

Research Report

Can't finish what you started? The effect of climactic interruption on behavior

Daniella M. Kumor^{*,1}, Taly Reich¹, Baba Shiv

Stanford Graduate School of Business, 655 Knight Way, Stanford, CA 94305, USA

Received 22 October 2012; received in revised form 22 May 2014; accepted 28 May 2014
Available online 4 June 2014

Abstract

Individuals experience a greater frequency of interruptions than ever before. Interruptions by e-mails, phone calls, text messages and other sources of disruption are ubiquitous. We examine the important unanswered question of whether interruptions can increase the likelihood that individuals will choose closure-associated behaviors. Specifically, we explore the possibility that interruptions that occur during the climactic moments of a task or activity can produce a heightened need for psychological closure. When an interruption prevents individuals from achieving closure in the interrupted domain, we show that the resulting unsatisfied need for psychological closure can cause individuals to seek closure in totally unrelated domains. These findings have important implications for understanding how consumer decisions may be influenced by the dynamic—and often interrupted—course of daily events.

© 2014 Society for Consumer Psychology. Published by Elsevier Inc. All rights reserved.

Keywords: Interruption; Decision making; Need for psychological closure

Individuals experience a greater frequency of interruptions and multitasking than ever before (Carrier, Cheever, Rosen, Benitez, & Chang, 2009). For example, undergraduates are interrupted every 2 minutes by instant messages, e-mail, and other sources of disruption when using computers (Benbunan-Fich & Truman, 2009). Adults are also interrupted with increasing frequency—in fact, office workers are interrupted every 5 minutes by e-mails alone (Jackson, Dawson, & Wilson, 2001). While significant research reveals that interruptions are ubiquitous, surprisingly little research has examined the impact of these interruptions—and their timing—on subsequent decisions.

Interruptions

Interruptions are conceptualized as externally-generated events that disrupt an individual's cognitive focus on a focal task (Corragio, 1990). Research has most frequently operationalized

interruptions as secondary tasks that individuals must complete before they can return to a focal task, or as a mechanical failure that disrupts a focal activity (e.g., the failure of a tape player that prevents individuals from listening to the entirety of an audio message) (Worchel & Arnold, 1974; Xia & Sudharshan, 2002).

Perhaps the most well-known consequence of interruptions is the Zeigarnik effect, which suggests that uncompleted (versus completed) tasks are better remembered (Zeigarnik, 1927). More recently, research has begun to explore the impact of interruptions on consumer behavior. For example, Liu (2008) found that interruptions increase consumers' choice of desirable rather than feasible options. Recent research also reveals that interruptions can impact consumers' affective experiences—for example, frequent interruptions decrease consumers' satisfaction when they shop online (Xia & Sudharshan, 2002). Nelson and Meyvis (2008) found that the affective consequences of interruptions depend on the valence of the interrupted task. Specifically, they found that interruptions improve positive experiences and worsen negative experiences (also see Nelson, Meyvis, & Galak, 2009). In sum, while recent research has begun to explore the impact of interruptions on consumer behavior, research to date has solely examined the effect of interruptions on the interrupted consumer task rather than on subsequent and unrelated consumer decisions.

* Corresponding author.

E-mail addresses: dkupor@stanford.edu (D.M. Kumor), treich@stanford.edu (T. Reich), bshiv@stanford.edu (B. Shiv).

¹ These authors contributed equally to this work.

Interruptions and need for psychological closure

Both the ubiquity of interruptions and anecdotal experience suggest that interruptions can occur during moments in which individuals are relatively indifferent about whether they finish a current activity, as well as during moments in which they are highly eager to finish an activity. Significant literature indicates that an individual's motivation to complete a goal-oriented activity critically depends on his/her temporal distance from the desired end (Henderson, Beck, & Palmatier, 2011; Kivetz, Urminsky, & Zheng, 2006; Touré-Tillery & Fishbach, 2011). Building on this research, we investigate whether an individual's desire to finish an interrupted activity depends on the timing of the interruption. Specifically, we examine whether an individual's desire to finish an interrupted activity is heightened when an interruption disrupts the climactic moments of an activity or task. A climax is defined as "the most intense, exciting, or important point of something" (Oxford Dictionaries). Phone calls, text messages, and other sources of disruption can sometimes interrupt the climactic moments of a variety of activities, including conversations, television shows, books, and news articles. The current research investigates whether these climactic interruptions foster a heightened need for psychological closure.

