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Reducing Information Avoidance Through Affirmation

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Abstract

Although screening for medical problems can have health benefits, the potentially threatening nature of the results can lead people to avoid screening. In three studies, we examined whether affirming people's self-worth reduces their avoidance of medical-screening feedback. Participants completed an online risk calculator for a fictitious medical condition and then were offered a choice to receive or not receive their risk feedback. Our results showed that affirmation decreased participants' avoidance of risk feedback (Study 1) and eliminated the increased avoidance typically observed when risk feedback might obligate people to engage in undesired behavior (Study 2) and when feedback is about risk for an untreatable disease (Study 3). These findings suggest that affirmation may be an effective strategy for increasing rates of medical screening.

Keywords

health, decision making

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As part of its yearly reports on the incidence and prevalence of cancer in the United States, the American Cancer Society offers guidelines for cancer screening and emphasizes the life-saving importance of adhering to these guidelines, yet millions of Americans fail to undergo regular screenings for various types of cancer (American Cancer Society, 2009). Although people forgo cancer screenings for a variety of reasons, many people avoid screenings because they do not want to know the results (e.g., Weitzman, Zapka, Estabrook, & Valentine Goins, 2001).

Why do people choose not to know about personal health risks? A recent review suggests that people are inclined to avoid information when it is threatening—that is, when it threatens a cherished belief, a current or desired emotion, or desired or habituated behavior (Sweeny, Melnyk, Miller, & Shepperd, 2010). Presumably, the more threatening the information, the more people are inclined to avoid it. Conversely, anything that diminishes the sense of threat associated with information should also reduce the avoidance of such information. This reasoning is consistent with self-affirmation theory, which assumes that people are motivated to sustain a global sense of self-worth and integrity (Steele, 1988). When global self-worth is threatened, people typically respond defensively: They disparage, dismiss, or avoid the source of threat. However, when aspects of the self that are unrelated to the threat are affirmed (i.e., when people consider their positive, non-threatened self-aspects), people's need to sustain a global sense of self-worth is met, and they respond less defensively to threatening information (Sherman & Cohen, 2006). For instance, affirming people's overall integrity increases their receptivity to threatening health-related information (c.f., Harris & Epton, 2009, 2010; Harris & Napper, 2005).

Evidence suggests that self-affirmation reduces feelings of threat (Sherman & Cohen, 2002), increases the acceptance of personal health information (Sherman, Nelson, & Steele, 2000), and can promote healthy behaviors (Epton & Harris, 2008). In one study, female coffee drinkers considered their ability to demonstrate a characteristic that was either important to them (affirmation condition) or unimportant to them (no-affirmation condition) and then read an article that linked caffeine consumption to breast cancer. Compared with non-affirmed participants, affirmed participants were more accepting of the message and reported greater intentions to reduce their coffee consumption (Sherman et al., 2000). Other studies have shown that affirmation reduces biased processing of health-related information (Reed & Aspinwall, 1998) and increases acceptance of other types of health-related messages (e.g., Harris & Napper, 2005).

In addition to influencing intentions, self-affirmation can produce positive changes in health-related behavior. For example, participants in one study (Epton & Harris, 2008) answered

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questions about either their past demonstrations of kindness (affirmation condition) or their preferences on neutral topics (e.g., favorite vacation spots; no-affirmation condition). Participants then read a message that encouraged the consumption of fruits and vegetables. During the following week, affirmed participants ate an average of six more servings of fruits and vegetables than nonaffirmed participants did.

In summary, research has shown that affirmation can increase people's acceptance of threatening health-related messages and thereby promote healthy behaviors (see Harris & Epton, 2009, for a review). Critically, research suggests that these effects occur primarily because affirmation reduces the perceived threat associated with such messages. We reasoned that if self-affirmation can reduce perceptions of threat associated with health-related information, then it should reduce people's avoidance of threatening health-related information.

Consistent with this reasoning are findings from a study in which affirmed and nonaffirmed participants received an opportunity to complete an online risk calculator for Type 2 diabetes. Affirmation decreased at-risk participants' derogation of the message and increased their likelihood of completing the calculator (van Koningsbruggen & Das, 2009). These findings demonstrate that affirmation can influence medical-screening decisions by reducing the threat associated with health-related messages (Harris & Epton, 2010).

