

Bridging the Research-practice Gap in Psychotherapy Training: Qualitative Analysis of Master's Students' Experiences in a Student-led Research and Practice Team

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The research-practice divide continues to plague psychotherapy training in the fields of psychology, counseling, and marriage and family therapy. Although similar solutions have been proposed in these different fields, they have focused on doctoral rather than master's training, and been based more on observations than empirical data. To redress a perceived gap in research training in a master's program in clinical psychology with an emphasis on marriage and family therapy, a student-led Research and Practice Team (RAPT) was developed and assessed. Qualitative analysis of three discussion-based RAPT meeting transcripts explored students' experiences with RAPT. Interpretative Phenomenological Analysis of RAPT meetings revealed "Expression" and "Mentoring" as superordinate themes. Determining whether the team served as a Research Training Environment (RTE; Gelso, 2006), results supported five of the six tenets of RTE theory. Implications of findings for master's level training and research in marriage and family therapy, counseling and clinical psychology include incorporating novel training opportunities for the integration of research and clinical practice, and revising RTE theory for master's psychotherapy students.

Despite the importance of research in clinical work, a gap between research and practice occurs in psychology, counseling, and marriage and family therapy (MFT) training programs. Many therapists, particularly at the master's level, display ambivalent attitudes toward incorporating research into their practices and do not produce research (Brems, Johnson, & Gallucci, 1996). Johnson, Sandberg, and Miller (1999) found that although approximately 60% of a sample of MFT practitioners indicated a willingness to participate in a hypothetical research study, only about 40% indicated they empirically studied the outcomes of their clinical work, with most indicating the use of an exit satisfaction survey.

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Although Gelso (2006) proposed that graduate training is the most appropriate time to shape and develop counseling students' attitudes towards research, concern has been raised about the lack of research incorporation in all training models, including MFT and clinical psychology.

Due to the shared research-practice training gap problem across program types, integrating the current research from different fields is warranted. This article examines the literature on barriers and solutions to the problem of integrated research-practice training in the fields of MFT and counseling and clinical psychology, and presents a qualitative study exploring the proposed solution of a master's student-led research and practice team.

Students may not understand the value of research due to the lack of role models in the professional community. For example, consistent with previous studies, the modal number for lifetime publications was zero in a sample of 654 clinical psychologists (Norcross, Karpiak, & Santoro, 2005). Likewise challenging for the field of MFT, much of the research in this field is not done by MFTs but by others outside of the discipline (Crane, Wampler, Sprenkle, Sandberg, & Hovestadt, 2002). Betz (1997) suggested that mentoring by counseling psychologists is particularly effective when faculty advisors are actively involved in research projects because they serve as both role model and mentor. With heavy teaching and advising loads, faculty in master's programs may also have difficulty serving as research role models (Barraclough, 2006). Although counselor educators report that they believe research-specific mentoring is crucial to training counselors (Okech, Amstramovich, Johnson, Hoskins, & Rubel, 2006), "great divergence" has been found in the preparation of counselor educators in research and writing for publication (Kline & Farrell, 2005, p. 174).

Some MFT educators describe the research curriculum as lacking (Crane et al., 2002). The common standard for research exposure during master's training in counseling and marriage and family therapy is one or two research methods courses. Additionally, COAMFTE (2005) and CACREP (2009) do not state that programs must require a master's thesis. Out of 44 accredited master's MFT programs, these are not required in 24, optional in 11, and required in 9 (Crane et al., 2002). Along with such quantity concerns, the quality of existing counselor educator research courses has been called into question (Kline & Farrell, 2005). A deficiency of relevant research activities and opportunities may leave students with inadequate preparation for integrating research with practice and for publishing.

Crane et al. (2002) argued that the current culture of MFT does not support the scientist-practitioner model of training. One aspect of culture

is gender: the average MFT is a female with a master's degree and the average person publishing in the MFT field is a male with a doctoral degree (Crane et al.). Also, Crane et al. (2002), Gelso (2006) and Barraclough (2006) described that many MFT and counseling psychology students do not come into their master's and doctoral studies with a strong or specific interest in research. This finding may be due, in part, to admissions procedures. In a study of relative weighting of 9 admission variables to master's MFT programs, research experience received one of the lowest ratings (Walfish & Moreira, 2005). Expectations that all students are not interested in research may further students' disinterest in or fears of research, and create missed development opportunities.

