Integrating Qualitative and Quantitative Methods in Doctoral Education: A Case Study

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We were honored and flattered to be recognized in the feature article for our commitment to qualitative methods training. As an interdisciplinary program focused on organizational science, we strive not to privilege one form of training, thought, or inquiry over another. We recognize that a number of the problems and questions faced by organizational scholars and practitioners cannot adequately be addressed solely by a single discipline or method. Instead, we emphasize the synergy between different methods and modes of thought. Ultimately, our philosophy is that organizational phenomena are inherently interdisciplinary, thus training should reflect that. Our students are trained in industrial-organizational (I-O) psychology, management, organizational sociology, and organizational communication. We use this commentary as an opportunity to explain why our program values qualitative methods equally with quantitative methods, describe how we integrate that training, highlight a few success stories resulting from qualitative projects in our program, and then share some advice to other programs considering additional qualitative training.

Integrated Methods as a Program Value

The Organizational Science (OS) program's values statement explicitly discusses the criticality of valuing high quality research, be it qualitative, quantitative, lab based, field based, micro in orientation, macro in orientation, very basic, or very applied. To reflect this value, our doctoral students' core curriculum includes a full year of qualitative methods coursework and a number of qualitative methods elective courses alongside regular Current Topics sessions that include spotlights of qualitative projects. The qualitative coursework goes hand in hand with an equally extensive training in quantitative methods, encouraging students to recognize that the research question itself should drive the methodology, that powerful qualitative and

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quantitative tools abound, and that the methodologies can pair together extremely well, especially in the early stages of a phenomenon when inductive work is critical (e.g., Spector, Rogelberg, Ryan, Schmitt, & Zedeck, 2014). Ultimately, organizational problems do not always fit neatly into one form of inquiry or another, so we train our students to be both competent scholars across methods and capable of integrating those methods in science and practice.

Our Approach to Training

As noted above, qualitative methods courses are taught side by side with quantitative methods courses, as they each have great merits and complement each other well. Indeed, "real world" research questions often demand some degree of triangulation made possible only with multiple, divergent methodologies and analytical techniques. Thus, student training in both quantitative and qualitative methods are not taught as either/or propositions.

The program's first qualitative methods course introduces students to a wide variety of methods and to the theoretical and philosophical background associated with those approaches. Specifically, the course covers content analysis, ethnography, ethnomethodology, grounded theory, participant observation, symbolic interaction, evaluating qualitative methods, and assessing validity evidence. Students are expected to learn how to employ these methods, how to critique them, and how to teach them to other students. Then, students take these skills and put them to use in a class qualitative methods project. For example, the students read, present on, and discuss exemplar journal articles showcasing various qualitative methods and then identify the sort of research questions and applied problems for which the methods are best suited. The students are expected to develop field notes from observations and complete content-heavy exams on the methods.

The second core qualitative methods course delves more deeply into one or more qualitative methods or frameworks and the associated epistemology, ontology, foundation, and application. The second course is staggered by a full year (taking place in the second semester of the second year) because it challenges students to draw on a greater breadth of organizational knowledge and to critically approach a much more specific research question or problem. For example, students might develop and conduct a research study through a phenomenological lens with the guidance of the instructor. This course project requires that the students work with the instructor to identify a research question and appropriate methodological framework. They design the research questions and draw on the appropriate theories, develop the sampling frame and sampling method, select the fitting methodology and analytical technique, and gather and analyze the data. The students work

with popular qualitative research software and address issues with interpretive validity, intercoder reliability, and developing a codebook. Then the capstone experience of this course entails a coauthored journal manuscript synthesizing the training and efforts undertaken. In several cases, this "routine coursework" has yielded conference publications, journal publications, and/or consulting projects.

In addition to the qualitative research courses and training associated with the OS program, infrequently do students or faculty members feel they are going it alone. Rather, conversations, guidance, and shared resources across students and faculty aid in all phases of the research process. The goal is not to push students into any research area or methodology but to provide the information so students can make informed decisions on individual and collaborative projects. Faculty members understand they do not have all the answers and seek opportunities to learn as well. External academics and applied professionals often conduct training sessions for students and faculty. The topics of these training sessions are generated by the students and faculty, with consideration on gaining expertise in areas beyond the current faculty member's skillset.

Our Outcomes

We have a handful of "success stories" arising from our focus on integrating qualitative methods in our training. These are just some of many successful qualitative and mixed-methods projects, theses, and dissertations, but these examples capture how rapidly obstacles to qualitative methods can be overcome. Also, our students and faculty are open to a broader range of perspectives in developing, conducting, and evaluating research. We expect outcomes such as these to become routine in any program that earnestly integrates qualitative methods into its curriculum.

As part of an introductory Qualitative Research Methods course, OS students alongside Communication Studies students developed a consulting project for a new policy implementation with the University of North Carolina at Charlotte (UNC Charlotte) Graduate School. The students employed the skills they developed during the course (e.g., field observation, interviewing, coding) to provide empirically driven recommendations and guidance to the graduate school. Another class-based project in Qualitative Research Methods employed a snowball method to recruit and study virtual workers. The students participated in all aspects of the research and earned authorship with the faculty member on a publication titled "A Culture of Paradoxes: An Interpretive Phenomenological Approach to Virtual Work" (Long, Dunn, Makkawy, Uhrich, & Olien, 2013). Later, three OS students drew on their qualitative methods training to undertake a case study in a subsequent class. The case was presented at a national case conference and

then published in the journal affiliated with that conference (Berka, Lopina, Justice, & Beck, 2014).

