

Helping Students Apply the Scientist-Practitioner Model: A Teaching Approach

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Article:

The scientist-practitioner model was taught to counseling students by giving them an opportunity to integrate theory, research, and practice via a process research case study.

Counselor educators have long embraced the scientist-practitioner (or practitioner-scientist) model of training (e.g., Gelso, 1993; Haring-Hidore & Vacc, 1988; Howard, 1993; Vacc & Loesch, 1994). But despite the almost universal endorsement of this model, its success seems to have been minimal (see Gelso, 1993), leading to strong criticism of the model and its appropriateness for training future practitioners (e.g., Howard, 1985; Woolsey, 1986). In response, several writers recently have sought to redefine the scientist-practitioner model (e.g., Hoshmand, 1991; Hoshmand & Polkinghorne, 1992), or have suggested training approaches that might better encourage students to integrate research and practice (e.g., Gelso, 1993; Heppner & Anderson, 1985; Heppner et al., 1992a; Heppner, Kivlighan, & Wampold, 1992b). These writers have emphasized that scientist-practitioner training programs should strive not only to graduate counselors who continue to be involved in formal research, but also produce practitioners who use a scientific approach (e.g., "clinical inquiry," [Hoshmand, 1991]) in their counseling work. They also have indicated that students need a variety of opportunities to be involved in research during their training program, including the actual practice of applying scientific approaches during supervised clinical experiences. In fact, work behaviors emphasized during clinical training may become professional "habits," in that "how students are taught to work as counselors in their practica classes and internships most likely will reflect how they will work as practitioners" (Heppner & Anderson, 1985, p. 546).

Given the first author's adherence to the scientist-practitioner philosophy and its goals, a teaching approach was designed to give students an opportunity to integrate theory, research, and practice via a process research case study. This approach has been employed as a class assignment in an Advanced Theories and Practice course for doctoral students for the past 3 years. The current version, to be described, has evolved based on students' feedback and suggestions, including those of the second, third, and fourth authors. Goals of this approach include the following: (a) to briefly introduce students to an emerging body of literature on process research, (b) to illustrate the relationship of process research to the study of counseling theory, (c) to encourage the application of scientific attitudes and skills in counseling practice, and (d) to provide students with a structured self-assessment of their counseling approach. To best describe the approach, brief descriptions of the course and process research are necessary.

THE ADVANCED THEORIES AND PRACTICE COURSE

Doctoral-level counseling theory courses often are systematic reviews of traditional theories or intense study of one or two theories. Typically, more attention is given to the philosophical foundations of (e.g., see Okun, 1990) and empirical support for the theories than in master's-level theory courses. Despite the merits of this advanced review, however, it is increasingly clear that all theories "work" and that one approach is not superior to others across a range of clients or situations (with the possible exception of behavior therapy for anxiety-related problem behaviors) (e.g., Luborsky, Singer, & Luborsky, 1975; Smith, Glass, & Miller, 1980). Even more, despite volumes of published studies regarding the efficacy of one theoretical approach, there is little definitive information about how counseling works. Thus, this course was designed to introduce students to

theoretical and empirical works that focus on the "convergence" (Frank, 1982; Grencavage & Norcross, 1991; Mahrer & Nadler, 1986) of counseling theories. Convergence refers to attempts to identify the common elements across theories that might answer the question, What makes counseling work?

PROCESS RESEARCH

One empirical route to answering this question is process research, also referred to as discovery-oriented research (Heppner et al., 1992b; Hill, 1982, 1990, 1991; Hill & Corbett, 1993). Exploratory process research "describes what occurs within psychotherapy sessions from a nontheoretical stance" (Hill, 1990, p. 288), in essence, asking "what the effects or impacts of interventions are rather than asking what is 'right or best' or 'wrong or worst'" (Hill, 1982, p. 9). Thus, objectivity and openness are required of process researchers, with the long-term goal of systematically developing an empirically-based theory of counseling (Hill, 1990). Typically, measures of overt (e.g., verbal response modes) and covert (e.g., intentions) in-session behaviors of client and counselor, their interactions, critical in-session events, or the therapeutic relationship, are related to various indicators of client change (e.g., moving from external to internal focus) and session outcome (e.g., evaluation of session quality). Intensive case studies are a common research design, along with other qualitative approaches (e.g., grounded theory analysis) and sequential analysis (Hill & Corbett, 1993).

