

Causes of Delay in Consumer Decision Making: An Exploratory Study

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ABSTRACT

This paper conducts an exploratory study of reasons why consumers delay making decisions. A survey on purchases costing more than \$100 reveals five causes of delay. Three of these - task avoidance and unpleasantness, time pressure, and uncertainty - have been identified in other decision contexts, while causes related to the difficulty of selecting the best brand and perceived risk of product performance are more specific to consumer decision making. We find that difficulty of selection and time pressure are the most important causes of consumer delay and task avoidance the least important. Correlations between delay causes and time spent in each stage of the consumer decision making process provide tentative evidence that the different delay causes tend to prolong decision time in particular stages.

INTRODUCTION

Rare is the individual who never delays making decisions and taking actions. Delay and procrastination can improve decision making (Janis and Mann, 1977) and be an adaptive reaction to a decision (Taylor, 1979), but excessive delay can become maladaptive, prolonging a decision so long that it is finally made at the last minute in a slipshod fashion (Lay, 1986, 1988; Solomon and Rothblum, 1984), perhaps so late that the situation requiring the decision becomes moot (Simmons, Klein, and Thornton, 1974). The causes and effects of decision delay should be of interest whenever decision making and actions are studied. To quote Hogarth, Michaud, and Mery (1980): "whereas understanding how people make decisions is important, it is also necessary to understand why people *delay* making decisions . . ." (pg. 112).

Decision and task delay have been investigated in a number of contexts, including seeking help for a distressing personal problem (Amato and Bradshaw, 1985), donating a kidney (Simmons, Klein, and Thornton, 1973), urban development and business relocation (Hogarth, Michaud, and Mery, 1980), writing undergraduate term papers (Lay, 1988; Solomon and Rothblum, 1984), and completing personal projects (Lay, 1986) or small, everyday tasks (Milgram, Sroloff, and Rosenbaum, 1988). More general typologies of "nondecisions" have also been proposed (Corbin, 1980), including refusal, inattention, and delay.

However, little attention has been given to delay in consumer decision making. Decision and reaction time have been studied in experimental contexts, but a general study of reasons why consumers delay decisions has not been attempted.

The purpose of this paper is to investigate, in an exploratory fashion, the causes of consumer decision delay. Past research on delay has revealed that causes which may generalize to other contexts often exist alongside context-specific causes. We

propose that this may apply to consumer decision making. This paper next discusses causes of delay which have been identified in other contexts and propose aspects of consumer decision making which may create context-specific causes. We then describe a study designed to identify the structure of these causes, examine their different importance in causing delay in consumer decision making, and investigate their relationship to elapsed decision times in different stages of the consumer decision making process.

CAUSES OF DECISION DELAY AND PROCRASTINATION.

Causes from other contexts.

Several investigators have found that delay and procrastination can be caused by a person's tendency to avoid an unpleasant task or decision. Milgram, Sroloff, and Rosenbaum (1988) find high correlations between procrastination in everyday tasks and dysphoric affect ("the negative emotional response associated with doing a particular task"), as well as covert negativism ("an avoidant reaction" towards "demands imposed on us by resented authority figures"). Amato and Bradshaw (1985) identify "fear and stigma" and "problem avoidance and denial" as two reasons for procrastination in seeking help for a personal problem (derived with clustering procedures, these causes may not be orthogonal). Hogarth, Michaud, and Mery (1980) find that decision makers may delay when psychological regret (the anticipation of adverse consequences from future decisions) causes them to fear "possible accusations of irresponsibility, from others or even themselves." Solomon and Rothblum (1984) find that procrastination in writing term papers can be caused by two general factors relating to negative reactions to the task: (a) fear of failure, involving both one's own and other people's standards, as well as lack of self-confidence, and (b) aversion to the task and laziness. Lay (1988), also in the term paper context, finds that pessimistic procrastinators are likely to develop negative reactions by anticipating problems completing this task, such as suffering from writer's block, or misplacing notes, and may also develop these reactions from overestimating the amount of time necessary to complete the task. Janis and Mann (1977) discuss how defensive procrastination is one form of defensive avoidance, used by the decision maker as "a means of coping with the painful stresses of decision making . . ." (pg. 6). They contrast this strategy with "vigilant information processing" which satisfies "ideal procedural criteria" for decision making (pgs. 11-12). Given the ubiquity of this cause across many different tasks, we would also expect it to emerge as a cause of delay in a consumer context.

