

ATTITUDES AND SOCIAL COGNITION

Decision Sidestepping: How the Motivation for Closure Prompts Individuals to Bypass Decision Making

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We all too often have to make decisions—from the mundane (e.g., what to eat for breakfast) to the complex (e.g., what to buy a loved one)—and yet there exists a multitude of strategies that allows us to make a decision. This work focuses on a subset of decision strategies that allows individuals to make decisions by bypassing the decision-making process—a phenomenon we term *decision sidestepping*. Critical to the present manuscript, however, we contend that decision sidestepping stems from the motivation to achieve closure. We link this proposition back to the fundamental nature of closure and how those seeking closure are highly bothered by decision making. As such, we argue that the motivation to achieve closure prompts a reliance on sidestepping strategies (e.g., default bias, choice delegation, status quo bias, inaction inertia, option fixation) to reduce the bothersome nature of decision making. In support of this framework, five experiments demonstrate that (a) those seeking closure are more likely to engage in decision sidestepping, (b) the effect of closure on sidestepping stems from the bothersome nature of decision making, and (c) the reliance on sidestepping results in downstream consequences for subsequent choice. Taken together, these findings offer unique insight into the cognitive motivations stimulating a reliance on decision sidestepping and thus a novel framework by which to understand how individuals make decisions while bypassing the decision-making process.

Keywords: decision sidestepping, need for closure, decision aversion, bothersome, decision making

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Birthdays come, dinners are planned, and cars breakdown. In each situation, decisions must be made—and yet, rather interestingly, there often exists a multitude of ways to make each decision. To illustrate, imagine two individuals ordering an entrée at a new restaurant. One of these individuals elects to choose an option from the menu, whereas the other elects to choose the waiter's recommendation. Though both options represent a similar outcome (i.e., an entrée), they do not require the individuals to endure the same process. That is, though different strategies can generate even the same decision (e.g., selecting the same entrée), they can present a very different means by which decision makers come to that decision.

In light of these different processes, our interest is in the possibility that a subset of strategies represent a common means of decision making (for similar arguments, see Anderson, 2003; Luce, 1998). That is, we propose that a series of well-documented decision strategies—default bias, choice delegation, status quo

bias, inaction inertia, option fixation—all allow individuals to make a choice by bypassing or “sidestepping” the process. Though these strategies are diverse in their makeup, the present research offers a novel framework by which to unify decision makers' reliance on them through a common motivation. Specifically, we propose that the motivation to achieve cognitive closure heightens the bothersome nature of decision making prompting individuals to engage in what we term *decision sidestepping*.

Decision Sidestepping

Decision sidestepping is the tendency to rely on decision strategies that allow an individual to bypass (i.e., streamline) the decision-making process. We propose that a collective of distinct decision strategies embody this notion of decision sidestepping. Five such strategies are considered here. Specifically, by relying on the default option (Baron & Ritov, 1994; Johnson & Goldstein, 2003), delegating a choice (Tetlock & Boettger, 1994), maintaining an established status quo (Samuelson & Zeckhauser, 1988), or sticking with a prior decision (Mannetti, Pierro, & Kruglanski, 2007; Tykocinski, Pittman, & Tuttle, 1995), an individual has the opportunity to essentially bypass the decision-making process while still making a choice. Though these decision strategies certainly differ in a variety of ways, we contend that they are fundamentally linked in their ability to allow individuals the opportunity to engage in decision sidestepping.

Yet why would individuals rely on these specific strategies to sidestep decisions? We contend that the strategies in this collective

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each present decision makers with a choice precedent—defined as an established or preexisting standard—that is seen as a justifiable basis for making a choice. To illustrate, the default bias, choice delegation, status quo bias, inaction inertia, and option fixation all converge with respect to the notion that they are either based on a norm (e.g., the default bias, the status quo bias), a prior decision (e.g., inaction inertia, option fixation), or a credible source (e.g., choice delegation). As such, this precedent may be either explicit (e.g., delegating to a credible source; Mansell, Poses, Kazis, & Duefield, 2000) or implicit (e.g., relying on a prior decision; Chernev, 2004) to the decision maker. Of most importance, however, the presence of a choice precedent in the strategy is critical to sidestepping; otherwise, the decision could be based on an option that lacks a valid basis for choosing (e.g., reliance on a random option or a noncredible source).

In summary, then, we conceptualize decision sidestepping as the tendency to bypass the decision-making process by relying on a collective of strategies that allows individuals to base their decision on a choice precedent. Our interest, however, is not only in demonstrating the convergence of these diverse strategies under decision sidestepping but also in presenting a framework by which to understand why individuals' engage in decision sidestepping. In response, we propose that decision sidestepping stems from the motivation to achieve cognitive closure (Kruglanski, 1989; Kruglanski & Webster, 1996; see Roets, Kruglanski, Kossowska, Pierro, & Hong, 2015).

The Need for Cognitive Closure

The *need for cognitive closure* is defined as a fundamental desire to achieve resolution on a decision (Kruglanski, 1989; Kruglanski & Webster, 1996). The motivation encompasses the desire for a definite answer and, as such, individuals motivated to achieve closure favor order and predictability, are decisive and close-minded, and find discomfort with openness (Acar-Burkay, Fennis, & Warlop, 2014; Disatnik & Steinhart, 2015; Van Hiel & Mervielde, 2003; see Webster & Kruglanski, 1994). As a result, those seeking closure are fundamentally motivated to reduce the bothersome or aversive nature of unresolved decisions (Kruglanski, 1989; Kruglanski & Webster, 1996; see Kruglanski & Chun, 2008). Indeed, this aversion to openness is so strong that those seeking closure are willing to engage in considerable effort to resolve a decision they need not reconsider (Vermeir, Van Kenhove, & Hendrickx, 2002; see also Roets et al., 2015).

It is important to note that this bothersome feeling is more than a mere psychological itch; the pressing urge for closure has been shown to stimulate physiological consequences such as increased heart rate, blood pressure, and arousal when activated in decision contexts (Roets & Van Hiel, 2008). In fact, this distress can aversively impact mental health (e.g., elevated levels of anxiety and depression) when those seeking closure are exposed to a decision-making situation (Roets & Soetens, 2010). As such, decision makers seeking closure are theorized to engage in a systematic process whereby two sequential phases facilitate the immediate reduction of this aversive state: an urgency phase and a permanency phase (see Kruglanski, 2004). The *urgency* phase refers to an individual's tendency to "seize" on a solution to induce an overwhelming sense of resolution. The *permanency* phase refers to the individual's desire to preserve that solution by "freezing" on the given information and the resolution it provides.

Our interest is in the extent to which cognitive closure prompts individuals to engage in decision sidestepping. That is, due to the inherent openness of decision making, the motivation to achieve closure should heighten the bothersome or aversive nature of making decisions. Consequently, we predict that those seeking closure engage in decision sidestepping to reduce feeling bothered, as sidestepping should allow these individuals to seize and freeze upon a justifiable option to achieve resolution across a diverse array of decision contexts.

Overview

Decision sidestepping is the tendency to bypass the decision-making process by relying on a collection of strategies tied to a choice precedent. Though this phenomenon represents a subset of diverse strategies, the present research offers a conceptual framework to unify decision makers' reliance on these strategies through a common motivation. Specifically, we propose that those seeking cognitive closure engage in decision sidestepping to reduce the bothersome or aversive nature of decision making (see Figure 1 for conceptual model).

Five experiments are presented in support of this framework, with the goal of expanding our insight into the means by which individuals make decisions by sidestepping the process. In particular, we examine the association between cognitive closure and decision sidestepping in a field study (Experiment 1), test the extent to which the effect of closure on sidestepping is due to decision making being perceived as bothersome (Experiments 2 and 3), show the robustness of the effect by testing the ubiquity of sidestepping (Experiment 4), and demonstrate the consequence of decision sidestepping for suboptimal choice (Experiment 5). Additionally, we empirically address alternative mechanisms—uncertainty avoidance (Experiment 1), mental laziness (Experiment 2), and regret (Experiment 4)—to bolster support for our proposed causal framework.

