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Exploring Negativity Bias in Brand Beliefs and Stated Brand Switching Propensity

Abstract

Negativity bias has been well studied by psychologists but limited research has been conducted on it in a marketing context. Given previous research, this exploratory study aims to examine whether there are any negativity bias effects in brand beliefs and whether there is any influence on stated brand switching propensity amongst current users of a brand. The results suggest that there is a negativity bias evident in brand image data.

Introduction

Although there are other explanations available, it is commonly assumed that consumers utilise negative beliefs in the evaluation process, especially for high involvement decisions (Engel, Blackwell, & Miniard, 1993; Kotler, Brown, & Armstrong, 2001; Solomon, 1994). Some researchers have developed valence measures that subtract the number of negative beliefs from the number of positive beliefs a consumer mentions; it is expected that such a measure reflects an overall evaluation of a brand or item (Ito & Larsen, 1998; Krishnan, 1996).

Given the assumed importance of negative brand beliefs in the purchase decision process it is surprising that most brand image studies both in academic research (e.g., Barwise & Ehrenberg, 1985; Cohen & Houston, 1972; Kempf, 1999; Lassar, Mittal, & Sharma, 1995) and market research (Lehmann, Keller, & Farley, 2008; Winchester & Fletcher, 2000) include predominantly positive brand associations. The hesitation to measure negative brand beliefs in the past has led to limited empirical knowledge about them. Grudges against brands or negative brand attitudes by consumers has received very little systematic study (East, 1997), yet there have been calls for further knowledge to be developed in the area (Hoek, Dunnett, Wright, & Gendall, 2000; Romaniuk, 2000; Romaniuk & Sharp, 2000, 2003a; Winchester & Fletcher, 2000). In studies where negative brand beliefs have been considered in their own right, the importance of these beliefs in the decision making process is unclear. There have been studies that indicate that responses to negative image beliefs are either a result of brand switching (e.g., Bird, Channon, & Ehrenberg, 1970) or are indicative of reasons consumers switched brands (e.g., Woodside & Trappey, 2001). Whether the nomination of individual negative image beliefs is indicative or a result of customer switching has only been recently empirically tested in a longitudinal study (Winchester, Romaniuk, & Bogomolova, 2008). This study found that while responses to negative brand beliefs increased after switching brands, there is evidence that responses to negative brand beliefs can also be indicative of brand termination in a subscription market. Such evidence suggests an understanding of the role negative beliefs play in the propensity to switch brands needs further exploration.

Research in the psychological field demonstrates that negative information is less commonly retrieved than positive information (Crandall, 1975; Rozin & Royzman, 2001). However, it appears negative information receives more attention than positive information because it is more informative (Ito & Larsen, 1998). Negative cues are said to be given more weight, because they are "statistically rare" (Scott & Tybout, 1981, p.408), and there is a negative learning bias in attitude formation (Shook, Fazio, & Vasey, 2007). This phenomenon is known as negativity bias. Negativity bias is widely studied and accepted within psychology (Crandall, 1975; Ito & Larsen, 1998; Richey, Bono, Lewis, & Richey, 1982; Rozin & Royzman, 2001; Shook et al., 2007; Smith et al., 2006; Vaish, Grossman, & Woodward, 2008).

There has been limited study of negativity bias in the marketing field. Such studies have been conducted in a range of areas that include the evaluation of advertising (Shavitt & Brock, 1990), product beliefs (Herr, Kardes, & Kim, 1991; Mizerski, 1982; Scott & Tybout, 1981) and organisations (Folkes & Kamins, 1999). Limited research has been conducted on the effects of negativity bias in brand beliefs on consumer decision-making. The aim of this paper is to extend the prior knowledge of negativity bias into a consumer behaviour context by exploring whether negativity bias in brand beliefs and brand switching are associated. The study will consider aggregate responses, as individual brand beliefs have been shown to be unstable over time (e.g. Dall'Olmo Riley, Ehrenberg, Castleberry, Barwise, & Barnard, 1997). Initially, the effects of individual mentions of negative beliefs on propensity of current users to switch brands will be considered in comparison to positive belief mentions.

Given the prior mentioned empirical evidence that positive beliefs usually receive much higher levels of response in brand image surveys than negative beliefs (Bird & Ehrenberg, 1970; Winchester & Romaniuk, 2003), the argument for negativity bias may appear counterintuitive. Several authors, however, acknowledge that positive information is more common than negative information, but argue that when negative information is utilised in evaluations it gets more attention (Crandall, 1975; Ito & Larsen, 1998; Rozin & Royzman, 2001) and is easier to retrieve (Ito & Larsen, 1998). It is suggested that this may be because of the surprise element of negative occurrences compared with positive ones (Crandall, 1975; Ito & Larsen, 1998). Confounding this point of view however is Rozin and Royzman (2001) who argue the major trend in research thus far has been toward positivity bias rather than negativity bias. In addition, Smith et al (2006) argue that negativity bias is eliminated when positive constructs are made accessible to memory and Richey, Bono, Lewis and Richey (1982) found that when attention was given to personal characteristics constructs like likeability and intelligence, there was no negativity bias effect.

