# GABRIELA N. TONIETTO and SELIN A. MALKOC\*

Consumers often schedule their activities in an attempt to use their time more efficiently. Although the benefits of scheduling are well established, its potential downsides are not well understood. The authors examine whether scheduling uniquely undermines the benefits of leisure activities. In 13 studies using unambiguous leisure activities that consumers commonly schedule (e.g., movies, a coffee break), they find that scheduling a leisure activity (vs. experiencing it impromptu) makes it feel less free-flowing and more work-like. Furthermore, scheduling diminishes utility from leisure activities, in terms of both excitement in anticipation of the activities and experienced enjoyment. Importantly, the authors find that maintaining the free-flowing nature of the activity by "roughly scheduling" (without prespecified times) eliminates this effect, thus indicating that the effect is driven by a detriment from scheduling rather than by a boost from spontaneity. The reported findings highlight an important opportunity for marketers to improve consumers' experiences and utility by leveraging scheduling behavior while also providing important implications for consumer well-being from leisure consumption.

Keywords: scheduling, calendars, time consumption, leisure consumption

Online Supplement: http://dx.doi.org/10.1509/jmr.14.0591

# The Calendar Mindset: Scheduling Takes the Fun Out and Puts the Work In

Consumers often feel pressed for time as they face conflicting goals that compete for this limited resource (Etkin, Evangelidis, and Aaker 2014). To better manage their time, consumers are often advised to schedule their various activities (Bond and Feather 1988; Kaufman-Scarborough and Lindquist 2003). Consumers seem to have embraced this recommendation, particularly with the advent of smartphones and tablets: 22% of online U.S. adults maintain a calendar on their mobile device (Paul 2011), accessing their calendar five or more times per day (Ahonen 2013). Furthermore, consumers are scheduling not only work activities, which are traditionally scheduled, but also their leisure activities (Robinson and Godbey 1997; Southerton 2003, 2006). A recent *Wall Street Journal* article (Sovich 2016) argues that scheduling is quickly becoming the default for leisure activities, such that restaurant reservations are made days in advance and even off-times for movies sell out with prepurchased tickets. Although there is reason to believe that scheduling may help consumers take part in more experiences, these changes in consumer behavior prompt an important consideration about the quality of each experience: How does scheduling influence the way leisure activities are construed, evaluated, and experienced?

In this article, we examine this question and demonstrate that scheduling a leisure activity (vs. experiencing it impromptu) can have unintended negative consequences. In particular, we suggest that, when scheduled, leisure activities start to feel like work, which decreases the utility consumers obtain in terms of both excitement in anticipation of the activity and experienced enjoyment. This is because scheduling temporally structures otherwise free-flowing leisure

<sup>\*</sup>Gabriela N. Tonietto is a doctoral candidate, Washington University in St. Louis (e-mail: toniettog@wustl.edu). Selin A. Malkoc is Assistant Professor of Marketing, The Ohio State University (e-mail: malkoc@fisher.osu.edu). This article is based on the first author's dissertation research, under the supervision of the second author. The authors thank Joseph Goodman for his comments on a previous draft of this manuscript. The authors also thank the CB Research Lab and participants of the University of Southern California Marketing Seminar Series, Marketing in Israel 13, Summer Decision Making Conference, Haring Symposium, and University of Chicago Marketing Seminar Series for their helpful feedback. Ravi Dhar served as associate editor for this article.

activities, making them feel more like work. As such, the decrease in anticipation and consumption utility can be remedied by "roughly scheduling" (i.e., without prespecified times) in a manner that does not temporally structure leisure activities, thus indicating that the effect is driven by a detriment from scheduling and not by a boost from spontaneity.

It is important to note that we do not suggest that consumers should throw away their calendars and stop scheduling activities. Prior research has established clear benefits for scheduling (Bond and Feather 1988; Milkman et al. 2012), which we do not dispute. We simply suggest that scheduling leisure activities may undermine these benefits and reduce consumers' utility. In doing so, we examine activities that are distinctly intended as leisure, relatively short (i.e., a few hours), and commonly scheduled by consumers (e.g., movies, ice cream with a friend, a coffee break) but that may vary in their level of social commitment, external demands, and frequency. We consistently demonstrate that scheduling diminishes utility in terms of both excitement in anticipation of the activity and experienced enjoyment.

Our findings make two main contributions. First, scheduling is increasingly prevalent and regularly influences consumer behavior. However, its potential downsides are not well understood. Our work is the first to establish the potential negative consequences of scheduling as well as the first to suggest possible remedies to these negative consequences. Thus, our findings have important implications for consumer well-being. Second, our work adds to the literature on how external factors might undermine intrinsic processes. Consumers often have high levels of intrinsic motivation to engage in leisure activities (Choi and Fishbach 2011); prior research has demonstrated that several factors, including external rewards (Deci 1971; Lepper, Greene, and Nisbett 1973) and personal quantification (Etkin 2016), can undermine such intrinsic motivation. We contribute to this literature by showing that scheduling-a behavior that is often self-imposed and well-intentioned-can undermine consumers' intrinsic motivation, making otherwise fun activities feel like work.

# TIME CONSUMPTION: IMPROMPTU VERSUS SCHEDULED LEISURE

Consumers often divide their time into two important categories: scheduled and impromptu. That is, they schedule several of their activities and also leave some "free" time open for more impromptu activities (Southerton 2003). However, relatively little is known about the associations consumers may have with these behaviors. Impromptu behavior, often associated with a lack of planning and preparation, is performed on the spur of the moment. Although lay intuition would suggest a positive association between spontaneity and fun, findings by Unger and Kernan (1983) challenge this notion. The authors argue and demonstrate that spontaneity is neither a necessary component of leisure nor a reliable predictor of satisfaction with leisure activities. Thus, the benefits of spontaneity are not perfectly clear, and there may even be potential detriments to impromptu behavior for consumers, who often perceive little spare time in the present (Jhang and Lynch 2015).

In contrast to behaving in an impromptu manner, scheduling involves planning beforehand; to schedule is to plan (an event) to take place at a particular time. Thus, scheduling temporally structures activities by specifically allocating time to designated activities. Specific time allocation (often with the use of schedules and calendars) allows for better accounting of one's time (Bond and Feather 1988; Kaufman-Scarborough and Lindquist 2003), aids in time management, and reduces anxiety associated with busyness (Kaufman-Scarborough and Lindquist 2003; Southerton 2003). Scheduling may also increase the likelihood of engaging in the target activity by serving as an imposed deadline or a precommitment tool (Kivetz and Simonson 2002; Milkman et al. 2012; Shu and Gneezy 2010; Wertenbroch 1998). Importantly, however, this line of research has predominately focused on the work domain and has not examined how scheduling might change the perception of and utility from leisure activities.

# Scheduling Leisure

Consumers engage in two broad types of activities: work and leisure. We suggest that this distinction is critical in understanding how consumers react to scheduling. Work activities are instrumental in nature and extrinsically motivated (Babin, Darden, and Griffin 1994; Laran and Janiszewski 2011), done out of obligation (Southerton and Tomlinson 2005), and perceived as effortful and chore-like (Choi and Fishbach 2011). These activities can include one's actual work (i.e., paid work) or one's chores that are instrumental in achieving personal goals (i.e., unpaid work), both of which are considered unavoidable or necessary (Southerton 2006; Southerton and Tomlinson 2005). Leisure activities, conversely, are those in which a person can do whatever (s)he wants as opposed to what (s)he must do; these are, by definition, enjoyable. Leisure activities are noninstrumental and intrinsically motivated (Babin, Darden, and Griffin 1994; Laran and Janiszewski 2011; Unger and Kernan 1983), viewed as nonproductive use of time (Veblen [1899] 1979, p. 43), and marked by the pursuit of pleasure and opportunities to have fun (Keinan and Kivetz 2011).

Importantly, consumers perceive and experience time differently when engaged in work versus leisure activities. In particular, consumers have a close association between subjective time progression and fun, exemplified by the common lay belief that "time flies when you're having fun" (Conti 2001; Gable and Poole 2012; Sackett et al. 2010). When time passes quickly, consumers tend to evaluate activities as more fun (Sackett et. al 2010); conversely, when activities are evaluated as more fun, time is perceived as passing more quickly (Gable and Poole 2012). Relatedly, consumers who are intrinsically (vs. extrinsically) motivated to complete a task do not pay as much attention to time, leading the activity to feel free-flowing (Conti 2001). This association is well-founded, as most leisure activities are flexible and unstructured, whereas work tasks often have prespecified start and/or completion times (Bird and Ross 1993; Conti 2000). Note that while not all leisure activities are inherently unstructured (e.g., a yoga class or a movie starts at a particular time), the perception of flexibility and flow exist for most intrinsically motivated leisure activities (Conti 2001). If consumers perceive leisure activities to be free-flowing, then we would expect scheduling, which imposes a temporal structure (i.e., specific times to start and/or complete the task), to make leisure activities feel less free-flowing and thus more work-like. As such, we predict a detriment from scheduling and not a boost from impromptu activities. This is consistent with recent work demonstrating that quantification of leisure activities can change how work-like they feel (Etkin 2016).