Consistent with prior research (e.g., Levav, Kivetz, & Cho, 2010; Luce, 1998; Savary, Kleiman, Hassin, & Dhar, 2015), all experiments model a similar structure that capitalize on methodological variations due to the specific sidestepping strategy under study (i.e., default bias, choice delegation, status quo bias, inaction inertia, option fixation). For instance, although Experiment 1 focuses on the default and Experiment 4 focuses on inaction inertia, both explore the possible association between the motivation to attain closure and decision sidestepping within the classic paradigms used to test these strategies. Additionally, to further clarify this general structure, higher values in each experiment are coded to indicate greater sidestepping.¹

¹ Two aspects of our study sampling and exclusion criteria are worth noting. First, sample size estimates were based on previous research that also tested multiple decision strategies (Luce, 1998; Levav et al., 2010). It is important to note that to account for the estimated effect sizes of the meditational analysis, we increased the sample size of Experiment 2 (following the recommendations of Fritz & MacKinnon, 2007). Second, participants were excluded from experiments if they either failed to complete the experiment (Experiment 2: four participants; Experiment 4: one participant; Experiment 5: two participants) or reported an allergy to the focal stimuli (Experiment 1: one participant).

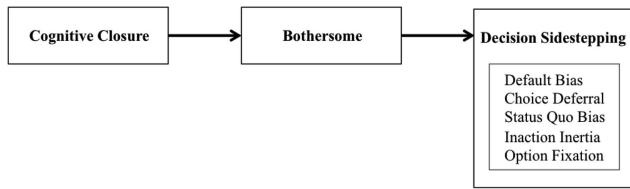


Figure 1. Conceptual model.

Experiment 1

We conducted an initial experiment to test our primary hypothesis that decision sidestepping stems from the motivation to achieve cognitive closure. Here, decision sidestepping was operationalized via reliance on the *default*. The default option represents a given choice unless otherwise specified (Baron & Ritov, 2009; Johnson & Goldstein, 2003, 2004; Yu, Mobbs, Seymour, & Calder, 2010).

Method

Participants and design. Ninety-three undergraduates (51% female; $M_{\text{age}} = 21$) were recruited to participate in a study on a university-wide personality profile in exchange for course credit. Participants were randomly assigned to one of two transparency conditions before completing a dispositional index of the need for cognitive closure (Webster & Kruglanski, 1994).

Procedure. Participants were informed at the outset of our supposed interest in obtaining an assessment of a personality profile of the student body at their university. Prior to completing the personality profile, however, participants were informed that—as an additional thank you for their time—they would be offered candy. Critical to our purposes, all participants were explicitly told they would receive a specific candy option as the default unless they noted otherwise (these instructions were adapted from Brown & Krishna, 2004). In the event that they deviated from the default, participants had the opportunity to select an alternative option from a variety bag.

It should be noted that to ensure that any effects were due to the presentation of a default and not any uncertainty surrounding the alternative options, we manipulated the transparency of the variety bag across experimental sessions. As such, the specific contents of the variety bag were either known or unknown to participants. In the known condition, we explicitly told participants the contents of the variety bag (i.e., Milky Way, KitKat, and Starburst), whereas in the unknown condition we did not tell participants the contents of the variety bag. Furthermore, to ensure any effects were not due to the specific type of candy being offered, the default option (i.e., milk chocolate M&Ms or Snickers) varied across experimental sessions.

After indicating whether they would stick with the default or select an alternative option, participants completed a series of items related to their personality as a filler task before completing the 15-item Need for Cognitive Closure Scale ($\alpha = .84$; Roets & Van Hiel, 2011). Example items from the Need for Cognitive Closure Scale include: “I dislike unpredictable situations,” “I don’t like going into a situation without knowing what I can expect from

it,” and “I like to have a place for everything and everything in its place.”

Upon completing the scale, participants were provided with their chosen candy, debriefed, and thanked for their participation.

Results

Participants’ candy choice was coded as 0 if they opted out of the default or 1 if they stayed with the default option. We then submitted these choice data to a hierarchical logistic regression, with transparency (0 = known, 1 = unknown) and need for closure (continuous, mean-centered) as main effect predictors in the first step and their interaction in the second step (following the recommendations of Cohen, Cohen, West, & Aiken, 2003). The analysis revealed only a main effect of need for closure ($\beta = 1.36$, Wald’s $\chi^2 = 10.72$, $p = .001$; see Table 1 for predicted probabilities). Consistent with expectations, participants’ likelihood to rely on the default option increased with their need for closure. Importantly, neither the main effect of transparency ($p > .06$) nor the Need for Closure \times Transparency interaction ($p > .86$) were significant.²

Discussion

The findings from Experiment 1 offer initial evidence that those seeking closure are more likely to engage in decision sidestepping. Indeed, the likelihood to rely on the default option increased with individuals’ need for cognitive closure. Moreover, this heightened reliance on the default occurred despite altering the specific default option across participants (see Footnote 2). In fact, exit interviews revealed no one indicated either of the default options as their favorite candy. The potential to obtain their favorite candy from the variety bag, then, appeared to matter less to those high in need for closure than did the opportunity to sidestep the decision. Finally, the reliance on the default occurred irrespective of whether the contents of the variety bag were known or unknown, a finding that suggests those high in need for closure were not relying on the default option merely as a means of avoiding uncertainty in the unknown condition.

Experiment 2

In Experiment 2, we directly tested the proposition that those seeking closure sidestep decisions as a means of reducing the bothersome or aversive nature of decision making. That is, given that those seeking closure are innately bothered by decision making (Kruglanski, 1989; Kruglanski & Chun, 2008), we believe that these individuals strategically engage in decision sidestepping to reduce the bothersome nature of decisions and achieve resolution. Moreover, given our contention that those seeking closure are highly motivated to attain resolution (Vermeir et al., 2002), we tested the extent to which the effects of closure on decision sidestepping were independent of mental laziness.

² For those interested, treating the default option (0 = M&Ms, 1 = Snickers) as a factor in a separate need for Closure \times Transparency \times Default option hierarchical logistic regression did not impact the results ($p > .53$). Thus, the association between closure and the default did not vary as a function of the specific default option.

Table 1

Predicted Choice Probabilities as a Function of Transparency and Need for Closure in Experiment 1

Transparency condition	Low closure (−1 SD)	High closure (+1 SD)
Unknown	.30	.75
Known	.54	.87

Note. Higher probabilities indicate a greater likelihood to select the default option.

Two other aspects of the experiment are important to note. First, we directly manipulated participants' need for closure to clarify any causal interpretation of the reliance on decision sidestepping. It is important to note that our manipulation of cognitive closure is specifically designed to isolate the *motivation* to achieve cognitive closure and thus avoided any prior manipulation that could arguably conflate motivational differences with differences in ability (e.g., cognitive load, see Ford & Kruglanski, 1995; time pressure, see Kruglanski & Webster, 1991; noise, see Kruglanski & Webster, 1991; Kruglanski, Webster, & Klem, 1993; for further discussion of this issue, see Roets et al., 2015). Second, we focused on an alternative form of decision sidestepping—*choice delegation*. Choice delegation is manifested in allowing another individual to make a decision on one's behalf (Aggarwal & Mazumdar, 2008; Tetlock & Boettger, 1994; Solomon, 1986).

Method

Participants and design. Ninety-six participants (60% male; $M_{\text{age}} = 31.52$) were recruited through Amazon Mechanical Turk to complete a study on decision making. Participants were randomly assigned to either a high or low need for closure condition.

Procedure. After being welcomed to the study, participants were informed of our interest in obtaining their reaction to recent research findings concerning the manner in which people make decisions. This information constituted our manipulation of need for closure (for similar manipulations of subdimensions of need for closure, see Clarkson, Valente, Leone, & Tormala, 2013; Mayseless & Kruglanski, 1987). In both conditions, participants were told the following:

Researchers have long been interested in individuals' motivation to gain a sense of closure with their decisions. That is, some individuals are highly motivated to achieve closure on a decision, whereas others are not motivated at all to achieve closure on a decision. For instance, when making plans, some individuals prefer to immediately and quickly finalize their plans, whereas others prefer to wait and slowly finalize their plans.

However, in the *high closure* condition, participants were additionally informed that a supposed analysis of 40 years of research on closure in decision making shows that "decision quality greatly increases when individuals are highly motivated to achieve closure on a decision" and that "desiring closure is critical to generating quality decisions." Conversely, in the *low closure* condition, participants were additionally informed that "decision quality greatly increases when individuals are not motivated to achieve closure on

a decision" and that "not desiring closure is critical to generating quality decisions."³

Following the need for closure manipulation, participants were asked to imagine that they were shopping at a popular electronics store for a sound system to accompany a recently purchased TV. Moreover, after browsing the options in the store, they had tentatively decided on a sound system to purchase. They were then approached by a sales associate who recommended purchasing a sound system of similar price but different than their selection. We then asked participants to indicate which option they would end up selecting on a binary scale anchored at 0 – *Their tentative choice* or 1 – *The recommended choice*.

