



Debiasing affective forecasting errors with targeted, but not representative, experience narratives



Victoria A. Shaffer^{a,*}, Elizabeth S. Focella^b, Laura D. Scherer^c, Brian J. Zikmund-Fisher^d

^a Department of Health Sciences, Department of Psychological Sciences, University of Missouri Columbia, MO, USA

^b Department of Psychology, University of Wisconsin, Oshkosh, Oshkosh, WI, USA

^c Department of Psychological Sciences, University of Missouri, Columbia, MO, USA

^d Department of Health Behavior & Health Education, University of Michigan, Ann Arbor, MI, USA

ARTICLE INFO

Article history:

Received 24 November 2015

Received in revised form 28 March 2016

Accepted 8 April 2016

Keywords:

Narratives

Decision making

Affective forecasting

ABSTRACT

Objective: To determine whether representative experience narratives (describing a range of possible experiences) or targeted experience narratives (targeting the direction of forecasting bias) can reduce affective forecasting errors, or errors in predictions of experiences.

Methods: In Study 1, participants (N=366) were surveyed about their experiences with 10 common medical events. Those who had never experienced the event provided ratings of predicted discomfort and those who had experienced the event provided ratings of actual discomfort. Participants making predictions were randomly assigned to either the representative experience narrative condition or the control condition in which they made predictions without reading narratives. In Study 2, participants (N=196) were again surveyed about their experiences with these 10 medical events, but participants making predictions were randomly assigned to either the targeted experience narrative condition or the control condition.

Results: Affective forecasting errors were observed in both studies. These forecasting errors were reduced with the use of targeted experience narratives (Study 2) but not representative experience narratives (Study 1).

Conclusion: Targeted, but not representative, narratives improved the accuracy of predicted discomfort. **Practice implications:** Public collections of patient experiences should favor stories that target affective forecasting biases over stories representing the range of possible experiences.

© 2016 Elsevier Ireland Ltd. All rights reserved.

1. Introduction

Patient narratives have become an integral part of the decision making process in healthcare. Patients are reaching out to other patients through the Internet and social media (e.g. [1]). There is a growing community of patient narratives shared by cancer survivors on YouTube [2], and recent research has explored the use of social media to share photo-stories designed to improve the health of people living with HIV/AIDS [3]. Patient stories are also found in the vast majority of patient decision aids [4], and there has been a rise in popularity of websites that collect and feature illness narratives from patients on different health topics. One of the most well developed of these sites is the DIPEX (database of patient experiences) project, available at healthtalk.org, which pairs

evidence-based information about diseases and treatments with stories of patient experiences [5]. Another popular UK-based website, patientvoices.org.uk, is designed to inform professionals involved in the creation and implementation of healthcare about the experiences of 'ordinary' patients [6]. More recently, researchers in the US have worked to establish a library of stories from US Veterans about living with diabetes and traumatic brain injuries (two prevalent conditions in this population) designed to promote patient-centered research and its implementation in the Veterans Affairs organization [7].

1.1. Patient narratives

While these collections of patient stories proliferate, there is little consensus among researchers about whether curating stories for public consumption improves medical decision making. Researchers who collect stories for these catalogs of patient experiences cite the demand for patient narratives [5] and our evolutionary and historical reliance on the use of stories as a

* Corresponding author at: University of Missouri, 501 Clark Hall, Columbia, MO 65211, USA.

E-mail address: shafferv@health.missouri.edu (V.A. Shaffer).

method of communicating important information [6] as primary motivators for the development of these websites. On the other hand, researchers who study patient decision making cite concerns about whether the use of narratives will bias decisions about healthcare, specifically altering risk perception such that rare outcomes are overweighted in comparison to more common outcomes [8,9].

Additionally, the only explicit goal of providing narratives in these forums is to address informational goals of patients with the assumption that providing information about personal experiences will result in more informed and better decisions by patients [5,10,11]. Yet there have been no empirical examinations of the efficacy of this approach for improving patient decision making. So how might patient stories influence the decision making process? Recent theoretical work on narratives suggest that there are different types of narratives, each of which have different effects on the decision making process [9]. In a recent taxonomy, Shaffer and Zikmund-Fisher [9] described three types of narratives: process, experience, and outcome. Outcome narratives describe the psychological or physical outcomes of an event (e.g. regret or survival), while process narratives describe the process people use to make a particular decision. In contrast, experience narratives are stories about 'what it felt like to do X'. These stories may include information about feelings (e.g. sadness), visceral experiences (e.g. pain), as well as length of time and amount of energy devoted to treatment and recovery.