Significant research suggests that interruptions can generate a need for closure. Indeed, it is well documented that individuals are motivated to complete an activity that they have started, and that interruptions increase individuals' desire to complete an interrupted task (Klinger, 1975; Lewin, 1926, 1935; Martin & Tesser, 1996; Ovsiankina, 1928). This increased desire can even persist when individuals are permanently prevented from finishing an activity (Carver & Sheier, 1998; Lewin, 1926; Martin & Tesser, 1996). We posit that certain interruptions can intensify this unsatisfied need for psychological closure. Specifically, we hypothesize that climactic interruptions (interruptions that disrupt the climactic moments of an activity or task) are more likely to foster an unsatisfied need for psychological closure than interruptions that occur during non-climactic intervals. This is because, by definition, a climactic interruption prevents individuals from experiencing the imminent resolution to a focal climactic build-up, which in turn may intensify individuals' perception that they have been left hanging by a target event and thus increase their desire to attain closure (Beike, Adams, & Wirth-Beaumont, 2007; Beike & Wirth-Beaumont, 2005).

An unsatisfied need for closure provokes behaviors targeted toward the attainment of closure (Kruglanski & Webster, 1996). Research reveals that mind-sets, desires, and goals activated during cognitive activity in one domain can persist to influence subsequent decisions in unrelated domains, independent of the motivation that gave rise to their activation (for a review, see Wyer & Xu, 2010). In a similar vein, we predict that when a climactic interruption prevents the attainment of closure in the interrupted domain, the resulting unsatisfied need for psychological closure can spill over onto behavior in other domains and impact decisions unrelated to the interrupted activity. Specifically, given that a need for closure motivates individuals to make a decision rather than remain in a state of

ambiguity (Webster & Kruglanski, 1994), we predict that an interruption can increase the likelihood that an individual will make a purchase decision rather than continue examining product alternatives.

Overview

We present four studies investigating the effect of interruptions on subsequent behavior. Study 1 examines the effect of the timing of the interruption of a focal activity on the likelihood of making closure-associated purchase decisions in a different domain. Studies 2A and 2B explore the mechanism driving this effect. Finally, Study 3 examines whether climactic interruptions can impact real choice behavior and explores post-choice need for psychological closure.

Study 1

The purpose of Study 1 is to document the basic effect of interruptions increasing the pursuit of closure-associated decisions in an unrelated domain. Making a purchase decision provides closure to a product search (e.g., Vermeir, Van Kenhove, & Hendrickx, 2002). Thus, we examine whether individuals who are unable to complete an interrupted activity are more likely to make purchase decisions than uninterrupted individuals. In addition, we explore the necessary conditions for the effect to occur—chiefly, we predict that only interruptions which disrupt the climactic moments of an activity increase the pursuit of closure-associated decisions.

Method

Eighty-seven participants from an online pool were randomly assigned to one of three conditions. In the *Control* condition, participants watched a short comedy clip in which a comedian relayed a childhood anecdote that culminated in a final joke. In the *Climax Interruption* condition, participants watched the same clip but experienced a video-malfunction immediately prior to the punch line of the comedian's joke. In the *Non-Climax Interruption* condition, participants watched the same clip but experienced a video-malfunction during a non-climactic moment of the comedian's anecdote, several seconds before the introduction of the final joke.