Following the choice, we assessed participants' aversion toward the choice and their mental laziness, with the order of each measure randomized. To assess the bothersome nature of the decision, participants rated the decision on the following four-item scale (presented in random order): How much of a bother was this decision for you? How troubling was this decision for you? How irritating was this decision for you? How aggravating was this decision for you? Responses were provided on a 9-point scale anchored at 1 – *Not much at all* to 9 – *Very much* and averaged ($\alpha = .72$), such that higher values indicated a more bothersome or aversive decision.

To assess mental laziness, participants responded to the following four-items (adapted from Meyers, Glaser, & Donald, 1998; presented in random order): How lazy were you in making your decision? How diligent were you in making your decision (reverse scored)? How motivated were you in making your decision (reverse-scored)? How interested were you in making your decision (reverse-scored)? Responses were provided on 9-point scales anchored at 1 – *Not at all* to 9 – *Very* and averaged ($\alpha = .82$) such that higher values indicated greater mental laziness.

Upon completing these items, participants were debriefed and thanked for their participation.

Results

Choice delegation. Participants' choice in sound system was coded as 0 – *Their tentative choice* or 1 – *The recommended choice*. These data were then submitted to a chi-square test to compare the difference as a function of need for closure. The analysis revealed a significant difference in choice based on the need for closure ($\chi^2[1, N = 96] = 4.96, p = .026$); those in the high need for closure condition (27.48%) were more likely to

³ To assess the efficacy of this manipulation, we conducted a pilot study ($N = 60$), in which participants were randomly assigned to either our high or low need for closure manipulation prior to completing Roets and Van Hiel's (2011) Need for Cognitive Closure Scale ($\alpha = .88$). However, to assess whether the manipulation affected need for closure and not participants' motivation to elaborate or mental laziness, participants also completed the Need for Cognition Scale (Cacioppo, Petty, & Kao, 1984), an assessment of situational elaboration (Barden & Petty, 2008; Wan, Rucker, Tormala, & Clarkson, 2010), and the mental laziness scale (see Experiment 2). A one-way multivariate analysis of variance revealed only a significant main effect of the manipulation ($F(1,58) = 4.62, p = .036$); as expected, those in the high closure condition ($M = 4.08, SD = .59$) scored significantly higher on the Need for Cognitive Closure Scale than did those in the low closure condition ($M = 3.60, SD = 1.07$). The manipulation showed no effect on need for cognition ($p > .77$), situational elaboration ($p > .55$), or mental laziness ($p > .26$).

delegate choice than were those in the low need for closure condition (9.52%).

Bothersome. The bothersome index was submitted to a t test, with need for closure as the independent variable. The analysis revealed a significant effect of need for closure ($t(94) = 1.99, p = .049$), such that individuals' high in need for closure ($M = 3.69, SD = 1.74$) were more bothered by the decision than those low in need for closure ($M = 3.07, SD = 1.22$).

Mental laziness. As with the bothersome index, the mental laziness index was submitted to a t test, with need for closure as the independent variable. The analysis, however, revealed no effect of need for closure ($p > .90$).⁴

Mediation analyses. We used bootstrapping procedures to assess the extent to which the effect of need for closure on choice delegation is driven by the bothersome nature of the decision (Hayes, 2013). The analysis revealed a significant mediating pathway through the bothersome index (95% CI: .01, .90 see Figure 2 for full path analysis). Indeed, the effect of need for closure on participants' choice through bothersome remained significant even when including mental laziness in the model (95% CI: .001, .90).

Discussion

Experiment 2 sought to offer initial insight into the underlying process driving the reliance of those seeking closure on decision sidestepping. The findings revealed that (a) those high in need for closure reported the *same* decision as more bothersome than did those low in need for closure, and (b) this difference mediated participants' decision to delegate their choice. Moreover, this effect occurred absent differences in mental laziness. This finding is consistent with research showing that those seeking closure are motivated to attain resolution irrespective of the amount of effort invested in the choice (Vermeir et al., 2002). Along with uncertainty (Experiment 1), then, our findings suggest that the increased reliance on decision sidestepping by those seeking closure is also independent of mental laziness (see also Luce, 1998).

Experiment 3

Experiment 2 offered support for the hypothesis that those seeking closure engage in decision sidestepping to reduce the bothersome nature of decision making. In the present experiment, we sought to bolster that mediation support by directly manipulating the proposed mechanism (following the recommendation of Spencer, Zanna, & Fong, 2005). In particular, those high in need for closure should engage in decision sidestepping when decision making is bothersome; when the bothersome nature of the decision is minimized, we expect

those high in need for closure to decrease the extent to which they sidestep decisions.

Experiment 3a

We conducted an initial experiment that directly manipulated the bothersome nature of the decision for individuals high and low in need for closure. Additionally, we focused on an alternative form of decision sidestepping—the *status quo* (Chernev, 2004; Inman & Zeelenberg, 2002; see Samuelson & Zeckhauser, 1988).

Method.

Participants and design. Seventy-five participants (57% female; $M_{\text{age}} = 32.28$) were recruited through Amazon Mechanical Turk to complete a study on menu design. Participants were randomly assigned to receive either a categorized (i.e., low bothersome) or uncategorized (i.e., high bothersome) menu. We also obtained a dispositional index of participants' need for closure.

Procedure. Upon being welcomed to the study, participants were informed upfront of our interests in obtaining their reactions toward different menu designs. Specifically, they were told they would be rating one of several potential menus for an avant garde restaurant (*The Standard*). Furthermore, to help evaluate the menu, participants were instructed to imagine they were actually dining at the restaurant for dinner. Participants were then randomly assigned to receive one of two menus. In the uncategorized (i.e., high bothersome) condition, participants received a menu layout where all items were listed together. However, in the categorized (i.e., low bothersome) condition, participants received a menu layout where options were broken up by categories (see Appendix A for stimuli). The bothersome manipulation is consistent with previous research, which shows that categorizing information makes decision making less aversive (Dhar, 1997; see Mogilner, Rudnick, & Iyengar, 2008). Importantly, the content across both menus did not differ—only the extent to which they were viewed as bothersome.⁵

To provide a status quo option, participants were informed of *The Standard Favorite*, a local menu standout that was reasonably priced within the mix of various entrées. This information about the status quo option was also printed at the bottom of each menu. After reviewing their menu, participants were then asked to select their own entrée from the menu or to select *The Standard Favorite*. If they

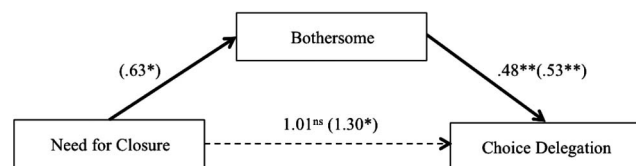


Figure 2. Path analysis in Experiment 2. Note: Values in parentheses indicate standardized beta coefficients before controlling for other variables in the model. * $p < .05$. ** $p < .01$.

⁴ We also assessed the amount of time participants' spent choosing as an additional index of laziness (for similar research that indexed effort by time spent making the decision, see Bettman, Johnson, & Payne, 1990; Luce, 1998). Similar to the mental laziness scale, analysis of the choice time data did not reveal a relationship between individuals' need for closure and the amount of time spent making a choice ($p > .27$).

⁵ The menu designs were submitted to a pilot study ($N = 50$) in which participants were randomly assigned to receive either the uncategorized (i.e., high bothersome) or categorized (i.e., low bothersome) menu before indicating how bothersome they found it to process the menu on the following four items: How much of a bother was it to process the content of the menu? How troubling was it to process the content of the menu? How irritating was it to process the content of the menu? Responses were provided on 9-point scales anchored at 1 – *Not much at all* to 9 – *Very much* and averaged ($\alpha = .95$), such that higher values indicated a more bothersome menu. Consistent with expectations, the analysis revealed a significant difference in bothersome based on menu type ($t(48) = 2.06, p = .045$). Specifically, the uncategorized menu ($M = 4.08, SD = 2.59$) was reported as more bothersome than the categorized menu ($M = 2.75, SD = 1.95$).

selected their own entrée, they were then asked to type in a box which entrée they chose.

