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Theory Building Through Qualitative Research: Marshalling Opportunities to Advance Cancer Screening Efforts

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In the series of articles that compose this special issue of *Health Education & Behavior*, Rena Pasick and her transdisciplinary team present a collective challenge to business as usual with common health behavior theory constructs. These authors argue that the five primary constructs explored are neither equally relevant across different social contexts and populations nor resilient to mixed empirical evidence in empirical investigations. Clearly, health behavior theories provide easy “rules of thumb,” operationalized across disparate behavioral outcomes, diverse populations, and different intervention strategies. Race or ethnicity is often situated as a background or moderator variable, included in models without disturbing the common currency of the theoretical relationships under investigation. One important risk of this state of affairs is that the continued application of theoretical constructs that were developed decades ago in primarily Caucasian populations may lead to a looming irrelevance of theory as we confront new and changing challenges in health care. Similarly, many novel, efficacious interventions—the use of patient navigators, for example—may evade conceptualization within existent health behavior change theory, leading us to be uninformed, or, worse, uncurious, regarding critical change processes.

Pasick and colleagues model one approach to theory revision, using qualitative strategies to identify how the broad social context in diverse communities (Filipino, Latino) may influence the construct validity of theoretical constructs. Their work aims to push beyond broad constructions of “culture” and social context (Airhihenbuwa, 1992) toward specific mechanisms through which culture may influence mammography adoption. The use of qualitative strategies in behavioral research funded by the National Institutes of Health is not new (Office of Behavioral and Social Sciences Research, 2001). Borrowed from

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anthropology, medical sociology, and nursing research (Willms et al., 1990), qualitative research is used for various purposes: in formative work for measure development and modification, including evaluation of cognitive interviewing data and think-aloud protocols (Davis et al., 2007), and to dictate culture-specific content consistent with established theory constructs (Erwin, Johnson, Feliciano, Zamora, & Jandorf, 2005); to develop culturally acceptable communication content (images, language) for dissemination in specific contexts not evaluated during efficacy phases of the research (Erwin et al., 2007); and also, post hoc, to understand unforeseen research barriers (de Salis, Tomlin, Toerien, & Donovan, 2008). However, qualitative approaches to theory innovation are uncommon, though not absent (Bradley et al., 2002), in the health literature.

Pasick and colleagues use qualitative strategies to justify more fundamental shifts in the way we think about theoretical predictors of cancer screening, proposing that inductive qualitative inquiry is one powerful approach to understanding aspects of the sociocultural context of mammography use by U.S. Filipina and Latina women. The findings from these articles present examples of a number of “routes” to theory innovation. For example, Joseph, Burke, Tuason, Barker, and Pasick (2009) argue that the fluid use of biomedical and traditional or alternative healing practices in Latinas and Filipinas reveal variable perceived benefits of these approaches that is inconsistent with the perceived benefit construct. Their findings indicate that traditional physicians may be thought of as beneficial for diagnosis of an illness, whereas traditional healers might be more useful for treating that disease. Washington, Burke, Joseph, Guerra, and Pasick (2009) find that the complex, pervasive effect of adult daughters on their mothers’ medical care—via their English language fluency and information-seeking and assertiveness skills—demonstrates the need to expand the social roles that should be considered within measurement of the subjective norms theoretical construct. These authors propose that the complexity of mother–adult daughter relationships, including life stage, geographical proximity, relationship quality, and motherhood status as salient, might be worthwhile additions to quantitative assessments of subjective norms. Finally, Pasick et al. (2009) use qualitative data to question the relevance of intention for mammography in these populations, showing that ubiquitous indirect communication, coined “saying yes but meaning no,” calls the intention construct into question. Although this finding clearly fits within the cultural norm of collectivist societies to communicate indirectly, avoid conflict, and respect authority (Hallenbeck, 2006), it is novel in that the work articulates the fact that clinicians or behavioral researchers might misinterpret agreement with an indeterminate plan (affirmative intentions to undergo screening), which is not necessarily consistent with a clear action plan to complete screening.

Although the authors’ results and interpretations are clear, their recommendations for next steps in this effort are less so. Indeed, many researchers will lack the resources, time, and/or expertise to include qualitative strategies in their research. In recent years, substantive progress has been made among qualitative methodologists themselves to codify and systematize concept construction and typologies in qualitatively derived theory (Morse, 2004). We next highlight ways in which the body of work put forth here “sets the stage” for a broader use of multiple strategies for qualitative inquiry in addressing health behavior theory innovation in diverse populations.

