NAPCRG

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Input from the North American Primary Care Research Group (NAPCRG), a multidisciplinary, multinational organization for primary care researchers, on a revised definition of behavioral and social sciences research (BSSR) at the National Institutes of Health (NIH).

The Office of Behavioral and Social Science Research's (OBSSR) existing definition of Behavioral and Social Science Research is fairly comprehensive already, as it currently spans a variety of fields, and links behavioral and social science research to biological and ecological contributors to disease etiology. However, it leaves out fundamental unifying principles that bind behavioral and social science research across subfields. The current definition also leaves out reference to several fields which we believe exist firmly within the continuum of BSSR, and which are pertinent to primary care researchers.

Unifying Principles:

Whether utilizing a purely mathematical model, delving into deep qualitative exploration, or mixing methods across paradigms, a unifying feature of BSSR is its recognition of research that is difficult or impossible to control via experimental, laboratory settings. Statistical models rely upon an answer that is to a greater or lesser extent *possibly* true, assessed through calculations of probability. In any statistical model that is non-definitional, there is an error term that contains everything that could not be measured, or properly operationalized, as a variable. Similarly, studies that rely upon qualitative techniques intrinsically accept a non-positivist and non-reductionist view, and embrace complexity in searching for answers to research questions. In short, BSSR embraces probability, error, and approximation, whether quantitative or qualitative. Surely, there is a wide paradigmatic range of views from post-positivist to constructivist world views that inform BSSR studies, but all wrestle with the inapplicability of positivistic reduction of study designs to simple experimental control, in order to answer complex questions about both social structures, and the inner lives and expressed behaviors of the individual in the context of those social structures.

Fields Left Out of the Current Definition

While the current definition of BSSR is wide-ranging, there are notable exclusions from the list of fields and areas of inquiry. One notable area is Public Health, and all of its embedded subfields, such as environmental health, the administration of organization, and health policy research. While the current definition certainly includes Health Services Research and the Biopsychosocial Model, the Socioecological Model and Epidemiology are notably absent. It is worth considering that whether one is studying economics, psychometrics, sociological demography, quantitative policy research, biostatistics or epidemiology, all are utilizing similar methods derived from the General Linear Model of statistics, with minor differences in emphasis between the order of variable entry, preferred tests between fields, and so forth. However, all use the same fundamental quantitative procedures, and all utilize qualitative research to inform what quantitative exploration cannot.

Additionally, education research, the scientific field of study that examines education and learning processes and the human attributes, interactions, organizations, and institutions that shape educational outcomes, as well as quality improvement and program evaluation (the latter two often not technically qualifying as pure "research") are core fields that utilize social and behavioral science principles and methods, and are applicable to health research. Whether studying human development, the deployment of social programs, the building of the health workforce, or in a variety of other capacities, both educational and program evaluation designs belong within the broader family of BSSR studies.

Finally, we believe primary care research as a field needs to be included in the definition of BSSR. As primary care researchers, working in departments of Family Medicine and in other specialties, we engage in all of these research designs, and employ theories and methods from across essentially every field mentioned in the current definition, as well as in our proposed additions above. Primary Care Research is also a unique context for the application of BSSR. More than the translation of laboratory findings or the execution of clinical trials, a major domain of Primary Care Research is the study of the longitudinal expression of wellness and disease, and the interaction between the individual and their own behaviors, their families, and their communities. Primary care research also studies how it ensures an adequate distribution of medical expertise throughout the health workforce, via medical education and workforce policy studies. Primary care research evaluates primary care systems via quality assurance and health services research, the interplay between social determinants of health and the individual, as well as the factors that create health disparities in patient panels. In short, as a frequent context and site for BSSR studies, and as a home to many BSSR researchers, we believe Primary Care Research belongs firmly within the definition of BSSR.

In conclusion, NAPCRG believes the definitions currently in use for Behavioral and Social Science Research should be amended to include:

1) The additional unifying principle that behavioral and social science research, whether quantitative, qualitative, or mixed, is any research that recognizes the roles of complexity, approximation and inference, as opposed to positivistic or reductionist definitional goals and experimental control.
2) Additional fields of study, including the socioecological model, epidemiology, education research (including quality improvement and program evaluation), and primary care research.

NAPCRG appreciates the opportunity to provide input into the reassessment of the definition of BSSR as used by the OBSSR.