

When More Time to Choose is Not Good

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Abstract

This paper investigates how time availability affects the relationship between Need for Cognitive Closure (NCC) and Choice-Process Satisfaction (CPS). We argue that the “time as resource” concept does not apply when prevention-focused consumers process non-alignable information. In this challenging decision situation, having more time to decide is unfavorable to CPS. A 2x2x2 between-subject experiment was conducted with 1,061 respondents to investigate the effect of NCC on CPS. The eight different scenarios (Table 2 refers) vary in consumer regulatory focus, information alignability, and time availability. The focus is on the role of time availability affecting the relationship between NCC and CPS. Regression analysis was conducted on each of the eight scenarios. The results show that the relationship between NCC and CPS is only significant when prevention-focused consumers process non-alignable information. The findings support the argument that the “time as resource” concept does not always apply. In these situations, NCC positively (negatively) affects CPS when time is limited (abundant). This paper challenges the long-held “time as resource” belief, and argues that having time abundance in challenging decision situations is unfavorable to CPS. Managers, especially retailers, can apply the findings to design decision-making environments such as providing time limits for complex choice decisions. This research is without limitation. The current research was conducted in an experimental environment. Future research should explore the real retail environment.

Keywords: Time as Resource, Need for Cognitive Closure, Choice-Process Satisfaction, Decision Situation, Prevention Focus

Introduction

Is the “time as resource” concept always true? Is having more time always perceived as favorable? This article argues that the “time as resource” concept is not applicable to consumers in certain situations. Generally, when consumers have time abundance, they have greater time resource and can process information at their own pace. This should positively impact the relationship between Need for Cognitive Closure (NCC) and Choice-Process Satisfaction (CPS); with time abundance, consumers should be satisfied with the choice process. However, our research results support that this concept is not applicable when prevention-focused consumers process non-alignable information.

The consumer choice decision is made in certain situations. Sometimes, the decision process is satisfactory but less so at other times. NCC is introduced to explain CPS because it may be the variable that helps to explain how consumers process information and perceive the decision situation (Mikulincer, 1997). The different levels of NCC concern the consumers' need whether they would like to have a definite answer, or whether they prefer to continue information gathering and the decision-making process (Kruglanski & Webster, 1996). NCC may or may not affect CPS depending on the situation. Although this paper does not hypothesize the situations when NCC affects CPS, an experiment was conducted that investigates this point.

In the context where NCC affects CPS, there could be a phenomenon that consumers may not prefer more time in some choice-decision situations. This raises interesting questions for scholars in consumer research. The highlight of this paper is to answer the question of how time availability affects the relationship between NCC and CPS.

We extended the knowledge frontier by discovering the situations that activate NCC to significantly impact CPS. We also challenged the long-held “time as resource” belief regarding the situations when this concept applies and does not apply. That is, the different levels of time availability affect the relationship of NCC and CPS in opposite ways.

Apart from contributing to consumer research theories, these findings benefit marketers, especially retailers, in managing appropriate choice process situations to increase customer satisfaction.

Literature Review

The Importance of Choice-Process Satisfaction and the Incorporation of Need for Cognitive Closure

Choice process can be satisfactory or not satisfactory. The satisfaction that consumers have with the process, not the outcome of what is chosen, is called “choice-process satisfaction” (CPS) (Zhang & Fitzsimons, 1999). CPS is very important because it directly affects overall satisfaction (Wicks & Chin, 2008; Zhang & Fitzsimons, 1999), and may impact future sales more than choice-outcome satisfaction (Tanner, 1996). In addition, it also leads to re-patronage at the same store (Zhang & Fitzsimons, 1999) and enhances positive word of mouth (Baker et al., 1994). Despite the importance of CPS, research in this area is understudied. In addition, approaching this topic from an information-processing perspective may better explain CPS. Mikulincer (1997) suggested that NCC could underlie the mechanism in information processing.

NCC is “individuals’ desire for a firm answer to a question and an aversion toward ambiguity” (Kruglanski & Webster, 1996:264). This article seeks to extend the prior literature by incorporating NCC to explain CPS. This is because whether or not consumers want to stop thinking about the choice should impact their information-processing and CPA.

