While Parents Might Not Want to, Researchers Really Should Ask Questions About Risky Behaviors

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Abstract

In this reply, we focus on two major issues raised by our commentators. First, we deal with some empirical issues about whether asking questions really increases risky behavior. We argue that the results reviewed in our target article are valid, and are not due to lab-specific effects, or to question-wording or question-answering issues. Second, we tackle some issues related to the process by which questions might increase risky behavior. We focus on two mechanisms that seem promising for explaining the influence of questions on risky behavior: attitude activation and social norms. We also consider the impact of various moderators on the risky question-behavior effect, building on suggestions made in the commentaries. Finally, we make some suggestions about techniques that we – as parents, practitioners, and researchers – might use to reduce the impact of asking questions about risky behavior.
Our goal in writing this target article (Fitzsimons & Moore, 2008) was to generate dialogue by introducing the possibility that asking questions about risky behaviors might have harmful effects for adolescents. Given the breadth and depth of the ideas outlined in the commentaries and the questions posed by our commentators, we think we can claim initial success for this goal. Clearly, however, the suggestion that questions about risky behaviors might be harmful is a contentious one, particularly given the consequences it highlights. We are in complete agreement with Sherman (2008) that this topic is of fundamental importance and has potentially far-reaching and significant consequences for many constituents – parents, policy makers, researchers, and adolescents themselves. However, we disagree that the possibility that asking questions can increase risky behavior should not be seriously entertained at this time, based both on the evidence currently available and the significance of the issue. A number of studies covering different risky behaviors indicate that asking questions about these behaviors negatively impacts those answering the questions, by increasing their frequency of engaging in the risky behavior. Of course these studies are not enough evidence from which to draw final conclusions, particularly for practitioners and policy makers – but given the importance of the topic and the available evidence, it is imperative to pay attention to the issue instead of dismissing it as an impossibility. Perhaps the reported effects would be less controversial and harder to dismiss if we had a single concrete explanation for them. However, while the precise process by which these effects occur has yet to be definitively shown, this is not a good reason to dismiss the initial empirical results. Simply because we do not understand why something occurs does not mean it cannot occur and should not be investigated.

Thus, although dialogue is the first step in bringing this issue to the fore, as our commentators rightly point out, the next step is more research. While parents shrink from asking
adolescents about risky behavior and practitioners support asking questions about risky behavior, it is really researchers who should be investigating the impact of asking adolescents about risky behavior. As Gollwitzer and Oettingen (2008) suggest, researchers need to provide clear evidence which parents and policy makers can use to analyze the costs and benefits of questioning adolescents. We believe there is enough initial evidence to make this issue the subject of a great deal of research aimed at investigating various factors: whether questions negatively impact risky behavior, why questions might influence risky behavior, how large this effect might be, and what might moderate its strength. By adding control conditions to existing screening studies and designing future studies specifically aimed at answering these questions, we can begin to collect the evidence needed to draw firm conclusions. Only then will we be able to provide public policy practitioners and parents with enough information to make informed decisions regarding asking children about risky behavior.

In the rest of this comment, we focus on two major issues that were raised by commentators. First, we tackle some empirical issues about whether questions really increase risky behavior. Second, we attempt to untangle some of the issues related to the process by which questions might increase risky behavior. We focus on two potential mechanisms that seem promising for explaining the influence of questions on risky behavior – attitude activation and social norms – and also consider the impact of various moderators. Finally, we close with some suggestions about what we can do – as parents, practitioners, and researchers – to address this issue.

**Does Asking Questions Really Increase Risky Behavior?**
A common question in the commentaries revolved around the effect itself – does asking questions *really* increase risky behavior? It does seem surprising that questions have such a large impact on behavior, particularly when questions about risky behaviors influence behavior in a direction contrary to other work in the question-behavior literature. However, these results should not be dismissed simply because they are surprising, contrary or not sufficiently understood. In this section, we tackle some empirical points raised by our commentators about whether the effect occurs, and return to the issue of why it occurs later. We believe and argue that our initial results are not due to lab-specific effects, question framing, or the responses that individuals give to questions about risky behavior.