In an ostensibly unrelated study, participants were then instructed to imagine that they were shopping for several consumer products (e.g., luggage, cake, etc.). Participants were presented with the specifications of two items in each of five product categories, and were asked to imagine that these were the first two items that they encountered while shopping for the products online. Next, participants were asked to indicate whether they would be more likely to purchase one of the two presented items, or whether they would be more likely to continue looking for alternatives. Participants read that they would not actually need to continue examining product alternatives as part of the study, and that they should simply report what they would choose to do if they were in the described situation. Participants reported their choices by selecting a radio

button labeled “Continue looking for alternatives,” “Choose Option A,” or “Choose Option B.” The total number of times participants chose one of the presented products was summed to create a single index of purchase likelihood. Fifty participants did not meet the inclusion criteria (see SOM) and thus are not included in the study sample.

Results and discussion

An ANOVA of condition on likelihood of purchase revealed a significant effect of condition on number of purchase decisions, $F(2,84) = 4.03$, $p = 0.021$. Post-hoc comparisons revealed that participants in the *Climax Interruption* condition ($M = 2.50$, $SD = 1.42$) made significantly more purchase decisions than participants in the *Control* condition ($M = 1.48$, $SD = 1.12$) (Fisher’s LSD: $p = .007$) and *Non-Climax Interruption* condition ($M = 1.79$, $SD = 1.43$) (Fisher’s LSD: $p = .046$), which did not differ from each other (Fisher’s LSD: $p = .368$).

In short, consistent with our hypothesis, we find that interruptions can increase the likelihood of making purchase decisions in domains totally unrelated to the domain in which the interruption occurred. We further find that this effect emerges when an interruption disrupts the climactic moments of an activity, but not when an interruption occurs during a non-climactic portion of the activity.

Study 2A

The first study provides evidence consistent with our hypothesis that climatic interruptions can increase the likelihood of making purchase decisions in unrelated domains. We hypothesize that this increased purchase likelihood is driven by climactic interruptions triggering a need for psychological closure (NFPC). When an interruption prevents individuals from achieving psychological closure in the interrupted domain, the resulting unsatisfied NFPC increases the pursuit of closure-associated decisions in unrelated domains. Study 2 sought to both replicate the main effect documented in Study 1, and more importantly, establish that NFPC mediates the effect of climatic interruption on purchase likelihood.

Perhaps the most widely used measure of need for closure is the Need For Closure Scale (NFCS), a scale which measures individual-differences in need for closure (Webster & Kruglanski, 1994). Because the proposed mechanism is a situational need for psychological closure (rather than an individual difference), we administered a situational need for psychological closure (NFPC) scale (adapted from Beike et al., 2007).

Method

Forty-four participants from an online pool were assigned to either the *Control* condition or the *Climactic Interruption* condition described in Study 1. After completing the same manipulation and product choice task as in Study 1, participants completed a 5-item situational NFPC scale adapted from Beike et al. (2007) (e.g., “The comedy clip is “unfinished business” for me;” see Appendix A for the full scale). Items were

presented on a 7-point scale, anchored by 1 = *Not at All* and 7 = *Very Much* ($\alpha = .79$). All participants met the inclusion criteria (see SOM).