# When Leisure Becomes Work: The Effect on Utility

If scheduled leisure activities take on work-like qualities, this would likely have important downstream consequences. Research to date examining how work versus leisure activities are evaluated has established that work activities are associated with more negative experiences and evaluations than tasks performed for leisure (Choi and Fishbach 2011; Fishbach, Shah, and Kruglanski 2004; Higgins and Trope 1990; Laran and Janiszewski 2011). This research manipulated the framing (i.e., work or fun) of activities that cannot be clearly classified as work or leisure. For instance, reading can feel effortful, chore-like (Choi and Fishbach 2011), and depleting (Laran and Janiszewski 2011) if done to achieve a work goal (e.g., study), but it may be experienced as purely enjoyable if performed for leisure. If so, we would expect tasks that are construed as work-like to have diminished utility-both from anticipation as well as from actual consumption. However, unlike the prior research demonstrating how work versus leisure goals alter the experience of an ambiguous activity, we argue that a subtle manipulation (i.e., scheduling) of an unambiguous leisure activity can make the activity feel more like work and decrease utility. In doing so, we examine utility both from anticipation and from consumption. That is, we explore how excited (vs. more reluctant or resentful) consumers feel in anticipation of the activity as well as how much they enjoy the activity once it is actually consumed. We suggest that both sources of utility can be diminished for scheduled leisure.

Next, we report results from 13 studies using a host of domains in the lab and in the field. Together, our results provide support for the detrimental effect of scheduling on how leisure activities are anticipated and experienced. In particular, we demonstrate that (1) when leisure activities are scheduled, they take on qualities of work, leading to lower utility; (2) this effect is observed only when the scheduling is specific (vs. rough or absent); and (3) this effect is unique to leisure (vs. work) activities. Study 1 (and six additional appended studies) establishes that scheduling leisure activities leads them to take on work-like qualities, while Study 2 shows that even an impromptu activity can feel like work if it is temporally structured (i.e., partitioned into temporal segments). Study 3 establishes that the difference in utility for scheduled versus impromptu activities is driven by an imposition of temporal structure by demonstrating that roughly planning (without predetermined times) does not lead to the detrimental effect of scheduling for anticipation utility. Study 4 demonstrates that setting only a start time is enough structure to lead to the effect of scheduling, and Study 5 shows that scheduling uniquely affects leisure and not work activities. Finally, Studies 6a and 6b test the effect of scheduling on consumption utility. We find that scheduling to watch a fun video (vs. watching it impromptu) leads to greater work construal and decreases enjoyment (Study 6a) and that students enjoy a coffee break less if they specifically (vs. roughly) scheduled their break (Study 6b). Although each study isolates a single important aspect of our conceptual framework, they collectively support the proposition that scheduling leisure activities can infuse them with work-like qualities and decrease utility.

# STUDY 1: EFFECT OF SCHEDULING ON WORK QUALITIES

The purpose of Study 1 is to examine whether scheduled leisure activities take on work-like qualities. We first conducted a pretest to identify appropriate measures to gauge the qualities of work. We asked 52 undergraduate students to define work in their own words and provide examples of work activities. Almost half (44%) of participants defined work in terms of required effort/energy, 15% defined work as obligatory (e.g., "obligation," "must be done"), and 19% provided chores as an example of work. These findings are consistent with the literature (Choi and Fishbach 2011; Southerton and Tomlinson 2005; Warren 2011), which has consistently defined work as effortful, necessary, unavoidable, and chore-like. As such, in the ensuing studies we measure work by using a varying subset of the following items: "effortful," "chore," "obligation," "commitment," "constraining," and "work."

In the main experiment, we provided participants with a fictitious schedule for the week. Half imagined scheduling a leisure activity in advance, while the other half imagined engaging in the same activity impromptu. All participants indicated how they would feel about this activity immediately before it took place.

### Method and Procedure

Sixty-eight undergraduate students took part in this twocell (scheduled vs. impromptu) study. All participants were given a calendar filled with classes and extracurricular activities (see Appendix A) and were asked to imagine that this was their actual schedule for the week. Those in the scheduled condition first made plans to get frozen yogurt with a friend two days in advance and added the plans to their hypothetical calendar. Next, they completed a set of filler questions about their week. Finally, they were asked to imagine that it was now right before their get-together, and they rated the extent to which the activity felt like work ("commitment," "chore";  $\alpha = .61$ ) on nine-point scales (1 = "not at all," and 9 = "extremely"). Those in the impromptu condition imagined running into a friend and deciding to get frozen yogurt together immediately and rated the activity on the same items. In both conditions, the time and date for the activity was the same.

#### Results

As we predicted, those who scheduled getting frozen yogurt construed it more like work (M = 5.04) than those in the impromptu condition (M = 3.44; t(66) = 4.06, p < .01). Examining each of the measures independently led to the same conclusions: scheduling increased ratings of the commitment and chore items (M<sub>commitment</sub> = 6.06, M<sub>chore</sub> = 4.03) compared with experiencing it impromptu (M<sub>commitment</sub> = 4.03, t(66) = 4.22, p < .01; M<sub>chore</sub> = 2.85, t(66) = 2.48, p < .05). This study provides initial evidence that scheduling leads leisure activities to take on qualities of work.

#### Discussion and Studies 1b-1g

The finding from Study 1a, while compelling, leaves many questions unanswered. For instance, would the effect hold if the calendar provided were not as busy, or even if it were completely free? What if the event were recurring, had externally imposed timetables, or were a special occasion—would these factors eliminate the effect? Similarly, would the effect persist if the task were not initiated by someone else and instead were either self-initiated or even solitary? To rule out these alternatives, test for robustness, and better understand the conditions under which the effect unfolds, we conducted a series of strategic replications (for details, see Web Appendix A).

In Study 1b, we find that the effect of scheduling (vs. impromptu) leisure on work construal holds even when the calendar shown to participants is completely free  $(M_{scheduled} = 3.31, M_{impromptu} = 2.15; t(58) = 2.15, p < .05),$ suggesting that perceived busyness in the scheduling conditions does not drive the results. We further find that the effect is robust to activities that are recurring (i.e., take place every week, rather than once; Study 1c: M<sub>scheduled</sub> = 3.64,  $M_{impromptu} = 3.10$ ; t(107) = 2.16, p < .05); to activities with externally imposed timetables (i.e., intramural volleyball game; Study 1d: M<sub>scheduled</sub> = 4.11, M<sub>impromptu</sub> = 3.25; t(111) = 3.34, p < .01); and even to rare, special events (i.e., a special movie preview where the star actor and director sign autographs; Study 1e:  $M_{scheduled} = 3.47$ ,  $M_{impromptu} = 2.53$ ; t(73) = 2.35, p < .05), indicating that the results are not driven by degree of predictability and are robust to differences in the nature of the leisure task. Perhaps more importantly, the results were replicated when the activity was initiated by the participants (rather than their friends, as in our previous studies; Study 1f: M<sub>scheduled</sub> = 4.17,  $M_{impromptu} = 3.42$ ; t(74) = 2.11, p < .05) or was completed alone (Study 1g:  $M_{scheduled} = 3.67$ ,  $M_{impromptu} = 2.61$ ; t(77) = 2.57, p < .05). Thus, the effect of scheduling on the work construal of leisure activities is robust to the removal of social considerations, in rejection of the notion that the effect was simply due to an increased sense of social commitment or obligation. Taken together, we find that scheduling leisure increases work construal when the calendar is busy (1a) or not busy (1b), as well as when the leisure activity is recurring (1c), occurs on an external timetable (1d), is rather special (1e), is with a friend (1a), is solitary (1g), or is self- or friend-initiated (1f). These findings (see Table 1, Panel A) help establish that scheduling leisure activities leads such activities to take on qualities of work.

Note that in these studies we used a combination of items such as "effortful," "chore," "obligation," "commitment," "constraining," and "like work" to measure work construal. As such, one might wonder whether the effect of scheduling captures changes in obligation and commitment rather than work construal. To examine this alternative, we reconducted analyses without these two items where possible. For six out of seven studies, the results were statistically unaltered when these items were excluded (see Table 1, Panel B). Furthermore, using standardized scores of work construal (that excluded obligation and commitment items) to conduct a meta-analysis across the five two-cell design studies (1a, 1c, 1e, 1f, and 1g) results in a strong effect on this reduced set of measures ( $M_{scheduled} = .22, M_{impromptu} = -.21$ , p < .001). Taken together, we find that the effect of scheduling on work construal holds in the absence of these items, demonstrating that the work measure captures more than mere commitment.

Thus far, we have shown that scheduling leisure activities makes them feel more like work. We suggest that scheduling does so by imposing temporal structure. If this is the case, then imposing temporal structure even on impromptu leisure tasks should likewise increase work construal. We test this possibility next.

# STUDY 2: TEMPORALLY STRUCTURING IMPROMPTU LEISURE

Study 2 tests whether temporally structuring even an impromptu activity by partitioning it into temporal segments can lead the activity to feel more like work, even in the absence of a priori scheduling. If so, this would support the notion that temporal structure drives the effect of scheduling. Put differently, temporally structuring a leisure activity by either partitioning it into temporal segments or scheduling it should make it feel more like work by reducing perceived free-flow. To test whether our partitioning manipulation indeed influenced perceived free-flow, we asked 62 participants to rate a leisure activity that was (vs. was not) temporally structured on two seven-point scales (1 ="very rigid," and 7 = "very free-flowing"; 1 = "very restrictive," and 7 = "very flexible";  $\alpha = .93$ ). As we expected, once partitioned into temporal segments, the activity felt less free-flowing ( $M_{structured} = 3.28$ ,  $M_{control} = 4.56$ ; t(60) = 3.49, p < .01).