First, we acknowledge that the studies showing the negative impact of asking questions on risky behavior have come from researchers in one lab. However, these studies were conducted at various universities, over a number of years, by different experimenters. Thus, while we would naturally welcome replications from other labs, we do not believe the existing results are due simply to the quirks associated with a specific population or experimental procedure.

Similarly, the existing results are not an artifact of the way the question about the risky behavior was asked. Sherman suggests that some of the reported results might be explained by the “over-prediction of bad behavior” (Sherman, 2008, p. xx) from questions that ask about the frequency of behaviors instead of questions that ask whether behaviors will occur (yes/no questions). He surmises that individuals answering frequency questions might indicate a higher frequency of future behavior than they would have naturally because of the answers available to them in the question (e.g. 0, 1, 2, 3 vs. 0-3); presumably, this over-prediction could result in increased risky behavior in line with prior question-behavior research findings. However, in the
existing studies we reviewed, the questions asked about risky behaviors are of two types, neither of which is vulnerable to influence by response framing. Some studies use open-ended questions that ask participants to predict how often in the next few weeks they will engage in each behavior, while other studies ask participants how likely they are to engage in the behavior over a certain time period using a 7-point scale marked “Not at all likely” to “Very likely”. Neither of these types of questions is likely to artificially increase the answers individuals give with respect to frequency of the behavior, since neither type provides suggestions of frequency around which participants might anchor their predictions.

Beyond issues of question framing, Sherman wonders about the role of individuals’ answers to questions about risky behavior, that is, how their predictions about behavior flow through into subsequent behavior. There is no evidence from the existing studies we reviewed that the way individuals answer questions about risky behaviors influences their future behavior. In fact, the correlation between individuals’ predictions about their risky behavior and their reported (or actual) behavior is close to zero and is non-significant in all of the reported studies (e.g. Fitzsimons, Block & Williams, 2007; Fitzsimons, Nunes & Williams, 2007). On the surface, this result may seem difficult to resolve with some prior results on straightforward question-behavior effects (e.g., Morwitz et al. (1993) found a positive correlation between stated intent and purchase likelihood). However, we believe that the lack of correlation between intent and behavior for vice behaviors can be viewed as suggestive evidence that one process by which questions are influencing behavior is through implicit attitude activation, rather than through explicit attitudes or self predictions about future behavior.

Finally, also related to the issue of individuals’ answers to questions about risky behavior, Sherman questions why individuals do not answer these questions in socially
normative ways – that is, why they do not under-predict the frequency with which they will engage in risky behaviors. We return to this issue in the process section, but suggest (in agreement with our other commentators) that it may be related to specific social norms: what is socially normative for older adults may not be normative to adolescents in general, or to particular subgroups of adolescents, and thus adolescents’ answers to risky behavior questions will not necessarily show the under-prediction effects observed in other studies. Regardless of why individuals are not answering risky behavior questions in “classic” or normative ways, it appears that these answers are not significantly influencing their behavior – which opens up interesting questions about the process driving this effect; we discuss some of these questions in the next section.

In short, while there is debate over whether the act of asking questions is capable of increasing risky behavior, it is our belief that the existing studies provide an initial evidence base from which to conduct more research. Ultimately, to be a little cliché, whether questions about risky behavior really increase that behavior is an empirical question – if replications from other labs with various types of risky behavior (as compared to non-risky behaviors) are successful, we will be able to conclude that asking questions about risky behaviors can indeed increase the incidence of those behaviors. However, perhaps a more interesting question, and one that surfaced frequently in the commentaries, is why these effects might occur. This is a particularly pressing question given that the impact of questions about risky behavior does not map onto traditional question-behavior findings.