Need for Cognitive Closure

Need for Cognitive Closure (NCC) originated from Kruglanski's theory of lay epistemics (Kruglanski, 1980). NCC is a multi-dimensional construct originally comprising five dimensions. The five dimensions are: 1) order and structure; 2) predictability; 3) decisiveness; 4) ambiguity and 5) closed mind (Webster & Kruglanski, 1994). It was discussed that the decisiveness dimension does not reflect NCC because it measures the ability to decide, not the need to move towards cognitive closure (Roets & Hiel, 2011). The statistical results confirmed this point, since the decisive dimension does not have a significant relationship with the other four dimensions (Mannetti et al., 2002; Neuberg et al., 1997).

The essence of NCC is whether consumers see the “benefit” or the “cost” of cognitive closure. If they perceive the benefit from closure, they will want to “seize” and “freeze” the answer once they get it. In other words, they want to stop the thinking activity. On the other hand, if they perceive the cost from closure, they will want to find out more or keep thinking/considering (Kruglanski & Webster, 1996; Mannetti et al., 2002). Factors that lead consumers to perceive the benefit from closure include fatigue, illness, time limits, noise and task dullness(Mannetti et al., 2002; Webster & Kruglanski, 1997). On the other hand, the situations that make consumers want to avoid closure are concerns about accuracy, being accountable for the accuracy (Mannetti et

al., 2002; Webster & Kruglanski, 1997), and wanting to keep their options open (Webster & Kruglanski, 1997).

How consumers perceive the “benefit” or the “cost” of cognitive closure is important and should be incorporated in order to explain CPS. This is because whether consumers want to stop processing information, or consumers want to keep processing information, should affect the level of CPS.

The Decision Situation

The relationship between NCC and CPS occurs in decision situations. There could be situations that facilitate NCC to affect CPS, while there also could be situations that do not. Consumer information processing, feeling and satisfaction are part of consumer behavior. Consumer behavior is a function of two main factors: the consumer factor and the cognitive-task factor (Paas et al., 1994; Simon, 1995).

The consumer factor concerns the characteristics that affect how consumers perceive the situation and make decisions. The consumer factor in this research is regulatory focus. Regulatory focus is an inclination of how consumers regulate themselves in response to external stimuli (Crowe & Higgins, 1997; Pham & Higgins, 2005). This includes how they filter and process information. There are two types of regulatory focus: promotion focus and prevention focus. Promotion-focused consumers have “ideal” as a self-guide. They focus on hopes, wishes and aspirations (E. T. Higgins, 1997; E. T. Higgins et al., 1997). They are concerned with the absence/presence of the desired end state (Crowe & Higgins, 1997). They want to assure a hit rather than an error of omission (Crowe & Higgins, 1997; Pham & Avnet, 2004). On the other hand, prevention-focused consumers have “oughts” as a self-guide, which relate to “people’s duties, obligations, and responsibilities (Pham & Avnet 2004:503). They focus on obligations and safety (E. T. Higgins, 1997; E. T. Higgins et al., 1997). They are concerned with the absence/presence of the undesired end-state (Crowe & Higgins, 1997). They want to assure a correct rejection rather than an error of incorrect acceptance (Crowe & Higgins, 1997; Pham & Avnet, 2004). Given these characteristics, it is not surprising that regulatory focus influences cognition (Chou, 2012; Yuan & Namasivayam, 2012).

Regarding the cognitive task factor, we followed the prior framework of “focus and context” (Helson, 1964). The focus aspect in this paper is the alignability of information, which concerns the ease/complexity of information. This is relevant to the decision situation because it is the message that consumers process. Alignable information differs in the same dimension, while non-alignable information differs in different dimensions (Gourville & Soman, 2005). As a result, alignable information is easier (Boatwright & Nunes, 2001; R. Dhar, 1997; Zhang & Fitzsimons, 1999) and faster (Zhang & Fitzsimons, 1999) to process compared to non-alignable information. Alignability of information is important because its essence - the ease/complexity of

the information - should directly influence the level of consumer cognitive effort. It was also found that alignability relates to NCC (Zhang et al., 2002).

The context aspect in this paper is time availability. It refers to how much time consumers have at their disposal for a particular cognitive task. The time factor is increasingly important as consumers are becoming more time-pressured and often have to make decisions with limited time. Time availability is categorized into three levels: a) time abundance; moderate time limit; c) severe time limit (Suri & Monroe, 2003). When time is abundant, consumers do not have to hurry, do not feel pressured, and can use as much time as needed (Ravi Dhar & Nowlis, 1999; Ravi Dhar et al., 2000; Edland, 1994; M. Higgins, 1999; Nowlis, 1995; Svenson et al., 1990). In moderate and severe time limit situations, consumers have to accelerate their information processing (Chien-Huang & Wu, 2005). They are likely to feel rushed in both situations (Ravi Dhar et al., 2000). Consumers in severe time-limit situations are likely to feel stressed. One main difference between the moderate and severe time-limits concerns consumers in the moderate time-limit who will not change their information-processing method. However, consumers in the severe time-limit case may change their information-processing method, to replace the central-route information processing with the peripheral route (Payne et al., 1988; Svenson et al., 1990). Therefore, research requiring consumers to process information via central-route processing, such as this research, should not use the severe time-limit as it could distort the results.