MFT and counselor educators have suggested integrating research training into every aspect of their programs. Specific strategies include a) modeling research activity and interest, including integrating empirical articles into coursework (Crane et al., 2002; Gelso, 2006; Johnson, Ketring, Wampler, & Lamson, 2005), b) building research seminars into training (Gelso, 2006), c) offering a year-long practicum in research during doctoral training (Crane et al., 2002), d) making research training more similar to clinical training to increase students' comfort level, such as employing research supervisors and small research groups and teams (Crane et al., 2002; Gelso, 2006), e) modifying the curriculum to show how research can be applicable to the students (Gelso, 2006), f) having students present journal articles that informed their approaches with clinical case presentations and demonstrated knowledge of evidence-based practices (Barraclough, 2006; Hodgson et al., 2005), g) mentoring programs that pair beginning students and more advanced students (Gelso, 2006), and h) otherwise encouraging students to participate in research, including the provision of rewards and funding for conference attendance and presentations (Gelso, 2006; Hodgson et al., 2005).

The use of research teams to bridge the research-practice gap has also been recommended and studied. Research suggests that small groups or teams are less-intimidating, more collaborative, and more enjoyable learning experiences than individual research projects or courses (Crane et al., 2002; Gelso, 2006).

In addition to strategies to improve counselor research training, Gelso (2006) created Research Training Environment theory (RTE) and a measure to assess research training with clinical and counseling psychology students. The six RTE tenets include: a) faculty model scientific interest and behavior; b) students receive positive reinforcement for efforts in research; c) the early environment in which research is presented is minimally threatening; d) students are taught that every research study is flawed and limited; e) varied approaches to

research are demonstrated; and f) the integration of practice and science is demonstrated (Gelso, 2006). RTE has been positively related to doctoral students' research interest, attitudes, self-efficacy and productivity (Gelso, 2006; Mallinckrodt & Gelso, 2002).

In sum, the current literature on barriers and solution to the research-practice gap is limited as it focuses on doctoral rather than master's training and is based more on observations than empirical data. Students in master's programs are a unique population, in part because some may focus on engaging in research after graduation from their short programs (Gelso, 2006). Many suggestions for improving research training in MFT and clinical/counseling programs are similar, but few solutions have been studied or connected to existing theory, such as RTE.

The purpose of the current program of research was to redress the perceived lack of integrated training in a master's psychotherapy training program by developing and assessing a small student-led Research and Practice Team (RAPT). RAPT's primary objective was to provide a supportive forum for master's student discussion about and dissemination of information on incorporating research into practice. The goal of the present study was to qualitatively examine whether RAPT's objective was met in its first year meetings. A qualitative design was appropriate for this study because we sought a rich understanding of the student-participants' experiences of RAPT in their setting (Creswell, 2007). The research question for the study was: what were students' experiences with RAPT discussion-based meetings?

METHOD

Participants

Participants were full-time students from a master's program that enrolls approximately 50 students. The program's emphasis is providing the academic training required for MFT licensure in California. A total of 13 students (identified as P1, P2, etc.) participated in the RAPT discussion-based meetings analyzed in this study. Seven members attended the first meeting. Four members attended the second meeting, including one from the first meeting. Eight members attended the third meeting, including five previous attenders. The open-format meetings were designed to foster accessibility and provide flexibility. This procedure allowed the researchers to have extended contact with participants (3 meetings over the course of 6 months), as recommended for qualitative studies (Kline, 2008).

Procedure

In line with action research (Riel, 2007), RAPT was collaboratively created by the first and second authors and continues to be developed by

team leaders, member input and assessment. Hour-long monthly meetings were designed to be similar to a clinical practicum course but for research, where students were encouraged to discuss interests, difficulties, and possible solutions to problems related to the research process. To facilitate open discussion and peer support as well as reduce pressure, the team did not conduct research or follow an agenda.

