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**THE EFFECT OF PAIRED COMPARISONS  
ON TRIPLE CHOICE SETS**

A thesis presented in partial fulfilment of the  
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## **ABSTRACT**

As consumers become aware of different brands they might purchase, it is likely they will consider those brands by making a series of paired comparisons, before finally settling on one option they prefer most. Choice theory suggests that preferences are formed early, so by influencing a consumer to prefer one option in favour of other options at the start of a choice episode, this can have a systematic effect on subsequent, and in particular final choice. Simonson, Nowlis, and Lemon (1993) assert that consumers who make paired comparisons of alternatives that vary in price and quality before selecting from a triple set of the same options are more likely to choose the cheapest option, than those who evaluate just the triple set comprised of the same options. Four experiments tested this claim but the predicted effect failed to occur. Moreover, results from one experiment had the reverse effect, the preference share of the cheapest option decreased, while the share of the more expensive options increased. This was a statistically significant result. This contra finding is in agreement with the large body of published evidence that suggests consumers, when it is possible for them to do so, prefer higher quality to lower quality options. The effect of background factors on choice was of concern, so the effect of gender, household income, and age on choice was tested. Results from these tests were inconsistent, and showed that only young males from high-income households were significantly effected by the stepwise treatment. There was concern that heterogeneity in the sampled group of respondents might have confounded the measurement of treatment effects. To help reduce the influence of background factors, all results were weighted. However, Simonson et al. did not account for heterogeneity, so it is possible their treatments have interacted with some background factor associated with the context of choice, individual difference between respondents, or the product attributes. For this reason, the claim by Simonson et al. is open to criticism. Alternative explanations for Simonson et al. (1993) findings are advanced. New research is required into the effects of paired comparisons on choice.

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## INTRODUCTION

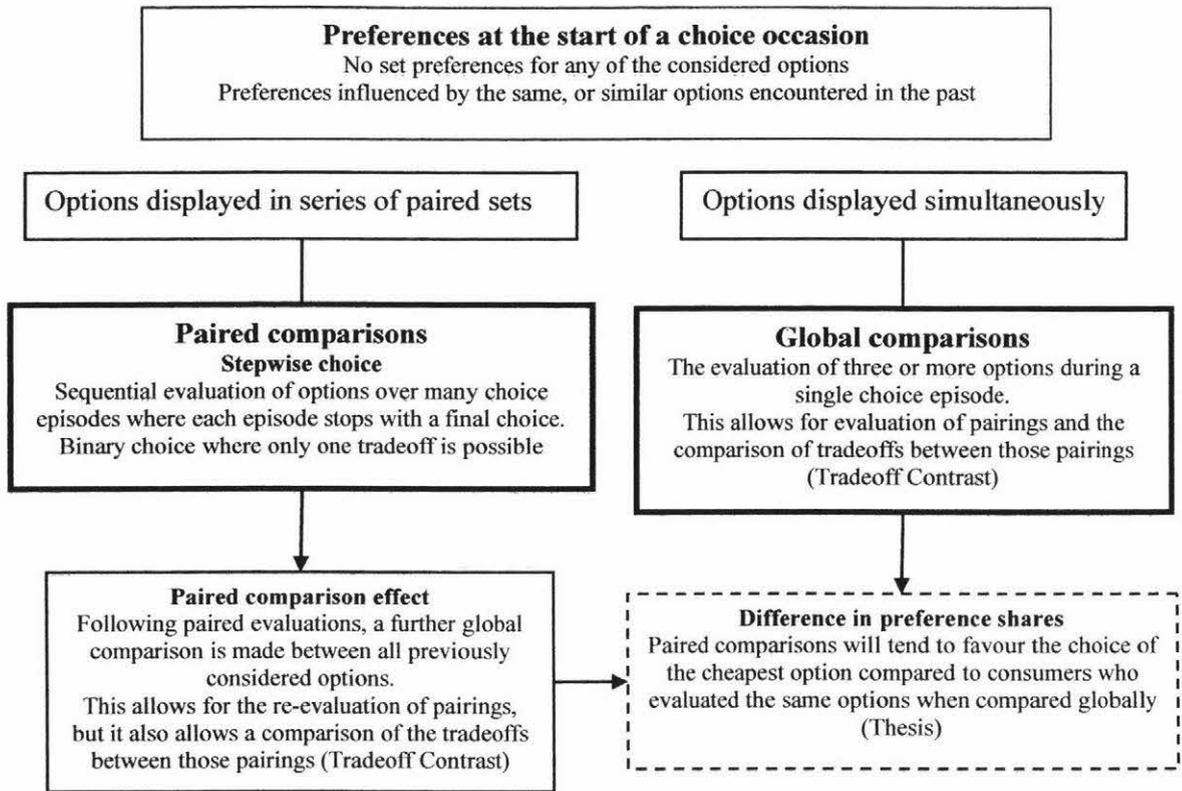
When a consumer becomes aware of different brands they might consider purchasing, they might compare each of the brands against each other in a series of paired or local comparisons, before finally settling on the one option they prefer most. Many believe it is during this early comparison phase that preferences for the considered options are formed, so by influencing a consumer to prefer one option in favour of other options early in a choice episode, then these early formed preferences can systematically effect subsequent evaluations. How these early pairings systematically effect final choice is the focus of this thesis.