How Would NCC Affect CPS?

The characteristics of consumers, and the type of information they process, should influence the relationship between NCC and CPS.

When consumers feel inclined to follow rules, do what they "should" do and try their best to meet obligations, they could be placed in a difficult situation when faced with a complex or difficult information-processing task. They may not want to process the difficult information, but will still do so because they need to abide by obligations. This internal conflict should influence whether consumers want to stop or continue the cognitive task, and whether they will be satisfied with this difficult process. From the above discussion, NCC should affect CPS when prevention-focused consumers process non-alignable information. In addition, time availability should moderate the relationship between NCC and CPS.

In this paper, we do not hypothesize the decision situations when NCC affects CPS. However, the experiment design covers this topic.

Is More Time Good or Bad?

Time is generally viewed as a resource. Time is considered valuable (Gonzalez, 1997) and is reflected in the term “time is money” (Jacoby et al., 1976). Although time is an intangible concept, it is finite and scarce (Moore, 1963). Time can be exchanged for money (Jacoby et al., 1976), saved (Gonzalez, 1997), spent (Jacoby et al., 1976), bought (Garretson & Mauser, 1963), and allocated (Gonzalez, 1997). In addition, time can be measured as the opportunity foregone to do other activities or to make money (Schary, 1971). This is in line with the time-cost concept (Siemens, 1971).

Even though time is widely considered to be a valuable resource, we argue that there are situations when more time is not favorable. Time is decontextualized (Adam, 1998). This means that the perception of time depends on the situation; when situations are different, time is perceived differently. In this paper, the role of time availability is highlighted in the situation when prevention-focused consumers process non-alignable information. Because “not all times are equal” (Adam, 1998: 21), the time when prevention-focused consumers process non-alignable information should be perceived more like work than leisure. As a result, having more time in this situation should not be favorable. When consumers have too much time, they tend to think too much (Chien-Huang & Wu, 2005). Jacoby and his colleagues proposed that more time required for a choice decision would reduce the process satisfaction (Jacoby et al., 1976). This leads to the first hypothesis as follows:

H1: *In the decision situation when prevention-focused consumers process non-alignable information, NCC will negatively affect CPS when time availability is abundant.*

Researchers found that having a time limit or having less time does not negatively affect the choice process (Ackerman & Gross, 2003) and even leads to a higher satisfaction compared to the group with more time (Zuzanek, 1998). When consumers have a moderate time limit, they work harder, they choose to process important information (Wallsten & Barton, 1982), and they process information faster (Chu & Spires, 2001; Payne et al., 1988). Ackerman and Gross (2003) also found that consumers with a time limit perform better.

Having a time limit is like having a deadline or an important time marker (McGrath & O'Connor, 1996). Having a deadline helps consumers to be more aware of the task, the time limit, and the work completion requirement within the time limit (Karau & Kelly, 1992; Waller et al., 2002), as well as engaging them to the decision-making and to work effectively (Parks & Cowlin, 1995). Numerous researchers, including Ho and colleagues (Ho et al., 2010),

recommend that people should set themselves a time limit in order to progress in their work and complete their task on time.

For prevention-focused consumers, a time limit serves as a regulation and control (Adam, 1998) and it should be prevalent in their planning since it provides them with certainty and a structure in life. At a minimum, they will know when their task will be completed. This leads to the second hypothesis, as follows:

H2: *In the decision situation when prevention-focused consumers process non-alignable information, NCC will positively affect CPS when time availability is moderately limited.*

Methodology

An experiment with a 2 (promotion/prevention regulatory focus) x 2 (alignable/non-alignable information) x 2 (time abundance/time limit) between-subject design was employed to test the hypotheses.

