Author's response to reviews

Title: Adjuncts or adversaries to shared decision making? Applying the Integrative Model of Behavior to the role and design of decision support interventions in health care interactions

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Author's response to reviews: see over
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Brian S. Mittman, PhD
Co-Editor-in-Chief
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Re.: MS# 7507330662115579

Dear Dr. Mittman,

Thank you for your letter dated December 23, 2008, regarding our manuscript entitled “Adjuncts or adversaries to shared decision making? Applying the Integrative Model of Behavior to the role and design of decision support technologies in health care interactions”. We greatly appreciate the detailed comments from the reviewers and below describe our specific revisions in response to their suggestions. In general, the reviewer and editor comments have helped us strengthen the unique contribution of this paper to the literature on developing decision support interventions for patients.

Reviewer 1:
The reviewer noted that our discussion was focused principally on patient behavior and ignored the interactional context with a physician in which shared decision making takes place.

We thank the reviewer for these suggestions and references to consider. We have edited section 2.1 (What behaviors are necessary for shared decision making) to clarify that shared decision making is an interactional process that requires participation by both patient and physician. Instead of listing the individual behaviors that are part of shared decision making in text, we now provide a table (now Table 1) that divides these behaviors into those that physicians need to engage in, those patients need to engage in and those both parties need to engage in, further highlighting the interactive nature of shared decision making. We further note and provide a reference for a recent study that applied dyadic analysis to examine the influence of patient and physician on each other in the decision-making process, to highlight that analytic methods are available to better describe and understand the interactional process. Nevertheless, because decision support interventions (DESlIs) are developed first and foremost for patients, we felt it appropriate to retain the focus of the remainder of the paper on the development of patient interventions. A detailed description of methods for dyadic analysis seemed beyond the scope of our current manuscript.

The reviewer suggested providing a table summarizing the Integrative Model instead of listing the variables in text.

As also suggested by reviewer 2, we have added a figure illustrating the Integrative Model. The figure supplements the text and provides heuristic value in helping readers unfamiliar with the model
visualize the conceptualization of behavior. However, we believe that the text describing the model is important in helping readers develop an understanding of the interrelationships between the constructs. The figure also helps the reader see that skills and environmental constraints play an important role in the translation of intention to behavior. As noted by the reviewer, a physician who does not welcome the participation of a patient in the decision-making process can nullify the patient’s attempt to engage in shared decision making. In the Integrative Model such a physician would be conceptualized as an environmental constraint that impedes the translation of intention into behavior.

The reviewer suggested adding additional items for behaviors other than expressing preferences into the table illustrating the questionnaire items to operationalize the Integrative Model.

We agree with the reviewer that expressing preferences is but one communicative behavior and that other behaviors are necessary for shared decision making. In the interest of keeping our tables concise and illustrating the need for multiple items to assess each central construct, we have not modified the tables, but instead have noted in text that these items can be adapted to the specific behavior of interest (see section 3.1). We provide several examples of other behaviors relevant to shared decision making that could be measured with adapted items.

The reviewer noted that given his theoretical perspective the findings of our study summarized in section 3.2. were not surprising.

We agree with the reviewer that these findings are not surprising, given the shortcomings in how this intervention was conceptualized and developed. We have clarified that these findings were “unexpected” given the purported effect of the intervention. We have also added text to this section noting that had the developers of the intervention taken a theory-based approach, the intervention would have arguably included components that specifically encouraged the desired behaviors, as also suggested by the reviewer.

Reviewer 2:

The reviewer questioned the added value of this manuscript, given that our proof of principle (the study summarized in section 3.2) was already in press.

We understand the reviewers concern about the added value of this paper. Our proof of principle paper has since been published by Patient Education & Counseling. In addition to other edits made in response to the reviewers’ suggestions, which we believe strengthen the contribution of this manuscript, we have also further reorganized our manuscript to address this concern. Specifically, we now make clear in the initial paragraph of our Background section that shared decision making may require the adoption of new behaviors by patients and that interventions to facilitate shared decision making need to devote more focus to this critical issue, which arguably has been overlooked to date. These points are further reinforced in section 2.1 (as described above) to emphasize that this has been an important gap in the development of decision support interventions. Although the reviewer is correct that methodological detail on how to apply behavioral theory is provided in other literature that we reference, we believe that the first step is to convince developers and researchers that the issue of behaviors necessary for shared decision making warrants more focus and illustrate in a heuristic manner how researchers can begin to tackle these issues.

The reviewer wondered what we meant with the statement “... are perhaps perceived in a different way”

We agree that this sentence was unclear and have removed it from this section.
The reviewer wondered what we meant with the statement “…or are based on other assumptions”

We have added the following text to make this statement clearer: “….for example that giving patients information about their options will be sufficient to facilitate shared decision-making”.

The reviewer suggested editing several additional unclear sentences.

Each of these sentences has been edited to clarify our intended meanings.

The reviewer suggested listing the shared decision making behaviors in a table.

As noted above, we have added a table listing these behaviors according to whom needs to engage in them (physician, patient, physician and patient).

The reviewer suggested that the choice of behavioral theory should be better justified.

We thank the reviewer for this suggestion and have edited section 2.2 to explain up front why we chose to focus on Fishbein’s Integrative Model. As noted in our revision, we selected this theory because it combines several widely used theoretical models that include similar constructs; there is substantial literature documenting the strength of these constructs in predicting behavior; and because it has a well-developed measurement approach, which is best and most accessibly described in the context of the Theory of Planned Behavior.

The reviewer wondered whether “behavior change” was the most appropriate terminology for our discussion.

We agree with the reviewer that “adoption” of these behaviors is a more suitable terminology and have edited our manuscript accordingly.

Reviewer 3:
The reviewer suggested that we should provide a more complete picture of the range of measures of shared decision making that are currently available.

We thank the reviewer for this suggestion. We have added a paragraph at the beginning of section 3 (Practical application) describing the range of measures currently available and referencing the 2 systematic reviews mentioned by the reviewer. We also note that measures of patient shared decision making behaviors are lacking.

The reviewer wondered why we chose to focus our discussion on the Integrative Model.

As noted above, we now provide a more detailed justification of our choice of theory in section 2.2.

The reviewer wondered about potential psychometric issues in using the measures described in our manuscript.

We thank the reviewer for this suggestion and have added a sentence noting that the psychometric properties of measures used need to be assessed on a case by case basis, as the measures are adapted according to the behavior of interest.

The suggestions from the reviewers have further improved our manuscript and we hope that you will now find it suitable for publication in Implementation Science. We would be happy to consider any
additional suggestions you or the reviewers may have. Because Dr. Martin Fishbein made important contributions to our revised manuscript we have included him as an author on this resubmission.

We look forward to hearing from you. Thank you for your attention in this matter.

Sincerely,

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Assistant Professor