The Construct of Control: Assessment of Shopping Environments

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Abstract

Environmental psychology, which studies the interrelationship between human behaviour and environments, is used here to examine shopping environment preference (mall versus online). The desire for control over the environment along with those personality traits related to control, locus of control and uncertainty orientation are examined. The results suggest that consumers who prefer the online environment desire a significantly higher level of control compared to mall shoppers. Online shoppers appear to be uncertainty oriented and have an internal locus of control. Conversely, those who prefer the mall environment are certainty oriented and have an external locus of control. The study indicates that certain personality traits may influence consumers' approach-avoidance behaviour.

Introduction

Understanding consumers' perceptions and feelings about marketplace environments is an important issue in marketing. Such exploration and interest can be seen in research focusing on environmental psychology, and specifically emotions, perceived control and consumption interactions. However, an important area that bridges old and new shopping environments is perceived control. A sense of control has been found to be important for both physical and mental well-being (Bandura, 1989; Skinner, 1996) and is considered to be related to numerous positive outcomes such as achievement and motivation (Skinner, 1996). *Control* has been defined as "an individual's belief, at any given point in time, in his or her ability to effect a change, in a desired direction, on the environment" (Greenberger, Strasser, Cummings, and Dunhan, 1989, p.31). *Perceived control*, which is the expectation of an individual "regarding the degree to which they are capable of performing a given behaviour" (Aijzen, 2002, p. 672) and their perceived ability to overcome any obstacles that they may encounter (Aijzen, 2002), has been found to influence emotions and subsequent behaviour (Skinner, 1996). Indeed, it has been argued that perceived control is more powerful than actual control and that it is enough for individuals to believe they are in control of a situation to bring about an emotional response such as arousal (Averill, 1973; Burger, 1989). Perceived control is intrinsic in nature and has been found to be associated with certain personality traits, in particular, locus of control and uncertainty orientation (Rotter, 1954; Sorrentino and Roney, 1999; Srinivasan and Tikoo, 1992). An important conceptualisation of perceived control is the distinction between agents-of-control (the individual or group), means-of-control (actions such as effort and attributes such as personality) and ends-of-control (consequences or outcome) (Skinner, 1996). This study focuses on the extent that a consumer's preference for mall or online shopping will be dependent on their perceived control, locus of control and uncertainty orientation.

Control and the Shopping Environment

Shopping environments have been found to differ across a number of dimensions that may influence their relative attractiveness to consumers (Alba *et al*., 1997). These dimensions include, amongst others, social interaction, entertainment (Alba *et al*., 1997; Degeratu, Rangaswamy, and Wu, 2000) and perceived control (Eastlick and Lotz, 1999). As an example, Eroglu, Machleit and Davis (2001) argue that consumers may experience very different levels of perceived control within the online and mall environments. It has been speculated that those who are attracted to the online environment seek and enjoy the high level of control that this environment offers (Wallace, 1999). On the other hand, the mall offers an environment where a consumer may find pleasure at a lower state of perceived control.

Perceived control has been found to influence shopper's emotions, with consumers experiencing heightened emotions when they feel that they are in control (Hui and Bateson, 1991; Ward and Barnes, 2001). Ward and Barnes (2001) argue that a sense of control has an affective influence upon shoppers that then influences resultant patronage behaviour. Research by Ward and Barnes (2001) found that perceived control can be a "robust predictor of consumer affect" (Ward and Barnes, 2001, p. 143).

Control and Emotions

Emotions are highly complex and sensitive to our personal and environmental circumstances (Ben-Ze'ev, 2000) and have been found to be important in understanding consumer reactions towards shopping environments (Bagozzi, Gopinath, and Nyer, 1999; Sherman and Mathur, 1997). Some people go shopping within a certain environment to improve their emotional state (Holbrook and Hirschman, 1982; Mano, 1999) while others may avoid the same or similar environments because they believe that it will bring about negative emotions (Aylott and Mitchell, 1998). Hence, cumulative interactions within a certain environment and the level of successful outcomes bring about perceptions of control over that environment and subsequent approach-avoidance behaviours (Skinner, 1996).

Mehrabian and Russell (1974) proposed that there are three basic emotive states, *pleasure* (P), *arousal* (A) and *dominance* (D), (PAD) that mediate approach-avoidance behaviours as the intervening orgasmic state (Donovan, Rossiter, Marcoolyn, and Nesdale, 1994; Eroglu *et al*., 2001). However, this approach to emotion is not without controversy, for example; due to lack of empirical support, dominance was deleted by Donovan and Rossiter (1982; 1994) (see also Dawson, Bloch, and Ridgway, 1990; Golden and Zimmer, 1986; Greeland and McGoldrick, 1994; Kakkar and Lutz, 1975; Lutz and Kakkar, 1975).