This study requires respondents to be highly involved in the cognitive task so that they will use the central route in their information processing. At the same time, they need to be unfamiliar with the task content in order not to rely on long-term memory. With these considerations in mind, the researchers presented career choices to undergraduate students, selected for the following reasons. First, undergraduate students are highly involved with the career choice because they will have to choose a career in the near future. This ensures that they will use central-route processing, and not a short-cut, in their information processing. Second, they are unlikely to have experienced the process of choosing a career or having a full-time job and, as mentioned earlier, will therefore be unfamiliar with the cognitive task and will not have developed a long-term memory to rely on.

In recruiting the respondents, the researcher approached lecturers who taught classes targeted at Year 2-Year 4 students, and asked lecturers for 30 minutes of class time to conduct the experiment. The researcher focused on higher-year classes because the class content covered specific content for future career, and should orientate students to thinking about their career.

Prior to the main experiment, qualitative pre-tests were conducted to ensure that questionnaire items conveyed the intended meaning. Quantitative pre-tests were conducted to ensure that the manipulation and experiment procedures met the research requirements. Manipulation tests will be explained together with the priming and manipulation.

Observations from 1,116 respondents were collected. One group of 55 observations was dropped due to manipulation concerns, resulting in 1,061 usable observations for the eight decision scenarios.

The respondents in each class were assigned to one of the eight scenarios. For example, in the scenario where prevention-focused consumers process non-alignable information with a moderate time limit, respondents were primed to be prevention-focused, were given the career choice task with non-alignable information and were timed.

In another scenario where promotion-focused consumers process alignable information with time abundance, respondents were primed to be promotion-focused, were given the career choice task with alignable information, and could complete the cognitive task at their own pace.

The researcher started the experiment by introducing the research. The respondents were requested to express their feelings and opinions freely, and were informed that their answers would be treated as confidential and analyzed at the aggregate level. The researcher then primed the respondents to become either promotion- or prevention-focused.

Regarding the regulatory-focus priming, the respondents in the prevention (promotion)-focus condition were asked to think about the obligation (aspiration) (Chernev, 2004; E. T. Higgins et al., 1994; Liberman et al., 2001) and write strategies to avoid failure (achieve success) (Chang & Chou, 2008; E. T. Higgins et al., 1994; Lockwood et al., 2002; Pham & Avnet, 2004). The additional priming was included in the career-choice task introduction following prior literature (Wang & Lee, 2006).

Prior to the main experiment, the Regulatory Focus Strategies Scale (RFSS) (Ouschan et al., 2007) was employed to check the manipulation in the pre-test. There are also other well-known scales such as the Regulatory Focus Questionnaire (RFQ) (E. T. Higgins et al., 2001), & Lockwood scale (Lockwood et al., 2002). However, RFSS was selected primarily because its focus is on the tendency of how consumers will respond to stimuli or situations.

After the priming, the respondents were asked to imagine that five companies accepted them for employment, from which they had to select one & provide a short rationale for their choice. Depending on their condition, respondents were given either an alignable or non-alignable career-choice task. Information in the alignable (non-alignable) condition differed in one same dimension (different dimensions).

To ensure manipulation effectiveness, and following Zhang and Fitzsimons (1999), the alignable and non-alignable choice sets were pre-tested prior to the main experiment.

Regarding time availability, respondents in the time abundance condition were not timed and were told that they could work at their own pace. Respondents in the moderate time limit condition were timed and reminded of their time limit. The moderate time limit was determined from the average time in the pre-test (Ahituv et al., 1998; Chien-Huang & Wu, 2005; Ravi Dhar &

Nowlis, 1999; Ravi Dhar et al., 2000; M. Higgins, 1999; Nowlis, 1995; Payne et al., 1992; Svenson et al., 1990).

Manipulation checks based on Suri and Monroe (2003) were conducted prior to the experiment. The manipulation checks for all three treatments were successful: regulatory focus, alignability of information and time availability.

After the priming and the manipulation, the respondents answered a questionnaire measuring NCC and CPS. The NCC scale is based on Roets and Van Hiel (Roets & Hiel, 2011). The CPS scale is based on Zhang and Fitzsimons (1999).

The researcher thanked the respondents for their time and cooperation, and gave them a snack bar as a token of thanks.

Regression analysis for each of the scenarios was conducted to study the impact of NCC on CPS for the eight decision scenarios.

