptive	2	3	4 somewhat descriptive	5	6	7 very descriptive
1.	Establishes good rapport with the supervisee.							
2.	Establishes clear goals conjointly.							
3.	Provides more structure in earlier sessions.							
4.	Observes supervisee counsel at least once each semester.							
5.	Listens completely to at least 2 audiotapes outside of the supervision hour.							
6.	Provides relevant literature or references on specific treatment or assessment techniques.							
7.	Gives appropriate feedback to supervisee about positive counseling behavior.							
8.	Gives appropriate feedback about nonfacilitating behavior (behavior which is not helpful, or may be a barrier to client's change or growth).							
9.	Is sensitive to the differences in how supervisee talks about actions and way he/she behaves.							
10.	Models good task-oriented skills.							
11.	Gives direct suggestions when appropriate.							
12.	Allows supervisee to observe, do co-counseling or to listen to audiotapes of supervisor's counseling session.							
13.	Available for consulting outside of regular scheduled meetings.							
14.	Uses supervisor-supervisee relations to demonstrate principles of counseling.							
15.	Helps supervisee conceptualize (think about, develop a mental image or model of) cases and evolve a joint conceptualization.							
16.	Helps supervisee experiment and to discover his/her own unique style.							
17.	Uses humor in supervisory sessions.							
18.	Labels counselor behavior as effective or ineffective.							
19.	Helps supervisee develop self-confidence as an emerging counselor.							
20.	Helps supervisee realize that trying new skills seems awkward at first.							
21.	Confronts supervisee when appropriate.							
22.	Helps supervisee assess his/her own strengths.							
23.	Helps supervisee assess his/her own weaknesses.							
24.	Evaluates supervisee at midsemester.							
25.	Renegotiates goals with supervisee at midsemester.							
26.	Calls supervisee by name at least one time per session.							
27.	Suggests alternative ways of conceptualizing (developing a mental image or model of) clients.							

1 2 3 4 5 6 7



28. Suggests alternative ways of intervening with clients.
29. Discusses experience in practicum (group supervision; a "class" which focuses on therapy issues) in addition to clients.
30. Gives emotional support when appropriate.
31. Encourages supervisee to find his/her own style.
32. Helps supervisee with personal problems that may interfere with his/her counseling.
33. Demonstrates techniques of intervention by role playing.
34. Helps supervisee deal with his/her own defensiveness when it arises in supervision.
35. Supervisor shares experience with clients with supervisee.
36. Consults with supervisee when emergencies arise with his/her clients.
37. Supervisor misses no more than one supervisory session.
38. Supervisory sessions last at least 50 minutes.
39. At least 45 minutes of each supervisory session are spent discussing counseling and/or clients.
40. Focus of supervisory session on relations between supervisor and supervisee.
41. Focus of most supervisory sessions on counseling session content.
42. Focus on conceptualization (developing a mental image or model) the dynamics (influencing forces) of the client's personality.
43. Supervisor makes it easy to give feedback about supervisory process.
44. Helps develop skills at intake interviews.
45. Helps prepare for consultation and case disposition after intake.
46. Observes at least three videotapes of supervisee's counseling each semester.
47. Suggests specific ways to help supervisee get client(s) to accept his/her conceptualization (mental image or model) of the client's problem.
48. Teaches specific counseling behaviors intended to facilitate (aid the development of) his/her style.

Please mark the next three statements as being TRUE or FALSE for <u>any</u> type of supervision.

49. The supervisor should consider supervision at least as important as the supervisee's classwork or other academic activities. TRUE____FALSE____

50. If problems arise in supervision, it is better for the supervisor to transfer the student to another supervisor than to try to resolve the problem. TRUE_____ FALSE_____
51. The supervisor should be willing to support the supervisee when he/she has difficulty in therapy. TRUE_____ FALSE_____

Continue now to indicate how descriptive each of the following supervisee behaviors is of supervision as_____.

The SUPERVISEE:

	not at all descriptive 1	2	3	somewhat descriptive 4	5	6	very descriptive 7
52. Expresses criticism or dissatisfaction with supervisor's style or interventions, personal attributes, or the process of supervision.							
53. Discusses a client whost treatment supervisee based on a theoretical orientation (i.e. client-centered, psychoanalytic, behavioral) differing from the supervisor's.							
54. Discusses personal issues that are affecting his/her work as a therapist.							
55. Discusses feeling "stuck" or confused with a particular client.							
56. Discusses mutual sexual attraction between client and himself/herself.							
57. Discusses his/her sexual attraction to client.							
58. Discusses a client who feels sexually attracted to him/her.							
59. Asks supervisor to demonstrate a technique.							
60. States a therapy session was "good" and asks supervisor to listen to an audiotape of it.							
61. Initiates discussion of theoretical or technical issues, or raises questions.							
62. Asks supervisor to watch a videotape of one of his/her therapy sessions.							
63. Expresses praise, satisfaction, or appreciation of the supervisor's supervisory style or intervention, personal attributes, or the process of supervision.							
64. Asks for specific changes in, or additions to, supervisory process or focus.							
65. Voices disagreement with supervisor's evaluation of him/her.							
66. Verbally refuses to carry out a specific supervisor suggestion.							
67. Brings up a case or intervention in which supervisee stated he/she was ineffective.							
68. Does therapy while his/her supervisor observes.							
69. Makes a formal case presentation.							
	1	2	3	4	5	6	7

	not at all descriptive			somewhat descriptive			very descriptive
	1	2	3	4	5	6	7
70. Asks supervisor to listen to the audiotape of one of his/her psychotherapy sessions.							
71. Raises staff or administrative issues.							
72. Discusses the content or amount of his/her learning in supervision.							
73. Voices disagreement with supervisor on theoretical issues.							
74. Voices disagreement with supervisor on appropriate diagnosis or treatment for a specific client.							
75. Discusses feelings of inadequacy or incompetence.							
76. Brings up dislike of, anger toward, or discomfort with a particular client.							
77. Asks supervisor to provide information about technical or theoretical therapy issues.							
78. Initiates discussion of a current case.							
79. States a therapy session was "bad" and asks supervisor to listen to an audiotape of it.							
80. Initiates discussion of supervisee's therapeutic strengths with a particular client.							
81. Misses a supervision session which is not made up.							
82. With supervisor devises supervision goals against which progress is measured.							
83. With supervisor agrees on specific skills to be learned (e.g. asking open-ended questions, etc.)							
84. With supervisor formally evaluates his/her performance at the end of the quarter.							
	1	2	3	4	5	6	7

Please mark the next three statements as being TRUE or FALSE for <u>any</u> type of supervision:

85. The best approach to supervision is for the student to fake information so he/she will look good. TRUE____FALSE____

86. Students should not intentionally miss or avoid supervisory sessions. TRUE____FALSE____

87. During supervisory sessions, the student should focus on issues which will help him/her become a better therapist. TRUE____FALSE____

APPENDIX C

INSTRUCTIONS GIVEN TO UNDERGRADUATE SUBJECTS

INSTRUCTIONS

Supervision in the clinical training of psychologists is a process by which the student (supervisee) learns how to be a therapist through direct experience in working with a client and through regular meetings with his or her supervising psychologist (supervisor). The meetings with the supervisor are individual sessions--only the supervisor and supervisee are present. These sessions are referred to as "supervision." The purpose of supervision is to help the supervisee become an increasingly better and more skilled therapist. Supervision has been described in many ways, depending upon the focus or goal of the meeting and the nature of the relationship between the supervisor and supervisee. For example, if a supervisee does not know what to do when a client becomes angry in a therapy session, the supervisor might explain the dynamics of anger, or may describe appropriate actions or therapeutic interventions for the student to use. This type of supervision would be described as teaching. If, on the other hand, the supervisor helped the supervisee recall and explore his or her feelings which occurred in response to the client's anger, or examined the supervisee's behavior which was influenced by those feelings, this supervision would be described as counseling or therapy.

This study asks you to consider five types of supervision. Each type is described on the first page of each questionnaire. They include: Supervision as Relationship Development and Goal-Setting, Supervision as Counseling or Therapy, Supervision as Teaching, Supervision as Consultation, and Supervision as Self-Supervision.

You have five identical questionnaires that list 48 supervisor

behaviors and 33 supervisee behaviors which might occur in a supervision session. There is one questionnaire for each type of supervision. Please read the definition on the front page and then turn to the attached questionnaire. Mark, in the appropriate square, your rating of how descriptive each statement is of that type of supervision. The range of choices is from 7 = very descriptive to 1 = not at all descriptive. For example, please turn to statement number 1 on the questionnaire attached to the definition of "Supervision as Relationship Development and Goal-Setting." If you believe that if in supervision, the supervisor "establishes good rapport (or a good relationship) with the supervisee" is very descriptive of supervision as relationship development and goal-setting, put a mark (X or ✓) in the square under 7. If you believe it is not at all descriptive of supervision as relationship development and goal-setting, place a mark under 1. If you judge it to fall somewhere in-between, put a mark in the appropriate square. Continue rating all statements for that questionnaire. Please notice that items 1-48 describe things the supervisor might do; items 52-84 describe supervisee behaviors. When you have finished, turn that questionnaire face down and go on to the next. Read the definition for supervision found on the first page, and then mark how descriptive you believe each statement is for that type of supervision. Continue this process until all five questionnaires are completed. If you have questions about any of the definitions, please ask before you begin the questionnaire.

