Developing a Signature Pedagogy in Master's Research Training

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Signature pedagogies have been identified as a conduit for unifying programs and socializing professionals to have similar values, skills, knowledge, and practices. Recently, Baltrinic and Wachter Morris (2020) put out a call to counselor educators to reflect on and consider signature pedagogies. Signature pedagogies in counselor education have been minimally explored and based on findings of empirical studies, there appears to be variability in some areas of preparation such as research training at the master's level. In this article, we join in the dialogue about signature pedagogies in counselor education by discussing research training at the master's level. We also provide a framework for initial steps toward developing a signature pedagogy in this domain and suggestions for empirical exploration.

Keywords: master's level research training, counselor research preparation, signature pedagogy

The science of teaching and learning (i.e., pedagogy) has become a more prominent focus in the field of counselor education (CE). Recently, scholars have focused on defining "pedagogical foundations" and evidence-based preparation of counselors and counselor educators (Baltrinic & Wachter Morris, 2020; Barrio Minton et al., 2018; Borders, 2019). Baltrinic and Wachter Morris (2020) have suggested signature pedagogies (SPs) in CE because of the following reasons: "Overall, signature pedagogies help professions within a discipline to define (a) what counts as important knowledge, (b) how knowledge transpires through acts of teaching and learning, (c) how knowledge is sequenced, and (d) how knowledge is evaluated and accepted (Shulman, 2005a)" (p. 2). While there is evidence of SPs in some areas of counselor training, such as supervision (Baltrinic & Wachter Morris, 2020), the field of CE may benefit from SPs in other domains. More specifically, an SP in research training of master's-level counseling students is one area that seems largely unexplored (Barrio Minton et al., 2014). This has potentially left the field without a unified approach to teaching research across all master's-level counseling programs. Thus, there may be differences in the degree to which counselors in practice value and use research.

More than 30 years ago, Heppner and Anderson (1985) started discussing potential inadequacies in research training of master's-level counseling programs. They identified gaps such as failure to draw links between research and practice, lack of integration of research across the training curriculum, and training counselors-in-training (CITs) to mostly see themselves as consumers of research. Unfortunately, research training at the master's level has since gained little momentum (Jorgensen & Duncan, 2015a, 2015b; Umstead, 2018, 2019). Jorgensen and Duncan (2015a, 2015b) found that some CITs and practitioners described minimal and inadequate counseling-based research training throughout their program and in their research methods courses. Relatedly, Umstead's (2018, 2019) findings revealed that counseling programs have inconsistently translated research to practice. The continued training gaps have potential consequences on both the counseling field and the view others have of our practices. In fact, researchers found that the general public may not even perceive some facets (e.g., marriage counseling) of the counseling profession as having a foundation in science (Platt & Scheitle, 2017). That said, it seems timely to engage in more dialogue about the future direction of research training at the master's level.

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The purpose of this article is to respond to Baltrinic and Wachter Morris' (2020) article by discussing research training at the master's level. Specifically, we will review previous literature on research training of master's-level counseling students and describe potential ideas for working toward an SP in this content area. We will also provide direction for empirically exploring our suggestions for an SP in master's research training.

Research Training at the Master's Level

Research training at the master's level historically has been viewed as lacking instructional design that draws connections between science and practice. For instance, Heppner and Anderson (1985) found that instructors often failed to teach research methods that CITs saw as applicable to their clinical work. Those researchers also suggested that there were gaps in the integration of research in applied courses and thus, contextualization of research within counseling practices was missing. Relatedly, Granello and Granello (1998) described concerns with having research training only occur in research courses and presented an infusion approach.

More recently, Steele and Rawls (2015) empirically explored master's-level counseling students' perceived preparation related to The Council for Accreditation of Counseling and Related Educational Programs (CACREP) research standards in addition to their attitudes toward quantitative research. Counseling students in their study reported feeling only moderately prepared across the CACREP research standards and rated low-to-moderate levels of self-efficacy toward quantitative research. Similarly, other researchers (Jorgensen & Duncan, 2015a, 2015b; Umstead, 2019) reported that some CITs and practitioners do not feel prepared to be researchers, are not connected to quantitative or qualitative research, and do not have a desire to conduct research. Jorgensen and Duncan (2015a) even found that some CITs indicated feeling excluded from research due to the perception that it was "saved" for doctoral-level students.

