

Research Dialogue

Will you read this article's abstract? Theories of the question–behavior effect

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Abstract

Question–behavior research has frequently demonstrated that asking questions about future behaviors increases the performance of socially normative behaviors. In response to Fitzsimons and Moore's review (2008) of the question–behavior effect in the context of risky behaviors, we consider how asking questions about an undesirable behavior may increase the probability of performing that behavior. We suggest that a theory with 19th century roots—ideomotor action—may be useful in understanding these potential effects.

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A growing body of literature in consumer psychology demonstrates that merely asking people a question about their future behavior influences the subsequent performance of that behavior. This *question–behavior effect* (Sprott et al., 2006) subsumes phenomena previously identified as *self-prophecy* (e.g., Spangenberg & Greenwald, 1999) and *mere measurement* (e.g., Morwitz, Johnson, & Schmittlein, 1993) effects, whereby questioning of a person (whether it be through an intention measure, a self-prediction, a measure of satisfaction, or other means) influences the future performance of a target behavior (Sprott et al., 2006). Prior question–behavior research has focused on influencing normatively ambiguous behaviors under the nomenclature of mere measurement, or increasing socially normative behaviors under the self-prophecy label.

Recent evidence has emerged regarding the possibility that questioning of future behavior might also increase the prevalence of undesirable behaviors such as adolescent drug and alcohol use (e.g., Fitzsimons, Nunes, & Williams, 2007). Fitzsimons and Moore's (2008) review in this issue provides an overview of this evidence and puts forth a potential explanation for said effects. Further, the authors detail cautions about conducting surveys that, by asking for predictions about performing undesirable behaviors, may unintentionally increase the likelihood of their performance (e.g., Williams, Fitzsimons, & Block, 2004). In this comment, we review available theoretical explanations for question–behavior effects including the interpretation of Fitzsimons and Moore and conclude that they cannot adequately explain findings for risky

behaviors. We conclude by proposing a new theoretical explanation for reported effects – ideomotor action – that we believe warrants empirical examination.

The question–behavior effect

Background

Question–behavior effects have been demonstrated with elicitation of forecasts of own behavior in a variety of response modalities, including paper and pencil, telephone, face-to-face survey methods as well as mass-communicated “ask yourself” advertisements and individual mailers. Self-prophecy studies typically find behavioral effects of making a dichotomous self-prediction to move in the direction of social norms (e.g., increased voting, more prevalent health-related behaviors, higher charitable donations, more frequent recycling, reduced gender stereotyping, and less-frequent cheating). In contrast, mere-measurement work has found behavioral changes in response to intervally-scaled intention measures for a variety of behaviors (e.g., purchase of durable and non-durable products, choice of and loyalty to service providers, flossing, and drug and alcohol use). Effect sizes associated with self-prophecy are often larger than those reported in the mere-measurement literature. Sprott et al. (2006) speculated that questions regarding socially normative actions (i.e., in self-prophecy studies) lead to larger behavioral changes than for behaviors like durable product purchases (i.e., in mere measurement work). Among identified moderators, recent work suggests that subtle changes in the question may impact size and nature of behavior

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change. Levav and Fitzsimons (2006) found that questions evoking easily imagined behaviors lead to larger question–behavior effects while Sprott, Smith, Spangenberg, and Freson (2003a), found larger effects for specific, as compared to more general, self-predictions. Space constraints preclude a more thorough review of prior research, but the interested reader is directed toward comprehensive, published reviews of the effect (e.g., Fitzsimons & Moore, 2008; Sprott et al., 2006).

The review by Fitzsimons and Moore (2008) stands in stark contrast to the majority of the research record and suggests that questions can also lead to increases in socially undesirable behaviors. The first evidence of this effect was reported by Williams, Block, and Fitzsimons (2006) who found that asking students about future drug use increased self-reported drug usage as compared to a control condition. Further, Fitzsimons et al. (2007) demonstrated that questioning can increase self-reported alcohol consumption and TV viewing, as well as influence actual student behaviors of being distracted from studying and missing class during a regular semester. While these findings suggest some sobering consequences for screening and/or predicting risky behaviors (e.g., substance use, unsafe sex), questions remain regarding the theoretical explanation proffered by Fitzsimons and Moore.

