



Effect of Brand Names in Choice Set and Time Pressure on Measures of Choice Overload

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Abstract

The study examines the effect of choice on customers during purchase decision in the presence and absence of brand names. The study seeks to understand the effect of limited and extensive choice on a customer with regards to the Indian mobile phone market. Our paper studies the effect of both these moderators together and checks if there is significant effect for these moderators on the four measures of choice overload; namely satisfaction with the choice, regret, confidence and task difficulty. To this end we propose to conduct six different studies where the participants would be provided with different choice sets with familiar, unfamiliar and no brands set in limited and extended time periods for making their choice. Each study would also have two parts – one which has a large number of choices and another which has limited number of choices.

Keywords: Choice, brand names, choice overload, time pressure.

1. Introduction

Just a few years before the advent of e-commerce in India, the number of options available to the Indian consumers, particularly in regard to electronic durable goods, were very limited. Nowadays however this situation has changed drastically. Even for the most inane product the consumer is open to a deluge of different options for each feature and price range. Common sense would dictate that this abundance of choice is good for the consumer as well as for competition and innovation. However, frequently during purchase decisions consumers would have come across a strange phenomenon. When facing a significant number of choices with no apparent differentiation, the consumer might postpone his purchase decision and the incidence of post purchase dissonance is very high. This is counter intuitive to the practical wisdom that more choice is always good for the consumer.

Initial foray into this field of research was done by Iyengar and Lepper (2000) with an experiment involving display of jams in a supermarket. They found that although more attention was garnered by the display having more jams, much smaller percentage of people actually purchased from the larger display than the smaller one. They did a further study where participants had to choose a chocolate from among six or thirty alternatives. Participants who choose from the six alternatives reported higher satisfaction from the taste of their chocolates than the participants that choose from the 30 alternatives (Iyengar & Lepper, 2000).

There is more and more research to show that consumers also have difficulty with complex choices. As number of options and information regarding these options increase, people tend to process smaller and smaller fraction of overall information available (Hauser & Wernerfelt, 1990). The two major factors of choice sets that influence decision making are the number of options and the number of attributes of a particular product or item. (Malhotra, Jain, & Lagakos, 1982). Both of these findings make it clear that with more number of choices, the number of things, like price, features, value etc., that the consumer has to keep

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in mind increases and as such they are more likely to not consider all factors involved in that purchase which would then lead to lesser and lesser confidence and satisfaction with that decision.

The effect of brand names and time pressure as moderators on choice overload has been studied independently in separate experiments. It has been shown that choosing among familiar brands lead to greater satisfaction than for choosing from unfamiliar or no brands at all (Misuraca, Ceresia, Teuscher, & Faraci, 2019). We expect time pressure would cause participant to have more negative affective responses (lesser satisfaction and confidence, higher regret and difficulty).

2. Literature Review & Hypotheses

It has been established that increasing choices increases the intrinsic motivation, performance and satisfaction for people (Deci, Nezlek, & Sheinman, 1981). However, an ever increasing body of literature have studied the behaviour of people where too many choices have a negative impact on overall satisfaction (Iyengar & Lepper, 2000). This is known as choice overload. People when faced with too many choices, seem to have lesser intrinsic motivation to choose and post choice satisfaction (Fasolo, Misuraca, & McClelland, 2003). The occurrence of choice overload has been found to depend on many variables such as time pressure (Haynes, 2009), choice set complexity, decision task difficulty, preference uncertainty, and decision goal (Chernev, Böckenholt, & Goodman, 2015).

Although large assortment sizes have been shown to have some advantages, it has been shown that it can overstrain consumers since their ability to consciously process information is limited, which in turn lead to lesser product satisfaction (Iyengar & Lepper, 2000). Although processing of information is essential for satisfying choices, in certain conditions like having to rely on limited cues or by the use of some heuristics, spontaneous decisions have also been shown to have positive effect on satisfaction of purchase decision. (Messner & Wanke, 2010).

The presence of an ideal point has been found to help satisfaction when it comes to large assortments. It has been shown that in the absence of such an ideal point, consumers have to take further effort to form such an ideal point and then analyse the large assortment for best matches to their ideal point. This means that when large assortments are present it is better to have an ideal point to simplify the decision making process and make sure that customer has higher preference as well as satisfaction for the purchase decision made (Chernev, 2003).

The role of brand names in choice overload has only been studied in isolation without any of the other dependant variables. Brand names were associated with lesser perceived task difficulty and feeling of regret (Misuraca, Ceresia, Teuscher, & Faraci, 2019). Our paper aims to study the effect of time as a moderator when using brand names in the choice sets. No difference in choice time was found between people with tendency to maximize versus satisficers during choice making (Rogge, 2016). However there are other studies that have found the opposite of this result. "Not knowing the difference between brands with similar attributes may result in consumers simply transferring their confidence in one brand to another" (Wang, & Shukla, 2013: 301).

The hypotheses proposed and tested by us with the six different studies in this paper are as stated below:

H1: The presence of brand names will increase confidence and satisfaction with decision made while decreasing regret and difficulty in making the decision.

H2: Reducing the amount of time to make the decision will lead to decrease in confidence and satisfaction with the decision made while increasing the regret and difficulty in making the decision.