Based on the conflicting prior research outlined above, there is no clear trend and therefore the following competing hypotheses are presented:

> *H1a: That each mention of a negative brand belief has a lesser effect on increasing the stated intention to switch brands than each mention of a positive brand belief has on decreasing the stated intention to switch brands*

> *H1b: That each mention of a negative brand belief has a greater effect on increasing the stated intention to switch brands than each mention of a positive brand belief has on decreasing the stated intention to switch brands*

Method

Data

Data from typical commercially conducted brand image surveys was used. To triangulate findings and avoid the possibility of exceptional one-off results, in this study patterns are investigated three different industries; in business to business and business to consumer markets; and using different methodologies to elicit brand images. Three product categories were chosen to investigate the research question: financial services, power utilities and insurance services. These categories were chosen because they were conducted in subscription markets that made brand usage easier to determine (Sharp, Wright, & Goodhardt, 2002), and because brand switching is much easier to determine in subscription markets, this study is more likely to arrive at generalisable results regarding the question of how negative brand-belief associations affect switching behaviour. This requires the use of a range of data sets rather than one single data set. The common practise of using one data set in such research has been criticised for its likelihood of leading to errors and invalid findings (Barwise, 1995; Ehrenberg & Bound, 1993; Hubbard & Armstrong, 1994; Hubbard, Brodie, & Armstrong, 1992; Lindsay & Ehrenberg, 1993). To avoid errors associated with sample size, brands with market shares lower than 5% were removed from the analysis.

It could be argued that even within a product category replication studies may lead to different results. In order to ensure that this is not the case the first study includes three separately collected data sets from within the same product category: financial services.

A summary of the key data set characteristics for all studies is provided in Table 1.

Table 1: Outline of studies included in research

Study	Market	Sample Size	Method	Sample	# of +ve beliefs	# of -ve beliefs
Study 1a	Financial Services	645	Mail	B2B	17	4
Study 1b	Financial Services	535	Mail	B2B	17	4
Study 1c	Financial Services	525	Mail	B2B	17	4
Study 2	Power Utilities	780	CATI	B2B	19	6
Study 3	Insurance services	627	CATI	B2C	5	3

Brand belief measures

For most studies in this paper, respondents were given the belief and asked which brands from a preset list they associated with the belief, known as the free-choice, pick any format (Barnard & Ehrenberg, 1990; Driesener & Romaniuk, 2006; Joyce, 1963). Free choice questioning techniques were chosen for the lower level of false positive responses (i.e. respondents being forced to give a response where they may not wish to), lower levels of respondent fatigue and because they are the most commonly used method of data collection in brand image studies (Barnard & Ehrenberg, 1990; Driesener & Romaniuk, 2006; Joyce, 1963). In the studies conducted, the negative beliefs were generally randomly interspersed in between non-negative beliefs. For the purposes of this study, only statements made about the brand the respondent currently used were analysed.

Unlike other studies conducted with negative beliefs, the beliefs chosen in these studies were not selected simply because they were the polar opposites of the positive beliefs used (e.g., Bird & Ehrenberg, 1970). They were chosen jointly between client and researchers on the expectation that the majority of customers, marketers, and researchers would consider that being associated with that belief would be undesirable. Positive beliefs were chosen for each market in the same manner.

Measure of stated intention to switch brand

One of the greatest criticisms of the commonly used intention to purchase measures is their level of inaccuracy (Juster, 1960; Malhotra, Shaw, Hall, & Crisp, 1996). An alternative measurement method is the probabilistic category, which concentrates on the respondent assessing their probability of purchase behaviour rather than asking their intention toward purchasing a brand (Danenberg & Sharp, 1996), which have been shown to be more accurate than intention scales (Day, Gan, Gendall, & Esslemont, 1991). The Juster scale has been shown to be more accurate at predicting future consumer purchases than intention scales in face-to-face, self-completion and telephone interviews (Brennan, Esslemont, & Hini, 1994; Day et al., 1991). Brennan, Esselmont and Hini (1994) developed a verbal method of the Juster scale they have called the 'Verbal Probability Scale' which is utilised in the studies conducted for this paper where CATI interviewing was utilised. In the case where a self-completion survey was utilised (such as the business banking studies), a typical 11-point Juster scale was used.It is accepted that the average scores out of 10 can be converted to proportion of the respondents likely to switch. For example, an average score of 2.6 on the verbal probability scale can be interpreted to 26% of respondents are likely to switch (Brennan & Esslemont, 1994; Day et al., 1991).