Upon indicating their dining choice, participants then rated the design of the menu on a series of items consistent with our cover story. Finally, participants completed the 15-item Need for Cognitive Closure Scale ($\alpha = .86$; Roets & Van Hiel, 2011) before being debriefed and thanked for their participation.

Results. Participants' choice was coded as 0 if they opted to select their own choice or 1 if they relied on the status quo. These choice data were then analyzed using hierarchical logistic regression, with need for closure (continuous, mean-centered) and menu type (0 = categorized, 1 = uncategorized) as main effect predictors in the first step and their interaction in the second step (Cohen et al., 2003).

This analysis revealed the predicted need for Closure \times Menu type interaction ($\beta = 1.95$, Wald's $\chi^2 = 7.30$, $p = .007$; see Figure 3). For those high in need for closure (+1 SD), there was a significant difference in participants' choice to rely on the status quo based on menu type ($\beta = 1.77$, Wald's $\chi^2 = 5.16$, $p = .023$). For those low in need for closure (−1 SD), menu type had no effect on participants' choice to rely on the status quo ($p > .09$). As expected, neither main effect was significant ($ps > .65$).⁶

Experiment 3b

Experiment 3b sought to bolster the findings of Experiment 3a in three important ways. First, we manipulated (rather than measured) need for closure to strengthen our causal argument. Second, we altered our manipulation of bothersome and our measure of decision sidestepping (*choice delegation*; see Experiment 2) to assess the generalizability of the effect. Finally, we amended the paradigm to heighten the consequence of the decision for participants.

Method.

Participants and design. Eighty Amazon Mechanical Turk participants (57% female; $M_{age} = 36.30$) completed a study on

online videos. Participants were randomly assigned to a 2 (need for closure: high or low) \times 2 (video layout: horizontal or vertical) between-subjects design.

Procedure. Following an introduction to the study, participants were told of our interest in their reaction to new decision-making research. We then presented participants with the closure manipulation used in Experiment 2. Recall this manipulation present participants with information about a supposed research review highlighting the advantages of either achieving closure (i.e., high closure condition) or not achieving closure (i.e., low closure condition) with decisions.

Afterward, participants were told of our desire to obtain their reaction to one of several videos. They were then presented with six video options. Each video option was represented by a picture (i.e., screenshot of the video) and corresponding title. Importantly, one of the six video options was marked beneath the title as the *recommended choice*, which participants were told was a video ostensibly recommended by an individual who works for an independent firm that evaluates online videos. To control for any unexpected bias in video attractiveness, we randomized across participants which of the six videos was listed as the recommended choice. Participants were then asked to choose a video to watch. Specifically, whether they would like to make their own choice or delegate to the recommended choice.

To manipulate the bothersome nature of the decision, we altered the visual array of the videos. In the high bothersome condition, the six video options were presented vertically in a single column. In the low bothersome condition, the six video options were presented horizontally in a 2 \times 3 matrix. This manipulation was based on research showing that people are more inclined to process information horizontally (vs. vertically; Goldberg, Stimson, Lewenstein, Scott, & Wichansky, 2002; see Appendix B for stimuli).⁷

Participants then watched the video of their choice—either their own selection or the recommended choice. Consistent with the cover story, participants then provided their feedback on their selected video before being debriefed and thanked for their time.

Results. Participants' choice was coded as 0 if they opted to select their own choice or 1 if they delegated to the recommended choice. The data were submitted to a hierarchical logistic regression, with need for closure (0 = low closure, 1 = high closure) and

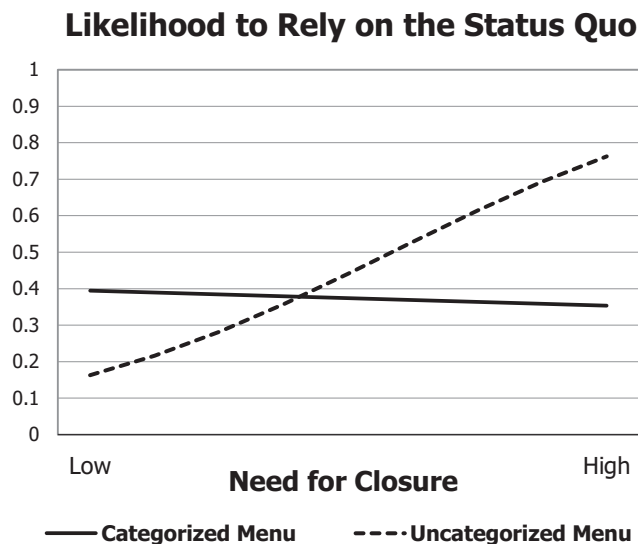


Figure 3. Choice estimates as a function of menu type and need for closure in Experiment 3a. Higher (lower) values indicate a greater likelihood to rely on the status quo (vs. make own) choice. The categorized menu represents the low bothersome condition and the uncategorized menu represents the high bothersome condition.

⁶ Viewed differently, those in the uncategorized (i.e., high bothersome) menu condition showed a marginal difference in the likelihood to rely on the status quo as a function of closure ($\beta = .79$, Wald's $\chi^2 = 2.78$, $p = .096$), such that reliance on the status quo *increased* with need for closure. Those in the categorized (i.e., low bothersome) menu condition showed a significant difference in the likelihood to rely on the status quo as a function of closure ($\beta = -1.16$, Wald's $\chi^2 = 4.54$, $p = .033$), such that reliance on the status quo decreased with need for closure. Thus, when the bothersome nature of the decision was experimentally reduced, those seeking closure were less likely to engage in decision sidestepping.

⁷ The video layouts were submitted to a pilot study ($N = 52$) to ensure that the vertical layout of videos was perceived to be more bothersome than the horizontal layout. Participants were randomly assigned to either receive the vertical (i.e., high bothersome) or horizontal (i.e., low bothersome) video layout and asked to rate how bothersome they found it to process the video options, adapting the items from the menu pretest to fit the video paradigm (see Footnote 5; $\alpha = .85$). Analysis revealed a significant difference in bothersome based on the layout ($t(50) = 2.35$, $p = .023$), such that the vertical layout ($M = 3.36$, $SD = 2.07$) was reported to be significantly more bothersome than the horizontal layout ($M = 2.27$, $SD = 1.14$).

video layout (0 = horizontal, 1 = vertical) as main effect predictors in the first step and their interaction in the second step (Cohen et al., 2003).

Consistent with Experiment 3a, the analysis revealed a significant Need for Closure \times Video Layout interaction ($\beta = 2.87$, Wald's $\chi^2 = 4.47$, $p = .035$; see Figure 4). For those in the high closure condition, there was a significant difference in participants' likelihood to delegate choice as a function of video layout ($\chi^2 [1, N = 40] = 5.23$, $p = .022$), such that participants were more likely to delegate choice in the vertical (40%) versus horizontal (6.67%) layout condition. However, for those in the low need for closure condition, the video layout had no effect on participants' likelihood to delegate choice ($p > .41$). As expected, neither main effect was significant ($ps > .30$).⁸

Discussion. The findings of Experiment 3 offer robust support for the hypothesis that those seeking closure sidestep decisions to reduce the bothersome nature of decision making. Indeed, those seeking closure were more likely to engage in decision sidestepping (here, choice delegation) when decision making was highly bothersome; by experimentally reducing the bothersome nature of the decision, those seeking closure reported less reliance on decision sidestepping. Moreover, these effects occurred across different paradigms, different indices of sidestepping, and different manipulations of bothersome. Additionally, these findings were observed irrespective of whether need for closure was measured (Experiment 3a) or manipulated (Experiment 3b). These findings, then, are consistent with the results of Experiment 2 while offering direct support for the importance of bothersome in driving the reliance on decision sidestepping in those seeking closure.

Experiment 4

Our integration of these specific decision strategies under decision sidestepping focuses on their ability to reduce the bothersome nature of decisions. It is important to note, however, prior work has theoretically linked a subset of sidestepping strategies to the motivation to reduce feelings of regret (see Anderson, 2003). Indeed, decision makers are highly sensitive to feelings of regret and therefore base

their decisions on options that allow them to reduce it (Arkes, Kung, & Hutzel, 2002; Gilovich & Medvec, 1995; Kahneman & Tversky, 1982; Simonson, 1992; Tsiros & Mittal, 2000). Thus, we sought to directly test this competing hypothesis within our framework. That is, though the anticipation of regret is clearly unpleasant, we contend that (at times) it can be overridden or eclipsed by feelings of bothersome. To that end, we explored the possibility that individuals seeking closure would engage in decision sidestepping in contexts where the potential for regret is minimized.