Mark one questionnaire completely before going on to the next.

Do not return to a completed questionnaire to change your ratings or to compare your responses for the different types of supervision. There is no right or wrong response, and your first impressions are valued.

When everyone has completed the questionnaires, I will describe, for those who are interested, the purpose of this study and the contribution you have made through your participation.

APPENDIX D

INSTRUCTIONS GIVEN TO

GRADUATE SUBJECTS

TO: Graduate Students in Clinical Psychology

FROM: Bonnie Brekke

RE: Participation in Study Entitled: Validation of Structure of Supervisor and Supervisee Behaviors in Clinical Supervision

I am currently doing a validation study for my master's thesis and would like to request your assistance. The current literature in clinical supervision as a part of graduate training in psychotherapy, delineates five types of supervision which may occur over the period of graduate study. These include supervision as: (a) relationship development and goal-setting, (b) counseling or therapy, (c) teaching, (d) consultation, and (e) self-supervision. In supervisory research, dependent measures typically include ratings of the frequency or importance of specific supervisee and/or supervisor behaviors. These ratings are obtained through responses on written questionnaires. Although the behavioral items incorporated in these questionnaires have been used repeatedly across studies, no empirical work has been done to determine the validity of these items as descriptors of the various types of supervision. The current study is designed to address this issue.

Because a large sample (approximately 500) is required for this study, I have requested participation of Psych 110-students. Their task has been to read an operational definition for each type of supervision and, on the basis of that definition, to rate how descriptive they believe each questionnaire item is of that type of supervision. To evaluate the usefulness of these undergraduate responses for the development of a questionnaire which would be used among graduate students in clinical training, it is necessary to have, also, data provided by graduate students who are familiar with the processes of therapy and supervision. Your participation, therefore, is highly valued.

Attached to this memo are five identical questionnaires that list 48 supervisor behaviors (items 1-48) and 33 supervisee behaviors (items 52-84) which might occur in a supervisory session. Stapled to each is an operational definition for one of the five types of supervision (relationship development and goal-setting, counseling or therapy, teaching, consultation, and self-supervision). Please read the definition, and then on the basis of that statement, rate how descriptive you believe each questionnaire item is of that form of supervision. The range of choice is from 7 = very descriptive to 1 = not at all descriptive. Continue this procedure until all five questionnaires are completed. This study does not ask for a comparison among the types of supervision, therefore, please mark one questionnaire completely before going on to the next. Do not return to a completed questionnaire to change your ratings or to compare your responses. If you have questions or need clarification, please call me.

When you have finished, please clip the five questionnaires together and place them in my box. I would appreciate their return by Friday, April 26.

Thank you for your time and your participation in this study.

Instruction Form Given to Non-Clinical Psychology Graduate Students

EXPERIMENT: Validation of Structure of Supervisor and Supervisee Behavior (Supervision Questionnaire)

EXPERIMENTER: Bonnie M. Brekke, Graduate Student
Clinical Psychology

I am currently doing a validation study for my master's thesis and would like to request your assistance. The current literature in clinical supervision as a part of graduate training in psychotherapy, delineates five types of supervision which may occur over the period of graduate study. These include supervision as: (a) relationship development and goal-setting, (b) counseling or therapy, (c) teaching, (d) consultation, and (e) self-supervision. In supervisory research, dependent measures typically include ratings of the frequency or importance of specific supervisee and/or supervisor behaviors. These ratings are obtained through responses on written questionnaires. Although the behavioral items incorporated in these questionnaires have been used repeatedly across studies, no empirical work has been done to determine the validity of these items as descriptors of the various types of supervision. The current study is designed to address this issue. Your participation is highly valued.

Attached to this memo are five identical questionnaires that list 48 supervisor behaviors (items 1-48) and 33 supervisee behaviors (items 52-84) which might occur in a supervisory session. Stapled to each is an operational definition for one of the five types of supervision (relationship development and goal-setting, counseling or therapy, teaching, consultation, and self-supervision). Please read the definition, and then, on the basis of that statement, rate how descriptive you believe each questionnaire item is of that form of supervision. The range of choice is from 7 = very descriptive to 1 = not at all descriptive. Continue this procedure until all five questionnaires are completed. This study does not ask for a comparison among the types of supervision, therefore, please mark one questionnaire completely before going on to the next. Do not return to a completed questionnaire to change your ratings or to compare your responses. If you have questions or need clarification, please call me.

When you have finished, please clip the five questionnaires together and return them to . Collection of data will be completed the week of June 3.

Thank you for your time and your participation in this study.

APPENDIX E

HYPOTHESIS VECTORS

HYPOTHESIS VECTORS

The SUPERVISOR:	Factor 1	2	3	4	5
1. Establishes good rapport with the supervisee.	1	0	0	0	0
2. Establishes clear goals conjointly.	1	0	0	0	0
3. Provides more structure in earlier sessions.	0	0	1	0	0
4. Observes supervisee counsel at least once each semester.	0	0	1	0	0
5. Listens completely to at least two audiotapes outside of the supervision hour.	0	0	1	0	0
6. Provides relevant literature or references on specific treatment or assessment techniques.	0	0	1	0	0
7. Gives appropriate feedback to supervisee about positive counseling behavior.	0	0	1	0	0
8. Gives appropriate feedback about nonfacilitating behavior.	0	0	1	0	0
9. Is sensitive to the differences in how supervisee talks about actions and way he/she behaves.	0	1	0	0	0
10. Models good task-oriented skills.	0	0	1	0	0
11. Gives direct suggestions when appropriate.	0	0	1	0	0
12. Allows supervisee to observe, do co-counseling or to listen to audiotapes of supervisor's counseling session.	0	0	1	0	0
13. Available for consulting outside of regular scheduled meetings.	0	0	0	1	0
14. Uses supervisor-supervisee relations to demonstrate principles of counseling.	0	0	1	0	0
15. Helps supervisee conceptualize cases and evolve a joint conceptualization.	0	0	0	1	0
16. Helps supervisee experiment and to discover his/her own unique style.	0	0	0	1	0
17. Uses humor in supervisory sessions.	1	0	0	0	0
18. Labels counselor behavior as effective or ineffective.	0	0	1	0	0
19. Helps supervisee develop self-confidence as an emerging counselor.	0	1	0	1	0
20. Helps supervisee realize that trying new skills seems awkward at first.	0	1	0	0	0
21. Confronts supervisee when appropriate.	0	1	0	0	0

Hypothesis Vectors cont.

	Factor	1	2	3	4	5
22.	Helps supervisee assess his/her own strengths.	0	1	0	0	0
23.	Helps supervisee assess his/her own weaknesses.	0	1	0	0	0
24.	Evaluates supervisee at midsemester.	0	0	1	0	0
25.	Renegotiates goals with supervisee at midsemester.	1	0	0	0	0
26.	Calls supervisee by name at least one time per session.	1	0	0	0	0
27.	Suggests alternative ways of conceptualizing clients.	0	0	1	1	0
28.	Suggests alternative ways of intervening with clients.	0	0	1	1	0
29.	Discusses experience in practicum in addition to clients.	0	0	1	0	0
30.	Gives emotional support when appropriate.	0	1	0	0	0
31.	Encourages supervisee to find his/her own style.	0	0	0	1	0
32.	Helps supervisee with personal problems that may interfere with his/her counseling.	0	1	0	0	0
33.	Demonstrates techniques of intervention by role playing.	0	0	1	0	0
34.	Helps supervisee deal with his/her own defensiveness when it arises in supervision.	0	1	0	0	0
35.	Supervisor shares experience with clients with supervisee.	0	0	0	1	0
36.	Consults with supervisee when emergencies arise with his/her clients.	0	0	0	1	0
37.	Supervisor misses no more than one supervisory session.	1	0	0	0	0
38.	Supervisory sessions last at least 50 minutes.	0	0	0	0	0
39.	At least 45 minutes of each supervisory session are spent discussing counseling and/or clients.	0	0	0	1	0
40.	Focus of supervisory session on relations between supervisor and supervisee.	0	1	0	0	0
41.	Focus of most supervisory sessions on counseling session content.	0	0	1	0	0
42.	Focus on conceptualizing the dynamics of the client's personality.	0	0	1	1	0

Hypothesis Vectors cont.

