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An investigation of consumers' exploratory tendencies as motivators of their responsive behaviour to deals

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Abstract   An understanding of the motivators of consumer deal redemption behaviour is expected to enable marketers to use deals more effectively. In this study, consumers' exploratory tendencies (CET) have been assessed as potential motivators of proneness to eight types of deals, during the purchase of shampoo and refrigerator—two product categories. Consumers showed varying proneness to different types of deals depending on the type of exploratory tendency that they needed to satisfy and the type of good that was on sale. These findings can enable marketers to choose the most appropriate type of deal to achieve their sales target.
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Introduction and justification for this research

Consumer sales promotion (deal) is increasingly gaining importance (Shah & D'Souza, 2009) as such promotions are useful at all stages of the product life cycle, from encouraging trial to inducing brand switching, to maintaining loyalty (Prendergast, Poon, & Tsang, 2008). This is particularly the case because marketers are under severe pressure to show good bottom line results on short-term basis and keep consumers away from competitors' products (Stafford & Stafford, 2000). A deal relates to short-term incentives that companies offer to stimulate customers into buying their products (Pelsmacker, Geuens, & Bergh, 2001). In countries like India,

cultural factors also create an environment conducive to deals, as festivities are accompanied by offers and sales promotions made as part of the celebration; shopping is an integral part of these occasions, and consumers get attracted to sales promotion offers (Kumar, 2009).

To develop an effective sales promotional programme, a company needs to identify its target audiences and understand why they respond to sales promotions (Shah & D'Souza, 2009). Most theories of sales promotion assume that monetary savings (Blattberg & Neslin, 1990) are the only benefit that motivates consumers to respond to sales promotion (Gijsbrechts, Campo, & Goossens, 2003). This is because promotions provide a feeling of saving and reduce the pain of paying, and make higher-quality brands affordable (Kumar, 2009). However, Chandon, Wansink, and Laurent (2000) suggest that monetary savings cannot fully explain why and how consumers respond to sales promotions. For instance, the following questions remain unanswered: why do some consumers switch brands because of a deal but then not redeem

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it? (Soman, 1998), or respond more to an on-shelf coupon than to a similarly advertised temporary price reduction that offers the same monetary incentive (Dhar & Hoch, 1996), or respond to insignificant price deals? (Hoch, Kim, Montgomery, & Rossi, 1994). Martinez and Montaner (2006) found that consumers with more financial constraints do not seem to be more deal-prone than consumers with a higher economic level. Several non-monetary motivators of consumers' proneness to deals were also assessed such as socio-demographic, hedonic, normative and behavioural characteristics of consumers (Dastidar & Datta, 2008). However, empirical studies yielded a blurred demographic portrait of deal-prone consumers (Martinez & Montaner, 2006). So, psychological variables were recommended to identify the deal-prone consumer (Martinez & Montaner, 2006) as individual traits are considered to be stable within oneself (Kassin, 2003).

In this regard, consumers' exploratory tendency (CET), a concept that was introduced in the early 1980s (Raju, 1980) to designate behaviour aimed at modifying environmental stimulation, was proposed as a potentially important psychological motivator of consumers' deal responsive behaviour (Raju, 1980; Steenkamp & Baumgartner, 1992). The concept suggests that individuals have a preferred or optimal stimulation level (OSL) (Raju, 1980), which is stable within oneself but varies from one person to another (Steenkamp & Baumgartner, 1992). When stimulation (complexity and/or arousal) falls below this level, individuals become bored and try to increase it to the desired level (Soares, Farhangmehr, & Ruvio, 2008). In contrast, when stimulation surpasses the optimal level, individuals try to reduce it to a more comfortable level (Hoyer & Ridgway, 1984 and others). Applied to marketing, consumers with higher exploratory tendencies, that is, those with higher needs for stimulation, tend to seek more diversity in their information search activities and buying decisions (Soares et al., 2008). Consumers' tendencies of risk taking (Cox, 1967) and innovative behaviour (McAlister & Pessemier, 1982) in product purchase, variety-seeking (McAlister & Pessemier, 1982), recreational shopping and information search (Price and Ridgway, 1982), and interpersonal communication about purchases (Raju, 1980) are regarded as manifestations of exploratory tendencies in the consumer buying process (Steenkamp & Baumgartner, 1992). Consumers with higher exploratory tendencies may look for sales promotions as these can provide them with the stimulation required to address their intrinsic need for attaining OSL (Baumgartner & Steenkamp, 1996; Kahn & Raju, 1991). Hence, consumers' higher need for stimulation (that is, exploratory tendency) can be expected to partially influence their proneness to redeem deals (Ailawadi, Neslin, & Gedenk, 2001). In other words, consumers with higher exploratory tendencies can become more interested in sales promotions that offer stimulation and added value beyond the typical economic benefits (Chandon et al., 2000). Consequently, in this study, we examine the role played by CET, and how psychographic traits affect deal proneness. A preliminary analysis indicated that the demographic variables (gender, age, income and education) had no significant impact on CET (Dastidar & Datta, 2009), so, they were not included in the hypothesis testing as mediating variables. As the diversity of promotional tools being used is rapidly increasing (Prendergast et al., 2008), the challenge before marketers is to choose the most appropriate deal out of many alternatives for best results (Raju, 1995). To fill