To test this possibility, we relied on an alternative sidestepping strategy—*inaction inertia*. Inaction inertia is demonstrated when an individual continues to reject an option that is similar to a previously rejected option (Tykocinski & Pittman, 1998; Tykocinski et al., 1995). For instance, individuals presented with an opportunity to purchase a tablet at 10% off are more likely to reject the offer if they previously rejected an opportunity to purchase a similar tablet at 15% off, even though the initial offer does nothing to diminish the absolute value of the subsequent offer. According to this research, individuals are more likely to reject the second offer to reduce feelings of regret over not taking advantage of the initial offer (Arkes et al., 2002; Sevdalis, Harvey, & Yip, 2006; Tsiros, 2009; Tykocinski & Pittman, 1998). Consistent with this regret account, reliance on inaction inertia only occurs when the subsequent offer is worse than the initial offer and the discrepancy between the initial and subsequent offer is substantial (Sevdalis et al., 2006; Tykocinski et al., 1995), as both conditions enhance the potential for regret over not taking advantage of the initial offer.

We propose that neither the size of the discrepancy between offers nor the value of the subsequent offer relative to the initial offer should inhibit the likelihood to engage in inaction inertia (i.e., reject the subsequent offer) for those motivated to achieve closure. That is, individuals who freeze on their decision should be more likely to demonstrate inaction inertia as to not revisit that decision and thus maintain their resolution irrespective of the attractiveness of the subsequent offer. We therefore altered the classic inaction inertia paradigm to allow for a test of the predictive value of cognitive closure under conditions shown to not alter feelings of regret. Specifically, we used a *minimal* rather than a substantial discrepancy between the initial and subsequent offers and we added a condition where the subsequent offer actually *improved* upon the initial offer, as these conditions should reduce (if not remove) regret. Thus, we expected those high (vs. low) in the need for cognitive closure be more likely to reject the second offer, even if the second offer minimized the potential for regret (i.e., was minimal in discrepancy or improved upon the initial offer).

Likelihood to Delegate Choice

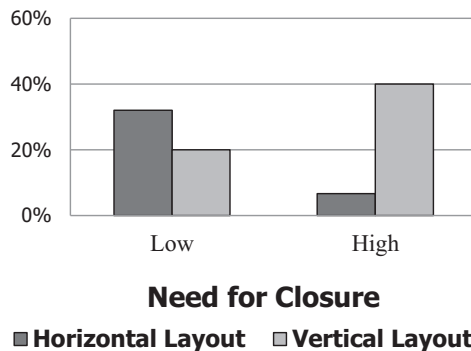


Figure 4. Response frequencies as a function of video layout and need for closure in Experiment 3b. Higher (lower) percentages indicate a greater likelihood to delegate (vs. make own) choice. The horizontal layout represents the low bothersome condition and the vertical layout represents the high bothersome condition.

⁸ Viewed differently, those in the vertical layout (i.e., high bothersome) condition showed a nonsignificant trend in the likelihood to delegate choice as a function of closure ($\chi^2 [1, N = 40] = 1.71$, $p = .197$), such that those in the high (vs. low) closure condition were *more* likely to delegate choice. Those in the horizontal (i.e., low bothersome) condition showed a marginal difference in the likelihood to delegate choice as a function of closure ($\chi^2 [1, N = 40] = 3.45$, $p = .063$), such that those in the high (vs. low) closure condition were *less* likely to delegate choice. Consistent with Experiment 3a, then, those seeking closure were less likely to engage in decision sidestepping when the bothersome nature of the decision was experimentally reduced.

Method

Participants and design. One hundred twenty-one participants (53% male; $M_{\text{age}} = 33.80$) were recruited through Amazon Mechanical Turk to complete a study on decision making. Participants were randomly assigned to one of three conditions: an *attenuation* condition in which the subsequent offer was worse than the initial offer, an *enhancement* condition in which the subsequent offer was better than the initial offer, or a *control* condition in which participants only received the subsequent offer. At the conclusion of the study, we obtained a dispositional assessment of participants' need for cognitive closure.

Procedure. After being welcomed to the study, participants were asked to consider the possibility of either buying or upgrading their existing phone to a new smartphone. Participants in the control condition were asked to imagine they saw a commercial from a retailer advertising a weeklong deal on smartphones at a discounted price of 12%. They were then asked to indicate whether or not they would take advantage of this opportunity on a binary scale labeled 0 – No or 1 – Yes. Prior to imagining this offer, however, participants in the attenuation and enhancement conditions were asked to imagine they had rejected an earlier offer to purchase a smartphone. Specifically, they were told to imagine they saw a commercial for a local retailer offering for a limited time either a 14% (i.e., attenuation condition) or 10% (i.e., enhancement condition) discount on all smartphones. They were then informed of the same offer and given the same choice as presented to the control condition. This paradigm was adapted from prior research on inaction inertia (Arkes et al., 2002; Tsiros, 2009; Tykocinski & Pittman, 1998; Tykocinski et al., 1995). To be clear, then, in the attenuation condition, the initially rejected offer decreased from 14% to 12%, whereas in the enhancement condition the initially rejected offer increased from 10% to 12%. In the control condition, participants received only the 12% offer. Following a brief filler task, participants completed the 15-item Need for Cognitive Closure Scale ($\alpha = .91$) before being debriefed and thanked for their participation.

Results

The choice data were recoded such that higher scores indicated greater inaction inertia (0 = *different choice*, 1 = *same choice*) and submitted to a hierarchical logistic regression, with prior offer (0 = control, 1 = attenuation, 2 = enhancement) and need for closure (continuous, mean-centered) as main effect predictors in the first step and their interaction in the second step (Cohen et al., 2003). The analysis revealed a Significant prior offer \times Need for closure interaction ($\beta = .63$, Wald's $\chi^2 = 4.44$, $p = .035$; see Table 2 for predicted probabilities). For those high in need for closure (+1 SD), there was a significant effect of prior offer ($\beta = .84$, Wald's $\chi^2 = 5.01$, $p = .025$); consistent with expectations, participants were significantly more likely to reject the second offer relative to the control condition in both the attenuation ($\beta = 1.54$, Wald's $\chi^2 = 4.52$, $p = .033$) and enhancement ($\beta = 1.00$, Wald's $\chi^2 = 5.81$, $p = .016$) conditions, which did not differ from each other ($p > .78$). For those low in need for closure (–1 SD), there was no effect of prior offer on choice ($p > .42$).

Table 2

Predicted Choice Probabilities as a Function of Prior Offer and Need for Closure in Experiment 4

Subsequent offer	Low closure (–1 SD)	High closure (+1 SD)
Control	.74	.39
Attenuation	.60	.76
Enhancement	.77	.79

Note. Higher probabilities indicate a greater likelihood to engage in inaction inertia.

Discussion

The findings of Experiment 4 offer further evidence that those high (vs. low) in need for closure are more prone to engage in decision sidestepping, as individuals who seize and freeze on their decisions were more likely to reject an offer similar to one they previously rejected. Moreover, this heightened inaction inertia occurred even though the discrepancy between offers was minimal and even when the subsequent offer improved upon the initial offer. These findings suggest that those seeking closure persist with their initial decision irrespective of the potential for regret. Of course, this enhancement effect could be bounded; that is, those high in need for closure might choose the improved offer if it is sufficiently substantial enough to “unfreeze” their initial decision. Yet most critical to the present manuscript is that these findings reveal that (1) the bothersome nature of decision making can occur independent of regret, and (2) cognitive closure can have a powerful influence on resistance to subsequent (even improved) offers once an initial offer has been rejected (i.e., the enhancement condition).