Factor	1	2	3	4	5
43. Supervisor makes it easy to give feedback about supervisory process.	1	0	0	0	0
44. Helps develop skills at intake interviews.	0	0	1	0	0
45. Helps prepare for consultation and case disposition after intake.	0	0	0	1	0
46. Observes at least three videotapes of supervisee's counseling each semester.	0	0	1	0	0
47. Suggests specific ways to help supervisee get client(s) to accept his/her conceptualization of the client's problem.	0	0	1	0	0
48. Teaches specific counseling behaviors intended to facilitate his/her style.	0	0	1	0	0
The SUPERVISEE:					
52. Expresses criticism or dissatisfaction with supervisor's style or interventions, personal attributes, or the process of supervision.	0	1	0	0	0
53. Discusses a client whose treatment supervisee based on a theoretical orientation differing from the supervisor's.	0	0	0	1	0
54. Discusses personal issues that are affecting his/her work as a therapist.	0	1	0	0	0
55. Discusses feeling "stuck" or confused with a particular client.	0	1	0	1	0
56. Discusses mutual sexual attraction between client and himself/herself.	0	1	0	0	0
57. Discusses his/her sexual attraction to client.	0	1	0	0	0
58. Discusses a client who feels sexually attracted to him/her.	0	0	0	1	0
59. Asks supervisor to demonstrate a technique.	0	0	1	0	0
60. States a therapy session was "good" and asks supervisor to listen to an audiotape of it.	0	0	1	0	0
61. Initiates discussion of theoretical or technical issues, or raises questions.	0	0	0	1	0
62. Asks supervisor to watch a videotape of one of his/her therapy sessions.	0	0	1	0	0

Hypothesis Vectors cont.

Factor	1	2	3	4	5
63. Expresses praise, satisfaction, or appreciation of the supervisor's supervisory style or interventions, personal attributes, or the process of supervision.	0	1	0	0	0
64. Asks for specific changes in, or additions to, supervisory process or focus.	0	0	0	1	0
65. Voices disagreement with supervisor's evaluation of him/her.	0	0	1	0	0
66. Verbally refuses to carry out a specific supervisor suggestion.	0	0	0	1	0
67. Brings up a case or intervention in which supervisee stated he/she was ineffective.	0	0	0	1	0
68. Does therapy while his/her supervisor observes.	0	0	1	0	0
69. Makes a formal case presentation.	0	0	1	0	0
70. Asks supervisor to listen to the audiotape of one of his/her psychotherapy sessions.	0	0	1	0	0
71. Raises staff or administrative issues.	0	0	1	0	0
72. Discusses the content or amount of his/her learning in supervision.	0	0	1	0	0
73. Voices disagreement with supervisor on theoretical issues.	0	0	0	1	0
74. Voices disagreement with supervisor on appropriate diagnosis or treatment for a specific client.	0	0	0	1	0
75. Discusses feelings of inadequacy or incompetence.	0	1	0	0	0
76. Brings up dislike of, anger toward, or discomfort with a particular client.	0	1	0	0	0
77. Asks supervisor to provide information about technical or theoretical therapy issues.	0	0	1	0	0
78. Initiates discussion of a current case.	0	0	0	1	0
79. States a therapy session was "bad" and asks supervisor to listen to an audiotape of it.	0	0	1	0	0
80. Initiates discussion of supervisee's therapeutic strengths with a particular client.	0	0	1	0	0
81. Misses a supervision session which is not made up.	1	0	0	0	0

Hypothesis Vectors cont.

Factor	1	2	3	4	5
82. With supervisor, devises supervision goals against which progress is measured.	1	0	0	0	0
83. With supervisor, agrees on specific skills to be learned.	1	0	0	0	0
84. With supervisor, formally evaluates his/her performance at the end of the quarter.	0	0	1	0	0

APPENDIX F

FACTOR LOADING VECTORS

Supervision as Relationship Development and Goal-Setting

Factor Loading Vectors

	1	2	3	4	5
1	0.4188	0.3674	0.1537	0.2013	0.0000
2	0.4194	0.2698	0.1584	0.1601	0.0000
3	0.2622	0.1374	0.3942	0.2780	0.0000
4	0.3911	0.2463	0.4996	0.4218	0.0000
5	0.2998	0.1751	0.5436	0.3984	0.0000
6	0.3170	0.1838	0.6547	0.4665	0.0000
7	0.3323	0.2717	0.4649	0.4214	0.0000
8	0.2171	0.3025	0.4784	0.4402	0.0000
9	0.3863	0.5405	0.2881	0.3690	0.0000
10	0.3227	0.2737	0.4889	0.3712	0.0000
11	0.3196	0.3942	0.3919	0.3262	0.0000
12	0.3191	0.2490	0.5502	0.4438	0.0000
13	0.3587	0.4366	0.4569	0.5421	0.0000
14	0.2742	0.2998	0.3773	0.3554	0.0000
15	0.3526	0.2889	0.4828	0.4883	0.0000
16	0.4064	0.4952	0.3660	0.5196	0.0000
17	0.5462	0.3238	0.3407	0.3694	0.0000
18	0.1957	0.2129	0.4313	0.3283	0.0000
19	0.3270	0.5062	0.3261	0.4422	0.0000
20	0.3357	0.5107	0.2621	0.3359	0.0000
21	0.3011	0.4833	0.4401	0.4460	0.0000
22	0.3152	0.5497	0.4136	0.4368	0.0000
23	0.2653	0.5446	0.3942	0.4138	0.0000
24	0.4010	0.2811	0.5920	0.4722	0.0000
25	0.5671	0.3243	0.4467	0.3941	0.0000
26	0.5382	0.3249	0.2923	0.3318	0.0000
27	0.3477	0.3801	0.6149	0.6208	0.0000
28	0.3475	0.3483	0.6599	0.5990	0.0000
29	0.2739	0.2373	0.6295	0.5228	0.0000
30	0.4204	0.5468	0.1743	0.2634	0.0000
31	0.4419	0.4697	0.2710	0.4253	0.0000
32	0.2482	0.5610	0.2075	0.3194	0.0000
33	0.3031	0.3404	0.6229	0.5348	0.0000
34	0.3710	0.5916	0.3870	0.4692	0.0000
35	0.2986	0.3634	0.4060	0.4883	0.0000
36	0.2334	0.3275	0.4442	0.5345	0.0000
37	0.5433	0.2670	0.5120	0.4870	0.0000
38	0.4338	0.3026	0.4513	0.4213	0.0000
39	0.3015	0.1795	0.5482	0.4820	0.0000
40	0.1945	0.3074	-0.0325	0.0417	0.0000
41	0.2446	0.1821	0.5990	0.5089	0.0000
42	0.2011	0.2922	0.5010	0.5471	0.0000
43	0.4936	0.3602	0.3085	0.3232	0.0000
44	0.3990	0.3240	0.5865	0.5375	0.0000

Factor Loading Vectors: Relationship cont.

	1	2	3	4	5
45	0.3783	0.2586	0.6048	0.5826	0.0000
46	0.3895	0.2963	0.6116	0.5142	0.0000
47	0.2476	0.2667	0.5018	0.4544	0.0000
48	0.3441	0.3698	0.4858	0.4751	0.0000
52	0.2429	0.3706	0.3609	0.3964	0.0000
53	0.3423	0.3071	0.5282	0.6037	0.0000
54	0.3021	0.5561	0.1914	0.2860	0.0000
55	0.4526	0.6247	0.4020	0.5512	0.0000
56	0.2342	0.4608	0.2421	0.3204	0.0000
57	0.2450	0.4980	0.2755	0.3609	0.0000
58	0.2920	0.5030	0.3680	0.4773	0.0000
59	0.3704	0.2764	0.5575	0.4720	0.0000
60	0.4596	0.4135	0.6205	0.5529	0.0000
61	0.3778	0.2985	0.5347	0.4954	0.0000
62	0.4101	0.4424	0.6590	0.5576	0.0000
63	0.3578	0.4845	0.3552	0.4272	0.0000
64	0.3683	0.4187	0.4203	0.5420	0.0000
65	0.3639	0.4515	0.4165	0.4892	0.0000
66	0.1612	0.1984	0.2403	0.3472	0.0000
67	0.2452	0.4157	0.3151	0.4545	0.0000
68	0.2512	0.2092	0.5727	0.4188	0.0000
69	0.2947	0.1823	0.6511	0.4875	0.0000
70	0.4170	0.4075	0.6661	0.5522	0.0000
71	0.2474	0.1718	0.3956	0.3169	0.0000
72	0.3808	0.3386	0.3647	0.3540	0.0000
73	0.2704	0.3419	0.3727	0.4924	0.0000
74	0.1958	0.3643	0.4383	0.5734	0.0000
75	0.2251	0.5053	0.0024	0.2023	0.0000
76	0.2836	0.5300	0.3363	0.4544	0.0000
77	0.2343	0.1549	0.4793	0.3996	0.0000
78	0.3979	0.3259	0.5711	0.6197	0.0000
79	0.3965	0.4389	0.6262	0.5963	0.0000
80	0.3582	0.4083	0.5067	0.4924	0.0000
81	0.1762	0.0093	0.1662	0.1534	0.0000
82	0.4079	0.2461	0.1481	0.1772	0.0000
83	0.4857	0.2676	0.2601	0.2573	0.0000
84	0.4384	0.3198	0.5618	0.4764	0.0000