Despite Mehrabian and Russell's (1974) initial inclusion of dominance (control) as a component of emotion, evidence from the literature relating to this construct indicates that, rather than being a component of emotion, emotion is an outcome of perceived control (Ben-Ze'ev, 2000; Skinner, 1996; Ward and Barnes, 2001; Weiner, 1985). As Skinner (1996) succinctly states, when people perceive they have a high level of control, they will persist even when facing failure, they will be motivated, attentive and action oriented. Conversely, individuals who perceive that they have no control will become fearful and distressed. Skinner (1996) is of the opinion that "this set of reactions forms the cornerstone of all major theories of perceived control" (p. 559). Ben-Ze'ev (2000) provides further insight into the control-emotions relationship stating that a situation perceived as being totally outside an individual's control, such as a friend winning the lottery, will bring about less intense

emotions than a situation that is perceived as being more within an individual's control, such as a colleague winning a professional prize.

Compared to the term *dominance,* it would appear that the term *control* may be more suitable when considering consumer environments. Dominance is defined as: control, rule, authority or ascendancy (Delbridge, Bernard, Blair, Peters, and Butler, 1992). The terms *rule, authority* and *ascendancy* are more generally used in relation to one individual having ascendancy (rule or authority) over another, whereas the term control appears to be more suitable when considering the physical environment. More recently, control (rather than dominance) has been used to describe perceived differences between shopping environments (Hoffman, Novak, and Schlosser, 2000; Shim, Eastlick, Lotz, and Warrington, 2001).

Thus, from the literature, it would appear that perceived control is an important variable that influences shoppers' emotions (Eroglu *et al*., 2001; Ward and Barnes, 2001). It is argued here that the reason previous consumer research dropped the construct of dominance is because it was assumed to be simply a component of emotion rather than an antecedent (agent of control) that brings about an emotional response (ends of control) and subsequent approach-avoidance behaviours. Thus, *control-emotion-behaviour* should be considered when examining various shopping environments. It is further argued that the need for control is individual in nature and dependent upon the level of control that an individual personally desires. This then relates to psychological factors, such as personality, in that one's sense of control within an environment is relative to one's personality and subsequent desire for control. Hence, consumers will seek a shopping environment where, over time, their interactions indicate that the desired level of control they experience is in balance with their intrinsic (psychological) needs. The two personality traits that have been found to relate to an individual's desire and need for control are locus of control and uncertainty orientation (Rotter, 1954; Sorrentino and Roney, 1999; Srinivasan and Tikoo, 1992). Because differing levels of perceived control exist within the mall and online shopping environments (Eroglu *et al*., 2001) it is hypothesized that:

H_1: There will be a significant difference in perceived control between mall and online shoppers.

Locus of Control

The personality trait *locus of control* (LOC) recognises that, while certain individuals believe that they can control the outcome of future events by their own actions, others feel that external forces such as fate, luck or chance (Kulas, 1996) control their destiny (Rotter, 1966). Those who believe they have personal control are said to have an *internal LOC* while those who feel that their destiny is controlled by other circumstances have an *external LOC* (Rotter, 1966). Those with an internal LOC believe that positive outcomes are a result of their personal abilities and are therefore more likely to address new challenges in the belief that they will ultimately succeed while those with an external LOC do not believe that their own actions will change or improve the situation (Wise, 1996). Because personality, combined with the environment, influences approach-avoidance behaviour, and the personality trait LOC influences an individual's desire for control and as such it is hypothesized that:

H_2: There will be a significant difference in LOC between mall and online shoppers.

Uncertainty Orientation

Uncertainty Orientation relates to information seeking and makes a distinction between those who actively seek clarity and information about themselves and the environments in which

they find themselves (uncertainty-oriented), and those who prefer to maintain things as they are, not seeking new information or situations which only cause a sense of confusion (certainty-oriented) (Sorrentino and Roney, 1986). Those who are *uncertainty-oriented* (*UO*) are cognitively motivated to resolve uncertainty, predisposed to systematically process information during uncertain situations, and possess a "distinctly discovery-oriented cognitive style" (Hodson and Sorrentino, 1999, p. 254). On the other hand, those who are *certainty-oriented* (*CO*) have mental schemas that are attuned to and more capable of handling familiar and safe situations, and, for this reason, do not deal well with uncertainty (Smith and Bristor, 1994). UO people actively seek and value new information and continually challenge themselves with new ideas while those who are CO prefer to stay with the status quo (Smith and Bristor, 1994) within a predictable environment (Sorrentino and Roney, 1999). UO people have been found to be motivated by diagnostic tasks while those who are CO are more motivated by non-diagnostic tasks (Sorrentino and Roney, 1986). Sorrentino and Roney (1999) argue that, when UO individuals are deprived of control over a situation, they will seek out information to restore their perceived sense of control whereas those who are CO will avoid processing information because they fear confusion and greater uncertainty. Because personality, combined with the environment, influences approach-avoidance behaviour, and the personality trait UO influences an individual's desire for control (Sorrentino and Roney, 1999), it is hypothesized that:

H$_3$: There will be a significant difference in UO between mall and online shoppers.