After IRB approval was received, all students were invited to participate in RAPT through flyers posted around campus. Also, flyers and informed consent forms were placed in their mailboxes. At every RAPT discussion-based meeting, an anonymous vote was taken to determine if the session would be audio recorded for later qualitative analysis. All students consented to audiotaping of the three meetings. The primary researcher also took field notes after the RAPT meetings and meetings with her faculty advisor, which the advisor validated.

To obtain an in-depth understanding of students' experiences in RAPT, the procedures of Interpretative Phenomenological Analysis (IPA) described by Smith, Jarman, and Osborn (1999), were used to analyze three transcripts of the RAPT meetings. The main goal of IPA is to explore the participants' lived experiences and views of the phenomena under investigation (Smith, Jarman, & Osborn, 1999), while also embracing the interpretive role and biases of the researchers seeking understanding. The self of the researcher is considered in IPA and other forms of qualitative research because researchers cannot be separated from the research process (Yeh & Inman, 2007). Because the primary researcher was a student in the program and the RAPT leader, she had valuable insight to offer regarding the context of the meetings and bias in interpreting some of her own statements and those of other team members. The secondary researcher is a faculty member in the program and faculty advisor to RAPT, who did not participate in the student meetings. Although she had increased objectivity as an outside observer, she described occasional bias given her connection with the student researcher and investment in RAPT. As part of self-observation and reflexivity, biases were discussed during data analysis and interpretation (Yeh & Inman, 2007).

First, the researcher and her faculty advisor independently read and re-read the transcripts, during which both researchers made notes summarizing statements, recorded associations or connections, made preliminary interpretations, and recorded their thoughts about each speaker's cognitions. Next, the researchers documented emerging themes on each transcript. Third, the researchers created a list of emerging themes, looked for connections between them, and clustered them together under two superordinate themes. As one way of enhancing the standards of rigor or trustworthiness (Morrow, 2007), each step of this

process was completed by the two researchers independently, after which the researchers came together to compare notes. The majority of the themes were similar. When one researcher coded a theme that the other had not, they discussed its rationale; all codes were kept. Other methods of cross-validation included consulting field notes and participants' RAPT feedback forms.

RESULTS

IPA analyses revealed a consistent pattern of ten themes that emerged across the three team meetings, which consisted of a total of 433 utterances. Three hundred thirty six utterances received codes and 97 were mostly comprised of feedback words or sounds (e.g., yeah; mhm; me too). No theme had less than four people contributing to the utterances, except for one theme (supporting/ mentoring/ encouraging) that emerged from four utterances made by two participants. After reviewing the themes, they were placed under two superordinate themes: "Expression" and "Mentoring." The superordinate theme of "Expression" emerged from 155 utterances and encompassed themes in which students shared interests, issues, feelings, and needs with the group. The superordinate theme of "Mentoring" emerged from 182 utterances and consisted of themes in which students served as peer mentors to one another through supporting one another, collaborating, sharing opportunities, and connecting students with others. Themes were not discrete or independent; in many cases, they were bi-directional in nature (e.g., a student expressed a concern or question, which led to a mentoring utterance by another student who answered the concern or question).

Expression Themes

Subordinate theme 1: Range of research and practice interests. This theme emerged from 55 utterances and represented times when students discussed past experiences, ambivalence, and current interests regarding research and clinical practice. Within this subordinate theme, therefore, there were three clusters: positive, ambivalent, and negative expressions. An example of a positive research or practice interest from the first meeting was given by P5, "But, I just love, I really like research...I don't necessarily want to do it but I just think it's important and interesting." An example of a different student expressing ambivalent research interests came from P12 in meeting 3:

I don't know if I really want to do research. I am still figuring that out. I've never done it before. I obviously know that it is very valuable and I respect [*sic*]. But, I don't really know if it's my thing. I am sometimes more on the people side of it.

This student, like many others, was unsure how research fit into his/her professional identity, and expressed a reason for the gap between research and practice: assuming that research is not people-oriented or client-focused. An example of a negative research experience was voiced by P13 in the third meeting: “I did some research in undergrad. I went to [name of school removed]. It was like forced and I hated it and I swore I would never do it again.”