Supervision as Counseling or Therapy

Factor Loading Vectors

	1	2	3	4	5
1	0.5052	0.3993	0.2775	0.3483	0.0000
2	0.6347	0.2618	0.5167	0.4576	0.0000
3	0.4400	0.0884	0.4580	0.3110	0.0000
4	0.5379	0.3176	0.6289	0.4862	0.0000
5	0.5851	0.2798	0.6958	0.5375	0.0000
6	0.4608	0.1832	0.6350	0.5187	0.0000
7	0.3805	0.3580	0.5651	0.5077	0.0000
8	0.3934	0.3578	0.5242	0.4801	0.0000
9	0.2159	0.5970	0.2321	0.3217	0.0000
10	0.4554	0.2749	0.5078	0.4517	0.0000
11	0.4093	0.2772	0.5147	0.4187	0.0000
12	0.5287	0.2476	0.7344	0.6327	0.0000
13	0.5901	0.4113	0.5567	0.5942	0.0000
14	0.3850	0.3932	0.5748	0.5120	0.0000
15	0.5700	0.4008	0.6546	0.6658	0.0000
16	0.3722	0.4443	0.4156	0.5329	0.0000
17	0.6490	0.3901	0.4680	0.5055	0.0000
18	0.4616	0.2673	0.5399	0.4648	0.0000
19	0.3045	0.6178	0.2743	0.4201	0.0000
20	0.3970	0.6286	0.3648	0.4340	0.0000
21	0.4406	0.4864	0.5195	0.4905	0.0000
22	0.1896	0.6387	0.2293	0.3080	0.0000
23	0.2240	0.6391	0.2317	0.3162	0.0000
24	0.6298	0.3397	0.6416	0.5305	0.0000
25	0.7072	0.2588	0.6172	0.5428	0.0000
26	0.6847	0.3499	0.4466	0.4525	0.0000
27	0.5244	0.3097	0.7200	0,6592	0.0000
28	0.5160	0.2757	0.7488	0.6674	0.0000
29	0.5125	0.2529	0.6778	0.5883	0.0000
30	0.4305	0.6665	0.3427	0.4670	0.0000
31	0.4247	0.4922	0.3364	0.4786	0.0000
32	0.2368	0.6504	0.2257	0.3545	0.0000
33	0.5275	0.2632	0.6026	0.5847	0.0000
34	0.2686	0.6800	0.2436	0.3716	0.0000
35	0.4409	0.3493	0.4077	0.5270	0.0000
36	0.4351	0.3657	0.4626	0.5814	0.0000
37	0.6274	0.3759	0.4612	0.4978	0.0000
38	0.5875	0.2379	0.5133	0.4595	0.0000
39	0.5776	0.1700	0.6226	0.5411	0.0000
40	0.4232	0.3140	0.3252	0.3459	0.0000
41	0.4321	0.2301	0.5707	0.5057	0.0000
42	0.5072	0.2104	0.6085	0.5971	0.0000
43	0.6512	0.4270	0.5064	0.5874	0.0000
44	0.5663	0.2956	0.6666	0.5940	0.0000
45	0.5811	0.2968	0.6691	0.6537	0.0000

Factor Loading Vectors: Counseling cont.

	1	2	3	4	5
46	0.5777	0.2507	0.6870	0.5644	0.0000
47	0.4583	0.3674	0.6540	0.6162	0.0000
48	0.3517	0.3105	0.5944	0.5105	0.0000
52	0.3371	0.4397	0.2942	0.4391	0.0000
53	0.3316	0.2586	0.5050	0.5765	0.0000
54	0.1347	0.6986	0.1712	0.3590	0.0000
55	0.2831	0.6973	0.3610	0.4974	0.0000
56	0.1925	0.6298	0.1846	0.3241	0.0000
57	0.1879	0.5990	0.1678	0.3045	0.0000
58	0.2777	0.5824	0.2251	0.3653	0.0000
59	0.4074	0.1924	0.6496	0.5193	0.0000
60	0.5319	0.2547	0.7022	0.5963	0.0000
61	0.4806	0.2079	0.6122	0.6138	0.0000
62	0.5667	0.3184	0.7297	0.6407	0.0000
63	0.4493	0.5222	0.4830	0.5710	0.0000
64	0.5041	0.4498	0.5510	0.6226	0.0000
65	0.4275	0.4100	0.4565	0.5608	0.0000
66	0.3170	0.1182	0.2588	0.3948	0.0000
67	0.3373	0.3725	0.3711	0.4755	0.0000
68	0.4574	0.2067	0.6486	0.5389	0.0000
69	0.4792	0.1052	0.7066	0.5573	0.0000
70	0.5627	0.2643	0.7086	0.6099	0.0000
71	0.3464	0.1239	0.4034	0.3890	0.0000
72	0.3066	0.4264	0.4559	0.4644	0.0000
73	0.3950	0.3006	0.3997	0.5696	0.0000
74	0.3573	0.3503	0.4529	0.5973	0.0000
75	0.1490	0.6447	0.1153	0.2917	0.0000
76	0.2104	0.6339	0.2078	0.4136	0.0000
77	0.4345	0.2148	0.6419	0.5208	0.0000
78	0.3538	0.2651	0.5186	0.5588	0.0000
79	0.4497	0.4047	0.6094	0.5879	0.0000
80	0.2907	0.4295	0.4104	0.4850	0.0000
81	0.2968	-0.0764	0.1750	0.1573	0.0000
82	0.6124	0.2163	0.5590	0.5302	0.0000
83	0.6399	0.2248	0.6319	0.5938	0.0000
84	0.6311	0.3313	0.6460	0.5611	0.0000

Supervision as Teaching

Factor Loading Vectors

	1	2	3	4	5
1	0.6464	0.4968	0.3026	0.4611	0.0000
2	0.6826	0.4826	0.3882	0.5200	0.0000
3	0.4175	0.2760	0.4915	0.3788	0.0000
4	0.2929	0.2413	0.6058	0.3545	0.0000
5	0.3357	0.2235	0.6195	0.3514	0.0000
6	0.3889	0.1760	0.6939	0.3982	0.0000
7	0.2712	0.2629	0.6259	0.3590	0.0000
8	0.1931	0.1862	0.5529	0.2760	0.0000
9	0.4210	0.5446	0.3473	0.4724	0.0000
10	0.2753	0.1767	0.5084	0.2844	0.0000
11	0.2485	0.1898	0.5140	0.2912	0.0000
12	0.3958	0.3520	0.5826	0.5474	0.0000
13	0.5590	0.4778	0.4765	0.5766	0.0000
14	0.3404	0.3812	0.4428	0.4815	0.0000
15	0.4463	0.4494	0.4724	0.6213	0.0000
16	0.5245	0.5766	0.3360	0.6484	0.0000
17	0.6068	0.5157	0.2812	0.4912	0.0000
18	0.2868	0.2033	0.5385	0.3297	0.0000
19	0.5983	0.6675	0.3858	0.6101	0.0000
20	0.6213	0.6851	0.4520	0.6291	0.0000
21	0.3532	0.3558	0.4608	0.3443	0.0000
22	0.4708	0.6087	0.3739	0.4629	0.0000
23	0.4046	0.5905	0.3724	0.4412	0.0000
24	0.5014	0.2764	0.6331	0.4248	0.0000
25	0.6665	0.4539	0.4650	0.5010	0.0000
26	0.6618	0.4321	0.3742	0.4237	0.0000
27	0.2900	0.2668	0.5553	0.4938	0.0000
28	0.2243	0.1646	0.5452	0.4179	0.0000
29	0.3884	0.2801	0.5584	0.4678	0.0000
30	0.5454	0.7285	0.2465	0.5336	0.0000
31	0.5660	0.6809	0.2523	0.6224	0.0000
32	0.4894	0.7297	0.2280	0.5143	0.0000
33	0.1621	0.1180	0.4271	0.2444	0.0000
34	0.4898	0.7292	0.3353	0.5254	0.0000
35	0.3036	0.3711	0.3354	0.4693	0.0000
36	0.4512	0.4743	0.4024	0.5905	0.0000
37	0.5356	0.3471	0.5199	0.4556	0.0000
38	0.5191	0.4047	0.4215	0.4389	0.0000
39	0.4015	0.2949	0.4625	0.4661	0.0000
40	0.4641	0.6000	0.1055	0.3895	0.0000
41	0.2406	0.2114	0.4937	0.3720	0.0000
42	0.4191	0.4052	0.4770	0.5528	0.0000
43	0.6858	0.6098	0.4085	0.5814	0.0000
44	0.4485	0.3150	0.5470	0.5548	0.0000
45	0.4570	0.3539	0.5494	0.5754	0.0000

Factor Loading Vectors: Teaching cont.