Why Does Asking Questions Increase Risky Behavior?
Beyond questions about the validity of existing studies, a crucial question to be established by future research is why asking questions about risky behaviors might increase those behaviors. What processes might be operating that would cause these increases? First, note that our focus on implicit attitude activation in the original article was not meant to exclude other potential mechanisms from consideration – as Spangenberg, Greenwald and Sprott (2008) point out, there are multiple explanations for why question-behavior effects occur, and we agree that the “something” that goes on in people’s heads between the question and subsequent behavior is in need of more research, and there could certainly be multiple “somethings” involved. Indeed, it is plausible that risky behaviors might be increased after answering questions not because of implicit attitude activation, but because of explicit adherence to adolescent social norms, an explanation that would be more in line with traditional self-prophecy findings. Below, we discuss these two potential explanations, both of which have some empirical support.

In the target article, we hypothesized that questions about risky behavior might activate individuals’ positive implicit attitudes toward risky behaviors, and that this activation would then drive future behavior and cause an increase in risky behaviors. A number of issues were raised with respect to this explanation. First, while some commentators granted our assumption that adolescents are likely to have implicit positive attitudes toward certain risky behaviors, others suggested that research into the implicit attitudes of adolescents would be helpful. We agree that determining the content of adolescents’ implicit attitudes toward risky behavior is a key ingredient in providing support for an attitude explanation. Some initial evidence suggests not only a dissociation between implicit and explicit attitudes about risky behaviors, but also that these attitudes are different among different populations. In a broad sample of individuals across
ages, Implicit Association Test (IAT; Greenwald, Nosek, & Banaji, 2003) results for attitudes toward abstaining from versus drinking alcohol show that individuals are more positively pro-abstaining for explicitly measured attitudes than they are for implicit attitudes. Interestingly, younger participants were less implicitly pro-abstaining than were older participants (Nosek, personal communication, 2007). We suggest that it is worthwhile to collect additional data on various risky behaviors (e.g. unsafe sex, drug use) to establish whether adolescents have positive implicit attitudes toward such behaviors. Such evidence would provide some support for the implicit attitude activation account. As Gollwitzer and Oettingen suggest, these data could also indicate how strong and stable such implicit attitudes are. Implicit measures such as the IAT could also be used to address the issue of whether questions about risky behaviors increase the positivity or strength of implicit attitudes along with their accessibility; there is already some initial evidence for both of these outcomes (Fitzsimons, Nunes, & Williams, 2007).

Second, assuming that questions influence behavior through implicit attitude activation, Sherman wondered why questions in particular have such a large impact on behavior, compared to other methods of activating implicit attitudes. He suggests that there are multiple additional factors which frequently activate implicit attitudes, for example, watching someone smoking. Why, if these other activations occur so frequently, do we still observe the impact of a single question answered at some previous time period? We suspect that there is something particular about the activation resulting from answering self-directed questions which leads to their large impact. Questions about future risky behavior are not “simple” activations of implicit attitudes such as seeing someone smoke in a movie or reading about drug use on the Internet – they are very specifically tied to the self. Thus, the attitude activation from self-directed questions about behavior may be stronger and last longer than “run of the mill”, momentary activations caused
by observing others engaging in risky behavior. Further, implicit attitude activation may only be part of the story; we turn to the other potential explanations next, but self-related questions about risky behavior might have their strong influence through a combination of processes such as implicit attitude activation and ideomotor action – that is, questions about the self engaging in risky behavior cause very specific links to be activated or created through answering the question and imagining the behavior, making their impact much stronger than we might expect.