One claim of interest is that of Simonson, Nowlis, and Lemon (1993), who contend that consumers who make paired comparisons of alternatives that vary in price and quality before selecting from a triple set of the same options, are more likely to choose the cheapest option than those who evaluate just the triple set comprised of the same options. More simply, Simonson et al. claim that pairwise consideration favours lower priced, lower quality options over higher priced, higher quality alternatives. If such choice tendencies are systematic and reliable, as claimed, then this local choice effect would be useful to marketing managers as they develop promotional marketing strategies. However, it is questionable if the local choice effect is as predictable as they suggest.

The corpus of opinion in the choice literature suggests, that when a consumer has an opportunity to select a higher quality option they will do so, rather than selecting a lower quality option. This contradicts Simonson et al. claim. Recent evidence from a replication of Simonson et al. experiments by Brennan and Laafai (2003; 2002; Laafai, 2002), failed to support Simonson et al. claim as no such systematic effect was found, but they do suggest the possibility of an income boundary effect. In sum, this replication, along with the overwhelming opinion of others, seems to suggest that the experimental evidence Simonson et al. has used to support their claim is an aberration. For this reason, it is worthwhile retesting their claim, but this time using a different methodology to display choice options, to account for the effects of heterogeneity in the samples, and to test for the effects of gender, household income, and age on choice.

Figure 1 outlines the general direction of the current study and the effect of paired comparisons on overall choice.

**Figure 1**  
**The effect of paired comparisons on overall choice**  
*Background contrast verse local contrast*



Briefly, some consumers arrive at a choice occasion with a well-developed preference for some, or all of the options presented to them. For these consumers choice is relatively straightforward. However, as it is unlikely that a consumer can have an established preference for every option they encounter, so they often need to form preferences from scratch. Without forming such preferences, the only other alternative to solve a choice problem, is choice by chance.

Realistically, most consumers arrive at a choice occasion unprepared, or at best with only minimal information about the options they are likely to encounter and eventually purchase. These consumers are likely to consider the various attributes or the features of each option relative to other options. To make these comparisons, they might utilise

information gained from similar choice situations, or they may obtain information directly from the choice environment. In such a retail environment, options are arranged in a manner that favours the selection of one particular option over others. Typical of such promotional strategies is to display items at eye level, or retailers may position offerings in some kind of sequence so a cheap option is compared with a more expensive option, and so on. Retailers also influence choice by the inventory they carry, for their offerings helps to define the number of options the consumer is likely to consider during a choice occasion, unless the consumer decides to shop at another store. In sum, the retailer not only influences the size of the local choice set, but can also dictate the order by which options are noticed and evaluated. One useful promotional strategy suggested by Simonson et al. is to arrange three options in such a way that consumers will first compare an expensive brand with a cheap brand, then a cheap brand with a middle priced brand, and so on. If Simonson et al. is correct then such an arrangement is likely to result in consumers preferring the promoted cheap brand, rather than one of the other brands displayed.

Figure 1 shows two choice conditions. On the left, a series of sequential pairwise choice episodes, followed by a final choice episode where all the options are considered together in a global comparison. Choice in the pairings means the choice of one option rejects the other option, while a final overall choice involving three or more options means that to select one option the choice maker must reject two or more options. To decide which option to keep and which option to reject requires a tradeoff between options or their attributes. The right hand side of Figure 1 shows a choice condition where all options are displayed simultaneously, so tradeoffs are possible between the options.

This thesis measures the difference in preference share between both pairwise and global choice conditions, in the expectation that consumers will favour the lowest priced, lowest quality option over higher price-quality options. If the preference share changes significantly in favour of the lowest price option, then this is sufficient evidence to support Simonson et al. claim.