	1	2	3	4	5
46	0.3278	0.2079	0.7059	0.3882	0.0000
47	0.3282	0.2526	0.6474	0.4533	0.0000
48	0.2465	0.1561	0.4805	0.3344	0.0000
52	0.3858	0.5499	0.1730	0.4356	0.0000
53	0.3250	0.3517	0.3233	0.5401	0.0000
54	0.4337	0.7374	0.1998	0.5493	0.0000
55	0.5075	0.6856	0.4417	0.6708	0.0000
56	0.2820	0.5849	0.2059	0.4261	0.0000
57	0.2979	0.5932	0.1913	0.4309	0.0000
58	0.2381	0.5336	0.1840	0.4038	0.0000
59	0.1515	0.0663	0.4825	0.2734	0.0000
60	0.3710	0.3589	0.6597	0.4902	0.0000
61	0.3897	0.2459	0.6179	0.5123	0.0000
62	0.3613	0.3076	0.6725	0.4618	0.0000
63	0.5708	0.6171	0.3425	0.5204	0.0000
64	0.5753	0.5068	0.4740	0.6440	0.0000
65	0.5338	0.4800	0.3877	0.5848	0.0000
66	0.3422	0.3429	0.1218	0.3920	0.0000
67	0.4153	0.4320	0.4368	0.5719	0.0000
68	0.1977	0.1587	0.5216	0.3145	0.0000
69	0.3384	0.1602	0.5584	0.3789	0.0000
70	0.3149	0.2950	0.6607	0.4487	0.0000
71	0.3501	0.3714	0.2542	0.3718	0.0000
72	0.4684	0.3799	0.5494	0.4808	0.0000
73	0.4734	0.4494	0.3614	0.5905	0.0000
74	0.4419	0.5089	0.3876	0.6306	0.0000
75	0.5436	0.7667	0.2442	0.5686	0.0000
76	0.4722	0.7355	0.3542	0.5729	0.0000
77	0.2186	0.1139	0.5384	0.3449	0.0000
78	0.4634	0.4262	0.5615	0.6284	0.0000
79	0.3483	0.3471	0.6574	0.4941	0.0000
80	0.4724	0.4483	0.5963	0.5808	0.0000
81	0.3522	0.2727	-0.0271	0.1480	0.0000
82	0.6490	0.4597	0.5080	0.5704	0.0000
83	0.6222	0.3623	0.5047	0.5496	0.0000
84	0.6811	0.3936	0.6157	0.5517	0.0000

Supervision as Consultation

Factor Loading Vectors

	1	2	3	4	5
1	0.6144	0.5319	0.4171	0.4391	0.0000
2	0.5719	0.3899	0.3570	0.3028	0.0000
3	0.4043	0.3160	0.3923	0.2027	0.0000
4	0.5967	0.4407	0.6843	0.4502	0.0000
5	0.4654	0.3300	0.6066	0.3983	0.0000
6	0.4194	0.3452	0.6474	0.4724	0.0000
7	0.3586	0.3855	0.6146	0.4710	0.0000
8	0.3381	0.4040	0.5791	0.4762	0.0000
9	0.5272	0.6517	0.4172	0.4338	0.0000
10	0.5291	0.4686	0.5439	0.3927	0.0000
11	0.3597	0.3508	0.4817	0.3153	0.0000
12	0.3565	0.3275	0.5191	0.3778	0.0000
13	0.5107	0.4459	0.5146	0.4677	0.0000
14	0.5177	0.4605	0.6350	0.5213	0.0000
15	0.2773	0.2722	0.4569	0.5158	0.0000
16	0.4845	0.5893	0.4782	0.5800	0.0000
17	0.6837	0.5719	0.4844	0.4168	0.0000
18	0.4053	0.3738	0.5116	0.3908	0.0000
19	0.5634	0.6301	0.5172	0.4842	0.0000
20	0.6025	0.6040	0.5913	0.5015	0.0000
21	0.5063	0.5793	0.5154	0.4421	0.0000
22	0.5301	0.6687	0.4755	0.4633	0.0000
23	0.5486	0.6662	0.4954	0.4516	0.0000
24	0.6532	0.4652	0.6449	0.4107	0.0000
25	0.7245	0.5097	0.6040	0.4240	0.0000
26	0.6778	0.4461	0.4724	0.4122	0.0000
27	0.2121	0.2874	0.4656	0.5548	0.0000
28	0.0896	0.1832	0.4153	0.4731	0.0000
29	0.3583	0.3774	0.5803	0.4703	0.0000
30	0.5700	0.6891	0.5156	0.4996	0.0000
31	0.4314	0.5537	0.3849	0.4962	0.0000
32	0.5148	0.6685	0.4004	0.3637	0.0000
33	0.4870	0.4112	0.5978	0.4032	0.0000
34	0.5357	0.7004	0.4231	0.4566	0.0000
35	0.3327	0.3373	0.3932	0.5055	0.0000
36	0.3938	0.4061	0.4718	0.6505	0.0000
37	0.6596	0.4426	0.5023	0.4503	0.0000
38	0.6346	0.4078	0.4539	0.4066	0.0000
39	0.4174	0.2375	0.4440	0.4155	0.0000
40	0.4405	0.4783	0.3000	0.1531	0.0000
41	0.2774	0.2939	0.4854	0.4670	0.0000
42	0.2080	0.2366	0.4076	0.5196	0.0000
43	0.5600	0.5795	0.5217	0.5677	0.0000
44	0.4945	0.4522	0.6234	0.5566	0.0000
45	0.4245	0.3259	0.5520	0.5193	0.0000

Factor Loading Vectors: Consultation cont.

	1	2	3	4	5
46	0.4810	0.3300	0.6360	0.4325	0.0000
47	0.1753	0.2442	0.4651	0.4711	0.0000
48	0.4983	0.4788	0.5890	0.3870	0.0000
52	0.2934	0.3899	0.1830	0.3107	0.0000
53	0.1833	0.3009	0.3860	0.5707	0.0000
54	0.3506	0.6447	0.2958	0.3608	0.0000
55	0.2005	0.4999	0.3617	0.5341	0.0000
56	0.1569	0.4594	0.2487	0.4247	0.0000
57	0.1313	0.4320	0.1818	0.3898	0.0000
58	0.0779	0.3706	0.2064	0.4240	0.0000
59	0.3930	0.4169	0.5845	0.4418	0.0000
60	0.4820	0.4333	0.6633	0.5029	0.0000
61	0.3685	0.4813	0.5125	0.5859	0.0000
62	0.4379	0.4102	0.6612	0.5106	0.0000
63	0.5192	0.6209	0.4839	0.4928	0.0000
64	0.4521	0.4210	0.4297	0.5148	0.0000
65	0.4188	0.4448	0.4219	0.4931	0.0000
66	0.2938	0.2834	0.1707	0.3367	0.0000
67	0.3070	0.3426	0.3401	0.4635	0.0000
68	0.3605	0.2809	0.5328	0.3815	0.0000
69	0.3187	0.2467	0.4936	0.3872	0.0000
70	0.3908	0.3679	0.6239	0.4836	0.0000
71	0.3641	0.2896	0.2932	0.2518	0.0000
72	0.4151	0.4675	0.4639	0.3855	0.0000
73	0.3100	0.3707	0.3484	0.4473	0.0000
74	0.1543	0.2466	0.3254	0.5038	0.0000
75	0.5398	0.7016	0.4019	0.4233	0.0000
76	0.3050	0.4963	0.2882	0.4696	0.0000
77	0.3543	0.3542	0.5482	0.4933	0.0000
78	0.1791	0.2103	0.3733	0.5393	0.0000
79	0.3880	0.3579	0.5899	0.4952	0.0000
80	0.2643	0.2682	0.4440	0.4795	0.0000
81	0.3719	0.1608	0.0936	0.0220	0.0000
82	0.6610	0.4805	0.5157	0.4130	0.0000
83	0.6180	0.4361	0.5038	0.3542	0.0000
84	0.6389	0.5154	0.6636	0.4941	0.0000