Additionally, CITs and practitioners have expressed that research training in their counseling program did not provide them with an understanding that research is a relevant part of their work as clinicians (Jorgensen & Duncan, 2015a, 2015b;

Umstead, 2019). Umstead (2019) discovered that some master's-level counselors reported experiencing a lack of hands-on research training, ineffective modality (e.g., online), and minimal messages around incorporating research into practice. Those same counselors provided suggestions for counseling programs with regards to research training, including a need to discuss tangible ways research can be applied and conducted in the field.

To further investigate instruction in research methods courses, Umstead (2018) conducted an analysis of CACREP master's research course syllabi. Across syllabi, Umstead found inconsistencies in the language used (e.g., some syllabi did not include language that connected research with practice), textbooks, assignments, outcomes, and measurements of learning. Umstead also found that topics covered in the master's level research courses did not necessarily align with skills and knowledge needed to effectively use and conduct research in counseling. Specifically, there were limited assignments and class topics that fostered the clinical applicability of research and concretely merged counseling and research.

With all that said, some counselors have indicated needing research skills (Peterson et al., 2016) and that being a researcher is a dimension of their overall professional identity (Jorgensen & Duncan, 2015a, 2015b). For example, practitioners reported a high need for the ability to measure client progress and growth (Peterson et al., 2016). Additionally, Wester et al. (2018) found that clinicians, including counselors, *consume* (e.g., read research to support one's use of certain treatment practices), *apply* (e.g., use research to guide treatment plans), and *engage in* (e.g., collect data to assess client change) research in practice in various ways. Umstead (2019) expanded upon Wester et al.'s work by finding that counselors also *disseminate* research (e.g., discuss client outcomes with treatment teams, present at conferences and workshops) as a part of practice.

Based on the extant scholarly literature, it appears that master's level counseling students experience variability, and possibly inadequacy, in the quality of their research training and likely are inconsistently socialized around research (Anderson

& Heppner, 1986; Granello & Granello, 1998; Heppner & Anderson, 1985; Jorgensen & Duncan, 2015a, 2015b; Steele & Rawls, 2015; Umstead, 2018, 2019). It is our conclusion, then, that an SP in research training at the master's level currently does not exist. In the proceeding section, we will discuss ideas for moving the field toward an SP in master's research training.

Elevating Research Training at
the Master's Level

The overarching aim of our suggestions is to unify CE programs and offer steps toward elevating research training at the master's level through an emphasis on making research relevant to clinical practices (i.e., clinically relevant and applicable research). Baltrinic and Wachter Morris (2020) indicated that the focus of SPs relies on values expressed through particular standards in the field (e.g., ethical codes, accreditation standards). As such, we built upon and further emphasized the research-related values that already seem to convey and promote the clinical relevance of research in counseling. We hope that by doing so, our ideas provide a more concrete map for socializing master's-level students to be practitioner-researchers who consume, apply, produce, and disseminate research and data that directly links with clinical work.

Further, we utilized suggestions from Baltrinic and Wachter Morris (2020) by including both broad and specific considerations of research training in entry-level programs at *professional*, *program*, and *course* levels. We summarized some of those considerations in the following sections and provided more details in Table 1. We also infused research to demonstrate theoretical and empirical foundations for our suggestions (e.g., practitioner-scientist [Wachter Morris et al., 2018], research training environment theory [RTE; Gelso, 1993, 2006], researcher identity theory [RI; Jorgensen & Duncan, 2015a], and research competencies [Wester & Borders, 2014]).