3. Methodology

3.1 Method

The procedure for the study consists of six studies in total - three studies with limited time and three studies with extended time. Within each set of three studies, the first three would have large choice sets and small choice set with familiar brand names, unfamiliar brand names and no brand names respectively. The large choice set would contain 24 options while the smaller choice set would contain only 6 options. The product used for the study would be mobile phones. Therefore the six studies would be as follows:

- 1) Familiar brands in limited time. (n=53)
- 2) Unfamiliar brands in limited time. (n=51)
- 3) No brands in limited time. (n=50)
- 4) Familiar brands in extended time. (n=44)

- 5) Unfamiliar brands in extended time. (n=43)
 6) No brands in extended time. (n=45)

3.2 Choice of brands and time limit

The familiar and unfamiliar brands are decided by conducting a norming study where participants (n=30) were asked to rate how familiar they are with a brand sold in India on a five point Likert scale (1 = very unfamiliar; 5 = very familiar). The most familiar six brands and the most unfamiliar six brands were chosen and a choice set that contains four products of each set would be constructed. The choices were presented in a comparison matrix without any pictures in order to avoid the choices being influenced by incidental factors in their appearance, rather than intentionally presented information.

The time given to participants in the limited time experiments were two minutes to go through the choice sets for both large and small choice sets. They were given a further thirty seconds to answer the questions for each of the choice sets. In the extended time experiments the participants were given however much time they required to go through the different options to arrive at their choice and then to further indicate their responses to the follow-on questionnaire.

3.3 Study participants and procedure

The study participants were students of post graduate programme in an Indian university with good exposure to and customers of mobile phones. The students were randomly assigned to each of the different studies. Participants would be told that the study is being conducted to examine how people decide which product to buy out of the many products available in a shop/ supermarket. They were then given an A3 size sheet which would contain the large and small choice sets. They were then asked to go through large choice set and make a choice, and then the small choice set and make a choice. After the participants made their choices from each of the choice set they were asked to rate their confidence, regret, and satisfaction with their choice and task difficulty on a five point Likert scale.

a. Variables

The variables of the study were the four measures of choice overload as found from literature. These are confidence and satisfaction with the choice made, regret for making that particular choice and task difficulty in making the choice. The moderators for the study were time and brand names.

4. Conclusion

The table below shows the mean and standard deviation of the responses made by the participants for the different measures of choice overload for the different studies.

	Limited Time				Extended Time			
Mean	Confidence	Satisfaction	Regret	Difficulty	Confidence	Satisfaction	Regret	Difficulty
Study 1	4.462	4.442	1.712	3.115	4.500	4.269	1.788	2.712
Study 2	3.926	3.981	2.093	3.148	4.111	4.000	2.111	2.741
Study 3	4.069	4.345	1.983	2.931	3.983	3.879	2.224	3.000
Study 4	4.629	4.514	1.514	2.543	4.686	4.514	1.543	2.457
Study 5	4.289	4.132	1.921	2.868	4.237	4.132	1.789	2.342
Study 6	4.368	4.184	1.684	3.000	4.368	4.132	1.789	2.605
Std Dev	Confidence	Satisfaction	Regret	Difficulty	Confidence	Satisfaction	Regret	Difficulty
Study 1	0.641	0.539	0.893	1.215	0.610	0.689	0.957	1.242
Study 2	0.843	0.687	0.875	1.204	0.793	0.777	0.965	1.200
Study 3	0.769	0.664	0.868	1.006	0.761	1.010	1.109	1.257
Study 4	0.690	0.507	0.887	1.067	0.471	0.702	0.852	1.245
Study 5	0.956	0.963	0.997	1.339	1.025	0.963	0.843	1.279
Study 6	0.714	0.730	0.662	1.230	0.819	0.875	0.875	1.220

Simple two sample t-tests assuming unequal variances were performed for each study and then further for each set of choice in limited time and their corresponding response for extended time. The more prominent of the findings from the analysis are given below.

In study 1 only satisfaction and difficulty showed any significant difference. In limited time there was significant difference in difficulty (significance level = 5%) faced by participants in making their choice. These are also significant difference in satisfaction (significance level = 10%) with the choice for the participants.

In study 2 only difficulty (significance level = 5%) in making the choice made showed a significant difference. Participants had no significant difference in satisfaction, regret or confidence when the choice set was comprised of unfamiliar brands.

In study 3 regret and satisfaction showed significant difference. In limited time and absence of brand names participants faced more regret (significance level = 10%) with their choices and less satisfaction (significance level = 1%) with the choices they made from the large choice set.

In study 4 none of the measures of choice overload showed any significant difference in means. In extended time participants felt no difference in the satisfaction, confidence, regret and difficulty in their choice when making it with familiar brand names.

In study 5 only difficulty (significance level = 5%) in making the choice made showed a significant difference. As in the case of limited time, with extended time also participants only registered higher difficulty in making choices between the large and small choice sets.

In study 6, again only difficulty (significance level = 10%) showed any significant difference with the choice they had to make in large and small choice sets.

In respect to further t-tests done between the limited and extended time periods, many showed significant difference in their means. The confidence (significance level = 5%) with choice made for familiar brands was less in limited time than for extended time for the small choice sets. The confidence (significance level = 5%) with choice made was less for both unfamiliar as well as no brands in limited time as compared to extended time for large choice sets. In the case of satisfaction, there was only significant difference in the case of familiar brands in limited and extended times. Participants had less satisfaction (significance level = 5%) with the choice made with familiar brands in the small choice set. Regret with the choice made on the other hand had more interesting results. Participants showed more regret for the choice made (significance level = 5%) when under the time pressure for large choice sets in case of both unfamiliar and no brands and for small choice set in the case of unfamiliar brands.

Difficulty (significance level = 5%) in making the choice was higher for participants were higher under time pressure in case of large sets of familiar brands. It was also higher in the case of small choice sets with unfamiliar and no brands.

The implications for managers are that when they impose time pressure on consumers they should be aware that greater choice in this situation would likely lead to a decrease in satisfaction and increase in difficulty faced by these consumers, even if they are provided by choices of popular brands. Even in other cases the difficulty faced by the consumers are significantly higher. In case of no time pressure, consumers are more well off if they have to choose from among popular brand names.

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