Results and discussion

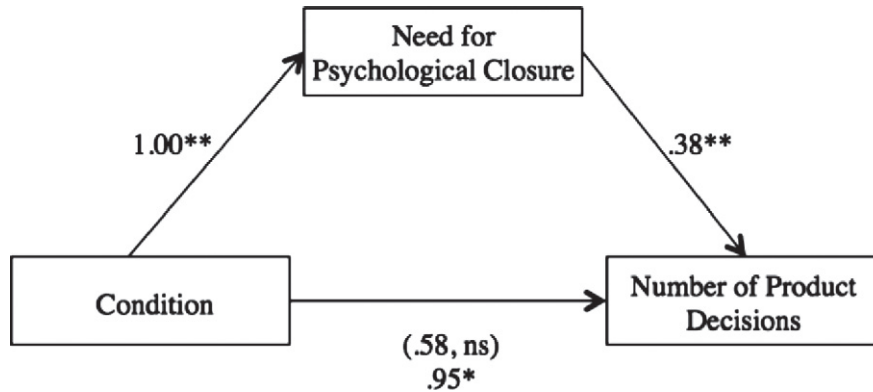
An independent samples *t*-test revealed that participants in the *Climax Interruption* condition ($M = 2.64$, $SD = 1.53$) made more purchase decisions than participants in the *Control* condition ($M = 1.68$, $SD = 1.64$; $t(42) = 2.00$, $p = 0.053$). Participants in the *Climax Interruption* condition ($M = 4.21$, $SD = 1.32$) also experienced greater NFPC than participants in the *Control* condition ($M = 3.21$, $SD = 1.47$; $t(42) = 2.38$, $p = 0.022$). We followed the procedures outlined by Hayes (2013) to examine whether NFPC mediated the effect of condition on purchase decisions. As predicted, NFPC mediated this effect (CI: .0791 to .8610; see Fig. 1).

Study 2B

Studies 1 and 2A provide evidence consistent with our hypothesis that when a climactic interruption prevents the attainment of closure in the interrupted domain, the resulting unsatisfied need for psychological closure can increase the likelihood of making an unrelated purchase decision. However, is it possible that this increase in purchase decisions is instead driven by individuals’ desire to distract themselves from the unpleasant experience of a climactic interruption? Such an explanation presumes that product choice is more distracting than continued search, and is thus interesting in its own right. We explore this possible alternative explanation in Study 2B. Specifically, if this desire for distraction drives the current effect, then climactic interruptions should also increase choices to engage in distracting tasks that are not associated with closure (e.g., reading additional product information). Conversely, if climactic interruptions do not impact the likelihood of continued search when the only alternative course of action provides distraction without closure, then such results would be inconsistent with a distraction account. We investigate this possibility in Study 2B.

Method

One hundred forty-six participants from an online pool were randomly assigned to either a *Control* condition or a *Climax Interruption* condition. Participants completed the same manipulation and viewed the product scenario described in Study 1. However, rather than being asked to choose between purchasing one of the presented items or continuing to search for alternatives (as in Study 1 and Study 2A), participants were asked to choose between reading more about the presented items, or returning to the search at a later time. Participants learned that they would actually read additional product information if they chose the former option, but that they would not continue searching for products during the survey if they chose the latter option. Participants reported their choices by selecting either a radio button labeled “Read more about Option A,” “Read more about Option B,” or “I would return to



* $p < .05$ ** $p < .05$ *** $p < .01$

Fig. 1. Mediation model, Study 2A.

the search at a later time.” The total number of times participants chose to read about one of the presented items was summed to create a single measure of distraction seeking. Seventy-three participants did not meet the inclusion criteria (see SOM) and thus are not included in the study sample.

Results and discussion

As outlined previously, if the effect documented in Study 1 and Study 2A was driven by a desire for distraction, then individuals presented with a choice between hypothetical continued search and reading product information (an activity that provides distraction without closure) should be more likely to choose the latter option if they have experienced a climactic interruption. The results do not support this distraction account. An independent samples *t*-test revealed that participants in the *Control* condition ($M = 2.87$, $SD = 1.85$) and the *Climax Interruption* condition ($M = 3.04$, $SD = 1.80$) were equally likely to choose to read about the presented products, $t(144) = .56$, $p = .575$.

Study 3

Studies 1 and 2 provide evidence consistent with our hypothesis that climactic interruptions increase the likelihood of making unrelated purchase decisions. Study 3 sought to both demonstrate that climactic interruptions can impact choices with real consequences, and also explore the effect of these choices on post-interruption NFPC. In Study 2A, NFPC was measured only after the choice task, but not before. Therefore, Study 2A’s single post-choice NFPC measure does not provide insight into whether choice can *reduce* interruption-induced NFPC. In other words, while Study 2A suggested that interruption-induced increases in NFPC can persist post-choice, the absence of a pre-choice measure of NFPC precludes inferences about whether choice provides any psychological closure. Study 3 investigates this possibility.