Subordinate theme 2: Range of feelings. This theme was developed from 10 utterances and was defined by students’ verbalizing or revealing a variety of emotions, including humor, feeling lost, and envy. An example of this theme came from the first group meeting when a discussion of the future and graduate programs began and P7 said, “I don’t even have any [expletive] idea what or where I plan to apply.”

Subordinate theme 3: Expression of concerns. Students used the group to candidly share their concerns in four clusters that emerged from 60 utterances: negative aspects of the program, financial concerns, future plans, and research. Regarding negative aspects of the program, P9 in the second meeting shared concern that there was no thesis requirement:

“And, um, I assumed that I’d be doing a thesis. So, I have ideas and things that I would want to do with it, people who were lined up to help me with it. And then I was like, ‘oh, just kidding, I don’t have to do that. So, I have all this stuff I want to do and I need to find the right kind of forum.”

Students also expressed concerns about not knowing the proper process to complete research or if their research would be supported or approved.

Subordinate theme 4: Facilitation through group structure. Many of the group structuring utterances came from the primary researcher who functioned as the group’s student-leader. Structuring included explaining the purpose of the group to the members and the way the meeting would run as well as ensuring everyone had a chance to speak and managing time. This subordinate theme derived from 29 utterances contained no clusters because of its largely homogenous nature. One example of group structuring came when the leader (P1) ensured that everyone had a chance to speak before the end of the first meeting by saying, “Okay, well (participant 7), why don’t you go [speak] too because I know you have your practicum today.” Structuring was found to promote the expression of ideas, goals and concerns.

Mentoring

Subordinate theme 5: Connecting members. Developed from 21 utterances, this theme demonstrated how the group linked members with

each other and with faculty members in the program. Accordingly, the two clusters in this theme were connecting members with each other and connecting members with faculty members. An example of cluster one came from the third group meeting in which P3 discussed how the first group meeting allowed her to connect with a student with similar research interests and they subsequently started work together on a research project. P3 said, "Yeah, we talked about doing some stuff together. When we sat in the meeting and we talked. We had pretty much exactly the same kind of interests and we wanted to work with the same person and the same group."

Subordinate theme 6: Sharing. Theme 6 demonstrated how RAPT allowed members to impart knowledge and advise each other about opportunities relating to research, practice, and future goals. This theme of 101 utterances was divided into six clusters in which students shared research opportunities, educational opportunities, professional opportunities, factual information, future goals, and advice. Because utterances were similar, one topic cluster example is presented. Sharing information about future goals occurred in all three RAPT meetings and often when a first year student would ask a second year student about his/her doctoral application process. In the third group meeting, a first year student expressed a concern that doctoral programs might not give credit for his/her master's degree. A second year student (P1) responded by sharing information about future goals, "I think it depends on the type of program. There may be more acceptance in counseling or other programs like MFT programs which require a master's degree."

Subordinate theme 7: Collaborating. Collaborating demonstrated how the group connected members to explore opportunities to work together in research and the doctoral application process. The 15 utterances of this subordinate theme were divided into two clusters: the research process and the doctoral application process. Students often offered to collaborate on the processes or help each other with specific parts. For example, in meeting one, P3 said, "I would be totally willing and totally interested if you want me to do anything with you... if you want me to help you in presenting to [faculty name removed]."

Subordinate theme 8: Supporting, motivating, encouraging, and empowering. Derived from four utterances, this theme demonstrated how group members inspired one another to achieve goals. Often statements were solution-focused or positive. For example, in meeting one, when a student expressed a concern over how to determine the validity of a research project, another member (P1), responded with, "I don't know but we can find out."

Subordinate theme 9: Valuing group. Subordinate theme 9, developed from 16 utterances, demonstrated how group members

expressed appreciation for the group and what it helped them accomplish. For example, in meeting three, P2 shared how the meetings assisted her, “It helps me to get organized because like I said I am really scattered and if I can talk it out with people I can kind of see it more clearly what I am trying to do and focus better.”