Experiment 5

Experiment 5 sought to further investigate the downstream consequences associated with decision sidestepping. Specifically, if those seeking closure seize and freeze on a decision outcome, they should then continue to persist with that choice—even when presented with a more desirable outcome (see also Disatnik & Steinhart, 2015). To test this hypothesis, we relied on an alternative form of decision sidestepping—*option fixation*. Option fixation is manifested in relying on one's prior decision when confronted with a new choice (Mannetti et al., 2007). Importantly, here, we focus on an individual's reliance on a prior action (vs. inaction; see Experiment 4). For instance, imagine an individual who compares and then chooses stock A over stock B, before then being confronted with a second choice between stock A and stock C. Option fixation is represented in the individual continuing to choose stock A in the second choice, regardless of whether stock C is relatively inferior or superior.

Given that individuals should choose to persist with stock A when stock C is inferior, we focus on the counterintuitive possibility whereby individuals choose stock A even when stock C is superior. That is, we expect those high (vs. low) in need for closure to persist with their prior decision even when faced with more optimal options. Here, then, we had participants actually make an initial decision before being presented with an objectively better alternative.

Method

Participants and design. Fifty-four participants (65% male; $M_{\text{age}} = 32.87$) were recruited through Amazon Mechanical Turk to participate in a survey on vacation packages. Participants were randomly assigned to a high or low need for closure condition.

Procedure. After a brief introduction to the study, participants were asked to offer some insight about themselves, an exercise that served as our manipulation of need for cognitive closure. Specifically, participants responded to a six-item version of the Need for Cognitive Closure Scale (Kardes, Fennis, Hirt, Tormala, & Bul-lington, 2007) where agreement with all items indicated high need for closure. Examples of scale items include: "I dislike unpredictable situations," "I feel uncomfortable when I don't understand why an event occurred in my life," and "I find that establishing a consistent routine enables me to enjoy life more." Importantly, participants responded to each item on a 5-point scale with anchors biased to force either agreement or disagreement with these statements (Clarkson, Janiszewski, & Cinelli, 2013; Salancik, 1974; Salancik & Conway, 1975; Tormala & DeSensi, 2008). Specifically, those in the high closure condition were forced to agree with all six items by responding on a 5-point scale with anchors ranging from 1 – *Somewhat agree* to 5 – *Completely agree*. Conversely, those in the low closure condition were forced to disagree with all six items by responding on a 5-point scale with anchors ranging from 1 – *Somewhat disagree* to 5 – *Completely disagree*; see Petrocelli, Martin, & Li, 2010, for further discussion of the validity of this self-perception technique).⁹

We next presented participants with information on two vacation packages. In particular, they were informed that we were interested in their reactions to real vacation packages and, to control for perceived differences in pricing, we informed participants that all options were similarly priced. Participants were then presented with information about a beach and a city vacation and asked to make a choice between the two packages on a binary scale: 0 – *Beach vacation* or 1 – *City vacation*; (see Appendix C for stimuli).

Upon making their initial choice, participants were asked to make a second choice. This choice served as our target decision and presented participants the option between their initial choice and a separate vacation option similar to their initial vacation destination type. Specifically, those who chose the beach (city) vacation were presented with a separate beach (city) vacation package. It is important to note that the subsequent vacation package was pretested to be more desirable than the initial vacation package.¹⁰ After evaluating the subsequent vacation package, participants indicated their preference between their initial vacation package and the subsequent (and more desirable) vacation package on a binary scale.

Results

The choice data were submitted to a chi-square analysis. Consistent with expectations, the analysis revealed a significant difference in choice based on the closure manipulation ($\chi^2[1, N = 54] = 4.52, p = .033$); those in the high need for closure condition (40.74%) were more likely to stick with their initial choice (rather than the second, more desirable choice) than were those in the low need for closure condition (14.81%).¹¹

Discussion

The findings of Experiment 5 demonstrate that those seeking closure engage in decision sidestepping even though it resulted in a suboptimal choice. That is, those in the high need for closure condition were more likely to repeat their initial choice (i.e., option fixation) compared to those in the low need for closure condition, an effect that occurred despite the second vacation package being rated more desirable than the initial vacation package (see Footnote 10). Moreover, this effect was not constrained to a specific decision, as the effect occurred regardless of whether participants' initial preference was for a beach or city vacation (see Footnote 11). Thus, those seeking closure will engage in decision sidestepping at the expense of a more optimal choice.

General Discussion

The present research sought to unify a diverse set of decision strategies (i.e., default bias, choice delegation, status quo bias, inaction inertia, and option fixation) under the common notion of decision sidestepping. Given that decision sidestepping allows individuals to bypass or streamline the decision-making process, we hypothesized that sidestepping was most likely to occur for those seeking closure. Specifically, we argued that the motivation to attain cognitive closure heightens the bothersome or aversive nature of decision making and, in an effort to reduce this aversion, these individuals engage in decision sidestepping to attain resolution by relying on a justifiable option. Five experiments supported this proposition by demonstrating that (a) those motivated to attain cognitive closure were consistently more likely to sidestep deci-

⁹ We conducted a pilot study ($N = 57$) to assess the efficacy of this manipulation using the procedure detailed in Footnote 3. The analysis revealed only a significant main effect of the biased scale manipulation on need for closure ($F(1,55) = 5.54, p = .022$); those in the high closure condition ($M = 4.07, SD = .66$) scored significantly higher on the Need for Cognitive Closure Scale ($\alpha = .87$) than did those in the low closure condition ($M = 3.60, SD = .83$). The manipulation showed no effect on need for cognition ($p > .06$), situational elaboration ($p > .11$), or mental laziness ($p > .35$).

¹⁰ We conducted a pretest ($N = 47$) to ensure the second vacation package was perceived as more desirable than the initial vacation package (see Appendix C for stimuli). Participants were randomly assigned to respond to either the two beach vacations or the two city vacations on the following scales: How desirable is the vacation package? How appealing is the vacation package? How likable is the vacation package? Responses were given on 9-point scales anchored at 1 – *Not at all* to 9 – *Very much* and averaged for both the beach ($\alpha = .81$) and city ($\alpha = .96$) vacation packages. Results revealed that the two beach vacation packages differed in overall desirability ($t(27) = 2.10, p = .045$), such that participants rated the subsequent vacation ($M = 7.73, SD = 1.05$) as more desirable than the initial vacation ($M = 7.06, SD = 1.46$). Similarly, the two city vacation packages also differed in overall desirability ($t(18) = 2.20, p = .041$), such that participants rated the subsequent vacation ($M = 7.53, SD = 1.54$) as more desirable than the initial vacation ($M = 6.98, SD = 1.62$).

¹¹ For those interested, we conducted a secondary analysis to confirm that the initial vacation preference did not differentially impact reliance on decision sidestepping. We ran a hierarchical logistic regression with need for closure (0 = low, 1 = high) and vacation preference (0 = beach, 1 = city) as independent variables in the first step and their interaction in the second (Cohen et al., 2003). Consistent with expectations, neither the main effect for vacation preference ($p > .68$) nor a significant Vacation Preference \times Need for Closure interaction ($p > .84$) was significant. However, the main effect of closure remained significant ($\beta = 1.42$, Wald's $\chi^2 = 4.36, p = .037$).

sions, and (b) this choice to engage in decision sidestepping was driven by the bothersome nature of the decision.

Several aspects of the findings are worth highlighting. First, in an effort to demonstrate robustness, the effect of closure on sidestepping occurred (a) irrespective of whether the motivation for closure was measured or manipulated and (b) across a series of different (and consequential) paradigms. Second, those seeking closure engaged in decision sidestepping only when decision making was viewed as bothersome (Experiment 2); when bothersome was experimentally reduced, so too did the reliance of those seeking closure on decision sidestepping (Experiment 3). Moreover, the mediating role of bothersome was bolstered by the lack of support for several alternative explanations: choice uncertainty (Experiment 1), mental laziness (Experiment 2), and regret (Experiment 4). Third, the motivation for closure led individuals to increase reliance on decision sidestepping at the expense of more optimal options (Experiments 4 and 5), demonstrating that sidestepping can have important downstream consequences for subsequent decisions.

We find these effects especially important given that one could reasonably argue those high in need for closure engage in decision sidestepping as a low effort strategy. Though this possibility is consistent with our argument that individuals seeking closure rely on precedents to reduce feeling bothered with decision making, we do not believe reliance on decision sidestepping need be a low effort process (see Luce, 1998). In fact, those high in need for closure are motivated to attain resolution, irrespective of the amount of effort invested in the choice (Webster & Kruglanski, 1994; Roets et al., 2015) and can even exert more effort in coming to a decision than those low in need for closure (Vermeir et al., 2002). Consistent with this notion, need for closure had no effect on self-reported mental laziness (Experiment 2) or on the amount of time spent making decisions (see Footnote 4). In fact, this lack of difference is consistent with prior theorizing that those seeking closure are sufficiently motivated to expend effort to identify the option that best achieves a permanent solution (Kruglanski & Webster, 1996; Roets et al., 2015; see also Vermeir et al., 2002).