Hogarth, Michaud, and Mery (1980) find that decision delay also can be caused by three types of uncertainty: "(a) lack of knowledge about events that could affect outcomes, (b) ambiguity concerning the consequences of actions, . . . and (c) procedural uncertainty, concerning means to handle and process the decision, e.g. specifying relevant uncertainties, what information to seek and where, how to invent alternatives and assess consequences, etc." (pg. 110). This source of delay may also affect consumer decision making, since consumers must determine products' attributes as well as which attributes are important to them, and other people may need to approve the decision.

Amato and Bradshaw (1985) find that "negative helper evaluation" may prompt decision delay when seeking help for a distressing personal problem. This cause may be quite relevant to a consumer context, since consumers seeking help in decision making often turn to friends or salespeople. Amato and Bradshaw (1985) find that lack of available time can cause decision delay, while Lay (1988) finds that perceptions of how much time a task will take can also lead to delay, and that procrastinators perceive that they spend less than adequate time on projects (Lay, 1986). Time pressure and availability should also cause delay in consumer decision making, since other tasks and decisions compete for time.

Delay causes peculiar to consumer decision making.

Some aspects of consumer decision making may create delay reasons not usually found in other contexts. One reason which may arise in consumer contexts is the difficulty of deciding which alternative to choose from among a set of brands or models. Unlike many other types of decisions or tasks, which require either a yes/no decision or simply getting on with the matter (such as writing a term paper), consumer decisions require comparing a set of alternatives which may be quite similar. This comparison involves assembling the set of considered alternatives, identifying the relevant attributes, comparing the alternatives on these attributes, and determining which is most preferred; these tasks comprise the information search and evaluation stages of the consumer decision making process. Accordingly, we conjecture that difficulty in deciding which alternative to choose may be a delay cause peculiar to the consumer decision making context. Many aids in consumer decision making, such as consumer magazines and personal computer software which allows consumers to readily compare data on different alternatives in a product category, seem to be directed at aiding consumers in this stage of decision making.

Delay and stages of the consumer decision making process.

Four of the stages in the consumer decision making process are relevant to the study of delay in these decisions: 1) identify the consumer need, 2) search for information, 3) evaluate alternatives, and

4) purchase. One purpose of the present study is to investigate how each reason for delay is related to the amount of time a consumer takes to complete each stage in the decision making process. Due to the exploratory nature of this research, we do not hypothesize specific relationships between causes of delay and decision time spent in each phase; significant relationships found in the present work will provide areas for future investigation.

STUDY DESIGN

To examine the causes of consumer decision delay, the authors designed a survey asking consumers why they delayed making a major purchase (a product costing at least \$100) and how much time they took to complete various stages of the decision making process. Fifty-nine students, drawn from classes in two graduate schools of business in New York City, completed the survey. This sample is not intended to be representative of all consumers, but does provide insights into consumer delay for a well-educated segment that makes a considerable number of high involvement purchases, as suggested by the variety of product categories mentioned in the surveys.

Subjects were asked to describe purchases which they were aware of delaying. Although this limits the scope of the study to conscious reasons for delay, it might be difficult to ask consumers to give delay reasons and delay times for purchases which they felt had been made promptly. Delay reasons for such purchases may show a different structure than for the purchases reported here.

Forty items, reproduced in Table 1, were composed to probe causes of consumer delay. Each item was designed to probe either an already identified source of delay which might also influence consumer decisions (task avoidance and unpleasantness, uncertainty, helper evaluation, and time pressure), or a cause related to the consumer-specific source of choosing which alternative to purchase. Reasons which had already been identified were selected from a review of the literature. Additional reasons were selected using a small pilot study, where six consumers were asked in a written survey to report reasons why they delay purchases. Table 1 also indicates each item's source.

Respondents were asked to indicate "how important each reason was in causing you to defer the [purchase] decision" by marking a Likert scale with the response intervals (1) no influence, (2) a minor influence, (3) a moderate influence, (4) an important influence, (5) a very important influence, and (6) an extremely important influence.