In the research reported here, we also examined the effect of self-affirmation on medical-screening decisions. However, our research goes beyond prior research in at least two ways. First, van Koningsbruggen and Das (2009) examined information seeking—whether participants would click a link to gain access to a risk calculator. By contrast, we measured motivated avoidance. Specifically, in our studies, participants received their risk feedback by default unless they took action to avoid it. Thus, avoidance required action. This distinction is crucial because information avoidance is not merely the opposite of information seeking, but rather a motivated decision to remain ignorant (Sweeny et al., 2010).

Second, we examined whether affirmation reduces avoidance even in the presence of situational factors known to promote avoidance. Our research is thus the first to systematically investigate a potential remedy for information avoidance. Many prior studies on self-affirmation have focused on cognitions or behavioral intentions as a dependent measure. However, as Harris and Epton (2009) noted in a recent review, few studies have examined the relationship between affirmation and actual behavior. Indeed, to date, van Koningsbruggen and Das (2009) are the only researchers who have tested the effect of affirmation on medical-screening decisions. Our studies extended prior research by examining the effect of affirmation on the avoidance of potentially threatening health-risk information.

In three studies, we examined whether affirming people's self-worth reduces their avoidance of health-related information. In Study 1, we evaluated whether affirmation reduces the avoidance of health-related information generally. In Studies 2 and 3, we examined whether affirmation mitigates two factors linked to increased avoidance: high behavioral obligation and low personal control.

Study 1

Method

Participants. Forty psychology students (14 men, 26 women) took part in Study 1 in return for partial fulfillment of a research-participation requirement.

Design and procedure. When participants arrived at the lab, an experimenter dressed in medical scrubs escorted them to individual work stations and told them that they would complete two unrelated surveys: a paper-and-pencil survey from the psychology department that assessed values and an online survey from the university hospital that assessed risk for a disease.

The psychology-department survey contained the affirmation manipulation (Sherman et al., 2000). The instructions prompted participants to list traits that were central to their self-concept, to identify the trait that they considered most important, and then to write a short essay about a time they successfully demonstrated that trait (*affirmation* condition) or about a time a friend successfully demonstrated the trait (*no-affirmation* condition). In affirmation studies, the no-affirmation condition has typically involved writing about innocuous topics, such as preferences (e.g., Epton & Harris, 2008). By having no-affirmation participants write about a friend successfully demonstrating the trait, we eliminated the possibility that any effects would emerge because these participants had written about a positive or successful experience.

Next, as part of the online university-hospital survey, participants viewed a video about a (fictitious) disease called thioamine acetylase (TAA) deficiency (Jemmott, Ditto, & Croyle, 1986; Taylor & Shepperd, 1998). The video explained that TAA deficiency affects the body's ability to process nutrients and can lead to severe medical complications (e.g., exhaustion, immunodeficiency, physical deterioration, and early death). It also indicated that 20% of college students have TAA deficiency and that most of these students are unaware that they have it. After watching the video, participants completed a fictitious risk calculator and viewed a screen indicating that the computer could use their responses to the risk calculator to calculate their lifetime risk for TAA deficiency. Participants then chose between receiving and not receiving their lifetime-risk feedback. On the screen, the option for receiving risk feedback was selected by default. Participants therefore had to actively choose not to receive their feedback if they wished to avoid the information.

Results and discussion

As expected, affirmation reduced participants' avoidance of risk feedback. Specifically, fewer participants declined to learn

their lifetime risk of TAA deficiency in the affirmation condition (16%) than in the no-affirmation condition (55%), $\chi^2(1, N = 40) = 7.00$, $p < .01$, $R^2 = .17$. These results are the first to provide direct evidence that affirmation can decrease information avoidance.