Professional Level

At the professional level, an SP fosters the socialization of CITs in ways that distinguish the practice of counseling from other fields (Baltrinic &

Wachter Morris, 2020). To support and promote this distinction in the domain of research training, it is important for CEs to consider what may collectively guide all programs toward preparing CITs to be counselors who use research and see it as clinically relevant. Jorgensen and Duncan (2015a) found that for some CITs and practitioners, counselor and researcher identities were integrated and guided by external factors such as professional ethics and standards. Notably, Wachter Morris et al. (2018) explained that an identity as a *practitioner-scientist* may emerge as a result of this integration. Wachter Morris et al. further defined a *practitioner-scientist* as "multilayered and containing three major tasks: consumption of research, application of research, and engagement in research (or conducting research)" (p. 7). Interestingly, however, Umstead (2019) found that some counselors did not identify with the actual term of *practitioner-scientist*, which may demonstrate a need to consider professionally distinct labels such as *practitioner-researcher* or *counselor-researcher*. Some discussion of both broad and specific considerations of master's research training at the professional level are provided in the next section and also in Table 1.

Broad Considerations

It seems important to identify and examine frameworks such as existing models and ethical codes connected with counseling professional associations (e.g., American School Counselor Association [ASCA], American Counseling Association [ACA], American Mental Health Counselors Association [AMHCA], National Board for Certified Counselors [NBCC]). As outlined in the various counseling professional associations' ethical codes (e.g., ACA Codes of Ethics, 2014), research needs to be a part of clinical practice as it promotes informed decision-making. Additionally, the ethical codes indicate use of empirically validated treatment approaches and interventions and continuous examination of the efficacy of practices. These ideas are conveyed and supported across all counseling professional associations' ethical codes and in professional standards such as the ASCA National Model (2019). Although there may be variation in specific wording (e.g., to contextualize research practices) across the professional guides, we

Table 1

Considerations for a Signature Pedagogy in Master's Research Training

Level	Broad Considerations	Specific Considerations
Professional	Guided by research-related values and practices that are distinct to the counseling field and demonstrate clinical relevance (e.g., professional ethical codes, ASCA model, insurance standards)	• Counselors and CITs have a professional and ethical responsibility to engage in research-driven practice. • Counselors and CITs use research to make informed decisions and to maintain professional competence (e.g., continue or modify services, need for higher level care, appropriate treatment goals, multicultural competence). • Counselors and CITs use data gathering to monitor and evaluate the effectiveness of their work. • Counselors and CITs inform clients about the empirical basis (or lack of) of their theory, interventions, and the like. • Counselors gather and disseminate data that is specific to their professional settings. • Counselors and CITs ascribe and connect with professionally distinct labels such as practitioner-researcher or counselor-researcher.
Program	Guided by research-related values that are (overtly and covertly) conveyed through accreditation standards and promote merging of counselor and researcher identities	• Research (as linked with clinical practice) is overtly infused into program mission. • Prior research experience is discussed and considered during student admissions decisions. • Faculty discuss research as a part of being an ethical and competent practitioner. • Faculty refer to CITs as practitioner-researchers and/or counselor-researchers to further reinforce integrated identities. • Program faculty are intentional about when research course occurs (e.g., research course occurs after or concurrently with practicum to better build clinical relevance). • Counselor educators teach research courses. • Research is intentionally infused at various points in the program (starting at onset) and in all courses, including supervision of field experiences. • Other supplemental research experiences occur to connect students with research (e.g., invite practitioners to talk about research in practice, organize student research presentation events). • Student engagement in/with research (e.g., as a study participant, share about research consumed in class) is reinforced by all program faculty. • Program faculty send consistent messages about the value of research in counseling. • Faculty examine their own beliefs and researcher/clinician identities and how those impact program research culture.
Course	Guided by a combination of research-related values at the professional and program levels and a focus on clinically applicable research	• Intentionally select research textbook (e.g., highlights connection between research and practice). • Use clear language in syllabus that links research to counseling practice (e.g., "Research guides our work to determine next steps/interventions with clients."). • Include assignments that foster application and practice of connecting research and practice (e.g., role-play having students disseminate data to clients, treatment teams, school staff, insurance companies). • Integrate assignments that promote critique of research in terms of its clinical applicability (e.g., "How would this research directly apply to a client in front of me?"). • Infuse assignments and practice with analyzing clinical data sets (both qualitative and quantitative data). • Include assignments that encourage students to experience all stages of the research process as it relates to clinical practice (e.g., synthesis of literature, study design, data collection/analysis, and dissemination). • Infuse assignments that connect students with practitioners to promote collaborative and field-based research projects (e.g., students work with practitioners to develop a study that can directly inform clinical work). • Utilize activities/role-plays that involve students applying research methods that can be used in practice (e.g., phenomenology, photovoice, narrative, content analysis). • Invite guest speakers (practitioners in the field) to share about gathering data and using research to inform their work with clients. • Instructors seek to normalize student anxiety related to doing clinically applicable research, facilitating discussions that allow students to receive support while challenging their own perceptions of research. • Instructors collect class data on student outcomes (e.g., RSE, RI) and have students reflect on the potential implications of their scores on their use of research in practice. • Instructors consider the impact of their personal elements such as teaching philosophy, theoretical orientation, clinical experience, RI, and RSE on research training.