Results and Discussion

From the regression analysis in Table 2, it was determined that the relationship between NCC and CPS is significant only in scenarios when prevention-focused consumers process non-alignable information. This could be because prevention-focused consumers, when high cognitive load is required, focus on the choice task duty, since they are concerned with the undesired end-state and feel stressed. Therefore, the relationship between NCC and CPS is significant, while it is not significant with promotion-focused consumers or when consumers are processing alignable information. In other words, NCC affects CPS in situations when consumers, who have a tendency to comply with rules and fulfill obligations, feel the need to have the answer to a question, especially when the task or obligation demands high cognitive load.

This paper focuses on the role of time availability in these two significant situations. When time is abundant, NCC negatively affects CPS with the effect size of -.205 (Table 2) and Hypothesis 1 (H1) is therefore supported. When time is limited, NCC positively affects CPS with the effect size of .164 (Table 2) and Hypothesis 2 (H2) is supported.

The negative sign in the time abundance scenario could be interpreted as lack of appreciation for having more time for the choice process. However, limited time is favorable, since it has a positive effect on CPS. This could be because consumers do not favor more time and possibly desire to end the task more quickly when it requires high cognitive effort.

Tables 1 and 2 illustrate the findings.

Table 1 Descriptive Statistics

Scenario		Need for Cognitive Closure (NCC)				Choice-Process Satisfaction (CPS)			
		Mean	SD	Min	Max	Mean	SD	Min	Max
1	Alignable x Promotion x Time Abundance	6.61	1.17	2.20	9.00	7.09	1.26	3.30	10.00
2	Alignable x Promotion x Moderate Time Limit	7.07	1.32	3.30	9.40	6.71	1.47	2.70	9.30
3	Non-alignable x Promotion x Time Abundance	7.11	1.04	4.10	9.40	5.67	1.54	1.80	8.70
4	Non-alignable x Promotion x Moderate Time Limit	6.86	1.10	3.40	9.20	5.60	1.50	1.00	9.00
5	Alignable x Prevention x Time Abundance	6.82	1.10	4.30	9.10	6.93	1.29	3.30	9.70
6	Alignable x Prevention x Moderate Time Limit	6.69	1.14	3.20	9.10	6.90	1.34	3.30	9.70
7	Non-alignable x Prevention x Time Abundance	6.47	1.20	3.30	9.30	5.99	1.39	2.30	8.80
8	Non-alignable x Prevention x Moderate Time Limit	6.61	1.17	2.90	9.10	5.92	1.39	1.00	8.50

SD = Standard deviation

Table 2 Regression Results of the Eight Choice Decision Scenarios

	Scenario 1				Scenario 2				Scenario 3				Scenario 4			
	Promotion Focus x Alignable x Time Abundance				Promotion Focus x Alignable x Moderate Time Limit				Promotion Focus x Non-alignable x Time Abundance				Promotion Focus x Non-alignable x Moderate Time Limit			
	β	SE	Std. β	β	SE	Std. β	β	SE	Std. β	β	SE	Std. β	β	SE	Std. β	
Constant	8.780	.661	6.601	.731		6.943	.959		7.065	.887						
NCC	-.055	.087	-.051	.159	.094	.142	.069	.121	.045	-.017	.122	-.012				
	Scenario 5				Scenario 6				Scenario 7				Scenario 8			
	Prevention Focus x Alignable x Time Abundance				Prevention Focus x Alignable x Moderate Time Limit				Prevention Focus x Non-alignable x Time Abundance				Prevention Focus x Non-alignable x Moderate Time Limit			
	β	SE	Std. β	β	SE	Std. β	β	SE	Std. β	β	SE	Std. β	β	SE	Std. β	
Constant	7.108	.691		6.450	.781		9.438	.697		6.647	.671					
NCC	.155	.094	.132	.232	.099	.197	-.237	.090	-.205*	.195	.089	.164*				

* Significant: $p < .05$

β = Beta coefficient

Std. β = Standardized Beta coefficient

Conclusion

This research extends the prior literature by incorporating NCC to explain CPS. As expected, we found that the role of NCC on CPS is activated only when prevention-focused consumers process non-alignable information. NCC affects CPS in situations when consumers who have the tendency to comply with rules and fulfill obligations, feel the need to have the answer to a question, especially when the task or obligation requires high cognitive load.

In situations that are not as demanding - that is, when consumers process simple alignable information or when consumers are promotion focused - the consumers tend to be more relaxed and not focused on obligation. Therefore, they are more likely than prevention-focused consumers to take things lightly and not feel overwhelmed by the demanding situation.