Respondents also indicated how much total time (not just time spent on the decision) elapsed (1) after they recognized the consumer need but before they began information search, (2) during information search and evaluation, and (3) after choosing which brand to purchase but before actual purchase (description of each phase on the survey is more extensive than the terms used here). Elapsed time between need identification and the onset of

TABLE I
Means, factor loadings, and sources of items measuring reason for consumer delay

	T A V O I D	S E L E C T	U N C E R T	T P R E S S	P P R I S S K	
<u>Source</u>	<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>	<u>V</u>	<u>MEAN</u>
1) P Other things had higher priority.	*	*	*	.43	.30	4.12
2) U I couldn't use the product until the future.	.34	*	*	*	*	2.47
3) T The problem/situation for which the product was intended was unpleasant to think about.	<u>.71</u>	*	-.31	*	*	1.38
4) T I hoped the situation for which the product was needed would go away.	.61	.31	.32	*	*	1.30
5) U I needed to know more about what I could use the product for.	*	*	<u>.67</u>	*	*	2.03
6) C I wanted to know more about different brands or models.	*	<u>.57</u>	*	*	*	4.11
7) U I thought a better product might be introduced soon.	.32	.47	.36	*	*	2.11
8) C I expected the price to decrease soon.	*	.31	*	*	-.48	2.72
9) C I didn't want the shopping process to end.	.40	*	*	-.52	*	1.44
10) C There was no urgency to make the decision.	*	*	*	.35	*	3.76
11) C I couldn't afford to make the purchase at that time.	*	*	*	*	-.69	3.16
12) P Shopping for the product was difficult/inconvenient.	*	*	*	<u>.71</u>	*	3.61
13) T Shopping for the product was unpleasant.	<u>.70</u>	*	*	.35	*	2.00
14) U I was unsure I would use the product enough to justify buying it.	*	*	<u>.62</u>	*	*	2.45
15) U I needed to get other people to agree on the choice.	*	*	<u>.60</u>	*	.32	2.35
16) H I didn't like the salespeople I had to deal with.	.43	*	*	*	.35	1.79
17) U The decision depended on another decision which was not yet made.	.34	*	.60	*	*	1.76
18) T The product was difficult to evaluate objectively.	.43	.50	*	*	*	2.32
19) C It was difficult to find a place where I could examine or buy the product.	.64	*	*	*	*	1.77
20) C There were many alternative brands or models to consider.	*	<u>.83</u>	*	*	*	3.88
21) C There were many different product characteristics/features to consider.	*	<u>.84</u>	*	*	*	3.79
22) C The alternatives were so similar that it was hard to select the best one.	*	<u>.75</u>	*	*	*	3.32
23) C The alternatives were so different that it was hard to compare them.	.55	*	.42	*	*	1.50

TABLE 2
Correlations between measures of reasons for delay

	<u>SELECT</u>	<u>UNCERT</u>	<u>TPRESS</u>	<u>PPRISK</u>
TAVOID	1.11	.39	.26	.44
SELECT	.21	-.09	.37	
UNCERT			.12	.44
PPRISK				-.01

information search was requested since this period, when the consumer wants the product but is distracted by other activities and has not yet acted to gather information, may form an important area of decision delay. Elapsed time for the information gathering and alternative evaluation phases were combined into a single question since the consumer-specific delay cause, if found, was expected to affect elapsed time for both of these stages. Time between selecting an alternative and actual purchase again represents a period where the consumer is not active in decision making.

Respondents had the choice of providing elapsed time information in either years, months, weeks, days, hours, or minutes, and were asked to indicate how many units of the most appropriate time had elapsed in each stage. This information was subsequently reexpressed in weeks and used to create time variables for need recognition (abbreviated as NEED), search and evaluation (abbreviated as SEARCHVAL), and purchase (abbreviated as PURCH). Since these elapsed times are based on retrospective reporting, they are subject to errors of memory that can affect such data.

RESULTS.

Respondents reported purchases involving a wide range of goods, including clothing (19 respondents), computers (14), television and stereo equipment (7), watches (4), furniture (4), jewelry (2), and other purchases (7). Purchase prices ranged from \$120 to \$6500. This variety of products and prices suggests that the study describes decision delay for a broad cross section of consumer decisions.