this gap, this study is carried out across eight types of deals that are popular in the Indian marketplace. Consumers' deal proneness is chosen as the dependent variable in this study in terms of their response to deals. The construct of deal proneness—first used by Webster (1965)—has been defined as "a general proneness to respond to promotions because they are in deal form" (Gazquez-Abad & Sanchez-Perez, 2009). Deal proneness gives a measure of consumers' behavioural intentions rather than overt behaviour (Gazquez-Abad & Sanchez-Perez, 2009), reducing biased results that may be induced by situational factors. A number of studies have confirmed the validity of behavioural intention as a predictor of actual behaviour (Choo, Chung, & Pysarchik, 2004). This study is an evaluative and a diagnostic attempt to discover empirically the relationship between consumers' exploratory tendencies and their proneness to various deal types across the shampoo and refrigerator product categories.

To address the research problems stated above, the objective of this study is to evaluate the effect of consumers' exploratory tendencies on their proneness to eight types of deals, offered on the purchase of shampoo and refrigerator.

In this research, variety-seeking is studied in terms of brand-switching tendency (Raju, 1980). Variety seeking construct is studied by measuring only the "brand switching" variable but not the "repetitive behaviour proneness" variable (as per the original ETCBS scale) as they are closely related in an inverse fashion (Baumgartner & Steenkamp, 1996). Risk-taking is studied in terms of tendency of risk-taking/innovativeness (Raju, 1980). Risk-taking and innovativeness are studied as single construct because risk-taking and innovativeness are significantly correlated (Baumgartner & Steenkamp, 1991) and loaded on one factor (Dastidar & Datta, 2009). This is similar to Baumgartner and Steenkamp's finding (1996). Also, Midgley and Dowling (1978) state that risk taking is a component and motivator of innovativeness, and innovativeness is a form of risk taking behaviour (Foxal & Bhate, 1991). These findings and arguments suggest that risk taking and innovativeness conceptually imply the same thing. Curiosity is studied in terms of exploration through shopping, inter-personal communication, and information seeking (Raju, 1980).

This study is carried out in the context of eight types of consumer deals including Coupon, Sales, Rupees-off, Buy-one-get-one-free, Free gift with purchase, Shelf display, Rebate/Refund, and Contest. These deals are popular globally as well as in India (Dang & Koshy, 2004; Jethwaney & Jain, 2006) and include active and passive, price and non-price deal types (Lichtenstein, Burton, & Netemeyer, 1997). The various deals were identified from newspaper advertisements during the period of study in Kolkata.

An analysis of CET and the influence these intrinsic characteristics have on consumers' responses to sales promotions can assist marketers to identify target consumers and in turn, develop appropriate sales promotion programmes to persuade those consumers to react favourably by buying the product (Wakefield & Bush, 1998).

Review of literature and development of hypotheses

Sales promotions are the key promotional strategies that marketers employ (Shah & D'Souza, 2009) to provoke consum-

ers' behavioural responses, especially their immediate product interest and product purchase (Pelsmacker et al., 2001). As this paper focuses on sales promotions targeted at end consumers, the term "sales promotion" relates to consumer-oriented sales promotion, and is termed as "deal". Marketing practitioners and researchers alike have made considerable effort trying to identify and understand the "deal prone" consumer (for example, Lichtenstein, Netemeyer, & Burton, 1990; Schneider & Currim, 1991) because characterisation of the deal prone consumer contributes to the understanding of consumer behaviour (Webster, 1965) and enables marketers to design better promotional campaigns (Shah & D'Souza, 2009). However, results of deal proneness studies have been modest and conflicting (Martinez & Montaner, 2006).