Subordinate theme 10: Exploration. Through discussion, members may have gained insight into their thought processes about research and felt comfortable asking questions of one another to further insight and growth. This theme of 25 utterances involved two clusters: self-exploration and asking questions. Self-exploration occurred when students formed their ideas or plans as they spoke. When the group gave speakers space, they clarified ideas or plans and gained confidence. An example related to P2 formulating ideas about approaching a supervisor, “So, I thought because he had said that, but I’m trying to think of other ways to present... I want to have three ideas to present him with if I am going to present at the conference.”

DISCUSSION

Barriers to bridging the research-practice gap continue to plague the fields of MFT and counseling and clinical psychology. One common stereotype in the literature is that master’s level students are interested only in becoming practitioners (Crane et al., 2002, Gelso, 2006). When program decisions about student interests are based on this stereotype, students may not receive the integrated research-practice training they desire or need, which is a missed opportunity for the students, their programs, and their fields in general. Results from the present study indicate that some master’s students are interested in research, others are ambivalent about it, and some were motivated to apply to doctoral programs (as shown in the IPA themes of *Expression of concerns* and *Sharing*). Moreover, evidence from subthemes 7 (collaborating) and 9 (valuing group) shows that the participants energized each other. The superordinate themes showed that RAPT served as a valued place for mentorship/support and varied expression about research and practice.

Although some solutions have been proposed to redress the perceived lack of integrated research and practice training in psychotherapy training programs, little empirical research exists to test their effectiveness. The present study took the needed initial step of developing and qualitatively evaluating one potential solution, a master’s student-led team (RAPT). In addition, many of the IPA themes which emerged from the three RAPT meetings related to five out of the six tenets of Gelso’s RTE theory (Table 1).

Regarding RTE Tenet 1: *Faculty model appropriate scientific behavior and attitudes*, RAPT students engaged in peer modeling.

Although RAPT's faculty advisor may have served as a model, her role was not examined. By adding "and peers" after "Faculty..." the peer part of this tenet appeared supported by the IPA themes of *Range of research and practice interests* and *Sharing – Research opportunities* because students modeled scientific attitudes characterized as positive, ambivalent, or negative, allowing others to openly discuss their experiences with research and modeled scientific behavior by discussing their own research involvement. Gelso (2006) indicated that it is important that faculty discuss their positive and negative experiences with research, as it helps students to understand that they do not always have to be successful, making their research goals appear more attainable.

TABLE 1 Research Training Environment (RTE) Tenets Associated with Interpretive Phenomenological Analysis (IPA) Themes Across Three Research and Practice Team (R APT) Meetings and Proposed Seventh RTE Tenet

<u>RTE Tenet</u>	<u>IPA Themes</u>
1. Modeling appropriate scientific behaviors and attitudes	Range of research and practice interests Sharing – Research opportunities
2. Positive reinforcement for research effort	Supporting & encouraging Collaborating
3. Research team as a less threatening	Valuing group Exploration Expression of concerns Range of feelings
4. Research as flawed and limited	Exploration Expression of concerns – Research
5. Integration of science and practice	Range of research and practice interests Collaboration
6. Varied approaches to research are taught and valued	[not applicable]
7. <i>Students are advised in the value of research for admission to doctoral programs and support is given to those who wish to continue their education</i>	<i>Expression of concerns – About future plans</i> <i>Sharing – About future goals</i> <i>Collaborating – On the doctoral application process</i>

The second RTE tenet: *Scientific activity is positively reinforced in the environment, both formally and informally* seemed to be supported by two IPA themes. In *Supporting and Encouraging*, students empowered one another with solution-focused supportive statements. In

Collaborating, students offered to work with one another on research projects. Praise and behavioral support served as reinforcers.

Next, RTE Tenet 3: *Students are involved in research early in their training and in a minimally threatening way* was well supported by four IPA themes: *Valuing Group, Exploration, Expression of Concerns*, and *Range of Feelings*. The students expressed how much they valued the group and were able to freely explore their own ideas and ask questions, in line with previous research supporting team environments as less intimidating (Barraclough, 2006; Gelso, 2006).