Cognitive dissonance resulting from differences between past behavior and social norms may also explain why questions about risky behaviors increase the frequency of these behaviors, in line with the more “classic” question-behavior studies discussed in our article and by Sherman. We clarified above that we do not think implicit attitude activation is the only mechanism capable of increasing risky behaviors after answering questions. It is possible that some adolescents have positive implicit and explicit attitudes about engaging in risky behaviors, and answer questions in line with these attitudes, thus increasing risky behavior through a traditional valence matched question-behavior mechanism (e.g., ask about a positive behavior and that behavior increases). This might be especially the case for subgroups of adolescents who hold particularly positive attitudes toward certain risky behaviors – as both Gollwitzer and Oettingen as well as Spangenberg, Greenwald and Sprott suggest, question-behavior effects might be even stronger among these groups. Note that our suggestion above regarding using the IAT or other measures to investigate adolescent attitudes toward risky behaviors will help establish the relationships between implicit and explicit attitudes, and could help identify subgroups that have positive explicit attitudes toward risky behaviors. This discussion also leads back to the issue of why we do not see movement in individuals’ answers to risky behavior questions – there is no evidence that they are over- or under-predicting risky behaviors. In fact,
in the Fitzsimons, Nunes, and Williams (2007) study Sherman discusses, individuals quite accurately predicted how many classes they would miss, though their behavior did not map onto these predictions. The issue may simply come down to one of proportion – the overall average predictions about future behavior in a sample will depend on how many individuals have positive versus negative explicit attitudes toward the behavior, and how these answers translate into behavior through self-prediction. In the studies on risky behavior we have conducted so far, given that participants’ answers do not predict future risky behavior, this change in behavior through subgroup norms explanation may not be satisfactory, but we do believe it is a possible mechanism to be explored.

Beyond further investigating the role of attitude activation and social norms in questions about risky behavior, there are other interesting mechanisms that have yet to be explored. As Spangenberg and colleagues suggest, the theory of ideomotor action might be usefully applied to the issue. Along with investigating various causal mechanisms, there are a number of potential moderators of the risky question-behavior effect that may indicate which causal mechanisms are stronger in certain situations; studies that differentiate between causal processes and identify moderators will both be necessary in future research. Gollwitzer and Oettingen identify a number of interesting potential moderators in their commentary, including question framing and features of the behavior itself; we provide some thoughts about these particular moderators below.

As studies about non-risky behaviors have indicated, question framing is a very important issue in moderating question-behavior effects. Gollwitzer and Oettingen suggest that the question target (the behavior itself versus related attitudes or intentions) and the question framing (in terms of frequency or intensity of behavior) are important moderators. We agree with these
suggestions, and would add to this line of thinking by suggesting that the framing or description of the behavior itself might be an important moderator: compare the impact of being asked a question about your likelihood of eating fatty food versus your likelihood of eating cookies. Such moderators might help answer questions about underlying processes, if different causal mechanisms make different predictions about behaviors. In this case, an attitude activation account would depend on individuals’ implicit attitudes toward fatty food versus cookies – we would wager that people tend to be more implicitly positive toward the concept of cookies rather than fat, and that the cookie question might therefore lead to an increase in cookie consumption, while the fatty food question would not increase consumption. The social norms account, on the other hand, might predict similar results for both types of framing – that eating fatty food and cookies are both viewed as non-normative or unhealthy behaviors, resulting in a decrease in cookie eating and fatty food consumption. Finally, an account based on ideomotor action would suggest an increase in both behaviors after being asked questions about them. By identifying additional moderators and situations under which different process accounts make unique predictions, we will be able to understand not only the nuances underlying the effect of questions on risky behavior, but also its causal mechanisms.

Similarly, the nature of the behavior in question ought to moderate the effects of questions on behaviors, and again should lead to insights about the causal mechanisms driving the effect. Not all negative behaviors are risky behaviors, nor will they all involve implicit/explicit attitude divergence; thus, increases in risky behavior for certain categories of behaviors might be best explained by a social normative perspective. That is, questioning individuals about behaviors toward which they most likely do not have positive implicit attitudes (e.g. cheating) might lead to increases in risky behavior from questioning only if individuals
have strong positive norms in regard to the behavior. Gollwitzer and Oettingen hypothesize that easier to implement behaviors might be more susceptible to question-behavior effects but harder to implement behaviors might be less susceptible; this seems a particularly likely prediction for an implicit attitude activation account, while it is less clear that a social norm explanation might predict these differences. To return to the framing issue, question wording again might be important in terms of the nature of the specific behaviors brought to mind, the particular attitudes that are activated by questions, the way individuals answer questions, and what actions are imagined when answering the question.