Lichtenstein et al. (1997) suggest that consumers favourably predisposed to one type of deal are, on average, more likely to be favourably predisposed to other deal types. However, Ailawadi et al. (2001) contend that consumers' sensitivities to deals differ across consumers and deal types. Regarding product category, Swaminathan and Bawa (2005) found that deal proneness differed in case of high-involvement and low-involvement product categories, and product class.

As consumers' deal proneness may be motivated by several factors (Shah & D'Souza, 2009), Ailawadi et al. (2001) have argued that it is essential to identify consumers who are more deal prone and understand what motivates their proneness to deals. Review of extant literature found that the characterisation of deal-prone consumers has traditionally been related to economic savings and price sensitivity (Dastidar & Datta, 2008; Miranda & Konya, 2007). However, since many studies suggest that monetary savings cannot fully explain why and how consumers respond to sales promotions (Chandon et al., 2000), several studies were carried out assessing consumers' hedonic, normative, behavioural and demographic characteristics, as well as deal characteristics as antecedents of deal responsive behaviour (Dastidar & Datta, 2008). Hedonic benefits imply experiential and affective benefits such as entertainment, exploration and self-expression (Shimp & Kavas, 1984) and are found to provide additional utility over economic benefit (Urbany, Dickson, & Kalapurakal, 1996). However, studies towards this end obtained conflicting results (Dastidar & Datta, 2009). A number of studies used psychological variables to identify the deal-prone consumer. Though the previous studies were able to identify a finite number of influential psychological factors, the review of literature shows conflicting results in many cases. To identify potentially important psychological factors that explain the underlying intrinsic mechanism leading to formation of deal redemption intentions (deal proneness), thereby characterising the deal prone consumers and understanding why they intend to respond to deals, Raju (1980), Steenkamp and Baumgartner (1992) among others proposed "consumers' exploratory tendencies" (CET) as potentially important psychological motivators of deal responsive behaviour. Raju (1980) and Soares et al. (2008) argued that accurate understanding of the exploratory tendencies depicted by consumers during the buying process can enable marketers to predict buyers' response patterns to various marketing stimuli, particularly in the context of product attributes, promotions, advertising and retailing. Raju (1980) stated that when consumers with high exploratory tendencies face new or unusual stimuli or situations, for example, new brands or retail environments, they are more likely

to face them than withdraw from them. They are less rigid in their response patterns and are more likely to seek change or variety. Kish and Donnenwerth (1969, pp. 551–556) characterise such consumers as "those who have a stronger than average need to seek and approach situations, activities, and ideas, which are novel, changing, complex, surprising, and more intense". According to Mittelstaedt, Grossbart, and Devere (1976) such consumers are likely to exhibit a greater awareness of and a greater tendency to evaluate, symbolically accept, try, and adopt new products, and retail facilities. These studies show that consumers with high exploratory tendencies are more likely to depict variety seeking, risk taking, and curiosity motivated behaviour during their purchase process. Literature review suggests that a variety-seeking-in-purchase facet, a risk taking facet, and an information-search facet (Joachimsthaler & Lastovicka, 1984) appear as a parsimonious account of exploratory tendency and are adequate to capture the different facets of exploratory behaviour.

Variety seeking

A simple definition of variety seeking behaviour is that it is a tendency for an individual to switch away from the item consumed on the last occasion (Givon, 1984). After a process of simplification of their decision process, consumers may find themselves in a situation of boredom that is caused by a sub-optimal level of stimulation derived from purchase behaviour. Consequently, they may complicate the buying process with variety-seeking behaviour (Howard & Sheth, 1969). Variety seeking research has emphasised the need to separate true variety seeking behaviour (which results from intrinsic motivations) from derived varied behaviour (which is extrinsically motivated) (Van Trijp, Hoyer, & Inman, 1996) In this study, the intrinsic variety seeking behaviour is taken into account when studying brand switching behaviour. Some studies have attempted to relate consumers' brand switching tendency with their proneness to deals. For example, Trivedi and Morgan (2003) and Prendergast et al. (2008) have shown that variety seekers are more likely to be prone to deal offers. Other studies too such as Webster (1965), Montgomery (1971), McCann (1974), Wakefield and Barnes (1996), Bawa, Srinivasan, and Srivastava (1997), Ailawadi et al. (2001) and Martinez and Montaner (2006) found positive relationship between consumers' variety seeking tendency and their response to deals. Consistent with these findings, and the argument that Indian consumers are likely to be prone to deals (Kumar, 2009), the following is hypothesised:

H1a. Consumers' brand switching tendency will positively affect their proneness to eight types of deals offered on shampoo.
H1b. Consumers' brand switching tendency will positively affect their proneness to eight types of deals offered on refrigerator.