Existing theoretical perspectives

Multiple theories have been proposed for question–behavior effects, including impression management, script- or schema-theory (Sherman, 1980), consistency (Cialdini & Trost, 1998), and implementation intentions (Gollwitzer & Schaal, 1998). While some have been empirically ruled out, it is clear from published research that there are a variety of mechanisms underlying reported effects (Sprott et al., 2006). The theoretical accounts that presently have greatest empirical support are attitude accessibility (Morwitz & Fitzsimons, 2004) and cognitive dissonance (Spangenberg, Sprott, Grohmann, & Smith, 2003). The attitude accessibility account holds that being asked the question increases the accessibility of beliefs about the behavior, such that changes in behavior reflect existing underlying attitudes relevant to the behavior. The cognitive dissonance account holds that the question simultaneously evokes social norms regarding the behavior and reminds the respondent of past failures to adhere to these norms. This juxtaposition evokes dissonance, in turn motivating behavior more adherent to the norms (cf. the hypocrisy induction of dissonance developed by Aronson and colleagues—e.g., Aronson, Fried, & Stone, 1991).

Emerging theoretical views for question–behavior effects do not, however, account for all reported findings. One challenge to theoretical interpretation comes from studies that have identified variables moderating question–behavior effects (e.g., Levav & Fitzsimons, 2006; Spangenberg & Sprott, 2006; Sprott et al., 2003a). For example, Sprott, Spangenberg, and Fisher (2003b) found that strength of social norms moderates the question–behavior effect, which fits with a dissonance-based explanation but is difficult to explain from an attitude accessibility perspective. Similarly, Morwitz and Fitzsimons

(2004) found strength of prior brand attitudes to moderate the question–behavior effect—which is more easily interpreted within the attitude accessibility than dissonance framework. The evidence reviewed by Fitzsimons and Moore (2008) raises further questions about the adequacy of existing theoretical views of the effect, prompting us to consider the possibility of a new theoretical interpretation. Before discussing this new interpretation, we review and critique the theoretical perspective outlined by Fitzsimons and Moore (2008).

Building upon an attitude accessibility-based view of question–behavior effects, Fitzsimons and Moore (2008) propose that questioning people about risky behaviors increases the accessibility of implicit attitudes which guide the performance of future undesirable actions in an unconscious fashion (even if explicit attitudes exist that are against performing such risky behaviors). For example, adolescents are argued to have favorable implicit attitudes towards drinking alcohol and when asked about this risky behavior, their implicit attitudes become accessible and guide behavior at the next opportunity to consume alcoholic beverages. While this theoretical view corresponds with prior theorizing, we share many of Sherman's (2008) concerns regarding the theoretical explanation detailed by Fitzsimons and Moore (2008). Our concerns surround two issues, including: (1) the nature and role of implicit attitudes, and (2) what constitutes a risky behavior.

Fitzsimons and Moore contend that questioning increases the performance of undesirable behaviors by making salient positive implicit attitudes toward the risky behavior. Fitzsimons et al. (2007) provide some initial process evidence to this effect by demonstrating faster categorization of “skipping class” as a positive outcome for students who are asked a question about this behavior. While this one study supports the process suggested by Fitzsimons and Moore, these data are far from conclusive. Indeed, other research has shown that similarly “risky behaviors” (like smoking) have evaluatively negative implicit attitudes. Further, Fitzsimons and Moore fail to consider the potential direct effect of questioning on the implicit attitudes themselves. Prior research has found a question to positively influence implicit stereotypes (Spangenberg & Greenwald, 1999) and implicit self-esteem (Perkins, Sprott, Spangenberg, Knuff, & Smith, 2006). These findings lead us to believe that questioning may also affect implicit attitudes and suggest that the relationship between questioning and implicit attitudes is far more complex than what Fitzsimons and Moore suggest.