# Method and Procedure

Two hundred one Amazon Mechanical Turk (MTurk) workers participated in this 2 (scheduled vs. impromptu) × 2 (control vs. structured) between-subjects study. Participants were shown a weekend calendar (see Web Appendix B). Those in the scheduled conditions imagined that it was Saturday morning and that they decided to go to the forest preserve with friends on Sunday at 12:00 P.M. Those in the impromptu conditions imagined that it was 11:00 A.M. on Sunday morning and that they made the same plans to be acted on in one hour. Regardless of the assigned scheduling condition, all participants in the control conditions were told the start time for the activity (i.e., noon) and read that "there are several activities to take part in [at the forest preserve]. Based on availability, you will try to sign up for two activities and have a picnic in between." Those in the structured conditions received more information regarding the timing of various activities and were told that "there are several activities to take part in [at the forest preserve], some taking place from 12:30 P.M. to 2:00 P.M. and others from 3:00 P.M. to 4:30 P.M. Based on availability, you will try to sign up for an activity for each time slot once you get there, leaving 2:00 P.M. to 3:00 P.M. to have a picnic for an hour in between." Finally, we measured work construal by having participants rate the extent to which the activity felt like a chore, like work, and effortful to do ( $\alpha = .92$ ).

### Results and Discussion

A 2 (temporal structure) × 2 (scheduling) analysis of variance produced a significant main effect of temporal structure (F(1, 197) = 4.07, p < .05) such that, overall, structuring the experience led to greater work construal (M = 3.21) than not imposing such temporal structure (M = 2.70). There was no significant main effect of scheduling (F(1, 197) = 1.28, p > .10). Importantly, we found the predicted temporal structure by scheduling interaction (F(1, 197) = 4.19, p < .05; see Figure 1). In the control condition, scheduling the leisure activity led it to feel more work-like (M = 3.10) than when it was impromptu (M = 2.30; t(197) = 2.26, p < .05). No such difference emerged for those in the temporal structure

Table 1 SUMMARY OF RESULTS

Panel A: Results for Work Construal Measure											
Study	Work Measure	Scheduled	Impromptu	Start Time Scheduled	Roughly Scheduled	Activity	Additional Takeaways				
1a	Chore, commitment	5.04	3.44***			Frozen yogurt					
1b	Obligation, commitment	3.31	2.15**			Movie	Robustness check: free calendar				
1c	Chore, obligation, effortful	3.64	3.10**			Frozen yogurt	Robustness check: recurring activity				
1d	Chore, effortful, work	4.11	3.25***			Volleyball	Robustness check: structured activity				
1e	Chore, obligation	3.47	2.53**			Movie	Robustness check: special occasion				
1f	Chore, obligation, commitment	4.17	3.42**			Movie	Robustness check: self-initiated activity				
1g	Chore, obligation, commitment	3.67	2.61**			Movie	Robustness check: solitary activity				
2	Chore, effortful, work	Control: 3.10 Structured: 3.10	Control: 2.30** Structured: 3.33			Forest preserve	Moderator: temporal structure				
4	Chore, effortful, work	3.30	2.43***	2.95		Frisbee	Mediator: free-flow				
5	Chore, effortful,	Leisure: 3.75	Leisure: 2.67***			Leisure: test drive	Moderator: task type				
	obligation	Work: 4.90	Work: 4.57			Work: car wash	51				
6a	Work–fun	5.24	5.64**			Video					
		Panel B: Results f	or Work Construal N	Aeasure Exclu	ding Commitm	nent and Obligation <sup>a</sup>					
Study	Work Measure	Scheduled	Impromptu								
1a	Chore	4.03	2.85**								
1c	Chore, effortful	3.38	2.93*								
1e	Chore	3.18	2.14**								
1f	Chore	2.84	2.55								
1g	Chore	4.29	3.31**								
5	Chore, effortful	Leisure: 3.68	Leisure: 2.51**								
		Work: 4.63	Work: 4.18								
			Panel C: Res	ults for Utility	Measure						
Study	Utility Measure	Scheduled	Impromptu	Start Time Scheduled	Roughly Scheduled	Activity	Additional Takeaways				
3	Anticipation utility <sup>b</sup>	4.92	5.42***		5.28**	Frozen yogurt	Moderator: roughly schedulin				
	Anticipation utility <sup>b</sup>	4.51	5.20***	4.84		Frisbee	Mediators: free-flow, work				
4		Leisure: 4.97	Leisure: 5.60***			Leisure: test drive	Moderator: task type				
4 5	Anticipation utility <sup>D</sup>						inouclation able type				
4 5	Anticipation utility <sup>b</sup>	Work: 4.02	Work: 4.00			Work: car wash					
	Anticipation utility <sup>b</sup> Enjoyment	Work: 4.02 5.43	Work: 4.00 5.83**			Work: car wash Video					

\*p < .10.

\*\**p* < .05.

\*\*\*p < .01; Significance reported compared to scheduled condition.

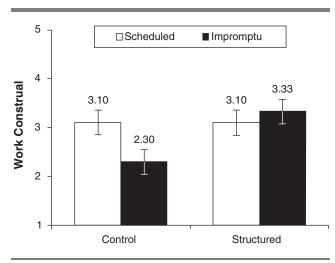
<sup>a</sup>This section only reports studies that originally used commitment and obligation items.

<sup>b</sup>Studies measuring anticipation utility used the following items: excited, thrilled, looking forward, reluctant (r), unenthusiastic (r), and resentful (r). Notes: (r) = reverse-scored.

condition ( $M_{scheduled} = 3.10$ ,  $M_{impromptu} = 3.33$ ; t(197) < 1). Importantly, we observed the effect of temporal structure for those participants in the impromptu (t(197) = 2.87, p < .01) conditions but not for those in the scheduled conditions (t(197) < 1). This effect is noteworthy, as it establishes that when the event is already scheduled and thus is temporally structured, additional structuring does not have a further effect. However, when an impromptu task is structured, it feels more like a scheduled task.

Study 2 demonstrates that temporal structuring underlies the effect of scheduling. In particular, we find that increasing the structure in how time will be allocated increases the work construal of leisure activities. Importantly, this additional structure moderates the effect of scheduling such that the impromptu condition becomes just as work-like as the scheduled condition under increased temporal structure. Thus, Study 2 demonstrates that imposing structure and reducing the free-flowing nature of leisure activities by either scheduling or temporally partitioning the activity leads to greater work construal.

If temporally structuring impromptu activities makes them feel like work, then we would expect unstructured



Notes: Error bars represent standard errors of the mean.

scheduling (i.e., without specifically allocating one's time) of leisure activities to behave similarly to impromptu leisure. That is, the negative effect of scheduling should occur only when the scheduling is relatively structured (with specific time allocation) and not when scheduling is rough (without specific time allocation). We examine this issue next while studying the consequences of scheduling for anticipation utility.

#### STUDY 3: SPECIFIC VERSUS ROUGH SCHEDULING

To test whether rough scheduling moderates the effect of scheduling, in Study 3 we introduced an additional condition in which participants roughly scheduled (i.e., without setting specific start or end times) a leisure activity ahead of time. We expected that only specific scheduling-and not just any plan-would decrease anticipation utility. As before, we first tested whether the rough scheduling manipulation indeed felt more free-flowing than specific scheduling. One hundred MTurk workers imagined seeing a movie with a friend that took place impromptu, after specific scheduling, or after rough scheduling. All participants rated the activity on the same freeflow measures as before. We found that specific scheduling (M = 3.83) led the activity to feel less free-flowing than when it was impromptu (M = 5.19, t(97) = -3.45, p < .01) or roughly scheduled (M = 4.76, t(97) = -2.44, p < .05). The impromptu and roughly scheduled conditions did not differ from each other (t(97) = 1.13, p > .10).

# Method and Procedure

One hundred sixty-three undergraduates took part in this study. We compared the anticipation utility of getting frozen yogurt with a friend when the outing was specifically scheduled (i.e., with set times), roughly scheduled (i.e., no set time), or impromptu. All participants were provided with a two-day calendar (see Web Appendix C) and were asked to imagine that it was their actual calendar for Monday and Tuesday. Participants in the specific scheduling condition imagined that it was Monday morning and that they made plans to get frozen yogurt with a friend at 4:00 P.M. Tuesday afternoon. Participants were then instructed to add the plan to their calendar. In the rough scheduling condition, participants imagined that it was Monday morning and that they made a plan with a friend to get frozen vogurt sometime during a gap of a few hours on their calendar between their last class and a meeting (for exact instructions, see Appendix B). They were then instructed to add this rough plan to their calendar (participants engaged in multiple behaviors including writing question marks, shading a large area of the calendar, and drawing arrows outside of the calendar). Thus, in both scheduling conditions (specific and rough), participants themselves marked their plans on their hypothetical calendar. Finally, participants in the impromptu condition imagined that as they left class Tuesday at 4:00 P.M., they ran into a friend and decided to get frozen yogurt immediately. Drawing on conceptualizations of anticipation utility from prior research (Loewenstein 1987; Rottenstreich and Hsee 2001), we used a series of anticipatory emotions to capture anticipation utility. Participants rated the extent to which they felt three negative ("resentful," "unenthusiastic," "reluctant") and three positive ("excited," "thrilled," "looking forward to it") emotions in anticipation of the activity.

# Results and Discussion

Because all the emotion items were highly reliable ( $\alpha = .78$ ), we combined them into an index measure by reverse coding the negative emotions. Using this index as the dependent variable, we found a significant effect of scheduling type (F(2, 160) = 5.07, p < .01). Planned contrasts showed that participants who specifically scheduled this get-together had lower anticipation utility (M = 4.92) compared with those who roughly scheduled it (M = 5.28; t(160) = -2.24, p < .05) or decided impromptu (M = 5.42; t(160) = -3.09, p < .01). Importantly, the rough scheduling and impromptu conditions did not differ (t(160) < 1).