consider the overlap in the underlying values as representing the distinct ways counselors need to act, think, and behave in the area of research.

Specific Considerations

Professional level considerations may be further defined by examining the exact ethical codes and standards in professional models in our field. Specifically, there are professional ethical codes that explicitly state ethical practice involves the use of research to inform and evaluate work with clients. For example, one ACA Code of Ethics (2014) specifies that counselors need to use approaches that are connected to theory and have empirical support. This and other examples in counseling-specific ethical codes demonstrate connection of research directly to everyday clinical practice.

Another example of professional level guidance around research training relates to the ASCA National Model (2019). The ASCA National Model provides school counselors with standards related to using data to inform decisions with students and in school systems (ASCA, 2019). This model also identifies various research activities in which school counselors examine and make meaning of learning outcomes and program data. Although this model is aimed at school counseling specifically, it demonstrates and supports a need for all counselors, regardless of specialty area, to gather and share data in the context of their professional settings.

Program Level

At the program level, development of an SP in research would involve considerations of program structure and curriculum, both broadly and specifically. As stated by Baltrinic and Wachter Morris (2020), the curriculum should align with the profession's standards around how counselors operate in the field: "the values inherent in the curriculum should reflect the profession's views on how counseling practitioners should think, act, and promote the profession, the essence of which is inherent in the definition of signature pedagogies" (p. 8). In many ways, curriculum that is aimed at training students to think and act *like a competent counselor* also facilitates thinking and acting *like a competent researcher*. Wester and Borders (2014) highlighted this connection in their research competencies (see Wester and Borders, 2014, for more detail). While

at first, many of the research competencies seem to be more of a target for doctoral-level research training, their competencies are also within reach and appropriate for CITs and practitioners. In fact, some of the research skills, knowledge, and attitudes that comprise the various research competency domains overlap with clinical skills, knowledge, and attitudes (e.g., "has perseverance," "identifies ethical dilemmas," "has competent counseling skills," "has a curious nature" [Wester & Borders, 2014, pp. 454–455]). Some discussion of both broad and specific considerations of master's research training at the program level are provided next and also in Table 1.

Broad Considerations

Program-level elements of an SP in this content area may be guided by research-related values communicated through accreditation standards, which seem to align well with emphasis on clinically applicable research. For example, CACREP (2015) features research as a core area for master's-level trainees in accredited programs. Within this core area, there are 10 standards that direct programs to implement research training practices such as teaching students to measure outcomes and use data with clients (see CACREP, 2015, for more detail). Although the CACREP standards convey values around research training (e.g., a value to gather data with clients), there are no specific methods or guidelines for executing these standards. Accordingly, the underlying values of research-related accreditation standards need to be more detailed to unify all programs around research training.

Specific Considerations

Specific aspects of an SP at this level may require program faculty to examine their current infrastructure, culture, and training processes and desired outcomes. This examination might involve faculty engaging in overt discussions to assess their collective views about research and how it links within counseling practices (i.e., clinical relevance). Jorgensen and Duncan (2015a) argued that researcher identity is a part of counselor identity and develops out of students first having a more solid professional counselor identity. Relatedly, Wester and Borders' (2014) research competencies highlighted that core counseling skills can also make

counselors inherently competent researchers. Counselors can transfer their clinical skills to practices of interpreting and applying research, asking clinically applicable research questions, and gathering data from clients that help them evaluate the effectiveness of their work. As Wester and Borders (2014) indicated, it is not only important for counselors to know how to use and apply research, but also how to conduct research with clients.

