Blood Donation: An Exploratory Study of Antecedents and Outcomes of Self-reported Behaviour

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Abstract

This research explores the antecedents and consequences of self-reported blood donation behaviour for females. A model is provided whereby firstly, the antecedents of blood donation behaviour are hypothesised to be involvement in the blood donation social issue and attitude towards the act of blood donation as a social issue. Secondly, it is hypothesised that the outcomes of blood donation behaviour are an assessment of consequences by individuals and arousal of feelings. The results indicated that both social issue involvement and attitude towards the social issue have significant effects on blood donation behaviour. In addition, blood donation behaviour was found to have a negative effect on subjective assessment of negative consequences and a positive effect on aroused feelings.

Introduction

According to the Australian Red Cross Blood Service the demand for blood is expected to double in the next 10 years. However, it seems that only around 3.5% of all Australians eligible to donate blood, (www.donateblood.com.au) do so, and as such there is an imperative to find ways to influence greater numbers of eligible individuals to become blood donors. This situation should be of interest to social marketers because by understanding factors that influence individuals to undertake positive social issue behaviours, such as donating blood, may provide clues to finding ways to influence other individuals to do the same. This position may be framed within the context of the blood donation social issue, and an individual's degree of involvement in and attitude towards the issue. Furthermore, in addition to the factors that determine behaviour, it may be that the outcomes of an individual's behaviour may also provide clues for social marketers to design more effective social marketing campaigns. Fundamentally, this may be viewed in terms of how individuals make a subjective assessment of negative consequences, and their aroused feelings as a result of their behaviour.

Social Issue Involvement

Involvement has been shown to have a significant influence on a wide range of consumer behaviours (Krugman, 1965; Mitchell, 1979; O'Cass, 2000), there has however, been limited interest in the role of involvement in relation to social issues and associated behaviours (Griffin and O'Cass, 2004). This situation would seem surprising, given that many of the behavioural choices social marketers attempt to influence appear to entail high involvement decisions (Andreasen, 1995; Celsi and Olsen, 1988). Therefore, drawing on Mittal's (1995) definition of involvement as a person's perceived importance of the object, it is suggested here that it may not matter what represents the 'object', (i.e., product, task or social issue) as long as it is deemed to be of concern, important or matters to the individual – it is involving. Importantly, involvement is viewed in the context of the pro or positive involvement in a

social issue as has been alluded to earlier by Griffin and O'Cass (2004). This means that those individuals (eligible to donate blood) who practise the positive social issue behaviour (i.e. donate blood) would be deemed to have a higher level of social issue involvement than those (eligible) individuals who do are not blood donors. This connection and corresponding behaviours is inline with extant views of involvement found in the literature (see Bloch and Richins 1983, Mittal, 1985). Moreover, because individuals will differ in their social issue involvement, they will also differ in their commitment to social issues (Sherif, Sherif and Nebergall, 1965), as well as their opinions regarding social issues (Harrell, 1979). Considering the earlier point that approximately only 3.5% of the eligible donor population actually undertake the behaviour and donate blood suggests that there may be a significant amount of the eligible donor population who level of social issue involvement is not a high enough level that would translate into actual behaviour (i.e., to donate blood). Thus,

H1: Involvement in the blood donation social issue has a significant positive effect on blood donation behaviour.

Attitude towards the Social Issue

Along with involvement, attitudes have been the focus of much consumer behaviour theory because they are seen to be an important predictor of behaviours (Ajzen, 2001; Fishbein and Ajzen, 1975). Attitude towards a social issue is defined as, a global and relatively enduring evaluation of a social issue promoted within the community (Petty *et al.* 1991, p.242, which in this case, is the 'blood donation' social issue.

Although the primary aim of social marketers is to change behaviours, they also attempt to change attitudes because of their predictive utility (Andreasen, 1995). Hence, in relation to social issues and the related behaviours, it has been suggested that an examination of the attitude-behaviour relationship may lead to a better understanding of individuals' social issue behaviours (e.g., Hines, Hungerford and Tomera, 1987; Smith, Haugtvedt and Petty, 1994). However, in evaluating the focal topic of the social issue (i.e., blood donation), it can be assumed that are individuals who hold favourable attitudes and those who hold unfavourable ones. Moreover, given that attitudes are seen to be predictors of behaviour (Fishbein and Ajzen, 1975), it can be inferred that a positive attitude towards the blood donation social issue could translate into a positive social issue behaviour (i.e., donating blood). However, Fazio and Zanna (1981) argue that attitudes based on direct experience tend to have greater clarity and, are held with more confidence and certainty than attitudes formed through indirect experiences. From a social marketing perspective, this suggests that influencing individuals to take on positive attitudes via indirect means (e.g., social advertisements) may be difficult, as is demonstrated by the very low percentage of blood donors in Australia. extending the view that positive attitudes towards (environmental) issues are likely to translate into positive environmental behaviours (Balderjahn, 1988; Hines et al. 1987) it is agued, here, that in general, a positive attitude towards a social issue should influence one to practice the related positive social issue behaviour, that is donate blood. Thus,

H2: Attitude towards the blood donation social issue has a significant positive effect on blood donation behaviour.