Study 3 provides evidence that temporal structure drives the effect of scheduling on anticipation utility. We find that specifically scheduling a leisure activity had a unique dampening effect on the anticipation utility for the activity, such that participants were less excited in anticipation of a specifically scheduled leisure activity. However, when the scheduling is rough, without preallocated times, anticipation utility of the activity is as positive as when the activity is impromptu, and significantly greater than when it is specifically scheduled. Furthermore, this result shows that the lower utility following specific scheduling is not due to a boost from spontaneity but instead due to a detriment from scheduling, as neither the specific nor the rough scheduling conditions had a spontaneous component. Nonetheless, when consumers schedule their leisure in a specific manner, we find a reduction in utility even compared with this nonspontaneous rough scheduling condition. This effect occurs because roughly scheduling, unlike specific scheduling, maintains the perceived free-flowing nature of the activity, as our pretest confirms. However, we have not yet directly tested the role of perceived free-flow, an issue we address next.

# STUDY 4: SETTING START TIMES IS ENOUGH STRUCTURE

The purpose of Study 4 was twofold. First, we aimed to delve further into the aspects of scheduling that are vital to

increasing the temporal structure of the activity. Studies thus far have operationalized scheduling by setting both start and end times for the activity. Thus, it is not clear whether setting only start times would provide enough structure to find the negative effect of scheduling. We test this possibility by adding a third condition in which participants scheduled only a start time for the activity. Second, we also examined the role of perceived free-flow by including measures of free-flow in addition to measures of work construal and anticipation utility.

#### Method and Procedure

One hundred forty-one undergraduates took part in this three-cell (start and end times vs. start time only vs. impromptu) between-subjects study. All participants were given a three-day calendar (see Web Appendix D) and were asked to imagine that this was their actual schedule for the next few days. Participants in the start and end times scheduling condition imagined that it was Monday morning and that they made plans to play Frisbee with friends Wednesday afternoon from 4:30 to 6:30 P.M. We asked participants to add the plan to their calendar. In the start time-only scheduling condition, participants imagined that it was Monday morning and that they made plans to play Frisbee with friends Wednesday afternoon from 4:30 P.M. onward (without setting an end time for the activity-see Appendix C). They were then instructed to add this plan to their calendar (participants engaged in multiple behaviors, including blocking off time, shading the start time and drawing arrows, etc.). Finally, participants in the impromptu condition imagined that as they left class Wednesday at 4:00 P.M., they decided to play Frisbee with friends, quickly got ready, and headed there. First, participants indicated work construal of the activity ("effortful," "like a chore," "like work";  $\alpha = .90$ ), followed by anticipation utility using the same emotion items as in Study 3 ( $\alpha$  = .90). Finally, all participants rated the extent to which going from class to play Frisbee felt flexible and free-flowing ( $\alpha = .90$ ) on seven-point scales (1 = ``not at all,'' and 7 = ``to a great extent'').

#### Results

*Free-flowing.* We found a significant effect of scheduling condition (F(2, 138) = 5.83, p < .01). In particular, participants who scheduled both start and end times (M = 3.90) felt that the activity was less free-flowing compared with those who decided impromptu (M = 4.81; t(138) = -3.09, p < .01). Furthermore, those who scheduled only a start time (M = 3.99) also felt that the activity was less free-flowing compared with the impromptu condition (t(138) = -2.80, p < .01). The two scheduling conditions did not differ from each other (t(138) < 1). Thus, setting only a start time was enough to disrupt the perceived free-flow.

*Work construal.* We also found a significant effect of scheduling condition (F(2, 138) = 4.35, p < .05), whereby participants who scheduled both start and end times (M = 3.30) felt that the activity was more like work compared with those who decided impromptu (M = 2.43, t(138) = 2.93, p < .01). Furthermore, those who scheduled only a start time (M = 2.95) also felt that the activity was (marginally) more work-like compared with those in the impromptu condition (t(138) = 1.75, p < .10). The two scheduling conditions did not differ from each other (t(138) = -1.18, p > .10)

such that both led playing Frisbee to feel more like work compared with engaging in the activity impromptu.

Next, we examined whether changes in work construal operated through perceptions of free-flow using bootstrapped mediation with 5,000 samples. We first contrastcoded scheduling conditions into two contrasts (C1: start and end = -1, start only = -1, impromptu = 2; C2: start and end = 1, start only = -1, impromptu = 0). We found a significant indirect effect of the scheduling C1 contrast on work construal that operated through perceived free-flow (95% confidence interval [CI] = [-.183, -.040]; for full regression results, see Web Appendix D, Panel A). Thus, scheduling a start time or both start and end times led the activity to feel less free-flowing, which then increased the work construal of the activity.

Anticipation utility. Replicating Study 3, we found a significant effect of scheduling condition on anticipation utility (F(2, 138) = 4.01, p < .05). In particular, participants who scheduled both start and end times (M = 4.51) had lower anticipation utility than those who decided impromptu (M = 5.20; t(138) = -2.83, p < .01). Those who scheduled only a start time (M = 4.84) fell in between the other two conditions, though neither difference reached significance (impromptu: t(138) = -1.49, p > .10; start and end: t(138) = 1.34, p > .10).

Next, we examined whether the effect of scheduling on anticipation utility operated through work construal and perceptions of free-flow. A mediation analysis (Hayes 2012, Model 6, 5,000 bootstrapped samples) produced a significant indirect effect of scheduling C1 contrast through perceived free-flow and work construal (95% CI = [.022, .107]; Web Appendix D, Panel B). That is, scheduling reduced anticipation utility by disrupting the free-flowing nature of the leisure activity, which then led the activity to feel more like work.

#### Discussion

This study demonstrates that setting only a start time (compared with setting both start and end times) is enough structure to reduce the flexibility and free-flowing nature of leisure activities. We also found support for a serial mediation. That is, we demonstrate that either type of scheduling (vs. impromptu) leads the activity to feel less free-flowing, which then makes the activity feel more like work, which then reduces anticipation utility. Note that such a mediation model cannot differentiate whether work construal or utility come first in the causal framework. That is, it is also possible for utility to feed into work construal or work and utility to operate as simultaneous, rather than sequential, outcomes of scheduling. Although we cannot statistically isolate the specifics of the causal chain, our results nonetheless establish that scheduling (by setting a start time only or a start and an end time) chips away from the anticipation utility of the task, makes it feel like work, and decreases its perceived free-flow.

# STUDY 5: SCHEDULING WORK TASKS

If the structuring effect of scheduling only influences activities that tend to feel free-flowing, one should not expect scheduling to alter the construal and utility of work activities, which are already associated with temporal structure and are generally not perceived to be free-flowing (Conti 2000). We examine this issue by manipulating the type of task in addition to scheduling.

# Method and Procedure

Two hundred twenty-eight MTurk workers participated in this 2 (task: work vs. leisure) × 2 (scheduled vs. impromptu) between-subjects study. Participants were shown a weekend calendar similar to prior studies. Those in the scheduled conditions imagined that it was Saturday morning and that they decided to either get their car washed (work task) or test drive a car (leisure task) on Sunday at 3:30 P.M. Those in the impromptu conditions imagined that it was 3:00 P.M. on Sunday afternoon and they made the same plans to be acted on in half an hour. In addition to the emotion items ( $\alpha = .88$ ) used previously to assess anticipation utility, we added an additional overall evaluation measure (sevenpoint scale: 1 = "can't wait to go," and 7 = "wish I could cancel"). Finally, we measured work construal ("chore," "obligation," "effortful to do";  $\alpha = .80$ ).

#### Results

Work construal. Our analysis found a significant main effect of task type (F(1, 224) = 74.91, p < .01) such that the car wash (M = 4.73) was construed more like work than the test drive (M = 3.21), confirming that the task type manipulation was successful. There was also a significant main effect of scheduling (F(1, 224) = 16.27, p < .01), such that those who scheduled (M = 4.33) construed the task to be more like work than those who did not schedule (M =3.62). These main effects were qualified by the predicted task × scheduling interaction (F(1, 224) = 4.53, p < .05; see Figure 2, Panel A). That is, when considering a leisure task, those who scheduled construed the task as more work-like (M = 3.75) than those who engaged in the task impromptu (M = 2.67; t(224) = 4.36, p < .01). No such difference emerged for those who evaluated the work task ( $M_{scheduled} =$ 4.90;  $M_{impromptu} = 4.57$ ; t(224) = 1.35, p > .10).

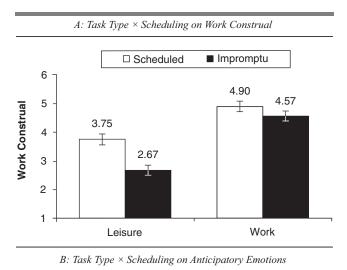
Anticipation utility. Examining the emotions index, we found a main effect of task type (F(1, 224) = 55.13, p < .01) such that those who considered the car wash (M = 4.01)expressed significantly lower anticipation utility than those who considered the test drive (M = 5.28). There was also a marginally significant main effect of scheduling (F(1,(M = 3.22, p = .07) such that those who scheduled (M = 4.49) felt less positively about the task than those who did not schedule (M = 4.80). These main effects were qualified by a (marginal) interaction (F(1, 224) = 2.96, p = .06; see Figure 2, Panel B). When considering a leisure task, those who scheduled (M = 4.97) had lower anticipation utility than those who engaged in the task impromptu (M = 5.60; t(224) = -2.60, p = .01). Furthermore, no such difference emerged for those who considered a work task (M<sub>scheduled</sub> = 4.02;  $M_{impromptu} = 4.00$ ; t(224) < 1).