One possible starting place for addressing program infrastructure and culture is to be more intentional about which faculty teach counseling research courses. According to Umstead (2018), faculty from disciplines outside of CE may teach research methods courses, which can serve to further disconnect research from counseling. We believe that counselor educators should teach research methods to best facilitate clinical applicability. Specifically, when thinking about the RTE theory (Gelso, 1993, 2006) ingredient of linking practice and science, it may be difficult for a faculty who is not an experienced counselor to fully accomplish this for CITs. Also, by having counselor educators teach research methods, programs send a message that research is a part of counselor identity (Jorgensen & Duncan, 2015a).

Another specific program consideration includes faculty involving students in research that is clinically focused. This idea also links with teaching how research can be done in practice settings and merging research with practice (Gelso, 1993, 2006; Jorgensen & Duncan, 2015a, 2015b; Umstead, 2019). To further contextualize research, we suggest that CE programs adopt an infusion approach and integrate research throughout the entire duration of training and across all classes (Granello & Granello, 1998). Regarding infusion, it may be important for all courses to include research-oriented experiences that emphasize evidenced-based practices (Wachter Morris et al., 2018), use of research to inform one's practice, and dissemination of information in accessible and clinically relevant ways (Wester & Borders, 2014).

Course Level

At the course level, an SP becomes even more specific and may help instructors be more intentional with what they are doing to teach research, how they are doing it, and why they are doing it

(e.g., surface, deep, and implicit structures). This component of SP may be one of the most direct means for initiating and facilitating an understanding that research applies to clinical work. As Jorgensen and Duncan (2015a) found, CITs and practitioners have experienced their research methods courses as exactly what "turned them off" from research. Further, Gelso (1993, 2006) emphasized that faculty may miss the opportunity in research methods courses to teach students to look inward for research ideas and truly wed research in practice. Some discussion of both broad and specific considerations of master's research training at the course level are provided next and also in Table 1.

Broad Considerations

Broad aspects of SP at the course level may be guided by a combination of the research-related values at the program and profession levels and a unified profession perspective that master's-level students be trained as researchers. As indicated by various scholars (Jorgensen & Duncan, 2015a, 2015b; Umstead, 2019; Wachter Morris et al., 2018), training CITs to be *practitioner-researchers* may help them more easily *connect the dots* between practice and research when out in the field. This is imperative as the research practices of CITs and practitioners can, and do, have profound and immediate impact on the counseling process and client outcomes (e.g., client progress, continued care, higher level care, access to other services).

Specific Considerations

At this level are tangible steps toward training master's-level students to see research as clinically relevant. Some specific aspects of a research course include being intentional with development of the syllabus, textbook selection, student learning outcomes, assignments, in-class discourse and activities, and evaluation of learning. We encourage instructors to use a textbook that infuses counselor identity, research topics and methodologies that are relevant to practice, and concrete examples that connect research and practice. Another consideration includes using language throughout the syllabus that contextualizes research in counseling and clearly links each course component to standards of practice in the field (e.g., professional ethical codes,

ASCA Model, standards of clinical reviews with insurance companies).

Additionally, we encourage instructors to evaluate their specific class activities, assignments, learning outcomes, and methods for measuring research learning (e.g., measure changes in RI and researcher self-efficacy [RSE]). Instructors could develop key performance indicators (KPIs) informed by practitioner-scientist tasks (Wachter Morris et al., 2018). A few examples of those KPIs include:

- CITs will demonstrate the ability to consume and discuss counseling literature in session with clients; and
- CITs will gather, analyze, and discuss outcomes data with their clients.

Further, we suggest using developmentally appropriate learning and incorporating applied work to build interest through seeing research and data as applicable to practice. As Jorgensen and Duncan (2015a) found, students often do not connect with their initial conceptualizations of research *or* researchers. Guiding students to join research and practice in meaningful and practical ways may help counseling students see themselves as researchers. Importantly, this approach may also align with the idea of exposing students to research in minimally threatening ways (Gelso, 1993, 2006).

