Speaking to the Spirit: 
Examining the Effects of Spiritual-Framing on Breast Cancer Screening Messages 
Developed for African American Women

by

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ABSTRACT

Background: Studies offering plausible solutions to help increase breast cancer screening (BCS) among African American women are lacking; and culturally-tailored health communication may provide a useful strategy to address this issue. Spirituality not only represents an integral aspect of African American culture, but has also been identified as a potential barrier to BCS among this population. Rather than continuing to focus on spirituality as a barrier, there is an opportunity to develop responsive messages that tap into the protective properties of spirituality among this population. The goal of this study was to develop and test the effectiveness of spiritually-framed BCS messages compared to more traditional BCS messages among African American women. The study proceeded in two distinct phases: Phase I and Phase II. The specific aim of Phase I was to work with a group of African American women to identify important spiritual elements to be included in health communication materials, and subsequently develop a spiritually-framed BCS message in response to their feedback. The specific aim of Phase II was to evaluate the effectiveness of the spiritually-framed BCS message compared to a more traditional BCS message among African American women using a cognitive response analysis. Key components of framing theory, the elaboration-likelihood model of persuasion, and the theories of reasoned action and planned behavior were used to help explore the association between message framing, message elaboration, and behavioral intention.

Methods: During Phase I, three nominal group sessions were conducted with 15 African American women to identify and prioritize the most important spiritual elements to be included in BCS messages for this group. These concepts were used to draft a spiritually-framed BCS message. Next, 20 face-to-face, semi-structured interviews were conducted to help finalize the spiritually-framed BCS message for use in Phase II of the study. Phase II consisted of a double-
blind, randomized controlled trial in which a total of 200 self-identified African American women were randomly assigned to one of two groups: spiritual (n=100) or traditional (n=100). Participants reviewed either a spiritually-framed or traditional BCS message and completed a self-administered survey, including a thought-listing form. Participants were asked to write down all of the thoughts they had while reviewing the BCS message, as well as rate their thoughts as either positive, negative, or neutral.

**Results:** Phase I results revealed three important spiritual elements that can be incorporated into BCS health messages: 1) the body as a temple of God; 2) going to the doctor does not make you faithless; and 3) God did give us the spirit of fear. The resulting spiritually-framed BCS was evaluated in Phase II using hierarchical multiple regression, path analysis, and bootstrapping mediation analyses. Regression analyses indicated that, compared to the traditional message, the spiritually-framed BCS message was associated with greater message elaboration as measured by the number of thoughts, and the ratio of positive to negative thoughts that participants had while reviewing the message. Regression, as well as path analysis indicated that the spiritually-framed message was not directly associated with increased intention to obtain or recommend a mammogram. However, subsequent bootstrapping mediation analysis revealed that message involvement completely mediated the relationship between message framing and behavioral intention. Mediation analyses also revealed that message involvement partially mediated the relationship between message framing and message elaboration.

**Implications:** Religion and spirituality are arguably the foremost pervasive components of African American culture; therefore, exploring feasible approaches to developing spiritually-framed health messages is essential to achieving cultural-appropriateness in health promotion efforts in the African American community. Spiritual framing is an innovative approach to
providing relevant, culturally-appropriate BCS messages to African American women, and this study makes a unique contribution to the literature by providing a foundation and clear process for such messages to be explored. Furthermore, this study provides empirical evidence that spiritual-framing may increase the effectiveness of BCS messages among African American women, and that message involvement provides a mechanism by which spiritual-framing can influence message elaboration and behavioral intentions.