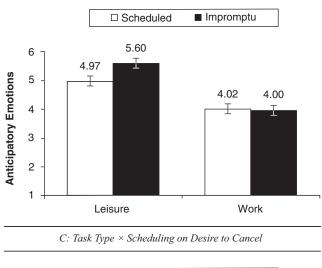
To examine whether the effect of scheduling on anticipation utility operated through work construal, we ran a moderated mediation analysis (5,000 samples). We found a significant indirect effect of the interaction on anticipatory emotions that operated through work construal (95% CI = [-.210, -.009]). Further analyses revealed that while work construal mediated the effect of scheduling on anticipation utility for the leisure activity (95% CI = [-.484, -.144]), this was not the case for the work task (95% CI = [-.213, .021]).

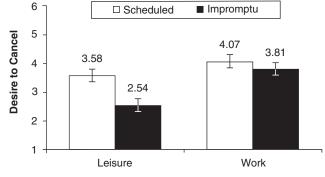
Next, looking at the overall evaluation, we found a significant main effect for task type (F(1, 224) = 15.29, p < .01)

929

# Figure 2 STUDY 5 RESULTS: TASK TYPE × SCHEDULING INTERACTION ON WORK CONSTRUAL AND ANTICIPATION UTILITY







Notes: Error bars represent standard errors of the mean.

such that desire to cancel was greater for the car wash (M = 3.94) than the test drive (M = 3.06). There was also a significant main effect of scheduling (F(1, 224) = 8.37, p < .01) such that those who scheduled (M = 3.83) expressed greater desire to cancel than those who did not schedule (M = 3.18).

These main effects were qualified by a (marginal) interaction (F(1, 224) = 2.96, p = .09; see Figure 2, Panel C). When considering a leisure task, those who scheduled (M = 3.58) expressed greater desire to cancel than those who engaged in the task impromptu (M = 2.54; t(224) = 3.26, p < .01). No such difference emerged for those who considered a work task (M<sub>scheduled</sub> = 4.07; M<sub>impromptu</sub> = 3.81; t(224) < 1).

Testing for moderated mediation (5,000 bootstrapped samples), we found a significant indirect effect of the interaction on desire to cancel that operated through work construal (95% CI = [.012, .260]). Further analyses showed that although work construal mediated the effect of scheduling on overall evaluation for the leisure activity (95% CI = [.180, .608]), this was not the case for the work task (95% CI = [-.024, .264]).

#### Discussion

In Study 5, we find that scheduling has a unique dampening effect on leisure activities. This is because scheduling only affects activities that are generally perceived as free-flowing (i.e., leisure). For tasks often associated with temporal structure and specific time allocation (e.g., work activities), scheduling does not alter their degree of work construal or the utility consumers gain in anticipation of the activities. In addition, we find that scheduling reduces anticipation utility through increased work construal, but only for leisure (vs. work) tasks. Taken together, our studies so far provide evidence for our proposed effect. Next, we demonstrate that the results are not limited to anticipation and indeed extend to consumption utility.

#### STUDIES 6A AND 6B: NONHYPOTHETICAL ACTIVITIES

All of the studies thus far have used a prospective, hypothetical design and measured anticipation utility. Thus, one may wonder whether the observed effect would extend to consumption utility. To address this possibility, we explore the enjoyment from consuming leisure activities that were specifically scheduled compared with impromptu (6a) or roughly scheduled (6b), finding that consumers who specifically schedule a leisure activity experience lower consumption enjoyment.

#### Study 6a

Method and procedure. We recruited 160 MTurk workers to watch and evaluate a ten-minute entertaining video and then randomly assigned them to either a scheduled or an impromptu condition. All participants were first provided with a list of ten popular (i.e., more than a million views on YouTube), entertaining videos (e.g., a clip from Whose *Line Is It Anyway?*) and were instructed to select the video that they thought would be the most fun and entertaining for them to watch. Given that the task was a "Human Intelligence Task" (HIT) posted for MTurk workers, to confirm that the task actually felt like a fun leisure activity, we ran a pretest with a separate group of 83 workers who were recruited using the same description and who chose to watch a video from the same list provided in the main study. After watching the video, participants rated the task on two scales assessing the degree to which this was a work/leisure task ("Having completed this HIT, was it more like work or leisure?" 1 = "more like work, and 7 = "more like leisure") and how fun this task was compared with other MTurk HITs

("Compared to other HITs, was this HIT more or less fun?" 1 = "much less fun," and 7 = "much more fun"). We found that participants overwhelmingly considered the task more like leisure (M = 6.12, t(82) = 14.74, p < .01, compared with scale midpoint) and much more fun than other MTurk HITs (M = 6.47, t(82) = 20.94, p < .01, compared with scale midpoint), indicating that this was indeed a fun leisure task for them.

Following the choice task, participants in the impromptu condition then watched their chosen video immediately and answered questions about their viewing experience. Those in the scheduled condition instead chose a specific day and time to watch their chosen video and added this plan to their calendar. To keep the time of day roughly constant between impromptu and scheduled conditions, participants scheduled (on their calendar or planner) the activity over the next couple of days during approximately the same time frame as the impromptu condition took place (between 9 A.M. and 12 P.M.). After participants indicated the day and time they scheduled to watch the video, they were asked to return at their determined time to do so. On the day each participant scheduled the task, we sent a reminder e-mail (akin to getting a reminder for scheduled tasks on one's computer or phone). Importantly, when participants in the scheduled condition returned to watch their chosen video, we used mild language to avoid evoking any negative associations, referring to the activity as their "chosen video" and the time as "set" rather than as "scheduled." At their scheduled time, participants watched their video and answered questions. To assess consumption utility, participants rated how much they enjoyed watching the video (1 = "not at all," and 7 ="extremely"). We measured work construal next by having participants rate the extent to which watching the video felt like work/fun (1 = "felt like work," and 7 = "felt like fun"). We also collected several control variables, including gender (male, female, other), employment status (unemployed, parttime, full-time, prefer not to answer), how many MTurk HITs they do per week, whether they regularly keep a calendar, and how long they watched their chosen video. We reasoned that controlling for these variables was crucial in our setting to understand the role of scheduling. It is important to control for the variable of keeping a regular calendar because our manipulation required the use of one. Similarly, it is important to control for employment status because the scheduled task can act as a distraction (and feel like work), and assessing participants' frequency of completing MTurk HITs enables us to control for their viewing this HIT as a leisure task. Finally, because the main dependent variable is enjoyment, we wanted to control for participants' actual watching behavior and used the time duration that they watched as a proxy. We used all collected covariates in all analyses for both work construal and consumption utility.

*Results.* Given the time delay in the scheduled condition, we anticipated attrition and thus overpopulated this condition (63 in impromptu and 97 in scheduled), and of the 160 participants recruited, 146 completed the full study. One hundred percent of the participants in the impromptu condition completed the study (as these participants immediately watched their chosen video), and 83 out of the 97 (85.57%) participants assigned to the scheduled condition completed the full study.

In line with the prior studies, we find that participants who scheduled to watch the video rated it as less fun/more like work (M = 5.24) than those who watched it impromptu (M = 5.64, t(136) = 2.04, p < .05; the model includes measured controls). Those who scheduled also had lower consumption utility and enjoyed their chosen video less (M = 5.43) than those who watched it impromptu (M = 5.83). t(136) = 2.02, p < .05). Furthermore, a bootstrapped mediation with 5,000 samples indicated that work construal mediated consumption utility (95% CI = [.008, .329]). These results are compelling because they indicate that even when participants are randomly assigned to schedule, scheduling makes a fun task feel more like work, decreasing its ultimate utility. Furthermore, this is a fairly strict test of our effect because the participants in the scheduled condition with the lowest predicted enjoyment would likely not bother to return to watch the video. One could wonder, however, whether the task assigned to participants was a pure leisure activity, as it was an HIT posted on MTurk. To address this issue, in Study 6b, we use an unambiguous leisure activity (i.e., a coffee break during finals) as the target activity. A further limitation of Study 6a was that half of the participants had to come back at a later time, whereas the other half completed the task immediately in order to make the impromptu condition truly impromptu. While several control variables potentially relevant to such selection issues were measured, in Study 6b, we keep this constant by inviting all participants to come back at a later time and manipulating whether the time is roughly scheduled (e.g., "anytime between 6:00 P.M. and 8:00 P.M.") or specifically scheduled (e.g., 6:45 P.M.).

#### Study 6b

Method and procedure. For Study 6b, we recruited 148 undergraduate students who were studying for finals. We set up a stand on campus where we provided free coffee and cookies to students to take a break. Between 90 minutes and 30 minutes prior to setting up the stand, we recruited participants by handing out tickets for free coffee and a cookie to students studying around campus. Half of the students were asked to pick a specific time to come by and take a break (specifically scheduled condition) and their chosen time was written on their ticket. The other half were given tickets that included a two-hour redemption window (e.g., from 6:00 P.M. to 8:00 P.M. [roughly scheduled condition]) and were told that they could come by any time during this window. Thus, for both conditions, students were given a ticket in advance. Then, during their time window or at their scheduled time, participants came by the stand and traded in their ticket for a free coffee and cookie. While they were taking their study break, we handed out a short survey assessing consumption utility by asking them how enjoyable they found the break (1 = "not at all," and 9 = "extremely").