RTE Tenet 4: *It is emphasized during training that all research studies are limited and flawed in one way or another* appeared supported by the IPA themes: *Exploration* and *Expression of Concerns – Research*. Clusters in the exploration theme demonstrated that students felt comfortable with the team environment to explore how they would do a research project by discussing the flaws and barriers and asking questions, modeling this tenet to others in the group. Also, when students expressed their concerns (e.g., research methodology; IRB approval), they were modeling that there were going to be natural flaws and barriers to their own projects and ideas, which may have assisted others in moving forward.

As with RTE tenet 1, tenet 5: *Students are shown how science and practice can be wedded* was viewed such that the students are not shown by professors, but by one another. This tenet seemed supported by the IPA themes of *Range of Research and Practice Interests* and *Collaboration* in which they expressed varied research and practice interests, often described that practice led them to a research interest or vice versa, and offered to collaborate when one had practice experience that may assist another's research interests.

From a positivist perspective, the limitations of this study included a small, homogenous and unique sample of students who self-selected to participate in RAPT meetings. It is unknown whether this type of team would help to instill research values in students who do not already have research interests. Although our sample was from a particular clinical psychology program with an emphasis in MFT, it followed similar training goals as master's programs in MFT and counseling (CACREP, 2009; COAMFTE, 2005). Also, the researchers held dual roles of participating or supervising the group and analyzing the transcripts, which may have biased interpretations (e.g., subordinate theme 4 was primarily derived from the first author's utterances). Furthermore, utterance frequency was not equal across participants, as is typical in group dynamics. Future studies could benefit from larger and more diverse samples, more objective analysts, interviews with each participant to validate themes, and empirical investigations of RTE in

master's programs. From a qualitative and post-positivist perspective, the researchers felt their methods met standards of trustworthiness, authenticity, and self-reflexivity that allowed them to more deeply understand the participants' voices and the study phenomena in its setting (Creswell, 2007; Yeh & Inman, 2007).

Notwithstanding the value of RTE theory, the present study's results indicate a need to revise RTE for master's students in psychotherapy programs. After relating the IPA themes to the RTE tenets, the researchers found that some IPA themes did not necessarily fit any RTE tenet. Much time (58 utterances) was spent discussing themes surrounding students' future plans, in which research was an important issue, including *Expression of Concerns – About Future Plans*, *Sharing – About Future Goals*, and *Collaborating – On the Doctoral Application Process*. IPA results imply that there may be a RTE tenet about discussing research and the future that is salient during master's education in terminal and non-terminal degree programs.

In fact, Gelso (2006) proposed a tenet that research productivity would be increased if the latter part of graduate education involved time spent discussing how some students engage in research after school. Because this tenet was thought to play a major role only in latter graduate education, it was excluded from the RTE scale and has not been studied much since. Yet, when master's students discuss future research, many consider doctoral education and their dissertations, and discussion of the future begins shortly after they enter master's programs.

Such discussions are likely to occur in the context of mentoring relationships, such as those between students and faculty advisors. Unlike doctoral and CACREP master's programs where advisors are considered standard and crucial to RTE, some terminal master's programs do not assign advisors. In such programs (as in our study), faculty advising is informal, must be sought out by the student, or is replaced by peer to peer mentoring. Still, faculty and student time constraints in many master's programs function as barriers to formal and informal mentoring (Barraclough, 2006). The authors believe that one of the reasons RAPT was experienced by students as successful was it allowed them to discuss their feelings, barriers, and hopes related to research, similar to a clinical practicum course or formal advisement. A practical implication of our study is that programs should consider implementing a peer to peer mentoring group or a year-long practicum course to support student's research efforts, interests and competencies in integrating research and practice.

In addition, given the present study's empirical support for Gelso's (2006) "forgotten" tenet, the authors propose a seventh RTE tenet for master's students in terminal programs: *Students are advised in the value*

of research for admission to doctoral programs and support is given to those who wish to continue their education (Table 1). Therefore, a future direction of master's level research and practice training is to modify the current standard of measurement for an RTE, The Research Training Environment Scale (RTES; Gelso, Mallinckrodt, & Royalty, 1991) so that it better assesses the construct at the master's level and can provide a valuable resource for master's program evaluation and development across the fields of counseling, counselor education, MFT and clinical psychology.

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