As previously noted, NFPC is characterized by a desire to quickly obtain an end state of a task or problem in order to terminate cognitive processing related to the task or problem

(Webster & Kruglanski, 1994). As a result, individuals high in need for closure engage in less predecision information processing and search—and make decisions on the basis of less information—in order to quickly obtain closure (Houghton & Grewal, 2000; Kruglanski & Webster, 1996; Mayseless & Kruglanski, 1987). Thus, we investigated whether climactic interruptions can lead people to seek psychological closure by examining fewer product alternatives in order to expedite the decision process.

Method

Eighty-one participants from an online pool were randomly assigned to either the *Control* or *Climax Interruption* condition described in Study 1. Participants next completed the same NFPC scale as in Study 2A. In an ostensibly unrelated survey, participants then learned that they would make a real product decision, and that they would be sent the product that they chose. Specifically, participants read the following instructions:

In this next survey, you will see a Ghiradelli chocolate on the next page. If you want the chocolate that you see on the next page, click the button labeled “I want this chocolate.” If you want to keep looking and see another chocolate, click the button labeled “I want to keep looking.” You can keep looking until you find a chocolate that you want.

On each page you can either choose the new chocolate that you see, a chocolate that you previously saw, or you can choose to keep looking.

You will be sent the chocolate that you choose.

After participants read these instructions and clicked to begin the choice task, they saw a picture of a Ghiradelli Chocolate Square with a brief description of the chocolate below it. Two radio buttons were presented beneath this product information—one radio button was labeled “I want this chocolate,” while the other was labeled “I want to keep looking.” The choice task terminated for participants who chose

the former option. Participants who chose to keep looking saw a picture and description of an alternative chocolate on the subsequent screen, and these participants could either choose to select the pictured chocolate, choose to keep looking, or choose the chocolate that they had previously viewed. This procedure continued until each participant selected a chocolate, or until participants viewed each of the available fourteen chocolates. Participants who chose to keep looking after viewing each of the available chocolates were routed to a screen which informed them that they had viewed all of the available chocolates, and prompted them to make a choice between one of the fourteen options that they had viewed. We captured the total number of chocolates that participants viewed before making a decision, as well as the number of seconds that participants spent making their decision. Immediately after making their choice, participants completed the NFPC a second time. At the end of the survey, participants were informed that they would receive a bonus of 60 cents (the approximate cost of a chocolate) rather than be sent their selected chocolate. Twenty participants did not meet the inclusion criteria (see SOM) and thus are not included in the study sample.

Results and discussion

An independent samples *t*-test revealed that participants in the *Climax Interruption* condition viewed fewer chocolates than participants in the *Control* condition before making their choice, $t(79) = 2.23$, $p = .029$ (Table 1). Participants in the *Climax Interruption* condition also spent fewer seconds making their decision than participants in the *Control* condition, $t(79) = 2.19$, $p = .032$ (Table 1). Together, these results suggest that climactic interruptions can cause individuals to engage in closure-seeking behavior—decreasing information search in order to quickly make a decision (Houghton & Grewal, 2000; Kruglanski & Webster, 1996; Mayseless & Kruglanski, 1987).

Further analysis revealed that participants in the *Climax Interruption* condition experienced marginally higher NFPC than participants in the *Control* condition immediately after the interruption ($t(79) = 1.94$, $p = .056$), and that this difference disappeared after the choice task ($t(79) = .05$, $p = .964$; Table 1). Interestingly, however, interruption-induced NFPC persisted post-choice in Study 2A. It is possible that one reason why Study 3 and Study 2A produced these different results is that the product choice task in Study 2A was hypothetical, while the product choice task in Study 3 was (ostensibly) real. Research reveals that goal states are better satisfied with real choices than with hypothetical choices—for example, a desire

for prestige is better satisfied with a real product choice than with a hypothetical product choice (Chartrand, Huber, Shiv, & Tanner, 2008). In a similar vein, it is possible that NFPC was better satisfied by the real product choices in Study 3 than by the hypothetical product choices in Study 2A. Of note, however, the interaction between condition (*Climax Interruption* vs. *Control*) and the time at which participants completed the NFPC scale (before vs. after the choice task) on NFPC did not reach significance ($F(1, 79) = 2.41$, $p = .124$). We discuss the implications of this result in the general discussion.