*Results.* Of the 148 tickets distributed, 54 were redeemed, for an overall response rate of 36.49%. Because prior research has demonstrated that setting a specific time can increase completion rate (Milkman et al. 2012), we overpopulated the rough scheduling condition (81 in the roughly scheduled condition and 67 in the specifically scheduled condition). In line with this prior work, there was a significantly higher redemption rate in the specifically scheduled condition (33 out of 67 [49.3%]) compared with the roughly scheduled condition (21 out of 81 [25.9%];  $\chi^2 = 8.61$ , p < .01).

More importantly, and as we expected, we found that students who specifically scheduled their break (M = 6.48) had lower consumption utility than those who roughly scheduled it (M = 7.57; t(52) = 2.91, p < .01). Thus, in line with the results from a hypothetical scenario in Study 3, we find that specifically (vs. roughly) scheduling a leisure activity by setting a specific start time reduced the enjoyment for a leisure activity. Importantly, in both conditions, the coffee break was scheduled and considered in advance; however, specifically scheduling uniquely decreased consumption utility.

Note that this study suffers from a selection issue, as we were only able to survey those who chose to use their tickets. Although there is no reason to believe that the selfselection to utilize the ticket would differ systematically between the two conditions, it is possible for several factors (e.g., how long the students were studying before taking a break, how long after receiving a ticket was it before they took a break) to contribute to such an issue. Thus, we measured and examined these variables. We found no significant differences. For both conditions, students had been studying for approximately five hours before taking the break (t < 1) and took their break approximately oneand-a-half hours on average after receiving their ticket (t < 1). Importantly though, taken in conjunction with Study 6a, we provide clear evidence that scheduling can lead leisure to be less enjoyable by making it feel more like work.

# Discussion of Studies 6a and 6b

Together, Studies 6a and 6b demonstrate that the effect observed for hypothetical activities extends to the utility for experienced activities. We find that compared with being more impromptu (Study 6a) or roughly scheduling (Study 6b), participants who specifically scheduled the same leisure activity had lower consumption utility. While these studies together utilize random assignment to demonstrate that specific scheduling uniquely reduces experienced enjoyment, we further tested whether the negative effect of scheduling would present itself for those who personally chose to schedule a leisure activity. As such, 100 MTurk participants recalled the last movie they saw in theaters and indicated their enjoyment as well as whether they had specifically scheduled, roughly scheduled, or seen the movie impromptu. We find that those who specifically scheduled reported lower enjoyment (M = 7.12) compared with those who had roughly scheduled (M = 7.94; t(97) = 2.84, p <.01) or behaved impromptu (M = 8.13; t(97) = 3.20, p < 100.01), who did not differ (|t(97)| < 1). Of course, these results should be interpreted only in conjunction with the other empirical evidence, as they are correlational in nature and open to several alternative explanations, but they again provide more evidence consistent with our proposed effect. Taken together, our results consistently demonstrate that when consumers schedule their leisure, they may inadvertently reduce their utility for the activity, regardless of whether this scheduling is consciously chosen or incidentally applied.

#### GENERAL DISCUSSION

Across 13 studies, we examine how scheduling leisure activities affects the way these events are construed and experienced. We consistently find that scheduling a leisure activity can dampen anticipation and consumption utility by making it feel more like work. Study 1 demonstrates that a leisure activity, when scheduled, takes on qualities of work. A series of six strategic replications (Web Appendix A) further shows that the effect of scheduling leisure on work construal is robust to the busyness (vs. emptiness) of the calendar as well as whether the activity is recurring (vs. one time), occurring with (vs. without) externally imposed timetables, special (vs. mundane), initiated by a friend (vs. self), or solitary (vs. social). In Study 2, we find support for the role of temporal structure by showing that imposing structure by partitioning the activity into temporal segments behaves similarly to scheduling, making even impromptu activities feel like work.

In Study 3, we find that roughly scheduling a leisure activity (i.e., without setting specific times) does not have the dampening effect of specific scheduling. This finding supports the role of temporal structuring and establishes that our results are not driven by a boost from spontaneity. Study 4 builds on this result, showing that setting only a start time for the activity is enough structure to disrupt the perceived free-flow of the activity. Furthermore, Study 4 demonstrates that scheduling leads leisure to feel less freeflowing, which then increases work construal and decreases the utility for the activity. Study 5 shows that the negative effects of scheduling are unique to leisure activities, and do not occur for work activities.

Finally, Studies 6a and 6b demonstrate that these effects hold for experienced activities. Participants had lower consumption utility following specific scheduling, such that they enjoyed an entertaining video (6a) and a study break (6b) less than people who did not specifically schedule these activities. Taken together, the studies provide consistent evidence that scheduling, by imposing temporal structure on otherwise free-flowing leisure activities, leads such activities to feel more like work and decreases their utility. Our results are noteworthy, as they are the first to show that scheduling can have negative consequences for leisure activities. In doing so, we add to an increasing body of literature that shows that planning (a related concept to scheduling) is not uniformly beneficial and can at times undermine goal commitment (Dalton and Spiller 2012) and reduce self-control (Townsend and Liu 2012). Our findings extend this literature by showing that scheduling, by imposing temporal structure, can lead leisure activities to feel more like work and reduce utility.

#### Scheduling as Intertemporal Choice

*Resource slack.* Prior research on intertemporal preferences has shown that consumers perceive greater slack for time in the future than in the present (Zauberman and Lynch 2005). As such, consumers think that they will have time in the future and willingly commit to activities, which they later come to regret when they realize they actually do not have the time. Thus, one might wonder whether such changes in perceived time slack also underlie our demonstration of decreased utility due to prior scheduling. However, in the resource slack paradigm, the comparison is between the evaluations of the event at two points in time—when it is scheduled and right before it is experienced but we are interested in comparing evaluations of the activity right before it is experienced and vary whether the event was specifically scheduled or not. Furthermore, resource slack is based on the notion that people cannot predict how busy they will be in the future; however, we keep this constant by providing all participants with calendars that hold the busyness level in the relevant time frame constant. Finally, our findings are rooted in the notion that leisure activities that are scheduled are construed more like work—which is not a relevant concern for the resource slack theory. Taken together, our findings go beyond the existing theorization in this domain and shed light on unique consequences of scheduling.

Preference uncertainty. Relatedly, one could also wonder whether our findings are driven by uncertainty about future preferences, in line with research that demonstrates that consumers may be uncertain about (Simonson 1990) or mispredict (Loewenstein, O'Donoghue, and Rabin 2003; Loewenstein and Prelec 1992) their future consumption preferences. Thus, it is plausible that scheduling (vs. behaving impromptu), which at least implicitly involves prediction of future preferences, leaves room for such misprediction. We argue that the negative impact of scheduling leisure cannot be accounted for by misprediction alone. In particular, we find that with rough, rather than specific, scheduling, there is no detriment to consumers (Studies 3 and 6b). Both roughly and specifically scheduled plans are matched in their potential for realized preference uncertainty and/or misprediction, yet only specific scheduling (i.e., with set times) is detrimental for leisure activities. Thus, we argue that scheduling, and not merely the inability to predict future preferences, leads to negative downstream consequences for leisure activities.

Savoring. Much of the prior work on anticipation utility has focused on savoring, or the positive utility experienced while waiting for an event (Loewenstein 1987; Loewenstein and Prelec 1992). In particular, Loewenstein (1987) demonstrated that consumers value delayed consumption of a desirable experience, presumably because anticipating the experience is enjoyable. We contribute to and complement this prior research by showing that the way the future is described might have important implications. In particular, prior work in this domain has described the future (planned) consumption using imprecise terminology (e.g., "in one month"), which is akin to our rough scheduling conditions. We find that while rough descriptions and impromptu activities have similarly high anticipation utility, specifically scheduling has a detrimental effect. These findings establish an important boundary condition to the savoring literature.

#### Potential Boundary Conditions

Although our primary interest has been to identify a generalized phenomenon regarding scheduling leisure activities, this effect is likely not universal. Our studies demonstrate that this effect is robust to a variety of changes in the context and types of activities and to individual differences such as propensity to plan and trait-level reactance (reported in Web Appendix A). However, we caution against extrapolating our results to instances beyond the context we studied (i.e., commonly scheduled leisure tasks that are relatively short), because other factors may be relevant that we did not directly test.

Highly involved populations. How involved consumers are with their activities can vary across activities and

situations for a given person or across individuals for a given activity (Havitz and Mannell 2005; Richins, Bloch, and McQuarrie 1992). In the context of scheduling, it is possible that consumers who are highly involved with an activity (i.e., a very avid football fan watching the Super Bowl) might perceive this activity as free-flowing regardless of scheduling. Furthermore, it is even possible for such a fan to derive positive utility in anticipation of the activity when it is scheduled. Studying involvement in this domain might be a fruitful avenue for further research.

*Populations with low opportunity cost of time.* While not very common, certain individuals or populations (e.g., prisoners, retirees) might have very low opportunity cost of time. That is, their time might be characterized by almost no allocation to work or leisure activities. In the absence of things to do (productively or enjoyably), it is possible that a scheduled activity might be the source of savoring and not dread. Although this is a provocative prediction, such populations are rather difficult to access. As such, in the current article, we focused on more general populations. Nonetheless, examination of this issue would be an interesting extension.