Last, we elected to use the term *decision sidestepping* to reflect a subset of strategies that provide individuals with a means of *choosing* while simultaneously streamlining the decision-making process. It's worth noting that this conceptualization bears resemblance to an alternative classification of strategies that allows individuals to avoid or otherwise not make a decision (i.e., *decision avoidance*, Anderson, 2003; see also Luce, 1998). Although the work on decision avoidance is relevant to this body of research in that it conceptually links a similar subset of decision strategies, it does not differentiate between an individual making and not making a choice. That is, choice delegation and choice delay both represent decision avoidance despite both also reflecting a clear difference in outcomes (i.e., the former option leads to making a choice, whereas the latter option leads to not making a choice). Our interest is in individuals' desire to attain (rather than avoid) a decision and we believe the label *decision sidestepping* more accurately captures this phenomenon.

A Test of Convergence

Critical to this research is the argument that these distinct yet classic decision-making strategies share a common bond in that

they offer resolution for those seeking closure. To offer further support for this novel framework, we ran an internal meta-analysis to directly test whether these different strategies are tapping into the same construct of decision sidestepping. We included the six experiments from this package that directly compared a sidestepping option to making one's own choice. The results of the meta-analysis revealed an overall a medium effect size (Cohen's $d = .53$). Importantly, the results of the test for heterogeneity reveal that meaningful variance does not exist ($Q = 1.61, p = .90$). However, taking into consideration the relatively small number of studies in the meta-analysis, we also turned to I^2 as a measure of variability, where a value of less than 25% is indicative of homogeneity (Higgins, Thompson, Deeks, & Altman, 2003). The analysis revealed an $I^2 = 0\%$. Both values, then, provide direct support for the claim that these decision-making strategies—though often studied independently—do represent a similar construct when viewed through a closure lens.

Future Directions

The present findings provide robust support for the framework surrounding decision sidestepping. Consequently, we believe this perspective offers ample directions for future research. We highlight three such possibilities here.

Motivational biases in differentiating sidestepping strategies. Though this research focused on sidestepping options compared to personal preferences, contexts do arise when individuals have the opportunity to choose between different sidestepping strategies. For instance, when frequenting a restaurant, diners could engage in decision sidestepping by either following the waiter's recommendation or relying on a selection from a previous visit. In such instances, we believe certain motivational factors may dictate individuals' choice between different sidestepping alternatives. As one illustration, consider that the construct of need for closure has been operationalized as consisting of two motivational dimensions: Personal Need for Structure and Personal Fear of Invalidity (see Thompson, Naccarato, Parker, & Moskowitz, 2001). Given those high in need for structure are concerned with order and predictability (Thompson et al., 2001), these individuals might be more likely to rely on sidestepping strategies that are based on prior decisions (e.g., option fixation). Conversely, given those high in personal fear of invalidity are concerned with the accuracy of their decisions (Clarkson, Valente, et al., 2013; Thompson et al., 2001), these individuals may be more likely to rely on sidestepping strategies that are based on social validation (e.g., choice delegation). Thus, motivational factors might provide a novel lens into decision makers' choices when presented with multiple sidestepping strategies.

New catalysts of decision sidestepping. The proposed framework demonstrates that those seeking closure rely on decision sidestepping to reduce the bothersome or aversive nature of decision making. Any factor, then, that heightens the cognitive burden related to decision making should subsequently increase the likelihood of decision sidestepping. For instance, factors such as time pressure (de Dreu, 2003; Kruglanski & Freund, 1983), a noisy environment (Kruglanski et al., 1993), changes or norm violations (Kruglanski, Pierro, Higgins, & Capozza, 2007; Kruglanski, Shah, Pierro, & Mannetti, 2002; Pierro, De Grada, Mannetti, Livi, & Kruglanski, 2004), and a looming deadline (Kruglanski & Webster, 1991) presumably make the decision more bothersome or

aversive. If so, then each of these factors should also increase the likelihood of decision sidestepping. In other words, if the bothersome nature of a decision is critical to triggering sidestepping, then understanding what heightens the bothersome nature of the decision process should offer insight into the factors that elicit decision sidestepping in those seeking closure.

The suboptimality of closure. The findings of Experiments 4 and 5 demonstrate that those seeking closure engage in suboptimal decision making at the expense of maintaining permanency. However, it is interesting to speculate whether these decisions are in fact suboptimal to those seeking closure. While the observed behavior is undoubtedly suboptimal in an economic sense, it could be argued that these findings are *not* suboptimal in a cognitive sense. That is, the observed 'suboptimal' behavior of those seeking closure might actually reflect some level of optimizing with respect to the dimension they perceive as most valuable (i.e., achieving and maintaining resolution). In other words, those seeking closure might find it more optimal to not reevaluate a decision, even at the expense of more economically viable options.

Practical Implications

Along with avenues of future research, the importance of cognitive closure in the emergence of decision sidestepping offers several practical implications worth noting. For instance, this work has implications for the prosocial efficacy of sidestepping strategies, as research shows individuals are prone to rely on default options irrespective of the prosocial implications. As one illustration, Johnson and Goldstein (2003) show individuals were significantly more likely to become organ donors simply because the default option was to be an organ donor (see also Johnson & Goldstein, 2004; McKenzie, Liersch, & Finkelstein, 2006). The present findings would suggest those seeking closure should be most likely to base their decisions on defaults and consequently any prosocial benefits that are embedded within them. Indeed, this work would also suggest that policymakers should consider the prosocial implications for any sidestepping strategy (e.g., status quo, delegation) given that certain individuals systematically turn to these options to reduce the bothersome nature of decision making.

Additionally, this work offers insight into the viability of social influence techniques. Consider, as an example, the door-in-the-face technique. This social influence strategy increases compliance to the target request by first eliciting an initial rejection to a larger request (Cialdini et al., 1975). The dominant explanation for this effect is that the concession from the larger request to a smaller request on the part of the influencer elicits feelings of reciprocity in decision makers that subsequently increases their likelihood to accept a second, smaller request (Cialdini & Goldstein, 2004; Cialdini et al., 1975; Fennis, Janssen, & Vohs, 2009). Yet the findings from Experiment 4 suggest this effect might be less likely for those high in need for closure, as this need for closure was shown to increase reliance on an initial rejection (i.e., inaction inertia). In fact, this research would suggest that the door-in-the face technique could actually backfire if the initial rejection provides a sense of resolution that those seeking closure rely on with subsequent choices (see also Disatnik & Steinhart, 2015).

Last, the present findings offer potential insight into the behavior of individuals seeking closure, as these decision makers may be especially sensitive to certain options merely as a function of their ability to provide an opportunity to engage in decision sidestep-

ping. For instance, consumers seeking closure may show greater reliance on status quo cues (e.g., the social proof of scarcity, Worchel, Lee, & Adewole, 1975), be more sensitive to subtle recommendations (e.g., greater shelf space allocation; Chandon, Hutchinson, Bradlow, & Young, 2009), and adhere to presumed defaults (e.g., product option framing; Park, Jun, & MacInnis, 2000). Indeed, this reliance should be most pronounced when the decision-making experience is especially bothersome, such as in unfamiliar or unstructured purchase contexts. Thus, consumers may engage in certain purchases to relieve an aversive process, though this closure may come at the cost of less optimal choices or greater vulnerability to subtle contextual cues.

Concluding Remarks

The current findings offer a framework by which to understand what motivates decision sidestepping. Specifically, we propose that decision sidestepping stems from the need for cognitive closure. This need, driven by the bothersome nature of decision making, offers not only a clear mechanism to account for decision sidestepping but also novel hypotheses regarding how individuals rely on decision sidestepping as a choice strategy. Consequently, this research offers unique insight into the decision strategies that represent sidestepping and the factors that facilitate their use. We look to future research to further elucidate the various conditions and choice strategies used to successfully engage in decision sidestepping.

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(Appendices follow)

Appendix A

Uncategorized (i.e., High Bothersome) and Categorized (i.e., Low Bothersome) Restaurant Menus Used in Experiment 3a

Uncatagorized Menu

THE STANDARD.
Great place. Great food.