PROCESS RESEARCH CASE STUDY

Students in the advanced theories class, then, read both conceptual and empirical literature related to the convergence theme. One class assignment is a quasi-research study based on the student's practicum experience with a volunteer client(s) in the departmental counseling clinic. This process research study differs from other "case studies" sometimes assigned during practicum or internship experiences in that it is structured along a typical research study protocol (e.g., use of literature-based research questions and standardized instruments) and includes input from the client. Research questions to be addressed by the study, along with instruments and procedures, are presented by the instructor (first author) during a class period just before the practicum begins. In her presentation, the instructor emphasizes how the research questions are based on literature read and discussed in class to date. These questions, which follow, became the organizational framework for conducting the study and writing the report:

1. What critical incidents in each session (helpful or hindering events) are reported by the client? By the counselor? Do these reported incidents match? Are there patterns in the reported incidents across sessions?
2. How does the client evaluate each session? the counselor? Do their evaluations match? Are there patterns in their evaluations across sessions?
3. Which sessions are identified as the best and worst by the client? by the counselor? Do their best and worst sessions match? What are characteristics of the best and worst sessions (based on session data) identified by the client and counselor?
4. How does the client describe (rate) the therapeutic relationship? the counselor? Do their ratings match?
5. What possible relationships between the various data sources may be hypothesized (e.g., variations in session evaluation ratings compared with type of critical incident reported)?

In line with the typical procedure of process research, data are collected for each counseling session. To address the first two research questions, two instruments are completed by the counselor and client after each session. The first is a postsession questionnaire (Hill, 1989) consisting of four questions about the most helpful or meaningful, and the most hindering or harmful, events in a session. Responses are classified into five categories: therapist techniques, therapist manner, client tasks, client manner, and working alliance. Second, the Session Evaluation Questionnaire (SEQ; Stiles & Snow, 1984) is completed as an indication of session impact. Four subscales measure session depth and smoothness along with postsession feelings of positivity and arousal. To address research questions 3 and 4, three additional instruments are administered after the final counseling

session. On the final questionnaire (Hill, 1989), counselors and clients indicated their choices of the "best" and "worst" sessions as well as their reasons for these choices. In addition, both participants describe the therapeutic relationship via the Barrett-Lennard Relationship Inventory (BLRI; Barrett-Lennard, 1978), a measure of perceived counselor level of regard, empathy, unconditionality, and congruence, and via the Working Alliance Inventory (WAI; Horvath & Greenburg, 1989), which measures counselor-client agreements on counseling task, bond, and goal. Data from all of the instruments are studied to answer the final research question.

Following typical research protocol, a graduate assistant collects the questionnaires (in sealed envelopes) after each session and then returns them to the appropriate counselor at the end of practicum. Students score the instruments and begin interpreting the results during a class period, working individually and in their practicum peer supervision groups. The case study research report is written following a specific outline provided by the first author. This outline includes (a) pertinent background information on client, counselor, and counseling sessions; (b) reporting of the results for each research question; (c) discussion of results such as counselor and client disagreements in ratings and responses, changes over time, comparisons and contrasts of results for various measures (e.g., the two relationship measures), and data for the "best" and "worst" sessions; and (d) implications for the counselor's work and for future research. Finally, results and conclusions are shared with class members in a final class session in which common themes are identified.

EVALUATIONS OF THE CASE STUDY

Several themes have been consistent in students' observations, as presented in their case study reports and their self-reported learnings in course evaluations. The most frequent theme involves contradictory responses, particularly the selection of the same counseling session as the best by one participant and as the worst by the other. One student, for example, chose the best session as the one in which the client freely expressed her emotions; the client named the same session as her worst, indicating confusion about what to do about the emotional issue. For another dyad, the client said the best session was one in which the counselor was confrontive, whereas the counselor reported being frustrated in this, her worst, session because of the client's resistance. Such contradictions are related to the second theme, the counselors' enhanced and very concrete awareness that they need to give more attention to clients' perceptions. One student noted that "clients do not always leave counseling sessions with the same impressions as the counselor," while another found that "clients may perceive that change has occurred before the counselor has identified change." Based on these observations, students cited an ongoing need to question their assumptions about clients and sessions, and even check in with clients periodically about how things are going.