A second concern relates to the behaviors that qualify as “risky.” As noted earlier, Fitzsimons, Williams and colleagues have shown increased undesirable behaviors regarding self-reported drug use, alcohol consumption, TV viewing, and distractions from studying and missing class. Fitzsimons and Moore (2008) contend that such undesirable question–behavior effects are due to the fact that these behaviors are risky and characterized by ambivalent attitudes (i.e., positive implicit and negative explicit attitudes). As noted by Sherman (2008), however, there exist other studies focused on similarly risky behaviors that demonstrate socially *desirable* effects of questioning. For example, Spangenberg and Obermiller (1996) showed that a question reduced cheating by students. Further, Levav and Fitzsimons (2006) found that questioning

reduces the consumption of fatty foods, while [Sprott et al. \(2003a\)](#), demonstrated a self-prediction to increase the choice of a healthy snack. Both of these general behaviors (cheating and consuming unhealthy foods) are quite similar to the “risky behaviors” reviewed by [Fitzsimons and Moore](#), yet demonstrate the “traditional” socially positive effects of questions typically associated with self-prophecy research. Clearly, there is more going on with these types of behaviors than suggested by [Fitzsimons and Moore](#) and further theoretical consideration and testing is warranted. We therefore propose a new interpretation of question-behavior effects in an attempt to provide new insights with regard to the findings reported by [Fitzsimons and Moore](#).

An ideomotor theory explanation for question-behavior effects

Ideomotor theory dates at least to the early 19th century (see historical review by [Stock & Stock, 2004](#)). The term “ideomotor” may have been used first by [Carpenter \(1852\)](#), who drew upon the theory that ideas or thoughts of action played a role in initiating the corresponding action in debunking alleged spiritualistic phenomena such as the “Chevreul pendulum effect” ([Chevreul, 1833](#)). This is a demonstration in which a pendulum suspended by a cord from the fingertips oscillates back and forth when the holder thinks about its possible movement. The pendulum holder remains unaware of his or her subtle actions that are the actual source of the pendulum’s movement. The principle was likewise used to explain magic writing on Ouija boards. [William James \(1950\)](#) defined the ideomotor effect as the perceptual image or idea of action initiating performance of that action when no other contradictory idea is present in the mind. The cognitivist ideomotor principle was eclipsed by behavioristic theories until the 1970s when it began to return to acceptability (e.g., [Burgess et al., 1998](#); [Easton & Shor, 1975](#); [Greenwald, 1970, 1972](#)).

Ideomotor theory provides an alternative perspective on question-behavior effects. The interpretation is that a question activates a perceptual image or idea of an action being asked about, with the activated image guiding future performance of the behavior. An ideomotor perspective may account for question-behavior effects for a variety of behaviors since many everyday actions are likely to have clear ideomotor representations. We should note that the appeal to ideomotor action is, at present, a less than fully satisfactory explanation because the mechanism and moderators of ideomotor effects remain far from completely specified. An ideomotor view of question-behavior effects, however, is consistent with research reviewed by [Fitzsimons and Moore \(2008\)](#), as well as research suggesting that question-behavior effects can be accounted for by implementation intentions and scripts.

Ideomotor theory suggests that question-behavior effects are more likely to emerge when a clear image of performing the behavior is available to the person responding to the question; missing class, consuming alcohol, using drugs, watching

television are all likely to have such clear idea-action sequences in memory. An ideomotor view is thus supported by [Levav and Fitzsimons \(2006\)](#) who demonstrate that behaviors which are “easy to represent” are more likely to exhibit question-behavior effects. In addition, prior ideomotor theorizing indicates that such effects are responsible for “the more automatic everyday actions, and for those actions that have typically been described as unconscious and involuntary” ([Stock & Stock, 2004, p. 186](#)). This automatic character is consistent with findings that question-behavior effects are more likely to occur without conscious cognitive mediation ([Fitzsimons & Shiv, 2001](#); [Fitzsimons & Williams, 2000](#)). Finally, ideomotor theory suggests stronger question-behavior effects for those having more experience with a particular behavior and therefore clearer idea-action sequences in memory. The study by [Williams et al. \(2006\)](#) which found stronger undesirable effects of questioning for those who had previously consumed drugs is therefore consistent with ideomotor theory.