Method

A self-administered survey was developed and undertaken online to ensure that all participants had the resources and abilities to shop either at a mall or online. Although some bias through differential access may be present in using this methodology, the advantages, as outlined by Churchill and Iacobucci (2002), indicate that this is the preferred approach for this study. A pre-test was undertaken prior to the survey for content validation and refinement. Information regarding the survey was distributed via an email covering letter that directed participants to a website that contained the survey to all employees of a local city council, a senior's online group and an online business group. Participants were asked to indicate their shopping environment preference (mall or online). LOC was measured using nine of the 11-item scale by James (1957) (two items were deleted due to confusion of their meaning during the pre-test) and UO was measured using Smith and Bristor's (1994) seven-item scale. Control was measured using terms adapted from Mehrabian and Russell's (1974) PAD scale using only those terms that related to agents of control. The modified terms used to measure control were: powerful, influential, dominant and autonomous.

Findings

Five hundred and sixty nine responses were received. On average, the participants were 39 years old and consisted of 53% females and 47% males. Factor analysis (direct Oblimin) found all scales to be uni-dimensional. Reliabilities were measured using Chronbach's alpha and all reliabilities were .85 or greater (Control: .88, LOC: .85, UO: .85). Factor loadings for Control ranged between .74 and .91, UO ranged between .59 and .80, while LOC ranged between .42 and .77.

The results for differences between mall and online shoppers relating to the hypotheses 1, 2 and 3 are presented in Table 1. The results shown in Table 1 indicate that all three hypotheses are supported. There is a statistically significant difference between mall and online shoppers'

perceived control over their environment. Furthermore, there is also a significant difference between those personality traits that influence a consumers' desire for control. Mall shoppers experience a lower sense of perceived control (mean: 3.46) compared to online shoppers (mean: 4.42). Regarding personality traits, mall shoppers appear to have an external LOC (mean: 3.19) while online shoppers appear to have an internal LOC (mean: 2.63). Additionally, mall shoppers appear to be CO (mean: 6.00) compared to online shoppers who appear to be UO (mean: 6.25).

Table 1. T-test Results (H1 to H3)

Construct	Mean	T-Value	Significance	Outcome
H_1: Perceived control	Mall: 3.46 Online: 4.42	-5.36	.001	Supported
H_2: LOC*	Mall: 3.19 Online: 2.63	4.38	.001	Supported
H_3: UO	Mall: 6.00 Online: 6.25	-3.26	.001	Supported

Note*: a lower score in this scale indicates internal LOC.

Discussion

The study sought to explore certain psychological factors that may influence approach-avoidance behaviours across two shopping environments. The results indicate that certain personality traits influence consumer shopping environment preference. Consumers who have personality traits external LOC and CO experience a lower sense of perceived control within their preferred mall shopping environment. Hence, they seek an environment where they can experience pleasure at a lower level of perceived control. On the other hand, the online environment offers much higher levels of control and consumers desiring greater control over their environment prefer to shop online. Findings from the study indicate that consumers who are UO and have an internal LOC desire greater control over their environment and for this reason they are drawn to the online environment where they experience and enjoy a heightened level of perceived control.

Furthermore, this study highlights an emerging theme (Eroglu *et al*., 2001) that, just as traditional shopping environments such as the mall and the supermarket contain certain unique characteristics and atmospherics, so too does the online shopping environment. The element of control has been discussed in this study, however, it would appear that further research into online atmospherics and the manner in which they may influence approach-avoidance behaviour warrants further attention. As an example, those who are UO seek a higher level of control over their environment compared to those who are CO but they are also information seekers who enjoy diagnostic tasks whilst CO individuals prefer the status quo. Hence, the UO consumer may prefer and enjoy the information-rich online environment whilst those who are CO would seek out the familiar surroundings and status quo of the mall. Thus, findings from this study indicate that, rather than looking at online shopping as merely convenient or time-saving, this environment may indeed draw certain consumers who are seeking an atmosphere that fulfils desired needs brought about by specific psychological factors.

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