Subjective Assessment of Negative Consequences

Whether individuals choose to engage in blood donation behaviour, or choose not to - in either circumstance, the actual behaviour undertaken by the individual will lead to certain outcomes. As noted by Bauer (1960), any action taken by an individual involves risk which produces consequences that cannot be anticipated with absolute certainty, some of which are likely to be unpleasant (e.g., feel psychologically uncomfortable or have unwanted anxiety or tension (Stone and Gronhaug, 1993)). Defined in the literature as 'perceived risk', Bauer (1960) noted that risk is present within the pre and post-decision process for consumers. Prior research has found that perceived risk is a factor for every individual's intention to donate blood (Allen and Butler 1993; Nonis, Ford, Logan and Hudson 1996). However, to our knowledge perceived risk has not been examined post behaviour, and risk in post-decision differs to pre-decision because it relates to actual behaviour as opposed to planned behaviour. In relation to post behaviour, there is still the potential for negative consequences, however, because the behaviour has already occurred, individuals are more able to make a direct assessment of those negative consequences. Moreover, as noted by Bauer (1960) risk in the pre-purchase stage is dependent upon individuals' own perceptions and relates to planned behaviour and, therefore, will vary. Similarly, risk in the post behaviour stage will also vary, because individuals will differ in how they make a subjective assessment of the negative consequences resulting from their behaviours, but post-decision relates more specifically to enacted (i.e., actual) behaviour.

In terms of blood donors, it could be inferred that there is little potential for negative consequences (perceived or actual) resulting from their behaviour. As such, it would be expected that they would conclude (i.e., make the evaluation) no negative consequences have resulted from their behaviour. On the other hand, for those individuals who choose not to be blood donors, it could be argued that they may be more likely to assess there to be a greater potential for negative consequences (e.g. feeling psychologically uncomfortable) as a result of their behavioural choice. Importantly, it is engaging in the positive behaviour (i.e., donating blood) or the opposing behaviour (i.e., not donating blood) that determines the extent individuals make an assessment of negative consequences. Thus,

H3: Blood donation behaviour has a significant negative effect on subjective assessment of negative consequences.

Feelings

Along with subjective negative consequences, an individuals' feelings are also deemed to be an outcome of their behaviour. Feelings are viewed here, in the context of affective reactions that individuals experience as a result of an encounter (Burke and Edell, 1989) or consumption experience (Richins, 1997). Within the context of social issues, an encounter or consumption experience could be likened to the behaviour undertaken (related to a social issue) by an individual. Moreover, according to Edell and Burke (1987) feelings are the property of the individual, in that a response to stimuli may lead to feelings of, for example, joy, happiness or boredom. Furthermore, feelings have a specific referent (Bagozzi, Gopinath and Nyer, 1999), or are relevant to a situation encountered by an individual (Lawler, 2002). Thus, in relation to individuals who practice a behaviour promoted in the community (or the opposing behaviour), the stimuli would be the behaviour that they have engaged in or avoided (i.e. donating blood), and it is that stimuli that elicits feelings for the individual (Burke and

Edell, 1989). Moreover, it is argued that those individuals who donate blood and, therefore, engage in a positive social issue behaviour promoted in the community, will be more likely to experience positive feelings (e.g., pleased, delighted, happy) as a result of their behaviour. Thus,

H4: Blood donation behaviour has a significant positive effect on aroused feelings.

Method

This research was based on the development of a web-based self-administered survey. The approach was chosen for the advantages of rapid deployment, assured non-response, and design flexibility (Aaker et al. 2005). The sample consisted of students and staff of an Australian university. Data collection involved the researchers sending an email (which included information on the purpose of study, as well as a link to a unique web site location to access the survey) via the email system to invite participation. Initially, respondents were required to choose a response that described their behaviour in relation to the blood donation (i.e., I do donate blood/I do not donate blood). In this way, respondents were categorised as either donors or non-donors. Social Issue Involvement (SII) was measured using five items adapted from Mittal (1995). Attitude towards a social issue was measured using four items (e.g., positive view, perception is good). Subjective assessment of negative consequences was measured using four items that tapped the negative consequences to oneself personally, or to others as a result of one's social issue behaviour (e.g., little to lose; no adverse consequences; anyone else to suffer; no negative consequences). Feelings were measured using four positive (e.g., happy, pleased, delighted, proud) and four negative items (e.g., angry, disgusted, bad, irritated) adapted from Edell and Burke (1989). A seven-point Likert scale format was utilised for the study.