Risk taking/innovativeness

Risk taking behaviour is defined as "individuals' decision-making behaviour in risky contexts" (Sitkin & Pablo, 1992, pp. 9–38). Risk refers to the uncertainty of outcomes and the pos-

sibility of loss (Taylor, 1974). Among "risky" consumer behaviours, innovativeness has probably attracted the maximum attention in literature. Foxal and Bhate (1991) illustrated that innovative behaviour can be modelled as a function of personality traits (1) innate innovativeness, (2) interest in product category, and (3) situational influences. Midgley and Dowling (1978) argue that these levels of innovative behaviour are conceptually distinct and that results cannot be expected to generalise from one category to another (Steenkamp & Baumgartner, 1992). Consistent with this argument, this study assesses risk taking/innovative behaviour across shampoo and refrigerator. Review of literature, to the best of our knowledge, shows few studies relating consumers' tendency of risk taking/innovativeness with their deal responsive behaviour. While Martinez and Montaner (2006) found a positive relationship, McCann (1974) found no relationship. In spite of the conflicting findings, based on the premise that consumers with higher exploratory tendency can be expected to partially influence their proneness to redeem deals (Ailawadi et al., 2001), the following is hypothesized:

H2a. Consumers' risk taking/innovative tendency will positively affect their proneness to eight types of deals offered on shampoo.
H2b. Consumers' risk taking/innovative tendency will positively affect their proneness to eight types of deals offered on refrigerator.

Curiosity motivated behaviour

Curiosity motivated behaviour is defined as the desire for knowledge for intrinsic reasons (Baumgartner & Steenkamp, 1996). Berlyne (1960) makes a distinction between specific and diversive curiosity—motivated behaviour. The former refers to exploration of a single stimulus in-depth because it arouses the consumer's curiosity. Diversive curiosity, on the other hand, represents a tendency to seek stimulation from a variety of sources. It occurs as a reaction to a state of boredom and is not directed towards one stimulus in particular. Only the second type of information seeking can be termed as exploratory. This implies that individuals with higher OSLs search for more information than those with lower OSLs when information acquisition is motivated by curiosity (Baumgartner & Steenkamp, 1996). In this study, consumers' curiosity motivated behaviour is studied in terms of diversive curiosity. Curiosity is studied in terms of exploration through shopping, inter-personal communication, and information seeking (Raju, 1980). Tendency of *exploration through shopping* derived from curiosity motivated behaviour is found to be driven by deals (Narasimhan, Neslin, & Sen, 1996). Two motives may underlie consumers' tendency of *information seeking*, namely, acquisition of information as a means to some further end (in the consumer context often the purchase of a brand), and information seeking out of curiosity in order to learn more about the environment (in the consumer context often about product and deal related information) (Baumgartner & Steenkamp, 1996). In the latter case the acquisition of information is an end in itself. Only this type of information seeking tendency can be considered as exploratory in nature, and is curiosity motivated (Baumgartner & Steenkamp, 1996). In this study, consumers' information seeking tendency is assessed in terms of the latter type. As seen from the review

of literature, studies relating to consumers' exploratory tendencies with their deal proneness have primarily focused on variety seeking, and to some extent risk taking tendencies. Scant research has been reported in the context of curiosity motivated tendencies. While two studies focused on exploration through shopping (Ailawadi et al., 2001; Narasimhan et al., 1996), no study, to the best of our knowledge, investigated the relationship between interpersonal communication, and information seeking tendencies and deal proneness. This study fills this gap. Based on the premise that higher exploratory tendency can be expected to partially influence consumers' proneness to redeem deals (Ailawadi et al., 2001), the following are hypothesised:

H3a. Consumers' tendency of exploration through shopping will positively affect their proneness to eight types of deals offered on shampoo.
H3b. Consumers' tendency of exploration through shopping will positively affect their proneness to eight types of deals offered on refrigerator.
H4a. Consumers' tendency of inter-personal communication will positively affect their proneness to eight types of deals offered on shampoo.
H4b. Consumers' tendency of inter-personal communication will positively affect their proneness to eight types of deals offered on refrigerator.
H5a. Consumers' tendency of information seeking will positively affect their proneness to eight types of deals offered on shampoo.
H5b. Consumers' tendency of information seeking will positively affect their proneness to eight types of deals offered on refrigerator.