General discussion

Interruptions punctuate daily life with increasing frequency. Surprisingly, no research has examined the impact of these pervasive interruptions on unrelated subsequent choices. The current research provides crucial insight into the influence of interruptions on decision behavior, illustrating that they can increase the desire for closure in unrelated domains. We hypothesized that a need for psychological closure is generated when a climactic interruption prevents individuals from obtaining psychological closure in the interrupted domain, thus causing the pursuit of closure-associated decisions in unrelated domains. Evidence for this effect was found in four studies. In Study 1, we found that interruptions increased consumer decision likelihood when an interruption disrupted the climactic moments of an activity, but not when an interruption disrupted the non-climactic moments of an activity. Study 2 explored the mechanism underlying this effect, and revealed that it is driven by NFPC (Study 2A) rather than a distraction-seeking mechanism (Study 2B). In Study 3, we found that climactic interruptions can impact real choice behavior. Together, the current research is the first to suggest that situational need for closure can influence behavior in a context unrelated to the domain in which the need for closure was aroused.

Alternative accounts

In addition to providing evidence for the proposed account, it is important to consider alternative explanations. As one example, is it possible that interruptions induced negative affect, and that this negative affect increased purchase decisions? We contend that this possibility is unlikely. Indeed, research reveals that individuals often base their evaluations of stimuli on the affect they happen to experience during their evaluation, and that this ambient affect thus influences decision-making (Schwarz & Clore, 1983, 1988, 1996). Consequently, negative affect causes individuals to evaluate products less favorably and be less likely to purchase them (Gorn, 1982; Gorn, Goldberg, & Basu, 1993). Hence, if interruption-induced negative affect drove the likelihood of subsequent product choice, we would expect interruptions to produce less favorable product evaluations and thus decrease the likelihood of choice. In contrast, we observed that interruptions increase choice. Therefore, we do not see our findings as consistent with a negative affect explanation.

Another possible explanation of the current results is that climactic interruptions produced depletion, which in turn drove

Table 1
Study 3 results.

Dependent variable	Condition	
	Interruption <i>M</i> (SD)	Control <i>M</i> (SD)
Number of chocolates searched	4.73 (3.89)	6.95 (4.98)
Search duration (seconds)	26.56 (29.02)	44.21 (42.50)
NFCS (Time 1)	4.63 (1.36)	4.05 (1.35)
NFCS (Time 2)	3.68 (.73)	3.68 (.84)

the observed reduction in search behavior. We think this account is unlikely to explain our results—indeed, if depletion drove the current effects, we would expect climactic interruption to reduce decisions to engage in the effortful task of reading additional product information. However, as seen in Study 2B, this reduction in effortful activity did not emerge. Nevertheless, we conducted an additional study to examine this possibility. This study revealed that climactic interruptions increased engagement in closure-associated behavior, even when doing so required more effort and time (see SOM for the full study). Thus, although it is theoretically possible that interruptions could produce depletion, we believe that this account does not offer a viable alternative explanation of the current results.