A third theme revolves around the self-assessment data that the case study provides students. For some, these data boost confidence and even risk taking, as when clients indicate that the counselor's confrontation was the most helpful event of a session. One counselor found evidence for her tendency to be highly self-critical, in that all of her hindering events were therapist techniques. This counselor, however, also found evidence to conclude, "I may need to acknowledge the work done within sessions may hold more power for clients than I realize."

The first advanced theories class members several years ago included a 15-minute transcript from a session of their choice to illustrate and help analyze a critical moment. A more informative approach would be to use one of the many verbal response category schemes to code counselor and client responses, as is typical in process research. These schemes, however, are somewhat complex and require fairly substantial training to use. Nevertheless, one student who had learned a category scheme as a research assistant did code his responses in excerpts of his work with two clients. Much to his surprise, this student found he was less directive (e.g., paraphrase responses) with one client than the other (e.g., providing information and interpretation responses). The clients differed on several input variables (e.g., sex, age, race) (see Hill, 1982, 1991), he noted, and he wondered which, if any, of these variables had influenced his behavior. Thus, the time devoted to teaching students a category scheme could be a worthwhile investment.

Other students have noted that the case study encouraged them to give attention to the microcomponents of a counseling session in addition to the big picture. An exercise sports science student, who was taking the class as

part of her cognate in counseling and who conducted the practicum with a student athlete consultee, concluded that her field had provided her with excellent instruction in theory and skills but had overlooked the importance of the relationship in her consultation work. Finally, true to the research enterprise, several students noted that the project raised more questions than it answered. Even so, the key point seemed to be that the project had raised awareness of potential issues that counselors need to continue to consider as they work with clients.

Of course, the ultimate evaluation question is whether the process research case study influences students' future involvement in research and their application of a scientific approach with their clients. No data have been collected to answer this question, and it is difficult to imagine a research design that could partial out the effects of this one class assignment from the entire "research training environment" (Gelso, 1993) in the doctoral program.

The case study project, however, compares well with Gelso's (1993) list of empirically-supported ingredients that enhance students' attitudes toward research and their productivity. For example, the advanced theories course typically comes during students' first semester in the doctoral program, thus providing "early and minimally threatening involvement" (Gelso, 1993, p. 471) in a research project. Students also quickly learn "the flawed and limited nature of every research study" (p. 471), both in terms of their own study (e.g., serving as counselor, rater, and experimenter for the study, possibly introducing biases) and process research in general. In addition, the case study exposes them to alternative methodologies that typically are not covered in their statistics and research classes. The "wedding of science and practice" (p. 473) is quite obvious, because students are able to apply the results to their own counseling behaviors and beliefs. Members of the most recent class developed their own individual conceptual models of counseling at the beginning of the course. They then discussed results of their case study in light of their models, adding modifications indicated by the results. One student, for example, noted that her model did not give enough emphasis to the client's responsibilities for counseling work, while another observed that he wanted to add relationship issues to his initial focus on counselor techniques. Finally, the first author shared her own excitement and frustrations with process research, thus, according to Gelso (1993), "modeling appropriate scientific behavior and attitudes" (p. 470), and provided encouragement and reinforcement for the students' research efforts.

CONCLUSION

The process research case study has been a challenging and rewarding class assignment, giving students an introduction to the research enterprise and the integration of theory, research, and practice. It seems that the case study, and adaptations of this teaching method, might be one small example of the "innovative curriculum reform" (Heppner et al., 1992a) advocated by scientist-practitioner adherents.

The teaching approach can be extended in several ways. A parallel assignment has been used in the doctoral course on counseling supervision with similar results. One student noted, for example, that "some of the supervisory skills I felt most uncomfortable with, such as challenging skills, were often cited by the supervisee as being most helpful." The case study seems to have been effective in helping beginning supervisors feel comfortable with the more structured role of supervisor (vs. counselor), particularly in terms of their setting the agendas for supervision sessions, as students empirically see the need to help beginning master's students with concrete skills. In addition, the authors have discussed possible applications of the case study with master's-level students in their practica and internships. Such extensions to entry-level students may be particularly salient, given that these students (vs. doctoral students) represent the majority of counseling practitioners.

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