Methodology

In this study, a survey design and a cross-sectional descriptive research approach is used. This is because the CET and deal proneness variables investigated in this study cannot be manipulated as they are intrinsic psychological characteristics, and such variables are best studied through descriptive research (Shuttleworth, 2008). Survey method was adopted as it facilitated collection of significant amounts of quantitative data to measure consumers' exploratory tendencies and their proneness to various types of deals (Burns & Bush, 2007). Personal (face-to-face) interview method of survey was adopted and interviews were carried out either in-home or in-office or through mall-intercept as per the respondents' convenience, and only those were surveyed who agreed to participate in the survey were surveyed. The survey instruments were originally developed in English and translated into local languages (Bengali and Hindi) for respondents who were not fluent in English and then double-blind back-translated for accuracy (Prendergast et al., 2008). To achieve comparability, the issue of equivalence of meaning was carefully addressed during translation. Moreover, following Martinez and Montaner (2006), two pretests of the questionnaire were conducted to increase the comprehension of the specific measurement items. In this study, the sampling frame is defined as those consumers who (a) belong to the age-group of 21 to 50 years, (b) reside in urban West-Bengal (India), (c) take active purchase related decisions, for

both fast moving consumer products and durable products such as shampoo and refrigerator respectively, and (d) are exposed to the eight types of deals included in this study. The 21 to 50 years age-group was included in the sampling frame as it represents the majority of the working age population in India and is assumed to make most of the purchase related decisions (Kumar, 2009). Students can be used as surrogates for other populations (Yavas, 1994) as they have distinct advantages such as availability, cooperation, and ease of following instructions (Hampton, 1979). To determine whether the effects of exploratory tendencies on deal proneness differ across the two product categories, shampoo and refrigerator were selected for the study as they represent two distinct product categories—shampoo is a low-priced, low-involvement consumable product, and refrigerator is a high-priced, high-involvement durable product (Prendergast et al., 2008). The study was carried out across two product categories to assure cross product validation of the findings as suggested by Dodson, Tybout, and Sternthal (1978), Henderson (1987) and others. While Ainslie and Rossi (1998) state that response to market-mix variables is not unique to specific product category, some early studies, however, found product class specific deal proneness (Bass & Wind, 1995; Bawa et al., 1997; Cunningham, 1956; Massy, Frank, & Lodahl, 1968). Also, Swaminathan and Bawa (2005) in a study found that deal proneness differed in case of high-involvement and low involvement product categories. Narasimhan et al. (1996) also found that effectiveness of deal such as shelf display differed in case of high-priced and low-priced product categories. Consequently, this study has been carried out in the context of shampoo—a low-priced, low-involvement consumable product, and refrigerator—a high-priced, high involvement durable product to obtain a category-specific measure of deal proneness (Prendergast et al., 2008) and to determine whether the effects of exploratory tendencies on deal proneness differs across the two product categories. Though no buy-one-get-one-free deal was found to be offered on purchase of refrigerator, it was found to be offered on purchase of other high-priced durable products such as LCD TV, LED TV, spectacles and apparel. In this study, refrigerator represents other similar products on which the buy-one-get-one-free deal is offered. A consumable and a durable product context were studied as they constituted the bulk (89%) of the frequency of promotions in the Indian marketplace (consumables = 45%; durable = 44%) whereas services showed meagre promotions frequency (11%) as per data available (Dang & Koshy, 2004). Shampoo and refrigerator are taken as examples because they were among the top three most demanded products in the consumable and durable product categories respectively.