GIVING CONTEXT TO BEHAVIOR THROUGH INDUCTIVE INQUIRY

The qualitative strategies employed in Pasick and colleagues' work assert the importance of "decentering" the ultimate outcome of interest—mammography screening—and instead broadly inquiring about the Filipino and Latino immigrant experience, values and culture, and relationships as well as health, cancer, and mammography. Although most health behavior research—whether qualitative or quantitative—is deductive, seeking to provide evidence for a preexisting hypothesis or inquiring directly about a critical outcome, inductive inquiry temporarily sets the outcome aside, allowing for the emergence of novel processes, explanations for why things happen, and the range of effects of these processes (Bradley, Curry, & Devers, 2007). This approach recognizes that disease, diagnosis, and treatment occur within otherwise complex lives with preexisting values and priorities that may or may not be ordered in the way a provider (or researcher) would expect. It is also useful in tapping information that may be unavailable to direct self-report. Inductive approaches may be most useful and justifiable in groups that have very low screening rates, in looking at provider perspectives on screening recommendation, and in populations that have received little or no prior research attention.

MOVING BEYOND FOCUS GROUPS

Although focus groups represent familiar strategies for generating preliminary data to justify subsequent empirical studies in cancer screening and other health behavior change studies, an exclusive reliance on focus groups in qualitative research in health behavior research is unfounded. Groups are usually conducted in health care or research settings. They are invaluable for targeted, deductive exploration of specific themes, but they are highly contrived situations—selected participants are usually strangers, matched for certain characteristics, with specific social rules enforced to minimize conflict and engage less talkative members. These controls bury contradictions and inconsistencies, and participants are quite vulnerable to impression management (Seal, Bogart, & Ehrhardt, 1998). Focus groups limit investigators' abilities to pursue more inductive paths, to follow the contingency of lived experience that are more visible amid in vivo settings, such as barber shops, church basements, or family homes. Research in this issue points us toward the significance of a broader catchment area, of expanding our inquiry to other key informants, not just patients but their daughters, neighbors, church sisters, and community leaders, and embraces individual interviews, family discussions, and reactions to educational materials as the "structure" for inductive inquiry. Adopting a theoretical sampling framework, informed by the lives and networks of key informants (Schwandt, 2001), we can select groups, units, or cases to better test health behaviors in the natural settings of social life, where determinants and barriers to cancer screening might come into clearer focus.

RETHINKING OUR RESEARCH CULTURE

Given the multilevel, multidimensional nature of culture, Pasick and colleagues argue for engagement with individuals with multiple perspectives (expert and lay) using multiple data forms (observed and self-reported) using multiple qualitative collection methods. They argue for research teams composed of multicultural investigators, as well as the active participation

of principal investigators alongside the entire team in regular, collaborative, intensive data coding and analysis meetings as opposed to the delegation of data analytic responsibilities to one staff data analyst. Although not required or practical in many studies, these strategies engage multiple perspectives and higher levels of analysis and foster a research culture that will be well positioned to use qualitative findings to engage rigorous behavioral theory modeling. Moreover, they facilitate the jump from description or diagnosis to prescription or intervention in health settings. At a minimum, consultation with those who can provide the emic perspective (e.g., a cultural insider or community member from the target population) and the etic perspective (e.g., an anthropologist with field expertise working with this population) at the outset and completion of the study would be useful in driving the research agenda and in improving the relevance of the findings for the population in question. Qualitative collaborators can guide an interdisciplinary team through systematic data collection to further assess “social context” in the real world beyond the clinic. It is important that just as biostatisticians must be consulted in the design and analysis of quantitative studies, qualitative methodologists can be integral to the development, design, analysis, and interpretation of the studies to ultimately strengthen behavioral theory. Behavioral theorists should similarly consider bringing on qualitative methodologists as coinvestigators for the life of a study.

In conclusion, we are optimistic that qualitative methods have the potential to make fundamental contributions to the development of *basic science* in behavioral and social domains, including needed innovation in health behavior theory. Accordingly, qualitative inquiry may be useful in elucidating changes to existing constructs, the relationship among constructs, and the directions of causation between predictors and outcomes in longitudinal relationships. In turn, applied researchers in health disparities and intervention development and dissemination also have much to gain by using qualitative inquiry to further their research goals. Using the set of articles published here as a stepping stone, an important set of next steps might include examination of the social context domains of identified in these articles—which include social capital, relational culture, and transculturation—across subgroups of various populations and may be particularly useful in helping us understand those who have never been screened for cancer. Indeed, these domains are a worthy focus of study in Caucasian subpopulations as well, as social context is certainly not a unique attribute of ethnic or racial minority groups. An expanded use of qualitative inquiry will strengthen and advance our knowledge of behavior change mechanisms in applied cancer screening settings.

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