Study 2

Study 1 showed that affirmation reduces avoidance of risk feedback generally. In Study 2, we examined whether affirmation diminishes people's avoidance of risk information that specifically may obligate them to engage in undesired behavior. People sometimes avoid information that they believe might obligate them to take action they would rather not take (Sweeny et al., 2010). For example, one survey revealed that many South African sex workers avoided HIV screenings because they feared a positive test result would force them to give up their livelihood (Varga, 2001). In another study (Howell & Shepperd, 2011), we offered participants the opportunity to complete an online screening for a disease but told them that they were required by law to undergo a follow-up examination if the screening revealed that they were at high risk. More participants declined the online screening when we described the follow-up examination as unpleasant and invasive than when we described it as innocuous. In Study 2, we examined whether affirming participants would reduce their avoidance of information that might obligate them to take undesired action.

Method

Participants. One hundred thirteen psychology students (32 men, 81 women) took part in Study 2 in return for partial fulfillment of a research-participation requirement.

Design and procedure. The procedure was identical to the procedure in Study 1, with one addition: Before deciding whether to learn their lifetime risk for TAA deficiency, participants read one of two statements. Participants in the *high-obligation* condition read that if the test results indicated that they were at high risk for TAA deficiency, they would be legally obligated to go to the university hospital for a definitive physical examination. Participants in the *low-obligation* condition read that if the test results indicated that they were at high risk for TAA deficiency, they should consider visiting their regular doctor and possibly undergo a physical examination.

Results and discussion

Results revealed that, as in Study 1, fewer affirmed participants (20%) than nonaffirmed participants (53%) avoided learning their results, $\chi^2(1, N = 113) = 16.44$, $p < .001$, $R^2 = .15$. Additionally, affirmation eliminated the effect of obligation on avoidance (see Fig. 1). When not affirmed, more participants in the high-obligation condition (72%) than in the low-obligation condition (40%) avoided learning their risk, $\chi^2(1, N = 113) = 4.77$, $p < .03$, $R^2 = .11$. By contrast, participants who were affirmed displayed relatively low avoidance in both the high-obligation (21%) and the low-obligation (19%) conditions, $\chi^2(1, N = 113) = 0.04$, n.s., $R^2 < .01$.

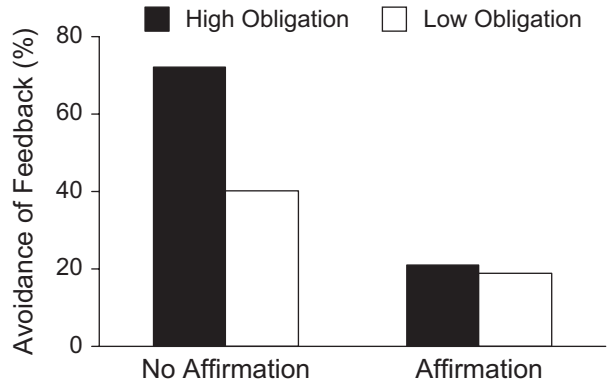

Fig. 1. Results from Study 2: percentage of participants who avoided their risk feedback as a function of affirmation condition and behavioral obligation.

Study 3

In Study 3, we examined whether affirmation diminishes the effect of another source of health-information avoidance: low controllability. Evidence suggests that people show greater avoidance of personal risk information for medical conditions that are uncontrollable than for medical conditions that are controllable (Yaniv, Benador, & Sagi, 2004). For instance, people are more likely to avoid personal risk information about an untreatable genetic disease than to avoid personal risk information about a treatable genetic disease (Dawson, Savitsky, & Dunning, 2006), and more women avoid learning their personal breast-cancer risk after reading about uncontrollable causes of breast cancer than after reading about controllable causes of breast cancer (Melnyk & Shepperd, 2011). In Study 3, we examined whether affirming participants would reduce their avoidance of personal risk information about an untreatable disease.

Method

Participants. One hundred four psychology students (36 men, 68 women) took part in Study 3 in return for partial fulfillment of a research-participation requirement.

Design and procedure. The procedure was identical to the procedure in Study 1, with one addition: In the *treatable* condition, the video informed participants that TAA deficiency could be treated through a simple pill regimen. In the *untreatable* condition, the video informed participants that there was no effective treatment for TAA deficiency.