Respondents spent, on average, 12.1 weeks after they recognized the need for the product but before they began searching for information, 8.9 weeks searching for information and evaluating alternatives, and 7.7 weeks between choosing an alternative and actual purchase. It is interesting to note that the first stage, which in some sense represents "pure" procrastination, is the longest, whereas the final choice stage, which is the focus of much consumer research, is the shortest.

Interpreting causes of consumer procrastination.

To identify the underlying structure of reasons for delay, the 40 items were subject to factor analysis using varimax rotation. A five-factor

solution, explaining 56.2% of total variance, was chosen based on the scree plot and the interpretability of the factors. To check for stability in the solution, ten observations were withheld and the analysis repeated; the factor loadings remained stable and their interpretation did not change.

Loadings for these five factors are reported in Table 1. Interpretation of these factors and construct multiple-item measures of each delay cause proceeded as follows:

Factor I: Six items (3, 13, 25, 27, 28, and 37) loaded at $\geq .7$ on this factor. Four were intended to probe task avoidance and unpleasantness, while two others were designed to probe the consumer-specific delay cause. This factor appears to represent the cause related to task avoidance and unpleasantness found in prior investigations. These items are not concerned with the product itself, but the respondent's reaction to the prospect of having to make this decision (items 3, 13, 27, and 37), to initiate the decision process (item 1), and to future consequences of this decision, unrelated to product satisfaction (item 25). Each respondent's scores on these six items were summed to create the task avoidance scale TAVOID (coefficient alpha = .88).

Factor II: Five items (6, 20, 21, 22, and 34) loaded at $\geq .57$ on this factor and at low levels on other factors. Four of these items had consumer-specific sources, while the fifth concerned uncertainty. This factor appears to represent the hypothesized delay cause arising from consumers' difficulty choosing the most preferred brand or model from a set of alternatives. The items refer to either describing and comparing alternatives on relevant product attributes (items 6, 20, 21, 22) or choosing an alternative that subsequently turns out to be inferior to others (item 34). These five items were summed to create the alternative selection scale SELECT (alpha = .84).

Factor III: Five items (5, 14, 15, 26, and 40) loaded at $\geq .60$ on this factor and possessed low loadings on other factors (the latter criterion eliminated items 17 and 24). All these items were designed to probe delay caused by uncertainty. This uncertainty can have different sources, related to consumer's use of the product (items 5 and 14),

TABLE 3
Correlations between delay reasons and elapsed time in decision stages

<u>Delay Measure</u>	<u>Decision Stage</u>		
	<u>NEED</u>	<u>SEARCHEV</u>	<u>PURCH</u>
TAVOID	.00	.05	-.02
SELECT	.04	-.18	-.10
UNCERT	.23*	.04	-.02
TPRESS	.26**	.29**	.03
PPRISK	-.15	-.07	-.11

* $p < .10$ ** $p < .05$

dalternative uses for the money (item 26) and other people's approval (items 15 and 40). None of these reasons concern the comparison and selection task, the realm of items in the SELECT factor. These five items were summed to create the uncertainty scale UNCERT ($\alpha = .75$).

Factor IV: Two items (12 and 38) loaded at $\geq .7$ on this factor. Both concern time pressure, caused either by the respondent's busy schedule (item 38) or the inconvenience of travelling to and shopping at outlets offering the product (item 12). These two items were summed to create the time pressure scale TPRESS ($\alpha = .80$).

Factor V: Four items (8, 11, 30, and 33) had loadings with absolute values $\geq .48$ on this factor (the next highest loading was .35). Two were designed to probe consumer-specific reasons, one helper-specific, and one uncertainty. Items 8 and 11, which had negative loadings, were concerned with financial factors, while items 30 and 33 appeared to probe perceived risk of poor product performance, due either to inaccurate salesperson information or faults of the product itself. The fact that the first pair of items possessed low correlations with the second recommended against including all four items in a single measure, regardless of the factor structure. Since items 30 and 33 were highly correlated ($\rho = .68$) while items 8 and 11 were not ($\rho = .26$), only the former two items were combined to create a measure of reason for consumer delay. Scores from items 30 and 33 were summed to create the scale for perceived performance risk, PPRISK ($\alpha = .81$).

Correlations between the five scales, reported in Table 2, reveal moderate levels of intercorrelation between some of the scales. The highest correlations concerned the scale PRISK. The alternative method of computing factor scores avoids this problem, but creates problems of interpretability when applied to 40 items. These correlations among scales suggest that causes of

delay may be related rather than independent, especially delay due to perceived risk.