Supervision as Self-Supervision

Factor Loading Vectors

	1	2	3	4	5
1	0.7258	0.5541	0.5996	0.5483	0.0000
2	0.7035	0.5986	0.6376	0.5662	0.0000
3	0.6290	0.5786	0.6688	0.6081	0.0000
4	0.6170	0.5109	0.6650	0.5622	0.0000
5	0.5385	0.4190	0.6378	0.5013	0.0000
6	0.6619	0.5900	0.7661	0.6403	0.0000
7	0.6947	0.7242	0.7825	0.6892	0.0000
8	0.6790	0.6893	0.7569	0.6654	0.0000
9	0.6953	0.7232	0.7145	0.6490	0.0000
10	0.5711	0.5003	0.6572	0.5585	0.0000
11	0.6429	0.6359	0.7102	0.6196	0.0000
12	0.5973	0.5639	0.6755	0.6498	0.0000
13	0.5988	0.5844	0.6252	0.6478	0.0000
14	0.6809	0.6251	0.7329	0.6743	0.0000
15	0.6726	0.6031	0.7073	0.6835	0.0000
16	0.5646	0.6309	0.5624	0.6595	0.0000
17	0.7137	0.5136	0.6094	0.6114	0.0000
18	0.6221	0.6754	0.7289	0.6382	0.0000
19	0.5506	0.6915	0.5777	0.6548	0.0000
20	0.6211	0.7253	0.6539	0.6905	0.0000
21	0.6373	0.6859	0.7031	0.6396	0.0000
22	0.5532	0.7280	0.6081	0.5905	0.0000
23	0.5250	0.7288	0.5953	0.5929	0.0000
24	0.5889	0.4998	0.6209	0.5210	0.0000
25	0.6926	0.6095	0.6984	0.5949	0.0000
26	0.6728	0.5051	0.5606	0.5914	0.0000
27	0.6699	0.6833	0.7782	0.7461	0.0000
28	0.6667	0.7107	0.7628	0.6983	0.0000
29	0.6708	0.5894	0.7480	0.6368	0.0000
30	0.6735	0.6981	0.6959	0.6704	0.0000
31	0.4602	0.4784	0.4411	0.5495	0.0000
32	0.6335	0.7788	0.6681	0.6427	0.0000
33	0.6156	0.5615	0.6520	0.5838	0.0000
34	0.6254	0.7587	0.6970	0.6878	0.0000
35	0.6326	0.6890	0.6666	0.7033	0.0000
36	0.6178	0.6199	0.6391	0.6926	0.0000
37	0.6848	0.4832	0.5883	0.5916	0.0000
38	0.6131	0.4642	0.5945	0.5698	0.0000
39	0.5922	0.4800	0.5965	0.6207	0.0000
40	0.6502	0.6197	0.6658	0.6084	0.0000
41	0.5833	0.5030	0.6473	0.5698	0.0000
42	0.5313	0.4597	0.5993	0.5404	0.0000
43	0.7283	0.6631	0.6986	0.6733	0.0000
44	0.6346	0.5992	0.7294	0.6745	0.0000
45	0.5947	0.5574	0.6678	0.6623	0.0000

Factor Loading Vectors: Self-Supervision cont.

	1	2	3	4	5
46	0.5835	0.4874	0.6062	0.4829	0.0000
47	0.6287	0.6304	0.6879	0.6126	0.0000
48	0.5723	0.5924	0.6611	0.5986	0.0000
52	0.4649	0.6122	0.5097	0.5978	0.0000
53	0.4510	0.5691	0.5061	0.6504	0.0000
54	0.3633	0.6963	0.4309	0.5520	0.0000
55	0.4795	0.6970	0.5185	0.6489	0.0000
56	0.4208	0.6614	0.4483	0.5331	0.0000
57	0.3732	0.6196	0.4138	0.5073	0.0000
58	0.4248	0.6272	0.4480	0.5566	0.0000
59	0.6298	0.5958	0.6897	0.6614	0.0000
60	0.5857	0.5638	0.6648	0.5909	0.0000
61	0.5751	0.6052	0.6615	0.7131	0.0000
62	0.6018	0.6026	0.6777	0.6252	0.0000
63	0.6946	0.6666	0.6782	0.6719	0.0000
64	0.5508	0.5187	0.5923	0.6385	0.0000
65	0.5001	0.5372	0.5545	0.6764	0.0000
66	0.3084	0.3384	0.3076	0.5108	0.0000
67	0.4087	0.5327	0.5049	0.6012	0.0000
68	0.5139	0.5427	0.6267	0.5257	0.0000
69	0.3542	0.3175	0.4678	0.4234	0.0000
70	0.5955	0.6142	0.6966	0.6138	0.0000
71	0.4419	0.3741	0.4750	0.4342	0.0000
72	0.4516	0.5291	0.6032	0.5390	0.0000
73	0.4842	0.4956	0.5189	0.6559	0.0000
74	0.5034	0.5119	0.5435	0.6777	0.0000
75	0.4960	0.6989	0.5580	0.6023	0.0000
76	0.4991	0.7211	0.5528	0.6203	0.0000
77	0.5884	0.6290	0.7151	0.6879	0.0000
78	0.4689	0.5055	0.5199	0.6012	0.0000
79	0.5216	0.5749	0.6251	0.5729	0.0000
80	0.5287	0.5611	0.5716	0.6029	0.0000
81	0.4509	0.2840	0.2947	0.3119	0.0000
82	0.7142	0.5655	0.6517	0.5936	0.0000
83	0.7295	0.6478	0.6852	0.6195	0.0000
84	0.5643	0.6030	0.6180	0.5802	0.0000

APPENDIX G

COMPARISON OF UNDERGRADUATE AND GRADUATE MEAN RATINGS

Supervision as Relationship Development and Goal-Setting

Differences Between Undergraduate and Graduate Mean Ratings

Item	Mean U	Mean G	Mean U - Mean G	S.D.
1	6.137	6.808	-0.671*	-0.538
2	5.566	5.808	-0.242	-0.151
3	3.930	4.269	-0.339	-0.173
4	3.777	4.231	-0.454	-0.218
5	3.180	3.308	-0.128	-0.066
6	4.262	3.385	0.877	0.464
7	5.516	5.269	0.247	0.153
8	4.914	4.769	0.145	0.077
9	5.355	5.654	-0.299	-0.186
10	4.773	4.385	0.388	0.213
11	5.457	4.231	1.226*	0.793
12	4.246	4.231	0.015	0.007
13	5.273	5.192	0.081	0.043
14	4.785	5.500	-0.715	-0.415
15	4.934	4.385	0.549	0.329
16	5.375	5.769	-0.394	0.230
17	4.641	5.423	-0.782	-0.393
18	3.328	3.077	0.251	0.136
19	5.551	6.500	-0.949*	-0.587
20	5.410	6.423	-1.013*	-0.656
21	4.984	4.231	0.753	0.426
22	5.719	5.385	0.334	0.227
23	5.582	5.231	0.351	0.222
24	4.203	3.423	0.780	0.387
25	4.477	5.038	-0.561	-0.287
26	4.914	5.962	-1.048*	-0.506
27	4.348	3.692	0.656	0.379
28	4.355	3.885	0.470	0.264
29	4.102	3.885	0.217	0.118
30	5.789	6.423	-0.634*	-0.504
31	5.648	6.038	-0.390	-0.261
32	5.102	5.769	-0.667	-0.408
33	4.266	4.115	0.151	0.085
34	4.879	5.115	-0.236	-0.149

Note.

Mean_U = Undergraduate Mean Rating

Mean_G = Graduate Mean Rating

* $\geq$ 0.5 SD

** $\geq$ 1.0 SD

Relationship cont.

Item	Mean U	Mean G	Mean - Mean U	Mean - Mean G	S.D.
35	4.453	5.000	-0.547		-0.271
36	4.469	5.000	-0.531		-0.255
37	4.504	5.577	-1.073		-0.472
38	3.977	5.192	-1.215*		-0.559
39	3.523	3.154	0.369		0.191
40	4.574	5.923	-1.349*		-0.765
41	4.016	3.192	0.824		0.474
42	4.590	3.385	1.205*		0.674
43	5.137	5.769	-0.632		-0.383
44	4.465	3.462	1.003*		0.569
45	4.313	3.731	0.582		0.333
46	3.840	3.808	0.032		0.016
47	4.418	3.577	0.841		0.462
48	4.910	3.962	0.948*		0.526
52	4.137	4.346	-0.209		-0.104
53	3.969	3.962	0.007		0.004
54	5.109	5.769	-0.660		-0.380
55	5.191	5.615	-0.424		-0.242
56	3.535	5.385	-1.850*		-0.857
57	3.539	5.346	-1.807*		-0.838
58	3.906	5.192	-1.286*		-0.610
59	5.328	4.192	1.136*		0.635
60	4.867	4.654	0.213		0.114
61	5.063	4.038	1.025*		0.599
62	4.652	4.885	-0.233		-0.123
63	5.195	5.538	-0.343		-0.200
64	4.750	5.500	-0.750		-0.484
65	4.535	4.885	-0.350		-0.193
66	3.328	3.654	-0.326		-0.179
67	4.320	4.885	-0.565		-0.315
68	4.531	4.269	0.262		0.137
69	4.223	3.654	0.569		0.283
70	4.539	4.808	-0.269		-0.143
71	3.195	3.346	-0.151		-0.083
72	5.055	5.077	-0.022		-0.014
73	4.172	3.885	0.287		0.159
74	4.273	4.038	0.235		0.133
75	5.430	5.962	-0.532		-0.335
76	4.750	5.538	-0.788		-0.418
77	4.754	4.192	0.562		0.324
78	4.566	5.077	-0.511		-0.287
79	4.504	5.231	-0.727		-0.377
80	4.305	4.923	-0.618		-0.351
81	2.547	3.346	-0.799		-0.438
82	4.750	5.885	-1.135*		-0.634
83	5.398	5.462	-0.064		-0.040
84	5.340	4.962	0.378		0.196