Results

The administration procedure yielded 345 completed surveys. However, given that the gender distribution was skewed towards females (81%), for this study, only the data related to female respondents were included in subsequent analysis (279). The preliminary analysis indicated that female respondent ages ranged from 18 to 65 and the average age was 27 years. In relation to blood donation behaviour, 65% of the respondents identified themselves as 'blood donors'. The analysis of the data was undertaken via correlation analysis, exploratory factor analysis, reliability analysis and Partial Least Squares (PLS) SEM analysis was used to test the hypotheses. The outer model (i.e. measurement model) was examined using PLS. All measures of constructs were submitted to preliminary analysis via PLS. The results indicated that all measures met acceptable benchmarks on factor loadings, weights AVEs, critical ratios and reliabilities.

Evaluation of the relationships was via statistical indices that attempt to explain the data, congruence with the hypotheses and precision. An examination of results was undertaken via r^2 , average variance accounted for (AVA), average variance extracted (AVE), and regression weights and bootstrap critical ratios (t-values) and path variance. As shown in Table 1, the AVA for the endogenous variables is .20 and R^2 values are equal to or greater than the recommended 0.10 (Falk and Miller 1992) for the predicted variable.

Table 1 Hypotheses Results

Predicted Variables	Predictor Variables	Нур	Path	Variance due to path ^a	\mathbb{R}^2	Critical Ratio ^a
Blood Donation	Social Issue Involvement	H1	.242	.07		4.44
Behaviour	Attitude towards Social Issue	H2	.123	.03	.10	1.78
Assessment of Negative	Blood Donation Behaviour	Н3	-0.414	.17		8.23
Consequences					.17	
Feelings	Blood Donation Behaviour	H4	.596	.32	.32	12.96
AVA					.20	
AVA ^a Only interpreted if R ² is greater	than 0.10; ^b Bootstrap estimate divided by	v bootstrap	standard eri	or:c Average Va	riance Ac	ecounted for.

Further, the significance of the paths was examined by calculating the product of the path coefficient and the correlation coefficient, with .015 (1.5%) as the threshold. All the paths exceed this criterion and the bootstrap critical ratios are above acceptable levels (greater than 1.64 and 1.96). Overall, the results used to evaluate the hypotheses indicate that all hypotheses are supported.

Discussion

As is shown by the findings, the degree to which individuals hold social issues to be important or meaningful in their lives is a factor for them undertaking the positive social issue behaviour - donating blood. In addition, as shown by the results an individual's positive attitude towards the blood donation issue is also a factor for them being a blood donor. Importantly, as these results are based on individuals' self-reported behaviour (rather than their intention to behave), exemplifies the role that involvement and attitude can play in the consumer behaviour process.

However, in understanding the factors that are associated with individuals donating blood, some of the explanation may be found in the post-consumption (i.e., post-exchange) phase of the consumer behaviour process, especially as these individuals receive no tangible or direct benefit from donating blood. As shown by the results, it appears that the outcome of the act of donating blood is an assessment of few negative consequences and more positive aroused feelings. On the other hand, as shown by the results those individuals who do not donate blood make a subjective assessment of more negative consequences and less positive feelings are aroused as a result of their non-actions. Thus, these individuals would seem to have an awareness that their act of *not* practicing positive social issue behaviour leads to negative outcomes.

Of particular interest, is that the strongest path is between the behavioural action and feelings. Thus, for those individuals who donate blood, engaging in the positive behaviour leads them to experience feeling happy, pleased and delighted with their actions. On the other hand, for those individuals who do not donate blood, their non-actions may lead them to experience feeling angry, disgusted or bad. From a consumer behaviour perspective, these results suggest that the positive feelings that individuals experience as a result of donating blood, may provide a way of making the act of donating blood more appealing to individuals. For example, promotional campaigns that highlight the aroused positive feelings associated with donating blood.

While the findings provide some important insights into social issues, particularly blood donation the study has limitations. A limitation of this study was that a convenience sample was used which was primarily generated from a database of an Australian university. Another limitation was that only female respondents were included in subsequent analysis. Furthermore, the study is limited by the constraints of the online environment via factors that include self-selection biases, inability to control or monitor for environmental influences, as well as technical difficulties for participants accessing, completing and returning surveys. Notwithstanding this, the results of the study offer some incremental insights into the factors that surround individuals' self-reported blood donation behaviour, rather than intention to donate blood.

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