Salted Caramel Butterscotch Pudding - Topped with house made whipped cream, chocolate cookie crumble and maldon sea salt	\$7
Loaded Baked Potato – Creamy gold Yukon Gold potato with butter, cheddar cheese, and bacon	\$3
Smothered Chicken – Grilled chicken breast topped with honey mustard, bacon, mushrooms, scallions, cheddar and mozzarella served with smoked cheddar mashed potatoes and sautéed green beans	\$17
Angry Mac and Cheese – Hot Mett and jalapeno cheese sauce	\$9
Iceberg Wedge – Tomato, bacon, Danish bleu cheese and bleu cheese dressing	\$11
Seasoned Rice – White rice with sautéed onion and garlic	\$2
S'mores Brownie – Chocolate brownie with graham cracker crust and roasted marshmallows	\$7
Tampico Shrimp – Jalapeno corn risotto, caramelized onion quesadilla, roasted tomato salsa and guacamole	\$22
Squash Wellington – Butternut squash and mushroom duxelle wrapped in filo pastry over lemon Brussels sprouts with sweet corn cream, tomato chutney and frisee	\$16
French Fries – Crispy, deep-fried potatoes	\$2
Smooosh Burger – Cheddar, pastrami, applewood bacon, fried egg, sweet onion relish and black pepper mayo	\$13
Broccoli Cheese Casserole - Broccoli is mixed with a flavorful cheese sauce, topped with buttered bread crumbs	\$3
Spicy Garlic Shrimp – II chili garlic butter over grilled baguette	\$11
Mini Chocolate Soufflé – Served warm with vanilla ice cream	\$9
Blackened Chicken Salad - Chopped lettuce, red pepper, corn, tomato, black beans, avocado, shredded cheddar and tortilla strips tossed in honey-lime vinaigrette	\$13
Crisp Caesar - Parmesan and buttered croutons	\$8
<u>The Standard Favorite: Smooosh Burger + French Fries</u>	\$15

Catagorized Menu

THE STANDARD.
Great place. Great food.

<u>Appetizers</u>	
Angry Mac and Cheese – Hot Mett and jalapeno cheese sauce	\$9
Spicy Garlic Shrimp – II chili garlic butter over grilled baguette	\$11
<u>Salads</u>	
Iceberg Wedge – Tomato, bacon, Danish bleu cheese and bleu cheese dressing	\$11
Crisp Caesar - Parmesan and buttered croutons	\$8
Blackened Chicken Salad - Chopped lettuce, red pepper, corn, tomato, black beans, avocado, shredded cheddar and tortilla strips tossed in honey-lime vinaigrette	\$13
<u>Entrées</u>	
Tampico Shrimp – Jalapeno corn risotto, caramelized onion quesadilla, roasted tomato salsa and guacamole	\$22
Squash Wellington – Butternut squash and mushroom duxelle wrapped in filo pastry over lemon Brussels sprouts with sweet corn cream, tomato chutney and frisee	\$16
Smooosh Burger – Cheddar, pastrami, applewood bacon, fried egg, sweet onion relish and black pepper mayo	\$13
Smothered Chicken – Grilled chicken breast topped with honey mustard, bacon, mushrooms, scallions, cheddar and mozzarella served with smoked cheddar mashed potatoes and sautéed green beans	\$17
<u>Sides</u>	
Loaded Baked Potato – Creamy gold Yukon Gold potato with butter, cheddar cheese, and bacon	\$3
Seasoned Rice – White rice with sautéed onion and garlic	\$3
Broccoli Cheese Casserole - Broccoli is mixed with a flavorful cheese sauce, topped with buttered bread crumbs	\$2
French Fries – Crispy, deep-fried potatoes	\$2
<u>Desserts</u>	
Mini Chocolate Soufflé – Served warm with vanilla ice cream	\$9
S'mores Brownie – Chocolate brownie with graham cracker crust and roasted marshmallows	\$7
Salted Caramel Butterscotch Pudding - Topped with house made whipped cream, chocolate cookie crumble and maldon sea salt	\$7
<u>The Standard Favorite: Smooosh Burger + French Fries</u>	\$15

(Appendices continue)

Appendix B

Vertical (i.e., High Bothersome) and Horizontal (i.e., Low Bothersome) Video Layouts Used in Experiment 3b

Vertical Layout



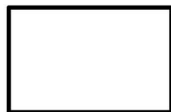
Dog's struggle



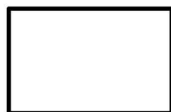
Music twins



Jingle guy



The strawberries



Grocery cake



Car Horn

Horizontal Layout



Dog's struggle



Jingle guy



Grocery cake



Music twins



The strawberries

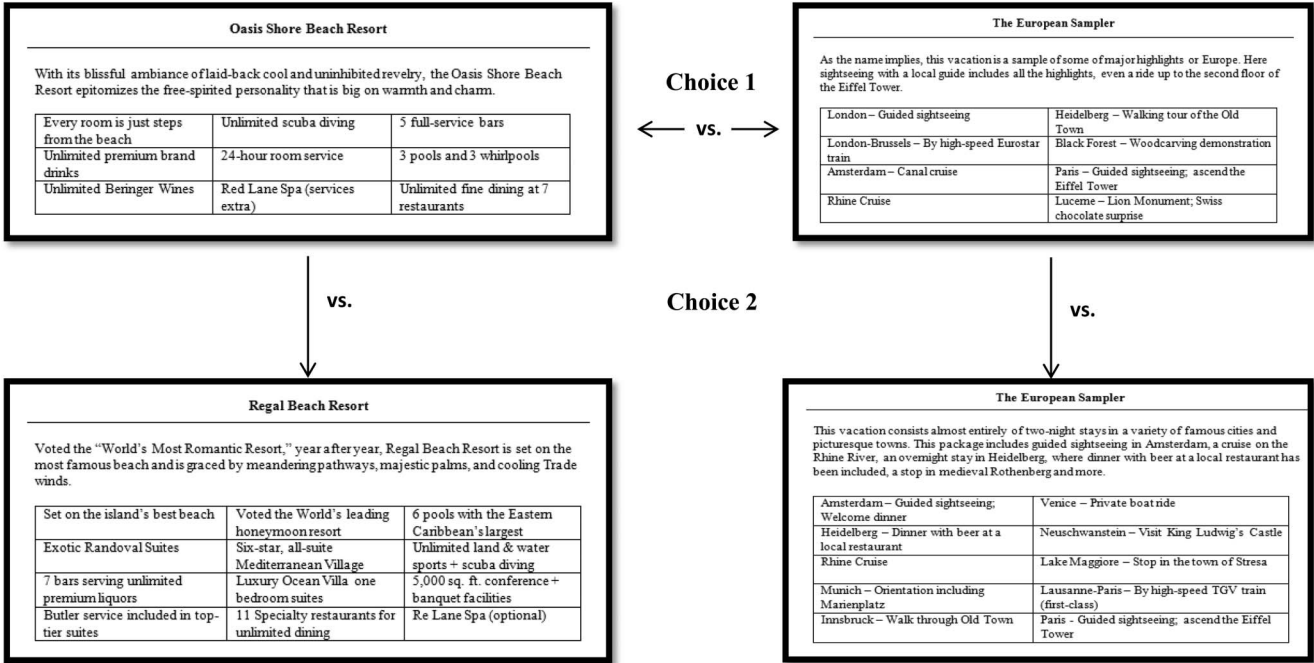


Car Horn

(Appendices continue)

Appendix C

Visual Flow of Vacation Packages Used in the Comparative Choices of Experiment 5



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Correction to Otto et al. (2016)

In the article, “Decision Sidestepping: How the Motivation for Closure Prompts Individuals to Bypass Decision Making” by Ashley S. Otto, Joshua J. Clarkson, and Frank R. Kardes (*Journal of Personality and Social Psychology*, 2016, Vol. 111, No. 1, pp. 1–16. <http://dx.doi.org/10.1037/pspa0000057>), the main heading for Experiment 3 was missing due to a production error, and the first sentence of the first paragraph of Experiment 3 should begin as follows: Experiment 2 offered support for the hypothesis that those seeking closure engage in decision sidestepping to reduce the bothersome nature of decision making. The online version of the article has been corrected.

<http://dx.doi.org/10.1037/pspa0000061>