Improving Adherence to Health Recommendations: The Role of Time Perspectives and Message Framing

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Abstract

OBJECTIVES: Adherence to health recommendations occurs only about 50 percent of the time adversely impacting the quality of public health and the costs of health care. The goal of this research is to develop and implement tailored advice that matches physician recommendations to the temporal orientation of individual patients to improve adherence to care regime and health outcomes.

Several measures exist that assess aspects of individuals’ temporal orientation, including the Zimbardo Time Perspective Inventory (ZTPI), the Consideration for Future Consequences Scale (CFC), and the Propensity to Plan Scale (PP). Whereas the first two scales (ZPTI and CFC) assess what outcomes of goal pursuit are valued, specifically the relative value of outcomes that occur in the near versus distant future, the third scale (PP) addresses people’s ability to form and implement plans for reaching goals. Based on the dimensions of temporal orientation we propose that medical messages need to be matched to individual differences on temporal orientation along two dimensions – the WHYs or the benefits of following physician advice and the HOW-tos or steps useful to implement action plans.

STUDIES: We have conducted studies to assess: (1) the relationship between the time perspective measures and health behaviors, (2) a protocol study (currently in progress) to systematize and understand physician recommendations to patients, and provide initial evidence that tailoring messages to individual characteristics increases behavioral intentions and behavioral outcomes, and (3) controlled experiments (in progress) that tests for the effects of different health messages on actual behavioral and health outcomes.

RESULTS: Future orientation measured by ZTPI is positively related to considering future consequences as measured by CFC ($r = .52$, $p<.015$) and also to planning for both the short- and the long-term, as measured by PP ($r = .59$, $p<.01$ and $r = .60$, $p<.01$, respectively). Thus, while the dimensions of temporal orientation are conceptually distinct, they overlap considerably.

An initial analysis of the protocol analysis suggests that physicians tend to: (a) distinguish between outcome benefits associated with a health behavior that occur in the far future and are relatively abstract (e.g., reduced “bad” cholesterol as a result of regular physical activity) from those that are visceral and occur in the present (e.g., reduced joint pain as a result of regular physical activity); (b) choose different levels of specificity when recommending means for engaging in a health behavior so that means are framed in either general ways (e.g., walk regularly) or specific ways (e.g., go down to the park and walk 30 minutes each day); (c) vary in whether the recommendations link the benefits and the means. We hypothesize that concrete, present benefits and specific means, especially when they are linked, facilitate adherence amongst the most vulnerable patient populations, that is, present-oriented individuals.