Through the OS program's consulting arm (the Organizational Science Center or OSC), one of the authors partnered with an OS faculty member to provide consulting services to UNC Charlotte's Student Health Center, Counseling Center, and Center for Wellness Promotion. The consulting team used a mixed-methods approach: They developed and conducted semistructured interviews and focus groups. Then, they used the findings from those qualitative approaches to build the quantitative piece (the survey) of the consulting service. Finally, they contextualized the survey results using data from the qualitative methods, providing insights that would not have been possible with a single-method design.

Faculty members have demonstrated heightened involvement in qualitative projects, too—even those who come from "hard" quantitative backgrounds. For example, one of the program's newer management faculty members—trained in quantitative methods—recounted a recent project involving OS students and a communication faculty member. In working together, they agreed that a decidedly qualitative approach—grounded theory—fit their research questions and research design best. Such partnerships are not uncommon: Recently, a team of Organizational Communication faculty teamed up with an I-O psychology faculty member and combined their training orientations to develop a measure and undertake a validation study for a local government agency.

Recommendations for Other Programs

In response to Pratt and Bonaccio (2016), we have a series of recommendations for I-O psychology programs looking to add or integrate qualitative methods. First, we suggest exposing students to qualitative methods as early as possible. Ideally, graduate students should be trained in qualitative methods in parallel with quantitative methods so as to establish early on a foundation of thought that each approach has tremendous merits and applicability depending on the situation and question at hand. Second, we recommend making a variety of tools and supplements for qualitative research available to students and faculty. To start with, our program purchased "qual kits" for student and faculty use. These kits include a suite of tools for qualitative research: an audio recorder, transcription software, and transcription equipment. NVivo is a popular, powerful software package for coding qualitative data, and the product website (http://www.qsrinternational.com/product) includes NVivo training resources. Consortium for the Advancement of Research Methods and Analysis webcasts include a number of effective qualitative methods courses. The National Communication Association (NCA) hosts a

number of resources on their website including guidelines for qualitative research (https://www.natcom.org/ResearchandPublishingResources/), webinars (https://www.natcom.org/webinars/), past presentations (https://www. natcom.org/CardCallsRecordings/), and a best practices document for research in the communication sciences (https://www.natcom.org/Secondary. aspx?id=4791). The National Science Foundation (NSF), too, provides guidelines for best practices in qualitative research (http://www.nsf.gov/ pubs/2004/nsf04219/start.htm and http://www.nsf.gov/sbe/ses/soc/ISSQR_ workshop_rpt.pdf). Scott and Garner (2013), Lindlof and Taylor (2011), Miles and Huberman (1994), and Van Maanen (1988) have each published great textbooks providing detailed descriptions of a variety of qualitative methods that form the core of our qualitative methods curriculum.

Third, we recommend partnering with faculty members in programs emphasizing qualitative methods. For example, our program's Organizational Communication faculty provides the bulk of the qualitative methods training, but you can find competent qualitative scholars in departments across the university, such as in the sociology department, the management department, the college of education, and even your own psychology department. We recommend inviting qualitative faculty to speak at brown-bag sessions or colloquia throughout the year. As much as we have discussed methods, tools need to be considered, too. Hence, we suggest demonstrating qualitative software packages during these brown-bag sessions, too. In addition, we host multiday workshops throughout the year. Such workshops are great opportunities to provide hands-on training with qualitative data analysis and qualitative methods. Incorporate qualitative research from top-tier I-O psychology journals into curricula—Pratt and Bonaccio provide several examples of journals that publish quality qualitative research. The goal is to make qualitative research training opportunities abundant and a natural part of the program's ecosystem.

Concluding Remarks

Again, we want to thank Pratt and Bonaccio for the opportunity to highlight a part of our program and the reason why we value it as much as we do. We hope we have started to make a case for the importance of incorporating qualitative methods training in doctoral education and diversifying the methodological toolset of coming generations of organizational scholars. We believe our broad approach to methodological training should not be unique nor relegated to interdisciplinary programs. Organizational problems do not restrict themselves to single disciplines, nor do they fit neatly into methodological toolboxes. As organizational theory is refined and the problems that researchers and practitioners tackle grow in complexity, the need for diverse and complementary methods will become urgent. Thus, we

suggest that qualitative methods training be instituted as part of the gold standard of I-O psychology training. We hope, too, that the success stories we outlined above underscore the rigor and quality of qualitative methods in both research and applied endeavors. Moreover, we hope that qualitative methods training can be met not with begrudging acceptance but with enthusiasm, as a valuable skill set. As organizational scientists, we study vexing and complex problems. We need at our disposal all types of tools, approaches, and philosophies in our attempt to make a positive change, seek truth, and advance our science/practice.

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It's Like Doing a Job Analysis: You Know More About Qualitative Methods Than You May Think

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Through learning about and doing job analysis, industrial-organizational (I-O) psychologists likely already possess skills and knowledge relevant

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