Supervision as Counseling

Differences Between Undergraduate and Graduate Mean Ratings

Item	Mean U	Mean G	Mean U − Mean G	S.D.
1	5.871	6.731	-0.860*	-0.577
2	5.004	4.538	0.466	0.244
3	4.557	3.923	0.634	0.337
4	4.678	5.115	-0.437	-0.219
5	4.361	4.077	0.284	0.142
6	4.706	3.385	1.321*	0.704
7	5.639	5.846	-0.207	-0.138
8	5.459	5.846	-0.387	-0.251
9	5.671	6.692	-1.021*	-0.714
10	4.757	4.385	0.372	0.202
11	5.478	4.423	1.055*	0.639
12	4.624	3.846	0.778	0.394
13	5.278	4.923	0.355	0.193
14	5.063	6.577	-1.514*	-0.895
15	4.988	4.538	0.450	0.255
16	5.616	6.231	-0.615	-0.394
17	4.455	5.808	-1.353*	-0.687
18	4.451	3.423	1.028*	0.534
19	6.008	6.077	-0.069	-0.051
20	5.471	5.500	-0.029	-0.018
21	5.302	5.577	-0.275	-0.170
22	6.200	6.500	-0.300	-0.262
23	6.192	6.462	-0.270	-0.243
24	4.620	3.885	0.735	0.379
25	4.478	3.962	0.516	0.267
26	4.969	5.962	-0.993	-0.482
27	4.831	4.385	0.446	0.244
28	4.820	3.846	0.974*	0.533
29	4.502	4.577	-0.075	-0.038
30	5.839	6.192	-0.353	-0.255
31	5.863	6.231	-0.368	-0.276
32	5.631	6.692	-1.061*	-0.683
33	4.608	4.308	0.300	0.165
34	5.667	6.462	-0.795*	-0.525

Note.

Mean U = Undergraduate Mean Rating

Mean G = Graduate Mean Rating

* ≧ 0.5 SD

** ≧ 1.0 SD

Counseling cont.

Item	Mean U	Mean G	Mean - Mean U	Mean - Mean G	S.D.
35	4.686	5.192	-0.506		-0.270
36	4.576	5.077	-0.501		-0.251
37	4.749	5.692	-0.943		-0.431
38	4.235	5.615	-1.380*		-0.629
39	3.969	3.115	0.854		0.408
40	4.620	5.538	-0.918		-0.490
41	4.369	3.731	0.638		0.330
42	4.529	3.769	0.760		0.390
43	5.192	5.846	-0.654		-0.392
44	4.784	3.615	1.169*		0.659
45	4.604	3.385	1.219*		0.680
46	4.396	4.615	-0.219		-0.105
47	4.925	3.462	1.463*		0.804
48	5.275	4.077	1.198*		0.684
52	4.318	4.577	-0.259		-0.130
53	4.427	3.962	0.465		0.252
54	5.522	6.577	-1.055*		-0.710
55	5.553	6.500	-0.947*		-0.623
56	4.714	6.192	-1.478*		-0.726
57	4.714	6.192	-1.478*		-0.714
58	4.780	5.885	-1.105*		-0.552
59	4.886	4.346	0.540		0.286
60	4.788	4.538	0.250		0.136
61	4.722	3.731	0.991*		0.555
62	4.773	4.654	0.119		0.063
63	4.910	5.154	-0.244		-0.125
64	4.694	4.885	-0.191		-0.106
65	4.537	4.846	-0.309		-0.175
66	3.478	3.769	-0.291		-0.146
67	4.647	5.154	-0.507		-0.279
68	4.725	4.500	0.225		0.114
69	4.212	3.500	0.712		0.349
70	4.639	4.500	0.139		0.070
71	3.204	3.077	0.127		0.066
72	5.024	4.731	0.293		0.181
73	4.220	4.385	-0.165		-0.089
74	4.325	4.154	0.171		0.092
75	5.584	6.423	-0.839*		-0.501
76	5.286	6.423	-1.137*		-0.642
77	4.690	3.808	0.882		0.472
78	4.761	4.769	-0.008		-0.004
79	4.776	5.038	-0.262		-0.138
80	4.863	5.462	-0.599		-0.328
81	2.639	2.962	-0.323		-0.160
82	4.408	3.962	0.446		0.241
83	4.816	3.808	1.008*		0.566
84	4.973	4.115	0.858		0.448

Supervision as Teaching

Differences Between Undergraduate and Graduate Mean Ratings

Item	Mean U	Mean G	Mean U − Mean G	S.D.
1	4.879	4.192	0.687	0.353
2	4.831	4.077	0.754	0.371
3	4.892	5.769	-0.877	-0.437
4	5.195	6.231	-1.036*	-0.559
5	4.866	5.385	-0.519	-0.262
6	5.671	6.615	-0.944*	-0.603
7	5.771	6.077	-0.306	-0.212
8	5.333	5.962	-0.629	-0.354
9	4.437	4.423	0.014	-0.008
10	5.684	6.308	-0.624	-0.405
11	6.082	6.192	-0.110	-0.078
12	5.082	4.654	0.428	0.225
13	4.667	4.385	0.282	0.143
14	4.961	3.423	1.538*	0.844
15	5.035	4.423	0.612	0.347
16	4.805	3.462	1.343*	0.711
17	4.043	4.231	-0.188	-0.093
18	4.896	5.769	-0.873	-0.482
19	4.978	4.769	0.209	0.117
20	4.961	5.115	-0.154	-0.087
21	5.584	5.769	-0.185	-0.122
22	5.411	5.038	0.373	0.229
23	5.420	5.000	0.420	0.261
24	5.455	6.308	-0.853	-0.478
25	4.671	4.500	0.171	0.088
26	4.091	4.577	-0.486	-0.231
27	5.338	5.692	-0.354	-0.210
28	5.571	6.154	-0.583	-0.383
29	5.234	4.423	0.811*	0.528
30	4.307	3.769	0.538	0.281
31	4.671	3.808	0.863	0.447
32	3.874	2.885	0.989	0.478
33	5.368	5.885	-0.517	-0.314
34	4.346	3.115	1.231*	0.655

Note.

Mean_U = Undergraduate Mean Rating

Mean_G = Graduate Mean Rating

* $\geq$ 0.5 SD

** $\geq$ 1.0 SD

Teaching cont.

Item	Mean U	Mean G	Mean - Mean U	Mean - Mean G	S.D.
35	4.684	4.615	0.069		0.036
36	4.398	4.615	-0.217		-0.105
37	4.874	4.692	0.182		0.084
38	4.437	4.615	-0.178		-0.083
39	4.398	5.269	-0.871		-0.425
40	3.576	1.846	1.730		0.913
41	4.913	5.692	-0.779		-0.449
42	4.762	5.115	-0.353		-0.192
43	4.723	3.346	1.377*		0.757
44	5.329	6.231	-0.902*		-0.534
45	5.212	5.808	-0.596		-0.352
46	4.896	5.769	-0.873		-0.457
47	5.186	5.538	-0.352		-0.213
48	5.658	6.423	-0.765		-0.466
52	3.571	2.500	1.071*		0.523
53	4.333	4.423	-0.090		-0.051
54	3.623	2.731	0.892		0.455
55	4.433	4.538	-0.105		-0.053
56	3.056	3.731	-0.675		-0.330
57	2.896	3.654	-0.758		-0.383
58	3.160	3.962	-0.802		-0.389
59	5.831	6.500	-0.669		-0.447
60	5.095	4.923	0.172		0.094
61	5.307	5.577	-0.270		-0.150
62	5.121	5.654	-0.533		-0.295
63	4.485	4.038	0.447		0.233
64	4.446	4.038	0.408		0.217
65	3.918	3.846	0.072		0.037
66	2.935	2.654	0.281		0.151
67	4.320	5.038	-0.718		-0.378
68	5.333	5.385	-0.052		-0.030
69	5.152	6.385	-1.233*		-0.661
70	5.035	5.308	-0.273		-0.144
71	3.165	4.346	-1.181*		-0.574
72	4.913	5.192	-0.279		-0.150
73	4.048	4.385	-0.337		-0.176
74	4.074	4.192	-0.118		-0.063
75	4.009	3.346	0.663		0.326
76	3.957	3.769	0.188		0.090
77	5.823	6.731	-0.908*		-0.645
78	4.957	5.500	-0.543		-0.295
79	5.061	4.577	0.484		0.258
80	4.606	4.192	0.414		0.228
81	3.026	3.154	-0.128		-0.061
82	4.563	5.000	-0.437		-0.233
83	5.355	5.846	-0.491		-0.284
84	5.338	6.000	-0.662		-0.350