Importance of delay reasons.

Table 1 also reports mean importance ratings for each of the 40 items. The three reasons rated highest in importance (items 1, 6, and 34) related to selecting alternatives or to time pressure, while the four rated lowest in importance (items 4, 25, 27, and 36) concerned task avoidance or uncertainty.

Mean item importance ratings for each of the five delay measures were also calculated, yielding: TAVOID (1.49), SELECT (3.82), UNCERT (2.26), TPRESS (3.66), and PPRISK (1.89). Taken together, the results for item and scale importances suggest that selecting an alternative and time pressure are the most important reasons for delay, whereas task avoidance and perceived risk are the least importance. Apparently respondents found the consumer-specific reason (SELECT) to be very important, but did not consider the decision making process as an unpleasant task to be avoided.

Correlations between delay reasons and decision times.

Another purpose of this study is to examine whether each delay reason is related to delay in a particular stage of the consumer decision making process. Table 3 reports correlations between each of the five delay measures and the decision time measures NEED, SEARCHEV, and PURCH. Significant correlations ($p < .10$) occurred between TPRESS and NEED, between TPRESS and SEARCHEV, and between UNCERT and NEED. Time pressure clearly lengthened the time between need recognition and search as well as the search process itself, as expected. Also, greater uncertainty led to a longer time between need recognition and beginning search. Although these results are tentative, it appears that there may be some relationships between reasons for delay and the length of the

decision process, and some decision stages may be more sensitive to delay than others.

DISCUSSION.

This exploratory investigation of reasons for delay in consumer decision making has provided several interesting, if preliminary, results. Consumers appear to delay major purchases for several reasons. Some of these, such as task avoidance and unpleasantness, uncertainty, and time pressure, occur also in other decision making contexts, while other reasons, such as selecting the most preferred alternative, are more specific to consumer decision making. The latter category may also include delay due to perceived performance risk, although the equivocal evidence for this cause makes this conclusion tentative until further work is done.

Some causes identified in other contexts may not translate directly to consumer decision making. The items intended to probe helper evaluation, which emerged in Amato and Bradshaw's (1985) study of delay in seeking help for a distressing personal problem, did not form a coherent reason for delay but instead were dispersed among other reasons. This further suggests that the structure of delay reasons may be partially context dependent.

The importance of these causes in delaying consumer decisions for products costing more than \$100 varied considerably. Interestingly, but not surprisingly, task avoidance is not a major reason for delay in consumer decision making. Rather, the competing demands of other higher priority activities (which delays the start of the search process) and the complexity of the set of alternatives explain the long delay between need recognition and final choice. Time pressure appears to be related to elapsed time spent between need recognition and the beginning of information search, as well as to length of search and evaluation, while uncertainty is related to the former stage.

Future research may focus on what can be done to shorten (or lengthen) the period of delay. In naturally occurring environments, it may be interesting to focus on the length of time the consumer spends in the two information processing stages and how this is related to the nature of processing (ie., by brand or by attribute).

The rank order of importance found here is considerably different from that found in some other contexts; for example, Amato and Bradshaw (1985) found that reasons relating to problem avoidance were rated as considerably *more* important than time pressure.

The present study suggest several fruitful areas for future research. There is a need to validate further the delay causes found in the present study, resolve areas of ambiguity such as occurred with perceived risk factor, and search for additional reasons for delay. Once convergent validity is established for the existence of these reasons across several studies, reliable and valid scales must be developed to measure the importance of these causes. Such research should also seek to resolve whether delay reasons are related or independent.

Further work is also needed to determine whether the structure of delay causes is stable across different types of consumer decisions or varies across decision types. We have studied purchases which cost at least \$100, and probably elicited high involvement and complex decision making from most consumers, but purchases of low-involvement goods may exhibit different structures of reasons for delay. The relative importance of delay reasons may also depend on the decision context, as well as on consumer characteristics such as expertise, age, education, lifestyle, and household size and composition.

Further investigations of elapsed time in each stage of the decision making process and particular reasons for delay are also needed. This work should extend beyond the preliminary, correlational analyses presented here and search for causality between delay reason and decision time.

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