Results

The analysis aims to explore whether those respondents who nominated any negative belief for the brand they currently use had a higher stated propensity to switch brands than those who did not. The users of each brand were broken down into those who mentioned any negative belief, and those who did not. The average verbal probability score for these two groups was calculated for each brand to compare the differences between the two groups' response level, and results were merged across brands as there was little variation evident for individual brand results. In line with other studies that use Juster ratings, the average Juster score for each brand was multiplied by 10 to present a proportion of the respondents likely to undertake the switching behaviour (Brennan & Esslemont, 1994; Day et al., 1991).

In Table 2, below, the overall results from all studies are considered and compared to the average change in proportion likely to switch for mentioning a positive belief. The results

here are a calculation of the mean difference in verbal probability score for a mention or non-mention of any particular belief, averaged over brand, and then by overall study.

Table 2: Difference in proportion predicted to switch brands per mention of negative attribute across studies where Juster measure used

	Proportion likely to switch per mention of negative attribute			
	Mention	No Mention	Difference (negative)	Difference (positive)
Business banking 1997	30%	18%	13pp	-8 pp
Business banking 1998	27%	15%	11pp	-8 pp
Business banking 2000	29%	17%	12pp	-9 pp
Power utilities in B2B market (SA)	39%	31%	8pp	-6 pp
Consumer insurance NSW	32%	22%	10pp	-5 pp
Mean	31%	20%	11pp	-7 pp

The overall results indicate that on an individual attribute level, mentioning negative brand beliefs do have the reverse effect of positive brand image beliefs, as on average, a negative belief mention increases the stated propensity to switch brands. The last column of the table for positive beliefs is put for comparison purposes, which demonstrates that as expected, a positive belief mention reduces the stated propensity to switch brands. For example, mentioning a negative belief on average in the comprehensive car insurance study also led to an increase in the respondent's nominated propensity to switch by ten percentage points. In addition to the finding above, negative beliefs appear to have a higher magnitude in their effect on stated propensity to switch.

The results presented thus far only have considered individual mentions. To better address the objectives of the study, a Pearson's correlation analyses were conducted across all levels of mentions of positive and negative beliefs with vulnerability scores across all studies. The results are presented in Table 3, below.

Table 3: Peasron's correlation between vulnerability score and number of beliefs mentioned

	Number of negative beliefs	Number of positive beliefs
Power utilities - business (SA)	+0.89	-0.75
Business banking 1997	+0.99	-0.81
Business banking 1998	+0.97	-0.88
Business banking 2000	+0.96	-0.50
Consumer Insurance (NSW)	+0.99	-0.43
Mean	+0.96	-0.67

Table 3, above, demonstrates that in all cases the correlations between an increase in negative belief associations and the proportion of respondents who state that they are likely to switch brands were very high (on average r=0.96). In comparison, the correlation for positive associations and the proportion of respondents who state that they are likely to switch brands was in the opposite direction as expected, but was lower (average r=-0.67).

Discussion

The results indicate that on an individual level, negative brand beliefs do have the reverse effect of positive brand beliefs, and in addition may have a higher magnitude in their effect on propensity to switch. The results support the second hypothesis presented:

> *H1b: That each mention of a negative brand belief has a greater effect on increasing the stated intention to switch brands than each mention of a positive brand belief has on decreasing the stated intention to switch brands*

Previous research had demonstrated that individual positive belief mentions were related to a lower probability of switching brands (Romaniuk, 2001; Romaniuk & Sharp, 2003b). The results of this exploratory study indicate that individual negative belief mentions appear to be related to an increased likelihood of switching behaviour, confirming earlier research (Romaniuk & Sharp, 1999) and consistent with research that indicated negative belief mentions increased prior to switching brands (Winchester et al., 2008).

However, while negative beliefs appear to work in an opposite manner to positive beliefs, this research suggests that individual negative beliefs, while having the opposing valence, have a greater magnitude effect than positive beliefs, supporting past findings that have claimed that the negative aspect of a construct can not be assumed to be the absolute opposite of the positive (e.g, La Barbera & Rosenberg, 1980). These results also suggest that valence measures that simply subtract negative belief mentions from positive belief mentions may not be a valid assessment of brand valence (e.g., Krishnan, 1996).

Earlier studies demonstrated that respondents generally do not elicit a large number of negative beliefs about brands. As discussed in the literature review, researchers who have considered the phenomenon of 'negativity bias' have acknowledged this in the past, but have argued that this small amount of negative information is given more attention in the decision making process (Crandall, 1975; Herr et al., 1991; Richey et al., 1982; Rozin & Royzman, 2001; Scott & Tybout, 1981; Shavitt & Brock, 1990). From a managerial point of view, results suggest negative beliefs may be worth measuring as a future indication of brand switching by current brand users. The results suggest that commercial brand image studies should contain negative beliefs so that managers are aware of the levels of negative associations, which may have to be acted upon, if compared to competing brands' users, the response levels are higher.

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