Remaining questions and future directions

Interestingly, the NFPC data in Study 3 trend toward suggesting that choices in a domain unrelated to the interrupted task can reduce interruption-induced NFPC. However, this trend did not reach significance. One possible interpretation of this result is that when a climactic interruption prevents the attainment of closure in the interrupted domain, the resulting unsatisfied NFPC—and consequent desire to satisfy this need—activates a more general mind-set oriented toward the pursuit of closure. Research reveals that motivation to obtain a particular objective in a certain domain can activate a more general mind-set that shapes unrelated responses in unrelated domains, regardless of whether such behaviors satisfy the original goal or motivation (for a review, see Wyer & Xu, 2010). In a similar vein, it is possible that an unsatisfied NFPC triggered by a climactic interruption activates a closure mind-set, which in turn increases the pursuit of closure-associated decisions in unrelated domains that do not necessarily satisfy the original need for closure. We leave this question to future research.

Also relevant to future research, we limited our examination of climactic interruptions to an analysis of decision behavior. However, there are a number of other consequences that warrant empirical attention. For example, because the current research suggests that climactic interruptions can increase the likelihood of choosing to purchase a product rather than continuing to examine alternatives, it is possible that these closure-motivated choices may increase post-purchase regret. In fact, research indicates that insufficient thinking about decision alternatives in and of itself can increase post-decision regret, even when decision outcomes are held constant (Das & Kerr, 2010; Pieters & Zeelenberg, 2005). To the extent that the current research suggests that need for psychological closure may increase hasty purchase decisions, it is possible that these decisions may increase post-decision regret.

Conclusion

Despite the ubiquity of interruptions, there has been little or no consideration of whether interruptions can impact consumer decisions that are unrelated to a previously interrupted event. The current research is the first to provide insight into the effect of climactic interruptions on behaviors in unrelated domains.

The finding that climactic interruptions can impact behaviors with real consequences suggests that these interruptions may exert previously unrecognized consequences on consumer decisions.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <http://dx.doi.org/10.1016/j.jcps.2014.05.006>.

References

- Beike, D., Adams, L., & Wirth-Beaumont, E. (2007). Incomplete inhibition of emotion in specific autobiographical memories. *Memory, 15*(4), 375–389.
- Beike, D. R., & Wirth-Beaumont, E. T. (2005). Psychological closure as a memory phenomenon. *Memory, 13*, 574–593.
- Benbunan-Fich, R., & Truman, G. (2009). Multitasking with laptops during meetings. *Communications of the ACM, 52*(2), 139–141.
- Carrier, L. M., Cheever, N. A., Rosen, L. D., Benitez, S., & Chang, J. (2009). Multitasking across generations: Multitasking choices and difficulty ratings in three generations of Americans. *Computers in Human Behavior, 25*, 483–489.
- Carver, C. S., & Sheier, M. F. (1998). *On the self-regulation of behavior*. Cambridge, England: Cambridge University Press.
- Chartrand, T. L., Huber, J., Shiv, B., & Tanner, R. J. (2008). Nonconscious goals and consumer choice. *Journal of Consumer Research, 35*(2), 189–201.
- Corragio, L. (1990). Deleterious effects of intermittent interruptions on the task performance of knowledge workers: A laboratory investigation. Unpublished doctoral dissertation, University of Arizona, Tucson.
- Das, N., & Kerr, A. H. (2010). Woulda, coulda, shoulda: A conceptual examination of the sources of post-choice regret. *The Journal of Marketing Theory and Practice, 18*(2), 171–180.
- Gorn, G. J. (1982). The effects of music in advertising on choice behavior: A classical conditioning approach. *The Journal of Marketing, 94*–101.
- Gorn, G. J., Goldberg, M. E., & Basu, K. (1993). Mood, awareness, and product evaluation. *Journal of Consumer Psychology, 2*(3), 237–256.
- Hayes, A. F. (2013). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. New York, NY: Guilford Press.
- Henderson, C., Beck, J., & Palmatier, R. (2011). Review of the theoretical underpinnings of loyalty programs. *Journal of Consumer Psychology, 3*, 256–276.
- Houghton, D. C., & Grewal, R. (2000). Please, let's get an answer—any answer: Need for consumer cognitive closure. *Psychology & Marketing, 17*, 911–934.
- Jackson, T. W., Dawson, R. J., & Wilson, D. (2001). The cost of email interruption. *Journal of Systems and Information Technology, 5*(1), 81–92.
- Kivetz, R., Urminsky, O., & Zheng, Y. H. (2006). The goal-gradient hypothesis resurrected: Purchase acceleration, illusionary goal progress, and customer retention. *Journal of Marketing Research, 43*(1), 39–58.
- Klinger, E. (1975). Consequences of commitment to and disengagement from incentives. *Psychological Review, 82*, 1–25.
- Kruglanski, A. W., & Webster, D. M. (1996). Motivated closing of the mind: “Seizing” and “freezing.”. *Psychological Review, 103*, 263–283.
- Lewin, K. (1926). Vorsatz, wille, and bedurfnis [intention, will, and need]. *Psychologische Forschung, 7*, 330–385.
- Lewin, K. (1935). *A dynamic theory of personality*. New York: McGraw Hill.
- Liu, W. (2008). Focusing on desirability: The effect of decision interruption and suspension on preferences. *Journal of Consumer Research, 35*(4), 640–652.
- Martin, L. L., & Tesser, A. (1996). Ruminative thoughts. In R. S. Wyer Jr. (Ed.), *Advances in social cognition, vol. 9*. (pp. 1–47) Hillsdale, NJ, England: Lawrence Erlbaum Associates, Inc.
- Mayseless, O., & Kruglanski, A. W. (1987). What makes you so sure? Effects of epistemic motivations on judgmental confidence. *Organizational Behavior and Human Decision Processes, 29*, 162–183.