Clearly, there are multiple mechanisms that might explain why asking questions about risky behaviors increases those behaviors. There are also numerous moderators of the effect, which should help pin down the role of specific mechanisms. While we cannot presently offer a conclusive theoretical explanation, we are hopeful that future research will make strides in ruling out some explanations while supporting others; we would also point out that this multiplicity of explanations and moderators make Gollwitzer and Oettingen’s suggestion of a sophisticated meta-analysis vitally important.

What Can we Do?

In addition to the suggestions we offered in the target article, the commentators have offered a number of intriguing suggestions about possibilities for dealing with potentially harmful effects of asking questions about vices. Gollwitzer and Oettingen suggested that a combination of mental contrasting (MC) and implementation intentions (II) be used to help prevent teens from engaging in risky behaviors. Mental contrasting would create the strong goal commitments necessary to successfully apply implementation intentions. A key requirement for
a technique such as MCII to be successful is of course the presence of a goal to avoid the risky behavior. When such goals are present, or can be cultivated, this could be a very successful approach to guiding teen behavior. If the guiding mechanism underlying the question-behavior effect in the domain of risky behavior is indeed an implicit positive versus explicit negative attitudinal distinction, a technique such as MCII could be extremely useful. The explicit negative attitude could be tapped into thus activating a strong goal (and accompanying implementation intention) to avoid the behavior, which might over-ride any implicit desire to engage in the risky behavior. If, however, the mechanism underlying the effects we have discussed is more driven by the fact some subgroups actually have positive attitudes toward risky behaviors, MCII’s effectiveness would be called into question. An interesting experiment might pair an MCII technique with a subsequent series of questions about the participants’ likelihood of engaging in future risky behavior. Any changes in behavior might yield interesting insights into the underlying mechanism driving increases in risky behavior due to questions.

Spangenberg, Greenwald and Sprott also had some very interesting suggestions about how we might potentially avoid increasing risky behavior through questions. Their ideas were motivated by a potential ideomotor aspect to responding to questions. By asking questions that activate images or ideas of individuals performing healthy behaviors, we may be able to offset potentially harmful questions about vice behaviors. This is certainly an intriguing notion, and has some preliminary support in the Levav and Fitzsimons (2006) finding that avoidance based questions seem to activate different representations than simple direct intention questions, and as a result are more successful at changing behavior. Spangenberg et al. close their comment with the suggestion that “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.” Such a notion
strikes us as a potentially very helpful technique for parents in dialogue with their children. In a way, such a line of questioning would be a very informal form of implementation intentions, and could yield quite positive outcomes.

Of course, while such approaches might be useful for parents, they do not help researchers interested in measuring risky behavior. Such researchers are not interested in how often a respondent will chew gum (instead of smoke), how many times they will have safe sex (versus how many they will have unsafe sex), or drink seltzer (versus alcohol). This leaves the researcher interested in studying risky behavior in a potentially difficult situation. In our own research, we have adopted some of the recommendations we put forth in the target article. We have attempted to raise awareness of the potential downsides of asking about risky behaviors amongst colleagues across our university. When we ask questions about risky behaviors in our own research, we forewarn participants that asking questions can change behavior, and that they should be aware of this possibility as they take part in the study. And perhaps most importantly, we constantly assess the potential good that might come from the research findings against the potential harm we may cause by asking about risky behaviors.

We are hopeful that this exchange of ideas on the subject of asking questions about risky behavior will not only generate discussion amongst consumer psychologists, but hopefully among a broader group of social scientists as well. Researchers in many fields of investigation, both inside academia as well as government, regularly ask extremely well-intentioned questions of children on the subject of risky behaviors. Perhaps more importantly, we are hopeful that this exchange of ideas will generate more empirical research on this subject. Researchers that are already asking questions about risky behaviors will hopefully consider adding a control group not asked the question to help determine how robust the effects we have discussed in this
exchange are. In addition, we are hopeful that researchers will consider examining how asking
questions about risky behaviors might be changing behavior. As social scientists, we are all
interested in helping the participants we study – we hope this dialogue will help advance this
goal.
References


