

**THE HONG KONG POLYTECHNIC UNIVERSITY
DEPARTMENT OF MANAGEMENT & MARKETING**

DEPARTMENTAL RESEARCH SEMINAR

"Analyzing Variety Seeking Behaviour using Panel Data"

By

Dr Esther Tang

Date: Monday, 05 February 2007

Time: 3:30 p.m. - 4:30 p.m.

Venue: M802

All interested are welcome

"Analyzing Variety Seeking Behavior using Panel Data"

ABSTRACT

Esther Tang and Iris Chin

Much research evidence in the literature has shown the significance of intrinsic and extrinsic motivation factors as determinants of variety seeking behavior, but mainly within the Western market contexts. The present research reviews and integrates some of the findings from this body of literature by considering the evidence of another, non-Western business market, Hong Kong. Using consumer panel data of six product classes, this study provides further empirical support to the postulated influential power of intrinsically (i.e. need for variety) and extrinsically motivated factors (i.e. product-category level characteristics) on product choice decisions.

Consistent with previous findings in Western cultures, the results of this study are suggestive of the influential role of consumers' intrinsic desire for variety and product-specific variables on variety-seeking behavior. However, it was found that extrinsic motivation elements play a more influential role in stimulating brand switches among Hong Kong consumers. More specifically, the type of product, purchase history and brand alternatives are found to be significant predictors of variety seeking behavior.

These findings have important marketing implications for practitioners, suggesting that Hong Kong consumers are more likely to consider marketing mix elements (e.g. product alternatives, promotion offers, and price promotions) as their product choice decision criteria. Marketers need to tactically design their assortment mix and marketing program so as to effectively influence consumer preferences. In particular, strategic issues relating to brand/line extension, loyalty building and promotional intensity in enhancing brand competitiveness are worthy of managerial considerations.

As an exploratory first step in understanding the variety seeking behavior of Asian consumers, this study contributes to the existing literature by providing insights into the variety seeking intensities of consumers within a non-Western market environment. On the basis of the study's findings, future researchers might consider further enlarging the research agenda by investigating the nature of variety seeking behavior in different Asian marketing contexts for comparative analysis.

Analyzing Variety Seeking Behaviour using Panel Data

Esther Tang

Variety Seeking in Purchase Behaviour

- The tendency of individuals to seek diversity in their choices of services or goods
- A determinant factor in brand switching

Motivating factors for variety-seeking behavior

1. Satiation/stimulation

(Maddi 1968, ... Venkatesan 1973, ... McAlister & Pessemer 1982, ... Bawa 1990, ... Kahn & Isen 1993, Ratner et al 1999)