A critical experimental test of the ideomotor explanation would explore the effects of questioning on a target undesirable behavior (e.g., consuming an alcoholic drink) and an alternate desirable but related behavior (e.g., drinking a soda), as compared to appropriate control conditions. Both sets of behaviors would be measured, along with implicit and explicit attitudes associated with the behaviors (for use as statistical control). Control conditions would include a standard question-behavior control (e.g., asking about an entirely unrelated behavior), as well as two experimental conditions wherein participants visualize performing each of the focal behaviors (e.g., instructions might state that participants need to “think about drinking an alcoholic drink at a party”). Ideomotor theory would predict an effect of the target question on alcohol consumption and the alternate question on drinking soda, as compared to the standard control (with attitudes controlled for in the analysis). The effect of questioning, however, would be the same for the effects of visualization for the respective behaviors.

An ideomotor account for the undesirable question-behavior effects reviewed by [Fitzsimons and Moore](#) does not fall prey to the criticisms levied against the implicit attitude explanation, since our account is not dependent upon the nature of implicit attitudes or what might constitute a “risky” behavior. The critical consideration from an ideomotor perspective is the representation of a particular behavior in terms of an idea-action sequence for performing the action and activating that sequence by asking a question. In sum, although ideomotor theory may not explain all prior question-behavior research findings, it seems well-suited to explain the effects reviewed by [Fitzsimons and Moore \(2008\)](#). In any event, it deserves experimental consideration as suggested above.

Where next?

[Sprott et al. \(2006\)](#) stated that, “As future research examines new and different contexts for the question-behavior effect, it is reasonable to assume that alternate processes will be uncovered.” We concur and provide our brief review and discussion to suggest that the potential benefits of investigating the proposed

ideomotor theoretical perspective in concert with cognitive dissonance and attitude accessibility may prove useful in explaining aspects of the question–behavior effect. To have such a simple, yet powerful influence technique at our disposal without understanding the underlying causal mechanisms is potentially counterproductive rather than a positive influence on society. Importantly, this new avenue of exploration could be critical to answering the question of when the effect will manifest with regard to either (or both) socially normative or socially undesirable behaviors.

As illustrated by the countervailing views expressed in this series of papers, there is considerable debate as to why question behavior effects manifest – especially those associated with undesirable outcomes. Indeed, it is not unreasonable to contend that other explanations not discussed herein may be able to account for the question-behavior effects reviewed by Fitzsimons and Moore (2008). For example, it may be that risky behaviors considered negative by broader society may in fact be socially normative for some subgroups (cf. Sprott et al., 2003a). In any event, it is critical that future question-behavior effect research provides clear process evidence for demonstrated effects. To date, most question-behavior researchers would agree that “something” comes to mind after being asked a question regarding a future behavior, which in turn guides the future performance of that behavior. The difficulty is that the field is amassing quite a long list of what that “something” may be (including attitudes [both implicit and explicit], prior behavior and social norms, implementation intentions, scripts, and now ideomotor cognitions), most of which have received some support in the published findings. Without additional research that provides much clearer and more compelling support for a particular theoretical view (while accounting for or eliminating other explanations), the efforts to advance our understanding of question-behavior effects will be hampered.

Fitzsimons and Moore nervously anticipate (and our personal experience suggests wisely) pending dialogues with teenage children regarding risky behaviors. They state that they won’t simply ask their children “Are you planning to drink at that party” and leave it at that. We conclude that asking “better questions” may be the best approach to asking young people about risky behaviors. An ideomotor theory explanation for the question–behavior effect, if supported, suggests that it may be normatively effective to ask teenagers about alternate, but related, behaviors that have equally clear idea-action sequences. In this way, asking the question should aid elicitation of behavior that is innocuous or at least not harmful. For example, instead of asking “Are you planning to drink alcohol tonight?,” ideomotor theory would suggest it more appropriate to ask “Are you planning to drink soft drinks tonight at the party?” Indeed, asking this question on more than one occasion may be beneficial in that questioning itself may strengthen beneficial idea-action sequences (e.g., drinking soft drinks at a party where alcohol is available). In summary, it may be most beneficial to question young people about what you want them to do in a risky situation, in contrast to what you don’t want them to do.

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