Supervision as Consultation

Differences Between Undergraduate and Graduate Mean Ratings

Item	Mean U	Mean G	Mean U - Mean G	S.D.
1	5.289	5.231	0.058	0.032
2	4.832	5.423	-0.591	-0.309
3	4.094	3.769	0.325	0.162
4	4.637	4.769	-0.132	-0.068
5	4.422	3.885	0.537	0.258
6	5.000	5.577	-0.577	-0.325
7	5.426	4.769	0.657	0.402
8	5.234	4.923	0.311	0.187
9	4.785	4.423	0.362	0.197
10	4.750	4.808	-0.058	-0.031
11	5.125	5.192	-0.067	-0.036
12	5.023	3.923	1.100*	0.562
13	4.949	5.346	-0.397	-0.208
14	4.777	3.385	1.392*	0.788
15	5.488	5.769	-0.281	-0.183
16	5.293	5.192	0.101	0.062
17	4.215	4.346	-0.131	-0.063
18	4.434	3.385	1.049*	0.545
19	5.266	4.923	0.343	0.199
20	5.020	4.423	0.597	0.326
21	4.977	4.115	0.862	0.473
22	5.336	4.692	0.644	0.367
23	5.320	4.692	0.628	0.353
24	4.418	3.308	1.110*	0.553
25	4.297	3.808	0.489	0.250
26	4.434	4.615	-0.181	-0.086
27	5.660	6.115	-0.455	-0.290
28	5.715	6.385	-0.670	-0.455
29	4.938	4.038	0.900*	0.504
30	4.840	4.385	0.455	0.267
31	5.434	5.077	0.357	0.211
32	4.621	3.462	1.159*	0.614
33	4.547	4.962	-0.415	-0.226
34	4.734	3.308	1.426*	0.797

Note.

Mean U = Undergraduate Mean Rating

Mean G = Graduate Mean Rating

* $\geq$ 0.5 SD

** $\geq$ 1.0 SD

Consultation cont.

Item	Mean U	Mean G	Mean U - Mean G	S.D.
35	5.016	4.769	0.247	0.140
36	5.215	5.423	-0.208	-0.111
37	4.582	5.538	-0.956	-0.448
38	4.188	4.423	-0.235	-0.108
39	4.516	5.346	-0.830	-0.386
40	3.656	2.192	1.464*	0.741
41	5.125	5.538	-0.413	-0.255
42	5.395	5.269	0.126	0.075
43	5.238	4.269	0.969*	0.590
44	4.879	4.000	0.879*	0.509
45	4.895	5.115	-0.220	-0.123
46	4.516	4.500	0.016	0.008
47	5.438	5.000	0.438	0.256
48	4.781	4.231	0.550	0.280
52	4.355	3.192	1.163*	0.602
53	5.410	5.269	0.141	0.084
54	4.551	3.346	1.205*	0.640
55	5.367	5.731	-0.364	-0.222
56	4.406	4.577	-0.171	-0.081
57	4.324	4.385	-0.061	-0.028
58	4.582	4.846	-0.264	-0.125
59	4.926	5.077	-0.151	-0.082
60	5.047	4.385	0.662	0.359
61	5.121	5.846	-0.725	-0.425
62	4.980	5.500	-0.520	-0.281
63	4.574	4.231	0.343	0.183
64	4.809	4.885	-0.076	-0.042
65	4.633	4.192	0.441	0.236
66	3.961	4.423	-0.462	-0.229
67	4.848	5.423	-0.575	-0.307
68	5.141	4.000	1.141*	0.668
69	4.766	4.577	0.189	0.095
70	4.980	5.077	-0.097	-0.051
71	3.277	3.885	-0.608	-0.295
72	4.609	4.500	0.109	0.060
73	4.504	4.885	-0.381	-0.208
74	5.211	5.154	0.057	0.031
75	4.484	3.769	0.715	0.377
76	5.250	4.577	0.673	0.368
77	5.012	5.962	-0.950*	-0.572
78	5.414	6.115	-0.701	-0.425
79	5.016	5.308	-0.292	-0.155
80	5.203	4.923	0.280	0.159
81	2.809	3.154	-0.345	-0.172
82	4.418	4.462	-0.044	-0.024
83	4.660	4.231	0.429	0.225
84	4.910	4.077	0.833	0.424

Supervision as Self-Supervision

Differences Between Undergraduate and Graduate Mean Ratings

Item	Mean U	Mean G	Mean U - Mean G	S.D.
1	4.081	3.640	0.441	0.178
2	4.043	3.800	0.243	0.101
3	3.702	2.040	1.662*	0.756
4	3.845	3.960	-0.115	-0.051
5	3.659	4.120	-0.461	-0.205
6	4.105	4.600	-0.495	-0.224
7	3.814	3.960	-0.146	-0.065
8	3.841	3.960	-0.119	-0.055
9	3.899	4.080	-0.181	-0.082
10	4.357	3.160	1.197*	0.554
11	4.054	3.640	0.414	0.180
12	4.136	3.920	0.216	0.094
13	4.105	3.960	0.145	0.063
14	3.492	2.760	0.732	0.340
15	3.775	3.640	0.135	0.062
16	4.709	5.000	-0.291	-0.130
17	3.888	3.800	0.088	0.039
18	3.860	3.840	0.020	0.009
19	4.791	4.440	0.351	0.162
20	4.341	4.080	0.261	0.118
21	4.035	3.920	0.115	0.052
22	4.578	5.000	-0.422	-0.184
23	4.453	4.800	-0.347	-0.152
24	3.930	2.840	1.090*	0.504
25	3.895	2.720	1.175*	0.549
26	3.550	3.400	0.150	0.066
27	3.798	3.600	0.198	0.095
28	3.736	3.520	0.216	0.101
29	3.709	3.880	-0.171	-0.080
30	4.279	4.120	0.159	0.073
31	5.252	5.320	-0.068	-0.034
32	3.930	3.960	-0.030	-0.014
33	3.554	2.720	0.834	0.392
34	3.977	4.080	-0.103	-0.047

Note.

Mean U = Undergraduate Mean Rating

Mean G = Graduate Mean Rating

* ≥ 0.5 SD

** ≥ 1.0 SD

Self-Supervision cont.

Item	Mean U	Mean G	Mean - Mean U	Mean - Mean G	S.D.
35	3.566	3.280	0.286		0.132
36	3.907	4.160	-0.253		-0.111
37	3.597	3.640	-0.043		-0.018
38	3.322	2.920	0.402		0.183
39	3.306	2.640	0.666		0.316
40	3.116	2.040	1.076*		0.537
41	4.004	3.800	0.204		0.102
42	4.264	4.200	0.064		0.031
43	4.066	3.720	0.346		0.158
44	4.205	2.760	1.445*		0.674
45	4.078	3.280	0.798		0.381
46	3.748	4.320	-0.572		-0.261
47	3.942	3.120	0.822		0.382
48	4.016	3.240	0.776		0.337
52	3.767	3.360	0.407		0.179
53	3.938	3.240	0.698		0.318
54	4.120	4.240	-0.120		-0.054
55	4.062	4.680	-0.618		-0.291
56	3.302	4.320	-1.018		-0.465
57	3.190	4.360	-1.170*		-0.536
58	3.186	4.240	-1.054		-0.481
59	3.926	2.960	0.966		0.439
60	4.171	4.120	0.051		0.024
61	4.349	4.160	0.189		0.090
62	3.965	4.680	-0.715		-0.326
63	4.035	3.400	0.635		0.290
64	4.035	3.800	0.235		0.109
65	4.027	3.960	0.067		0.029
66	3.376	3.240	0.136		0.064
67	4.155	4.400	-0.245		-0.113
68	3.996	4.080	-0.084		-0.042
69	4.620	3.920	0.700		0.313
70	3.977	4.760	-0.783		-0.366
71	3.527	3.560	-0.033		-0.016
72	4.380	2.920	1.460*		0.715
73	3.942	3.160	0.782		0.363
74	4.081	3.160	0.921		0.417
75	4.229	4.640	-0.411		-0.192
76	4.058	4.800	-0.742		-0.339
77	4.058	3.880	0.178		0.084
78	4.287	4.720	-0.433		-0.203
79	4.078	4.560	-0.482		-0.218
80	4.035	4.480	-0.445		-0.207
81	2.969	2.720	0.249		0.119
82	4.004	3.320	0.684		0.319
83	4.167	3.280	0.887		0.410
84	4.461	3.280	1.181*		0.523