Activities spanning multiple days. Throughout the studies, we used tasks that spanned no more than several hours. Thus, one may wonder whether scheduling may likewise affect longer tasks that span full (or multiple) days. Central to our theory is the idea that scheduling imposes temporal structure through partitioning time. In the case of activities that span multiple days (e.g., vacations), the temporal structure added by scheduling might not be readily salient. We therefore conjecture that activities spanning more than a day would likely not be subject to the effect of scheduling, as scheduling would not temporally structure or reduce the free-flowing nature of such extended activities. Although this is beyond the scope of the current article, it is a worthwhile possibility for further research.

Activities comprising multiple components. Throughout the studies, we predominately used activities that have a singular component (rather than multiple components, with the exception of Study 2). Thus, one may wonder whether scheduling individual components within an extended activity would show a detriment. When an activity has several components (e.g., an amusement park with multiple rides, a city with several tourist sites), scheduling may allow for better time management and may increase utility by enabling consumers to enjoy more of their desired activities (albeit perhaps with less enjoyment for each individual activity, as we propose). Thus, the net effect of scheduling may be positive because of the potential for greater efficiency or effectiveness in time use. This is an interesting extension, and further research could explore the net effect of scheduling on consumer happiness.

#### Potential Alternative Accounts

Across 13 studies, we provide consistent evidence that scheduling can lead leisure to feel more like work and decrease utility. In doing so, we have focused on demonstrating the robustness and boundaries to this effect. We use "work construal" as a broad construct that taps into how effortful and chore-like an activity feels after it is scheduled. Although we are able to provide some evidence against certain alternative accounts, we acknowledge that the effect of scheduling on utility is a complex and likely multiply determined phenomenon, which poses an opportunity for future studies to identify additional or more specific cognitive mechanisms. Next, we discuss the most prominent potential alternative mechanisms.

*Reactance*. Although we have suggested that scheduling leads to greater work construal and lessened utility for leisure activities by reducing perceived free-flow, one might wonder whether scheduling would also lead to reactance (Brehm 1966) by restricting personal freedom. We believe that reactance cannot account for our full set of results, because our effect persists when the task is personally planned or solitary (Studies 1f and 1g), and we find that roughly scheduling (which also restricts future time) does not follow the same pattern as specific scheduling (Studies 3 and 6b). Nonetheless, to test this account more directly, we ran an additional study (reported briefly in Web Appendix A as a posttest), measuring reactance using a subset of the Hong (1992) Psychological Reactance Scale and found that this did not moderate our effect. Thus, it is unlikely that reactance can fully account for our results.

*Construal.* It may also be possible that scheduling increases the focus on feasibility concerns regarding the leisure activity, thus making it feel more work-like and less enjoyable. To address this possibility, we ran an additional study in which participants considered a movie with a friend that was either scheduled or impromptu and rated the activity on free-flow. We also measured concreteness of their thinking following the scheduling manipulation using the behavioral identification scale (Vallacher and Wegner 1989). We found that whereas scheduled leisure was perceived as significantly less free-flowing (M = 4.18) than impromptu leisure (M = 4.96; p < .05), this did not affect concreteness in thinking (M<sub>scheduled</sub> = 7.18, M<sub>impromptu</sub> = 7.19; p > .10). As such, it is unlikely that construal would be the main driver of our results.

#### Implications

*Experiential marketing.* Because many leisure activities are experiential, our work also contributes to the growing literature on the effect of material versus experiential consumption on consumer happiness (Dunn, Gilbert, and Wilson 2011; Nicolao, Irwin, and Goodman 2009; Van Boven and Gilovich 2003). While much of this prior research has focused on the comparison between experiential and material purchases, we demonstrate a contextual factor—scheduling—that can influence the utility of experiences. Our findings suggest that happiness may depend not only on whether leisure is experienced but also on how the experiences are approached in terms of scheduling. Thus, it may not be enough to consider only *whether* to take part in positive experiences, such as leisure activities but also *how* to take part in such experiences.

Our results also have important implications for marketers, particularly in this domain. Experiential marketing is growing, with many firms offering full experiences (Schmitt 1999). For such efforts to foster enjoyable experiences to succeed in the long run, it is important for consumers to have favorable evaluations both in anticipation of and following consumption of the experiential product. Our results indicate that strategies that encourage/discourage consumers' scheduling behavior may affect such evaluations. That is, while programs that encourage consumer scheduling may increase short-term demand, it may be at the expense of long-term customer satisfaction as evidenced by the decreased utility for the activity. Experiential marketers, therefore, may benefit from policies that encourage more impromptu behavior—for example, through call-ahead seating rather than advanced reservations and by partnering with smartphone applications (e.g., YPlan, Tablelist; Sovich 2016) that help accommodate last-minute consumers by connecting them with available same-day tickets and reservations.

*Retailing.* Our results have important implications for retailers. Retailers often appeal to customers' desire to shop by introducing deals and sales. These promotional actions are generally scheduled and constrained (e.g., happy hours, sales limited to a few hours). Although constrained language

Appendix A STUDENT CALENDAR USED IN STUDY 1

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
8:00 A.M.							
8:30 a.m.							
9:00 a.m.							
9:30 a.m.							
10:00 а.м.							
10:30 а.м.			-				
11:00 а.м.	Class		Class		Class		Brunch at
11:30 а.м.		Class		Class			Bear's
12:00 р.м.	Lunch		Lunch		Lunch	Lunch	Den
12:30 р.м.	Break		Break		Break		
1:00 р.м.		Lunch		Lunch			Meeting
1:30 р.м.	Class	Break	Class	Break			
2:00 р.м.	****					Homework	
2:30 р.м.							
3:00 р.м.		Class		Class	Gym		
3:30 р.м.		<b>1</b>					Homework
4:00 p.m.			Gym				
4:30 р.м.							
5:00 р.м.	Meeting						
5:30 р.м.							
6:00 р.м.		Dinner	Dinner	Dinner	Dinner	Dinner	Dinner
6:30 р.м.	Dinner						
7:00 р.м.		1	Meeting				
7:30 р.м.		Meeting	-	Homework			
8:00 p.m.						Go out	Gym
8:30 p.m.						with	
9:00 p.m.						Friends	
9:30 р.м.	Homework	Homework	Homework	Go out			
10:00 р.м.				with	Go out		Homework
10:30 р.м.				Friends	with		
11:00 р.м.					Friends		

Notes: For the calendar stimuli used in other studies, please consult Web Appendices B and C.

may create a sense of scarcity, it may also have detrimental consequences for how enjoyable the shopping trip feels. In particular, our findings suggest that such specifically scheduled promotions may harm the shopping and consumption experience for leisure shoppers, making it feel more chore-like and less enjoyable. When aiming to maximize more want-based (vs. need-based) shopping, retailers may therefore benefit from using more rough language (e.g., "Sale all morning").

*Consumer welfare.* Our results have important implications for consumer well-being, contributing to prior literature demonstrating how time consumption influences happiness (Aaker, Rudd, and Mogilner 2011; Mogilner 2010). We show that scheduling can make leisure activities feel more like work and can dampen the anticipation and consumption utility of such activities. Thus, consumers may benefit from behaving more impromptu or by only roughly scheduling (e.g., without specified start and end times) when faced with opportunities for leisure.

Managerial implications. Our research has important implications for firms because it identifies an important way to increase both employee and customer satisfaction. In an attempt to promote a positive and balanced work environment, many firms organize nonwork events (e.g., happy hours, retreats) for their employees, giving them an opportunity to bond in a relaxed atmosphere. These activities, however, are often scheduled (e.g., Thursday 5-8 P.M.). Our work suggests that such an approach might backfire by making leisure engagements feel like work that has to be done (as opposed to something to be enjoyed). Fortunately, our research also provides a remedy: keep nonwork engagements impromptu or roughly scheduled. For example, impromptu social gatherings (proverbial "water cooler discussions") are crucial to employee satisfaction partly because they are not planned and are instead free-flowing. Increasing opportunities for employees to engage in nonscheduled leisure activities may lead to more employee engagement.

# APPENDIX B: INSTRUCTIONS USED IN STUDY 3

# Specific Scheduling Condition

That morning (Monday), while on your way to your first class you run into a friend you'd like to catch up with. You discuss grabbing froyo Tuesday and agree to meet up at 4:00 P.M.

Please add this plan to your calendar now.

# Rough Scheduling Condition

That morning (Monday), while on your way to your first class you run into a friend you'd like to catch up with. You discuss grabbing froyo sometime Tuesday before your meeting.

Please add this rough plan to your calendar now.

# APPENDIX C: INSTRUCTIONS USED IN STUDY 4

#### Start and End Scheduling Condition

That morning (Monday), you see an e-mail thread from a couple days ago. A few of your friends are going to get together to play Frisbee on Mudd Field Wednesday from 4:30–6:30 P.M. You're free at that time and decide to join.

Please add this plan to your calendar now.

#### Start Time Only Scheduling Condition

That morning (Monday), you see an e-mail thread from a couple days ago. A few of your friends are going to get together to play Frisbee on Mudd Field Wednesday from 4:30 P.M. onward. You're free at that time and decide to join.

Please add this plan to your calendar now.