Given the effect of NCC on CPS above, the focus of this paper is on the role of time availability affecting the relationship between NCC and CPS. When time is abundant, NCC negatively affects CPS. Having more time is not viewed as a resource because consumers look at the choice decision more like work or a compulsory task. They could view this work-time less favorably than leisure time (Adam, 1998). At the same time, prevention-focused consumers are prevented from not conforming to the obligation (E. T. Higgins, 1997; E. T. Higgins et al., 1997). They feel the need to dwell on the task in hand. An alternative explanation to this is because time is money, "any un-used time is money lost" (Adam, 1998:7). More time used on a demanding task leads to a higher unfavorable effect on CPS.

On the other hand, when time is limited, prevention-focused consumers feel assured of the structure and certainty. They might happily work hard and give their best within the time limit. Having this time limit helps to limit time spent on the demanding task, and as a result, is favorable to CPS.

Managers, especially retailers, can benefit from these findings by designing appropriate decision-making environments in order to improve consumer satisfaction. For example, providing time limits may be favorable in certain situations.

Future research is suggested to be conducted in a real retail environment, as this research was conducted in an experimental environment. Employing different domains is also encouraged to generalize the results. Another interesting area for future research is to investigate the relationship of CPS with other domains such as outcome satisfaction. That is, to study if there could be a contrast between CPS and outcome satisfaction. Can consumers be satisfied with the process even though they might not be satisfied with the choice outcome?

References

Ackerman, D.S., & Gross, B.L. (2003). Is Time Pressure All Bad? Measuring the Relationship Between Free Time Availability and Student Performance and Perceptions, *Marketing Education Review*, 13(2), 21-32.

Adam, B. (1998, July). *When Time is Money: Contested Rationalities of Time and Challenges to the Theory and Practice of Work*. Paper presented at the Keynote Paper for the Sociology of Work Group, ISA Montreal.

Ahituv, N., Igbaria, M., & Sella, A. (1998). The Effects of Time Pressure and Completeness of Information on Decision Making: JMIS. *Journal of Management Information Systems*, 15(2), 153-172.

Baker, J., Grewal, D., & Parasuraman, A. (1994). The Influence of Multiple Store Environment on Quality Inferences and Store Image. *Journal of the Academy of Marketing Science*, 22(4), 328-329.

Boatwright, P., & Nunes, J.C. (2001). Reducing Assortment: An Attribute-Based Approach. *Journal of Marketing*, 65, 50-63.

Chang, C.-C., & Chou, Y.-J. (2008). Goal Orientation and Comparative Valence in Persuasion. *Journal of Advertising*, 37, 73-87.

Chernev, A. (2004). Goal-Attribute Compatibility in Consumer Choice. *Journal of Consumer Psychology*, 14(1-2), 141-150.

Chien-Huang, L., & Wu, P.-H. (2005). How to Deal with Conflicts? The Effects of Consumers' Subjective Time Pressure on Product Attitude Judgment and Choice. *Journal of American Academy of Business*, 6(1), 219-224.

Chou, H.-J. (2012). Effects of Paternalistic Leadership on Job Satisfaction: Regulatory Focus as the Mediator, *The International Journal of Organizational Innovation*, 4(4) (Spring 2012), 62-85.

Chu, P.C., & Spires, E.E. (2001). Does Time Constraint on Users Negate the Efficacy of Decision Support Systems?. *Organizational Behavior and Human Decision Processes*, 85(2), 226-249.

Crowe, E. & Higgins, E.T. (1997). Regulatory Focus and Strategic Inclinations: Promotion and Prevention in Decision-Making. *Organizational Behavior and Human Decision Processes*, 69(2), 117-132.

Dhar, R. (1997). Consumer Preference for a No-Choice Option. *Journal of Consumer Research*, 24, 215-232.

Dhar, R., & Nowlis, S. M. (1999). The Effect of Time Pressure on Consumer Choice Deferral. *Journal of Consumer Research*, 25(4), 369-384.

Dhar, R., Nowlis, S.M., & Sherman, S.J. (2000). Trying Hard or Hardly Trying: An Analysis of Context Effects in Choice. *Journal of Consumer Psychology*, 9(4), 189-200.

Edland, A. (1994). Time Pressure and the Application of Decision Rules: Choices and Judgments Among Multiattribute Alternatives. *Scandinavian Journal of Psychology*, 35, 281-291.

Garretson, R.C., & Mauser, F.F. (1963). The Future Challenges Marketing. *Harvard Business Review*, 41(Nov./Dec. 1963), 168-178.

Gonzalez, R.M. (1997). The Value of Time: A Theoretical Review. *Transport Reviews*, 17(3), 245-266.