A combination of convenience sampling, judgment sampling and snowball sampling methods has been adopted in this study as this enabled us to conform to the sampling frame criteria defined in this research (Cooper & Schindler, 2006). Responses were collected from 410 sampling units. To minimise sampling errors, we checked whether the targeted respondents conformed to the sampling frame criteria (Burns & Bush, 2007). To avoid non-sampling errors, the target population was well defined, the appropriateness of the scale for use in this study was well explained, and assessment of missing data was done to ensure that no error had occurred during data collection and recording (Hair, Anderson, Tatham, & Black, 2006). The multi-item constructs were assessed for (1) Content validity, (2) Construct validity, that is, (a) Discriminant validity and (b) Convergent validity, and (3) Reliability (Cooper & Schindler, 2006) to avoid measurement errors. In order to strengthen the content validity of the measures used in this study, a panel of four experts in the field of marketing research (Aday, 1996) reviewed the instruments and their recommendations were incorporated in the test instrument (Shuttleworth, 2008). All the constructs, variables and items were clearly conceptualised at both conceptual and operational levels to ensure that the items did not measure more than one concept (Neuman, 1997). Also, use of higher level measures such as Likert scales which enabled collection of more detailed and precise information (Neuman, 1997), use of multiple items to measure a wider range of the meaning of a concept (Neuman, 1997) and the fact that the measures were adapted from literature, strengthened the content validity. In this study, discriminant and convergent validity of the measures were assessed through exploratory factor analyses and confirmatory factor analyses respectively. The assessment was carried out on a sample size of 150, before the start of collection of data. This sample size was based on the recommendation of including at least five samples per item (Hair et al., 2006). Discriminant validity was assessed through principal component analysis (PCA), significant cross-loading of items, total variance explained by the extracted factors, and computation of the factor correlation matrix (Field, 2000). Principal component analysis was undertaken to check the number of factors extracted and to match it with the number of factors (sub-scales) specified in literature (Hair et al., 2006). Significant cross-loadings of items (if any) were checked in the factor pattern matrices to assess the unidimensionality of the items (Hair et al., 2006). Only factors having eigenvalues greater than one were deemed significant (Hair et al., 2006). Oblimin rotation technique was adopted for PCA as there was no evidence in literature to support any assumption that the underlining factors (scales) would be completely uncorrelated (Hair et al., 2006) and oblique rotation reflects the underlying structure of the data more accurately (Gerbing & Anderson, 1988). Additionally, factor correlation matrix was computed to assess discriminant validity and correlation coefficients below the 0.85 cut-off mark were deemed appropriate in this study, which implies that there is no conceptual overlap among the sub-scales (Garson, 2007). Convergent validity was assessed through factor loading in principal component analysis through confirmatory approach, item-to-total correlations and alpha if item deleted (Field, 2000). Confirmatory factor analysis (CFA) was performed to check whether the number of factors and the loadings of the items on them conform to what is expected on the basis of pre-established theory (Field, 2000). If items have high loadings on the predicted factors, convergent validity is established (Garson, 2007). Based on the recommendations of Stevens (2002), factor loadings value of 0.3 and above were considered appropriate in this study. As a rule of thumb, item–total correlation values higher than 0.5 were considered appropriate (Hair et al., 2006) in this study to establish internal consistency. Prior to conducting factor analysis, the data was checked for measures of sampling adequacy and appropriateness for factor analysis using two correlation tests—Bartlett's test of sphericity and Kaiser–Meyer–Olkin (KMO) test (Field, 2000). The inter-correlations between

variables were also assessed. Correlation matrix determinant was checked for any multicollinearity in the data for each scale (Field, 2000). A correlation matrix determinant less than 1.0E-05 is deemed to imply non-multicollinearity (Field, 2000). Cronbach's alpha (also called coefficient alpha) statistic was used to measure reliability of the scales. Additionally, alpha value on deletion of an item, and item-to-total correlations were used to assess internal consistency (Field, 2000). Following Kline (1993), scales recording Cronbach's alpha values higher than 0.5 were deemed to have satisfactory reliability and those with values higher than 0.6–0.7 are deemed to have good reliability (Hair et al., 2006).

In this study, Raju's (1980) Exploratory Tendencies in Consumer Behavior Scales (ETCBS) have been adapted to measure CET after due modifications based on review of literature. In this study, 23 items out of 39 initially conceptualised by Raju (1980) are used to measure the three facets of CET. This is because although the range of specific exploratory consumer behaviour may be extensive, it is possible to capture the concept through a reduced set of dimensions. Baumgartner and Steenkamp (1996) stated that there are conceptual problems with the original differentiation of Raju's (1980) scale into seven factors because there is a clear overlap between some of them. For example, repetitive behaviour proneness is defined as "the tendency to stick with the same response over time" (Raju, 1980), which is closely related in an inverse fashion to brand switching, defined as "switching of brands primarily for change or variety" (Raju, 1980, pp. 272–282). Baumgartner and Steenkamp (1996) argued that the absence of clear boundaries in the seven facets is also reflected in the fact that in the scale implementing this conceptualisation 16 of the 39 items are specified to load on multiple factors. Additionally, with a view towards measuring exploratory consumer buying behaviour and assessing its relationship with other constructs, a seven-factor structure seems impractical (Wahlers, Dunn, & Etzel, 1986). For example, empirical investigations of the construct validity of the ETCBS scale have indicated that good psychometric properties (that is, a well-defined factor structure and high reliabilities) and meaningful associations with related constructs are difficult to obtain. Based on these arguments, the ETCBS scale is used in this study after modifications. Therefore, in this study, only 23 items out of 39 initially conceptualised by Raju (1980) are used to measure the three facets of CET, omitting the 16 items that were found to load on to multiple factors as suggested by Baumgartner and Steenkamp (1996), thereby also alleviating the task load on the respondents, following Gierl, Helm, and Stumpp (1999). Additionally, the measures used have depicted good reliability and construct validity in the Indian context.