#### REFERENCES

- Aaker, Jennifer L., Melanie Rudd, and Cassie Mogilner (2011), "If Money Does Not Make You Happy, Consider Time," *Journal of Consumer Psychology*, 21 (August), 126–30.
- Ahonen, Tomi (2013), "Around the World with Mobile Global Insights and Regional Relevance of Mobile Marketing," (May 9), [available at http://www.slideshare.net/vivastream/around-theworld-with-mobile-global-insights-and-regional-relevance-ofmobile-marketing-20847876].
- Babin, Barry J., William R. Darden, and Mitch Griffin (1994), "Work and/or Fun: Measuring Hedonic and Utilitarian Shopping Value," *Journal of Consumer Research*, 20 (3), 644–56.
- Bird, Chloe E. and Catherine E. Ross (1993), "Houseworkers and Paid Workers: Qualities of the Work and Effects on Personal Control," *Journal of Marriage and the Family*, 35 (4), 913–25.
- Bond, Michael J. and N.T. Feather (1988), "Some Correlates of Structure and Purpose in the Use of Time," *Journal of Personality* and Social Psychology, 55 (2), 321–29.
- Brehm, Jack W. (1966), A Theory of Psychological Reactance. New York: Academic Press.
- Choi, Jinhee and Ayelet Fishbach (2011), "Choice as an End Versus a Means," *Journal of Marketing Research*, 48 (June), 544–54.
- Conti, Regina (2000), "Competing Demands and Complimentary Motives: Procrastination on Intrinsically and Extrinsically Motivated Summer Projects," *Journal of Social Behavior and Personality*, 4 (5), 189–211.

— (2001), "Time Flies: Investigating the Connection Between Intrinsic Motivation and the Experience of Time," *Journal of Personality*, 69 (1), 1–26.

- Dalton, Amy N. and Stephen A. Spiller (2012), "Too Much of a Good Thing: The Benefits of Implementation Intentions Depend on the Number of Goals," *Journal of Consumer Research*, 39 (3), 600–14.
- Deci, Edward (1971), "Effects of Externally Mediated Rewards on Intrinsic Motivation," *Journal of Personality and Social Psychology*, 18 (1), 105–15.
- Dunn, Elizabeth W., Daniel T. Gilbert, and Timothy D. Wilson (2011), "If Money Doesn't Make You Happy, Then You Probably Aren't Spending It Right," *Journal of Consumer Psychol*ogy, 21 (2), 115–25.
- Etkin, Jordan (2016), "The Hidden Cost of Personal Quantification," *Journal of Consumer Research*, (published electronically February 16), [DOI:10.1093/jcr/ucv095].
- , Ionnis Evangelidis, and Jennifer Aaker (2014), "Pressed for Time? Goal Conflict Shapes How Time is Perceived, Spent, and Valued," *Journal of Marketing Research*, 52 (June), 394–406.
- Fishbach, Ayelet, James Y. Shah, and Arie W. Kruglanski (2004), "Emotional Transfer in Goal Systems," *Journal of Experimental Social Psychology*, 40 (6), 723–38.
- Gable, Phillip A. and Bryan D. Poole (2012), "Time Flies When You're Having Approach-Motivated Fun: Effects of Motivational Intensity on Time Perception," *Psychological Science*, 14 (8), 879–86.
- Havitz, Mark E. and Roger C. Mannell (2005), "Enduring Involvement, Situational Involvement, and Flow in Leisure and Non-Leisure Activities," *Journal of Leisure Research*, 37 (Spring), 152–77.

- Hayes, A.F. (2012), "PROCESS: A Versatile Computational Tool for Observed Variable Mediation, Moderation, and Conditional Process Modeling," white paper, (accessed September 14, 2016), [available at http://www.afhayes.com/ public/process2012.pdf].
- Higgins, E. Tory and Yaacov Trope (1990), "Activity Engagement Theory: Implications of Multiply Identifiable Input for Intrinsic Motivation," in *Handbook of Motivation and Cognition: Foundations of Social Behavior*, Vol. 2, E. Tory Higgins and Richard M. Sorrentino, eds. New York: Guilford Press, 229–64.
- Hong, Sung-Mook (1992), "Hong's Psychological Reactance Scale: A Further Factor Analytic Validation," *Psychological Reports*, 70 (April), 512–14.
- Jhang, Ji Hoon and John G. Lynch Jr. (2015), "Pardon the Interruption: Goal Proximity, Perceived Spare Time, and Impatience," *Journal of Consumer Research*, 41 (5), 1267–83.
- Kaufman-Scarborough, Carol and Jay D. Lindquist (2003), "Understanding the Experience of Time Scarcity Linking Consumer Time-Personality and Marketplace Behavior," *Time & Society*, 12 (2/3), 349–70.
- Keinan, Anat and Ran Kivetz (2011), "Productivity Orientation and the Consumption of Collectable Experiences," *Journal of Consumer Research*, 37 (6), 935–50.
- Kivetz, Ran and Itamar Simonson (2002), "Self-Control for the Righteous: Toward a Theory of Precommitment to Indulgence," *Journal of Consumer Research*, 29 (2), 199–217.
- Laran, Juliano and Chris Janiszewski (2011), "Work or Fun? How Task Construal and Completion Influence Regulatory Behavior," *Journal of Consumer Research*, 37 (6), 967–83.
- Lepper, Mark R., David Greene, and Richard E. Nisbett (1973), "Undermining Children's Intrinsic Interest with Extrinsic Rewards: A Test of 'Overjustification' Hypothesis," *Journal of Personality* and Social Psychology, 28 (1), 129–37.
- Loewenstein, George (1987), "Anticipation and the Valuation of Delayed Consumption," *Economic Journal*, 97 (387), 666–84.
  —, Ted O'Donoghue, and Matthew Rabin (2003), "Projection Bias in Predicting Future Utility," *Quarterly Journal of Economics*, 118 (4), 1209–48.
- Milkman, Katherine L., John Beshears, James J. Choi, David Laibson, and Brigitte C. Madrian (2012), "Following Through on Good Intentions: The Power of Planning Prompts," NBER Working Paper No. 17995, National Bureau of Economic Research.
- Mogilner, Cassie (2010), "The Pursuit of Happiness: Time, Money, and Social Connection," *Psychological Science*, 21 (9), 1348–54.
- Nicolao, Leonardo, Julie R. Irwin, and Joseph K. Goodman (2009), "Happiness for Sale: Do Experiential Purchases Make Consumers Happier than Material Purchases?" *Journal of Consumer Research*, 36 (2), 188–98.
- Paul, Pamela (2011), "A Paper Calendar? It's 2011," *The New York Times*, (July 29), [available at http://www.nytimes.com/2011/07/31/fashion/calendar-wars-pit-electronics-against-paper.html].
- Richins, Marsha L., Peter H. Bloch, and Edward F. McQuarrie (1992), "How Enduring and Situational Involvement Combine to

Create Involvement Responses," *Journal of Consumer Psychology*, 1 (2), 143–53.

- Robinson, John P. and Geoffrey Godbey (1997), *Time for Life: The Surprising Way Americans Use Their Time*. University Park: Pennsylvania State University Press.
- Rottenstreich, Yuval and Christopher K. Hsee (2001), "Money, Kisses, and Electric Shocks: On the Affective Psychology of Risk," *Psychological Science*, 12 (3), 185–90.
- Sackett, Aaron M., Tom Meyvis, Leif D. Nelson, Benjamin A. Converse, and Anna L. Sackett (2010), "You're Having Fun When Time Flies: The Hedonic Consequences of Subjective Time Progression," *Psychological Science*, 21 (1), 111–17.
- Schmitt, Bernd (1999), "Experiential Marketing," Journal of Marketing Management, 15, 53–67.
- Shu, Suzanne B. and Ayelet Gneezy (2010), "Procrastination of Enjoyable Experiences," *Journal of Marketing Research*, 47 (October), 933–44.
- Simonson, Itamar (1990), "The Effect of Purchase Quantity and Timing on Variety-Seeking Behavior," *Journal of Marketing Research*, 27 (May), 150–62.
- Southerton, Dale (2003), "Squeezing Time': Allocating Practices, Coordinating Networks and Scheduling Society," *Time & Society*, 12 (1), 5–25.
- (2006), "Analysing the Temporal Organization of Daily Life: Social Constraints, Practices and Their Allocation," *Sociology*, 40 (3), 435–54.
- and Mark Tomlinson (2005), "Pressed for Time': The Differential Impacts of a 'Time Squeeze," *Sociological Review*, 53 (2), 215–39.
- Sovich, Nina (2016), "The Age of Organized Spontaneity," *The Wall Street Journal*, (February 2), [available at http://www.wsj.com/articles/the-age-of-organized-spontaneity-1454441255].
- Townsend, Claudia and Wendy Liu (2012), "Is Planning Good for You? The Differential Impact of Planning on Self-Regulation," *Journal of Consumer Research*, 39 (4), 688–703.
- Unger, Lynette S. and Jerome B. Kernan (1983), "On the Meaning of Leisure: An Investigation of Some Determinants of the Subjective Experience," *Journal of Consumer Research*, 9 (4), 381–92.
- Vallacher, Robin R. and Daniel M. Wegner (1989), "Levels of Personal Agency: Individual Variation in Action Identification," *Journal of Personality and Social Psychology*, 57 (4), 660–71.
- Van Boven, Leaf and Thomas Gilovich (2003), "To Do or to Have? That Is the Question," *Journal of Personality and Social Psychology*, 85 (6), 1193–202.
- Veblen, Thorstein ([1899] 1979), *The Theory of the Leisure Classes*. New York: Penguin.
- Warren, Tracey (2011), "Researching the Gender Division of Unpaid Domestic Work: Practices, Relationships, Negotiations, and Meanings," *Sociological Review*, 59 (1), 129–48.
- Wertenbroch, Klaus (1998), "Consumption Self-Control by Rationing Purchase Quantities of Virtue and Vice," *Marketing Science*, 17 (4), 317–37.
- Zauberman, Gal and John G. Lynch Jr. (2005), "Resource Slack and Propensity to Discount Delayed Investments of Time Versus Money," *Journal of Experimental Psychology: General*, 134 (1), 23.