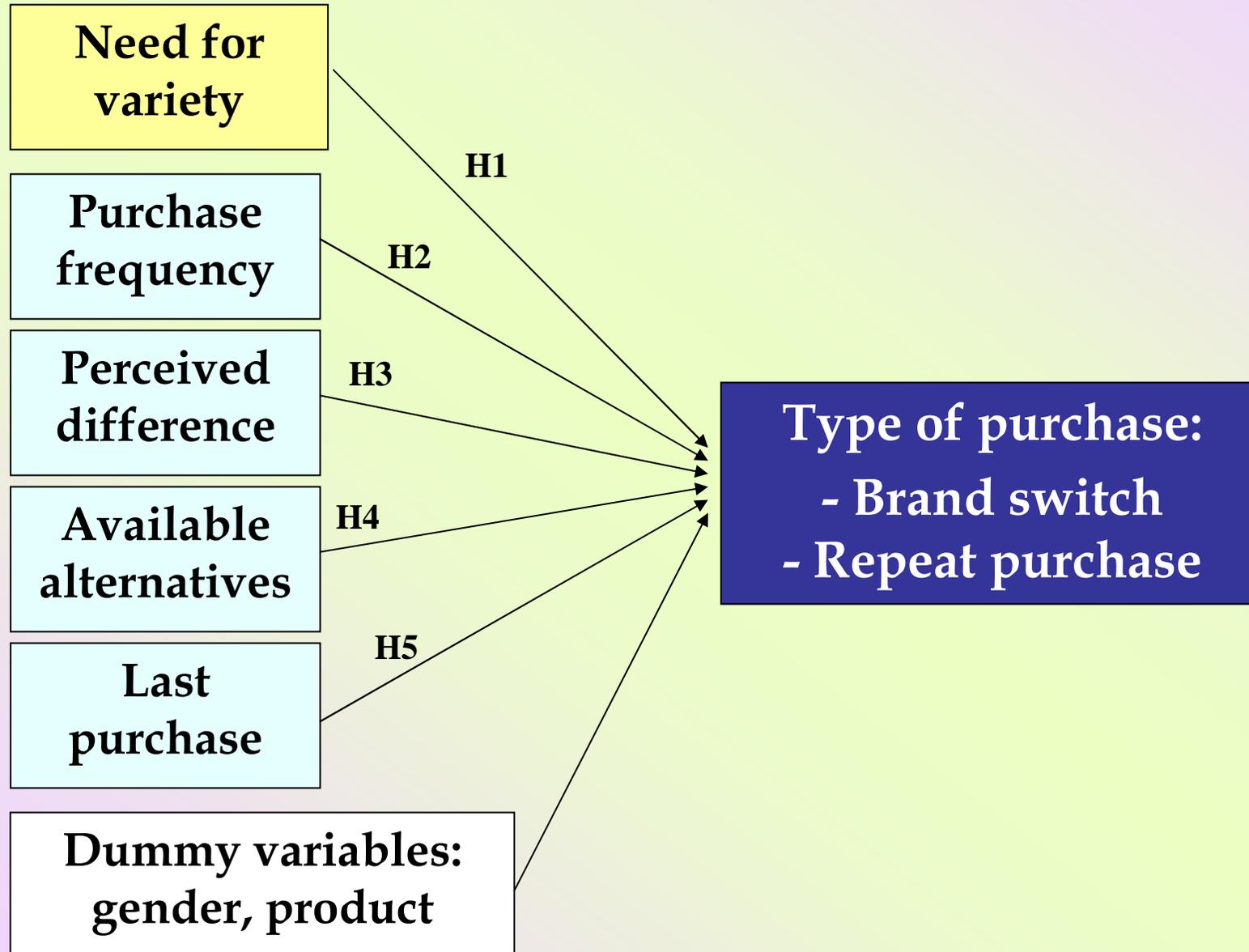
2. External situation

(Laurent 1978, ... Kahn & Louie 1990, ... Menon & Kahn 1995, .. Ratner & Kahn 2002)

3. Future preference uncertainty

(Pessemer 1978, ... Simonson & Winer 1992, ... Walsh 1995, ... Chen & Paliwoda 2004)

The Model



Hypothesis 1

- People who have a higher need for variety engage more in variety seeking purchase behavior than in repeat purchases

Hypothesis 2

- Variety seeking purchase behavior is more likely to occur for products that have higher rather than lower purchase frequencies

As consumers engage in repetitive purchase decision processes over time, boredom with the repetitive choice task may activate the variety drive (Howard & Sheth 1969, McAlister 1982, Hoyer & Ridgway 1984)

Hypothesis 3

- Variety seeking purchase behavior is more likely to occur when the difference between brands is perceived as smaller rather than larger

Consumers are more likely to choose brands with attributes that are superior to others in relation to their needs (Bass et al. 1972, Van Trijp et al. 1996)

Hypothesis 4

- Variety seeking purchase behavior is more likely to occur when there are more alternative brands to choose

Theories of exploratory behavior point out that upward/downward fluctuation in environmental stimulation, if sustained for a period of time, may shift the subsequent optimal level upward/downward (Berlyne 1960, Kahn 1998)

Hypothesis 5

- Variety seeking purchase behavior is affected by the last purchase choice

If the previous transaction was a repeat purchase, it is likely that variety seeking consumers would switch brand due to satiation or boredom. However, if the previous transaction was already a brand switch, the consumer might still switch again if the purchase brand fails to satisfy the consumer's needs.

Method

- The hypotheses are tested using the ACNielsen Homescan (consumer purchase panel) data in Hong Kong. The data represent a total of 1,200 representative families.
- The purchase information is also linked with other additional information acquired through the quarterly Homescan Panel*View Survey.

Products

- Food : packaged rice, liquid milk, instant noodle
- Non-food: toilet tissue, toothpaste, liquid soap

Reasons:

1. mature products, represent low involvement consumer behavior
2. no new brands or major promotion campaigns in these categories were launched during the period of investigation
3. food and non-food categories are considered to be different in terms of hedonic values.

Measures of Need for Variety

V1	I would rather stick with a brand I usually buy than try something I am not very sure of.
V2	When I go to a restaurant, I feel it is safer to order dishes I am familiar with.
V3	If I like a brand, I rarely switch from it just to try something different.
V4	I enjoy taking chances in buying unfamiliar brands just to get some variety in my purchases.
V5	Even though certain food products are available in a number of different flavors, I tend to buy the same flavor most of the time.
V6	I am very cautious in trying new or different products.

7-point scale, 1 = agree completely, 7 = disagree completely

Measures of Perceived Difference Between Brands

D1	Differences among the brands of Package Rice are large.
D2	Differences among the brands of Liquid Milk are large.
D3	Differences among the brands of Instant Noodle are large.
D4	Differences among the brands of Toilet Tissue are large.
D5	Differences among the brands of Toothpaste are large.
D6	Differences among the brands of Liquid soap are large.

7-point scale, 1 = agree completely, 7 = disagree completely

Purchase Statistics

July – December 2002

Product Category	No. of brands available	Average purchase frequency (times)	Range of purchase frequency	Percentage of brand switch
Packaged Rice	39	7.34	3 - 21	23.4%
Liquid Milk	23	21.64	6 - 57	36.1%
Instant Noodle	82	16.60	5 - 51	49.7%
Toilet Tissue	67	7.06	3 - 21	27.2%
Toothpaste	31	5.04	3 - 12	20.0%
liquid soap	105	5.78	3 - 14	30.5%

Logistic Regression Results

Classification Matrix

Observed	Predicted		Percentage correct	Prior probability
	Brand switch	Repeat purchase		
Brand switch	2996	2623	53.3%	37.9%
Repeat purchase	1719	7506	81.4%	62.1%
Overall hit rate			70.7%	

Logistic Regression Results

Dependent Variable: type of purchase (1: brand switch; 0: repeat purchase)

Independent Variables	β	Significance
H1: Need for variety	0.030	0.000
H2: Purchase frequency		Not significant
H3: Perceived difference between brands		Not significant
H4: No. of available alternatives	0.272	0.000
H5: Last purchase type (1: brand switch)	1.501	0.000
Dummy: Gender (1: female)	0.223	0.000
Dummy: Product type (1: food)	0.349	0.000

Nagelkerke $R^2 = 0.260$

Conclusions and Implications

- Some product categories inspire higher variety-seeking tendencies than others in consumers:
 - Offer a range of flavours or variants for some
 - emphasize building brand loyalty for others

Conclusions and Implications

- The impact of variety on cost and the reactions of consumers to large sets of options should be further studies
- Consumers are generally multi-brand loyal: switch among a number of brands