To measure consumers' deal proneness to eight different types of deals, the scales developed by Lichtenstein et al. (1997) are used in this research. The scales were modified in terms of content and item number from the original version to suit the targeted Indian consumers and ensure practicality of measure. Thirty items were finally adapted from the original 49, ensuring that the instrument contained a representative sample of the universe of subject matter of interest (Cooper & Schindler, 2006). Also, reducing the items alleviated the task load on the respondents as suggested by Gierl et al. (1999). Separate multi-item scales are used to measure each deal proneness type. The ETCBS and deal proneness scales are 7-point agree–disagree Likert scales. The scale is a defendable approximation to an interval scale, as there are multiple items, the number of components in the scale is more than five, and the data follow a normal distribution. Pretesting was carried out among 150 respondents through personal interview. The sample size is based on the recommendation of at least five samples per item (Hair et al., 2006).

After entering the data, it was assessed for missing data, outliers and normality. Data were tested for normality using normal probability plots, and skewness and kurtosis statistics (z–values) (Burns & Bush, 2007). To meet the research objectives, multiple regression analysis was used in this study. This is because it is intended to assess the association between a single dependent variable (proneness to each deal type) and several independent variables (CET variables), assessing only a single association at a time, that is, each variate is assessed independently (Roberts, 2006). The variables in this study show no multicollinearity, and depict normality, thereby justifying the use of regression (Roberts, 2006). In the regression analysis all the predictors are entered simultaneously into the model. This is because the regression analysis has been used in a confirmatory approach (Hair et al., 2006) and as the inter-correlations among the set of independent variables are low, the order of variable entry has little effect on the parameters calculated (Field, 2000). The unstandardised coefficient (Beta) values are taken into account to assess the relative contribution of each predictor variable. The simple R^2 (and not the adjusted R^2) is considered as the coefficient of determination in the multiple regression analysis as the number of observations is higher than the rule of thumb criteria of 10–15 observations per independent variable (Hair et al., 2006). Prior to testing multiple regression models, the data were assessed for violation of any key assumptions of the regression models (Hair et al., 2006), that is, linearity, homoscedasticity, normality, multicollinearity, and independence of the error terms (Dielman, 2001). Violation of linearity can result in an underestimation of the actual strength of the relationship found between the variables (Hair et al., 2006) and violation of non-normality may result in achieving invalid statistical results (Hair et al., 2006). High degrees of multicollinearity can result in regression coefficients being inaccurately estimated and difficulties in separating the influence of the individual variables on the dependent variables (Dielman, 2001). The assumption of homoscedasticity is violated when the residuals at each level of the predictor(s) have very unequal variances (Field, 2000). Heteroscedasticity results in unequal predictability at different levels of the independent variables and makes hypothesis tests either too conservative or too sensitive (Dielman, 2001). The assumption of independence of the error terms causes concern when there is correlation between the adjacent residuals. Linearity and homoscedasticity have been tested using standardised residual plots. Both residual plots and partial regression plots were assessed, which enabled us to ensure that the overall equation, as well as each independent variable's relationship was linear (Hair et al., 2006). Standardised residuals were used in order to make residuals directly comparable (Hair et al., 2006). If no assumptions were violated, the residuals would be randomly distributed around their mean of zero (Hair et al., 2006). Violation of these assumptions in a few cases in this study were remedied by logarithmic transformation of the data (Hair et al., 2006). The

normality of data for each composite variable (not individual items) is assessed through statistical test using skewness and kurtosis z-values (Field, 2000), and normal probability plots (Field, 2000). The z-values are derived by dividing the skewness and kurtosis statistics by the standard errors (Hair et al., 2006). As a rule of thumb, if the absolute z-value is more than 2.5, then the data will be deemed to have violated the assumption of normality (Griego & Morgan, 1998). Multicollinearity was checked using tolerance values, and values of variance inflation factor (VIF) (Hair et al., 2006). Any variable with tolerance value below 0.1 or with VIF value above 10.0 implies a correlation of more than 0.9 with other variables, indicative of the multicollinearity problem (Hair et al., 2006). The independence of error terms was assessed using Durbin–Watson statistics (Field, 2000). A test statistic of 2 or close to 2 implies that the errors are uncorrelated (Field, 2000).