Gourville, J.T., & Soman, D. (2005). Overchoice and Assortment Type: When and Why Variety Backfires. *Marketing Science*, 24(3), 382-395.

Helson, H. (1964). Current Trends and Issues in Adaptation-Level Theory. *American Psychologist*, 19, 26-38.

Higgins, E.T. (1997). Beyond Pleasure and Pain. *American Psychologist*, 52(12), 1280-1300.

Higgins, E.T., Friedman, R.S., Harlow, R.E., Idson, L.E., Ayduk, O.N., & Taylor, A. (2001). Achievement Orientations from Subjective Histories of Success: Promotion Pride Versus Prevention Pride. *European Journal of Social Psychology*, 31(1), 3-23.

Higgins, E.T., Roney, C.J.R., Crowe, E., & Hymes, C. (1994). Ideal Versus Ought Predilections for Approach and Avoidance: Distinct Self-Regulatory System. *Journal of Personality and Social Psychology*, 66, 276-286.

Higgins, E.T., Shah, J., & Friedman, R. (1997). Emotional Responses to Goal Attainment: Strength of Regulatory Focus as Moderator. *Journal of Personality and Social Psychology*, 72(3), 515-525.

Higgins, M. (1999). Meta-Information, and Time: Factors in Human Decision Making. *Journal of American Society for Information Science and Technology*, 50(2), 132-139.

Ho, J.C.W., Wong, L.C.J., & Wong, P.T.P. (2010). What Helps and What Hinders Thesis Completion: A Critical Incident Study. *International Journal of Existential Psychology and Psychotherapy*, 3(2), 117-221.

Jacoby, J., Szybillo, G.J., & Berning, C.K. (1976). Time and Consumer Behavior: An Interdisciplinary Overview. *Journal of Consumer Research*, 2, 320-339.

Karau, S.J., & Kelly, J.R. (1992). The Effects of Time Scarcity and Time Abundance on Group Performance Quality and Interaction Process. *Journal of Experimental Social Psychology*, 28, 542-571.

Kruglanski, A.W. (1980). Lay Epistemo-Logic. Process and Contents: Another Look at Attribution Theory. *Psychological Review*, 87(1), 70-87.

Kruglanski, A.W., & Webster, D.M. (1996). Motivated Closing of the Mind: 'Seizing' and 'Freezing'. *Psychological Review*, 103(2), 263-283.

Liberman, N., Molden, D.C., Idson, L.C., & Higgins, E.T. (2001). Promotion and Prevention Focus on Alternative Hypotheses: Implications for Attributional Functions. *Journal of Personality and Social Psychology, 80*(1), 5-18.

Lockwood, P., Jordan, C.H., & Kunda, Z. (2002). Motivation by Positive or Negative Role Models: Regulatory Focus Determines Who Will Best Inspire Us. *Journal of Personality and Social Psychology, 83*(3), 854-864.

Mannetti, L., Pierro, A., Kruglanski, A., Taris, T., & Bezinovic, P. (2002). A Cross-Cultural Study of the Need for Cognitive Closure Scale: Comparing its Structure in Croatia, Italy, USA and The Netherlands. *British Journal of Social Psychology, 41*(1), 139-156.

McGrath, J.E., & O'Connor, K.M. (1996). Temporal Issues in Work Groups. In M. A. West, *Handbook of Work Group Psychology* (pp. 22-52). Chichester, UK: John Wiley & Sons.

Mikulincer, M. (1997). Adult Attachment Style and Information Processing: Individual Differences in Curiosity and Cognitive Closure. *Journal of Personality and Social Psychology, 72*(5), 1217-1230.

Moore, W. (1963). *Man, Time and Society*. New York: Wiley.

Neuberg, S.L., Judice, T.N., & West, S.G. (1997). What the Need for Closure Scale Measures and What it does not: Toward Differentiating among Related Epistemic Motives. *Journal of Personality and Social Psychology, 72*(6), 1396-1412.

Nowlis, S.M. (1995). The Effect of Time Pressure on the Choice Between Brands that Differ in Quality, Price, and Product Features. *Marketing Letters, 6*(4), 287-295.

Ouschan, L., Boldero, J.M., Kashima, Y., Wakomoto, R. & Kashima, E.S. (2007). Regulatory Focus Strategies Scale: A Measure of Individual Differences in the Endorsement of Regulatory Strategies. *Asian Journal of Social Psychology, 10*, 243-257.