Experience narratives are most closely aligned with the stories of personal experiences shared on the DIPEX and Patient Voices websites. Shaffer and Zikmund-Fisher [9] hypothesized that the primary effects of experience narratives will be to increase knowledge (as also hypothesized by the developers of DIPEX and Patient Voices) and the perceived ability to imagine future health states. The latter effect could lead to an important secondary result: an improved ability to make affective forecasts, which are defined as predictions about the amount of pleasure or discomfort generated by a future experience.

1.2. Affective forecasting

Ample research has demonstrated that we are notoriously poor at predicting our future feelings (termed affective forecasting), and there are multiple ways that our affective forecasts can err (e.g. [12,13]). For example, while we may accurately predict the valence of an emotion (e.g. happy or sad), we often mispredict the intensity of an emotional experience [14] and the duration of our emotional reaction [15]. Several studies have demonstrated that healthy adults typically underestimate the happiness of people living with chronic health conditions by mispredicting the difficulty associated with managing chronic health conditions and failing to recognize that adaptation occurs [16–18]. While affective forecasting is not particularly problematic for low-risk decisions (e.g. where to go for dinner), it can have serious consequences for other types of high-stakes choices such as medical decisions because patients often make important choices between treatments by imagining which health state would be preferable [19]. Specifically, people make assumptions about how they will respond to changes in health and use these assumptions to inform medical decisions. This is important because informed decision making is often based on having an accurate belief about future quality of life [19]. By overestimating the unpleasantness of certain medical experiences, people may ultimately avoid important screenings or medical procedures with long-term health benefits. For example, Janz et al. [20] reported that people who choose not to get screened for colorectal cancer appear to do so in part because they overestimate the amount of anxiety and embarrassment they would experience during the screening procedure.

Recent research has shown that experience narratives may be useful in debiasing affective forecasting errors. Dillard et al. [21] employed narratives about colon cancer screening to debias judgments about the perceived barriers to colorectal cancer screening and increase interest in colorectal cancer screening. Angott et al. [22] used a video of a patient with ulcerative colitis changing their ostomy pouch to improve predictions made by healthy participants about the quality of life for patients with a chronic condition like ulcerative colitis. Further, Shaffer et al. recently demonstrated that experience narratives improved the perceived ability to imagine a future health state [23]. Therefore, these public repositories of patient stories may indeed play an important role in improving medical decision making, specifically by debiasing affective forecasting errors.

Yet, it is unclear which types of stories will successfully debias these errors. When examining the public collections of health narratives, there is no empirical evidence or theoretical framework used to identify the most appropriate method of story selection for these websites. Narratives for DIPEX were chosen to represent the fullest possible range of patient experiences with a condition [5]. In contrast, other researchers have specifically chosen stories that reflect themes emerging from the research literature on a particular topic [24]. Steiner [25] further argues that stories chosen to disseminate research should be representative of the main themes in the literature and information about the story's location of the distribution of all stories should be made explicit (i.e. highlighting whether a story represents a rare or common occurrence). Despite the range of approaches to the selection of stories, there is no evidence about the relative effectiveness of any single strategy in communicating information or improving patient decisions.

1.3. The present study

The present research is designed to directly test the hypothesis that experience narratives will reduce affective forecasting errors. In two studies we test two different approaches to debiasing using experience narratives: representative experience narratives and targeted experience narratives. As described by Herxheimer et al. [5], representative experience narratives are stories that are chosen to explicitly represent a range of possible experiences, providing information that gives shape to the distribution of all possible experiences. For example, when describing recovery from a particular surgery, one could include a narrative about a patient with the easiest possible path to recovery, one story from a patient with a few complications during recovery, and a story about a patient with multiple setbacks and complications during the recovery process. Providing the entire range of experiences can allow prospective patients to use their unique personal knowledge about their abilities, pain tolerance, and motivation to predict where their recovery will fall on this distribution of possible experiences.

While the use of representative narratives does provide a wealth of information about a given experience, it is also possible that providing multiple experiences will not improve affective forecasting because patients have no basis for determining which of the experiences are most relevant to their own decision making. Decades of research in social psychology has demonstrated that we have very little insight into our own judgments (e.g. [26,27]). Therefore, people may actually be unable to accurately predict where their experience would fall on a given distribution of possible experiences despite having unique knowledge of important personal information, such as their response to similar past events.

By contrast, another approach to debiasing affective forecasting is to provide experience narratives that focus on the direction of a known affective forecasting error (e.g. people underestimate the pain of a specific medical procedure). Instead of providing a representative set of stories, these targeted narratives, defined as

Download English Version:

<https://daneshyari.com/en/article/3813473>

Download Persian Version:

<https://daneshyari.com/article/3813473>

[Daneshyari.com](https://daneshyari.com)