Implications and Future Research

There are multiple implications of our suggestions on the field of CE. The broad and specific considerations (see Table 1) serve to harmonize research training across programs and promote robust empirical evaluation. As indicated by Barrio Minton et al. (2014), there has been minimal exploration specifically evaluating the teaching of research at the master's level. Therefore, our implications emphasize directions for future research to move CE toward developing an empirically-based SP in this content area.

Professional Level

Professional level exploration may give the field understanding of how clinicians launch and sustain in the field with regards to their socialization around research. Researchers could assess counseling students directly postgraduation to examine their RI; RSE; and perceptions, beliefs, and interest around research. Data from those assessments could be used to compare initial differences across programs that utilized the proposed suggestions versus those that did not. Researchers could also longitudinally explore data collected from graduates of CE programs to capture any research-related differences that emerge in students from programs utilizing the proposed suggestions versus those that did not. In addition to quantitative data, qualitative data from open-ended responses could be used to help program faculty contextualize and understand which factors — including program factors and current, practice-related factors — that impact graduates' identities as practitioner-researchers. Importantly, focusing research efforts on postgraduates in practice could help our field examine both program and field issues that need to be addressed.

Program Level

As mentioned in Baltrinic and Wachter Morris (2020), it may be helpful to start coordinated teaching across institutions. Faculty could parallel their teaching of research to align with our suggestions by using the same or similar assignments, textbook, course materials, and class activities that allow them to collect data and measure student outcomes. One specific example of a coordinated teaching class activity would be to use Photovoice methodology to explore students' perceptions of research in counseling at the beginning of the semester. That activity could enable faculty to collect and compare data across programs while simultaneously teaching students a methodology that they can use in clinical practice. Additionally, faculty engaging in coordinated teaching of research courses could empirically examine the impacts of our suggestions on RI, RSE, and overall counselor professional identity (Woo et al., 2018).

Counseling faculty could also use the data to conduct program evaluation. Specifically, as part of their assessment procedures, faculty might benefit from longitudinally examining whether and how research-related outcomes change in CITs across the duration of training. Collecting these data at multiple time points could allow faculty to determine the effectiveness of developmentally sequencing research activities, timing of the research course itself, and efforts to infuse research throughout the curriculum.

Course Level

Finally, counselor educators may empirically examine the impacts of the suggested teaching interventions in research courses. Faculty teaching research courses might quantitatively and/or qualitatively explore changes in outcomes such as RI, RSE, and interest in research to understand whether and how the interventions used in their classes influence students' identities as practitioner-researchers. Counseling faculty might also consider using multiple points of data collection throughout the program as a way to determine impact of the research course itself. For example, pre- and post-test scores on scales such as the RIS (Jorgensen & Schweinle, 2018) or Professional Identity Scale in Counseling (Woo et al., 2018) may give insight to student experiences in research courses. Further, researchers could investigate instructor elements such as teaching philosophy or theoretical orientation. Given our focus on clinically relevant research, it seems especially pertinent to examine the impact of clinical components of counselor educators' professional identity on research teaching and learning. That said, researchers could measure the relationship between student RI or RSE and instructors' counseling theoretical orientation.

Conclusion

The overall goal of this article is to provide counselor educators with suggestions for elevating research training at the master's level and lay the foundation for a potential SP in this domain. We argue that an SP in master's research training should emphasize the clinical utility of research and prepare CITs to effectively *consume*, *apply*, *engage in*, and *disseminate* research in counseling practice. Some potential outcomes of achieving an SP in master's research training could include CITs and practitioners doing the following: (1) using counseling literature and data to inform their case conceptualizations and treatment planning; (2) gathering and examining outcomes data with clients; (3) acknowledging research and data in their professional bios and disclosures; and (4) working on research teams to conduct and publish clinically relevant research. Ultimately, we intend for our discussion to serve as a catalyst for counselor educators to take steps toward implementing an SP in master's research

training and cultivating these and other possible outcomes.

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