Paas, F., Merrienboer, J.V., & Adam, J. (1994). Measurement of Cognitive Load in Instructional Research. *Perceptual and Motor Skills, 79*, 419-430.

Parks, C.D., & Cowlin, R. (1995). Group Discussion as Affected by Number of Alternatives and by a Time Limit. *Organization Behavior and Human Decision Processes, 62*(3), 267-275.

Payne, J.W., Bettman, J.R., Coupey, E., & Johnson, E.J. (1992). A Constructive Process View of Decision Making: Multiple Strategies in Judgment and Choice. *Acta Psychologica, 80*, 107-141.

Payne, J.W., Bettman, J.R., & Johnson, E.J. (1988). Adaptive Strategy Selection in Decision Making. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 14*, 534-552.

Pham, M.T., & Avnet, T. (2004). Ideals and Oughts and the Reliance on Affect versus Substance in Persuasion. *Journal of Consumer Research, 30* (March 2004), 503-518.

Pham, M.T., & Higgins, E.T. (2005). Promotion and Prevention in Consumer Decision-Making. In S. Ratneshwar & D.G. Mick, *Inside Consumption: Consumer Motives, Goals, and Desires* (pp. 8-43). London: Routledge.

Roets, A., & Van Hiel, A. (2011). Item Selection and Validation of a Brief, 15-Item Version of the Need for Closure Scale. *Personality and Individual Differences*, 50, 90-964.

Schary, P.B. (1971). Consumption and the Problem of Time. *Journal of Marketing*, 35(Apr. 1971), 50-55.

Siemens, N. (1971). A Simple GPM Time-Cost Tradeoff Algorithm, *Management Science*, 17(6), B-354-B-363.

Simon, H.A. (1995). Invariants of Human Behavior. *Annual Review of Psychology*, 41, 1-19.

Suri, R., & Monroe, K.B. (2003). The Effects of Time Constraints on Consumers' Judgments of Prices and Products. *Journal of Consumer Research*, 30, 92-104.

Svenson, O., Edland, A., & Slovic, P. (1990). Choice and Judgments of Incompletely Described Decision Alternatives under Time Pressure. *Acta Psychologica*, 153-169.

Tanner, J.F.J. (1996). Buyer Perceptions of the Purchase Process and its Effect on Customer Satisfaction. *Industrial Marketing Management*, 25, 125-133.

Waller, M.J., Zellmer-Bruhn, M.E., & Giambatista, R.C. (2002). Watching the Clock: Group Pacing Behavior under Dynamic Deadlines. *Academy of Management Journal*, 45(5), 1046-1055.

Wallsten, T.S., & Barton, C. (1982). Processing Probabilistic Multidimensional Information for Decisions. *Journal of Experimental Psychology: Learning, Memory and Cognition*, 8(5), 361-384.

Wang, J., & Lee, A.Y. (2006). The Role of Regulatory Focus in Preference Construction. *Journal of Marketing Research*. 43(Feb. 2006), 28-38.

Webster, D.M., & Kruglanski, A.W. (1994). Individual Differences in Need for Cognitive Closure. *Journal of Personality and Social Psychology*, 67(6), 1049-1062.

Webster, D.M., & Kruglanski, A.W. (1997). Cognitive and Social Consequences of the Need for Cognitive Closure. *European Review of Social Psychology*, 8(1), 133-173.

Wicks, A.M., & Chin, W.W. (2008). Measuring the Three Process Segments of a Customer's Service Experience for an Out-Patient Surgery Center. *International Journal of Health Care Quality Assurance*, 21(1), 24-38.

Yuan, Z.X., & Namasivayam, K. (2012). The Relationship of Chronic Regulatory Focus to Work-Family Conflict and Job Satisfaction. *International Journal of Hospitality Management*, 31(2), 458-467.

Zhang, S., & Fitzsimons, G.J. (1999). Choice-Process Satisfaction: The Influence of Attribute Alignability and Option Limitation. *Organizational Behavior and Human Decision Processes*, 77, 192-214.

Zhang, S., Kardes, F.R., & Cronley, M.L. (2002). Comparative Advertising: Effects of Structural Alignability on Target Brand Evaluations. *Journal of Consumer Psychology*, 12(4), 303-311.

Zuzanek, J. (1998). Time Use, Time Pressure, Personal Stress, Mental Health, and Life Satisfaction from a Life Cycle Perspective. *Journal of Occupational Science*, 5(1), 16-39.