Results and discussion

Fewer participants avoided their risk feedback in the affirmation condition (15%) than in the no-affirmation condition (54%), $\chi^2(1, N = 104) = 14.26, p < .001, R^2 = .17$. Furthermore, affirmation eliminated the effect of disease controllability on avoidance (see Fig. 2). In the no-affirmation condition, more participants avoided learning their risk for TAA deficiency when they had been told that it was an untreatable disease (68%) than when they had been told that it was a treatable disease (35%), $\chi^2(1, N = 104) = 4.17, p < .04, R^2 = .11$. In the affirmation condition, relatively few participants avoided their personal risk information in both the treatable condition (11%) and the untreatable condition (17%), $\chi^2(1, N = 104) = 0.55$, n.s., $R^2 = .01$.

General Discussion

In three studies, we found that affirmation significantly reduced participants' avoidance of medical-screening information. Affirmation also eliminated the effect of two situational factors known to prompt greater avoidance: high behavioral obligation and low personal control. Thus, our studies provide preliminary evidence that affirmation can reduce information avoidance.

We examined responses to a fictitious disease (although our participants believed it was real). Because the disease was fictitious, we were able to manipulate its characteristics to fit our sample and to manipulate its treatability in Study 3 without raising the suspicion of health-savvy participants. Furthermore, using a fictitious disease allowed us to examine participants' reactions to a disease about which they had no preconceptions or biases. Of course, actual diseases vary on numerous dimensions, such as severity, treatability, likelihood, and stigma, and people vary in their family history and personal experience with these diseases. These differences may influence the effect of self-affirmation on affect, cognitive processing, and defensiveness. For example, evidence suggests that self-affirmation can produce an unintended reduction in concerns about negative outcomes among people who are at low risk (Griffin & Harris, 2011; Harris & Epton, 2009), and the effects of self-affirmation are thus not always as straightforward as they may seem (see also Fry & Prentice-Dunn, 2005). Thus, it remains to be seen whether our findings can be replicated in studies in which people are offered screening opportunities for real medical conditions. It also remains to be seen whether our findings generalize to people who are less healthy or less affluent than college students.

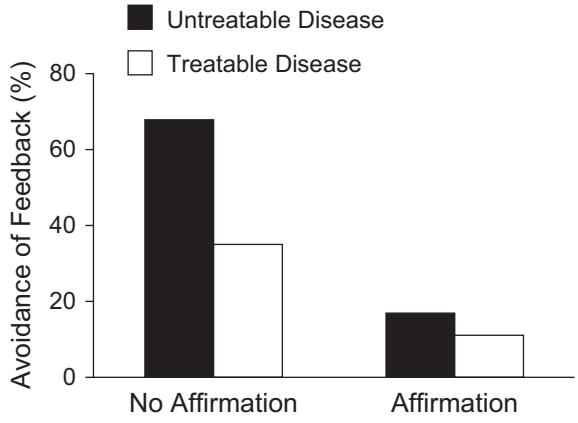

Fig. 2. Results from Study 3: percentage of participants who avoided their risk feedback as a function of affirmation condition and disease treatability.

Despite its limitations, our study has promising implications. From a theoretical perspective, our findings suggest that a process that has not received attention may underlie affirmation's ability to reduce defensiveness. Whereas researchers originally believed that affirmation refocuses attention on overall integrity (Steele, 1988), other researchers have recently proposed alternative accounts, including the possibility that self-affirmation reduces defensiveness and bolsters self-worth (Critcher, Dunning, & Armor, 2010; Sherman & Cohen, 2006). However, it is also possible that affirmation decreases information avoidance by diminishing the threat posed by bad news and thereby reducing the psychological resources required to cope with it. This account offers a plausible explanation of why affirmation ameliorates the influence of factors that promote avoidance, in addition to reducing avoidance in general.

In addition to making this theoretical contribution, our findings are clinically important in that they suggest a means of increasing rates of medical screening. Many diseases have a narrow window of time in which they can be treated successfully, and even a temporary avoidance of personal medical information can therefore have dire consequences. For example, early detection of HIV is essential to prevent the development of AIDS (Centers for Disease Control and Prevention, 2011), yet up to 55% of people who are screened for HIV never return to the test site to learn their results (Hightow et al., 2003; Molitor, Bell, & Truax, 1999). Our findings suggest that affirming individuals may increase return rates and thus survival rates for AIDS and other deadly but preventable diseases.

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Declaration of Conflicting Interests

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

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