- Nelson, L. D., & Meyvis, T. (2008). Interrupted consumption: Disrupting adaptation to hedonic experiences. *Journal of Marketing Research*, 45(6), 654–664.
- Nelson, L. D., Meyvis, T., & Galak, J. (2009). Enhancing the television-viewing experience through commercial interruptions. *Journal of Consumer Research*, 36(2), 160–172.
- Ovsiankina, M. (1928). Die Wiederaufnahme unterbrochener Handlungen. *Psychologische Forschung*, 11, 302–379.
- Pieters, R., & Zeelenberg, M. (2005). On bad decisions and deciding badly: When intention–behavior inconsistency is regrettable. *Organizational Behavior and Human Decision Processes*, 97, 18–30.
- Schwarz, N., & Clore, G. L. (1983). Mood, misattribution, and judgments of well-being: Informative and directive functions of affective states. *Journal of Personality and Social Psychology*, 45(3), 513–523.
- Schwarz, N., & Clore, G. L. (1988). How do I feel about it? The informative function of affective states. *Affect, Cognition, And Social Behavior*, 44–62.
- Schwarz, N., & Clore, G. L. (1996). Feelings and phenomenal experiences. *Social Psychology: Handbook of Basic Principles*, 2, 385–407.
- Touré-Tillery, M., & Fishbach, A. (2011). The course of motivation. *Journal of Consumer Psychology*, 21, 414–483.
- Vermeir, I., Van Kenhove, P., & Hendrickx, H. (2002). The influence of need for closure on consumer's choice behavior. *Journal of Economic Psychology*, 23, 703–727.
- Webster, D., & Kruglanski, A. (1994). Individual differences in need for cognitive closure. *Journal of Personality and Social Psychology*, 67(6), 1049–1062.
- Worchel, S., & Arnold, S. E. (1974). The effect of combined arousal states on attitude change. *Journal of Experimental Social Psychology*, 10, 549–560.
- Wyer, R. S., & Xu, A. J. (2010). The role of behavioral mind-sets in goal-directed activity: Conceptual underpinnings and empirical evidence. *Journal of Consumer Psychology*, 20(2), 107–125.
- Xia, L., & Sudharshan, D. (2002). Effects of interruptions on consumer online decision processes. *Journal of Consumer Psychology*, 12(3), 265–280.
- Zeigarnik, B. (1927). Das Behalten Erledigter und Unerledigter Handlungen. *Psychologische Forschung*, 9, 1–85.