Data analysis and results

Demographic profile of the respondents

Majority of the respondents are male (55.6%) as compared to 44.4% females. Of the sample, 47.3% of the sample is in the age-group of 21–30 years, 31.5% belongs to 31–40 years age-group, and the remaining 21.2% falls in the 41–50 age-group.

The 94.4% of the respondents are graduates or post-graduates and the rest 5.6% are undergraduates. In terms of monthly income, 31.4% of the respondents reported income less than Rs. 10,000, 43.2% reported income between Rs. 10,000–20,000, and the remaining 25.4% reported above Rs. 20,000.

Assessment of reliability and validity of the measures

Tests of the measures of sampling adequacy (MSA) are carried out to assess the appropriateness for factor analysis of the ETCBS and deal proneness scales. Bartlett's test of sphericity shows that the Chi-square values of ETCBS and deal proneness scales are large (978.079 and 2763.173 respectively) and the Bartlett's test is highly significant ($p < 0.001$). This depicts that the R-matrix is not an identity matrix (Field, 2000). Subsequent KMO test depicts that the KMO statistics of ETCBS (.718) and deal proneness (.819) scales as well as the sub-scales are greater than 0.5. This indicates that patterns of correlations are relatively compact and factor analysis is expected to yield distinct and reliable results (Field, 2000). The correlation matrix determinant of ETCBS and deal proneness scales establish the absence of multicollinearity among the items in these scales. Subsequently, discriminant validity of both ETCBS and deal proneness scales are assessed.

The factor pattern matrix of the ETCBS scale (Table 1) shows that five factors are extracted, which conform to the

Table 1 Factor pattern matrix of the 23 items measuring CET variables.

Items	Factors				
	1	2	3	4	5
	Brand switching	Inter-personal communication	Exploration through shopping	Information-seeking	Risk-taking/ innovativeness
Q1	.832				
Q2*	.655				
Q3*	.582				
Q4	.846				
Q5	.825				
Q6					.791
Q7					.790
Q8					.615
Q9					.736
Q10					.689
Q11					.709
Q12					.532
Q13			.784		
Q14*			.632		
Q15			.635		
Q16			.733		
Q17*		.718			
Q18		.592			
Q19		.778			
Q20*		.667			
Q21				.866	
Q22				.902	
Q23				.761	

*This item is reverse scaled.

specified five sub-scales in the ETCBS scale (Raju, 1980). Similarly, the factor pattern matrix of the deal proneness scales (Table 2) pertaining to shampoo and refrigerator shows that eight factors are extracted in each case, which conforms to the specified eight sub-scales in the deal proneness scale (Lichtenstein et al., 1990). Also, there are no cross-factor loadings of the sub-scales above 0.3 absolute value of loading in case of both the scales. It is also found that in case of ETCBS scale, five factors have eigenvalues greater than one which account for about 58% of the variance; and in case of deal proneness scale, eight factors have eigenvalues greater than one which account for about 72% of the variance. These findings establish the discriminant validity of the ETCBS and deal proneness sub-scales.

Additionally, an assessment of factor correlation of ETCBS and deal proneness scales show no significant correlations (greater than 0.85) between any of the factors in either of the scales. This implies that there is no conceptual overlapping among the factors (sub-scales), which further reiterate the discriminant validity of these sub-scales. Subsequently, convergent validity and reliability of both ETCBS and deal proneness scales were assessed. The results are depicted in Table 3.

Table 3 shows that the factor loadings of the items on their specified factors are higher than 0.3; all item–total correlations are higher than 0.5; and no item shows alpha value to be higher than the Cronbach's alpha value, on its deletion. These establish high convergent validity of the ETCBS and deal proneness sub-scales. It is also seen that all the sub-scales have recorded good reliability, except "information seeking", which has recorded medium reliability.

Tests of assumptions of the regression models

A correlation analysis between the CET variables indicates a marginal relationship between brand switching and risk-taking/innovativeness ($r = 0.310$, $p < 0.01$) and very weak relationships between other variables.

Normal probability plots were assessed for each variable as to whether all the points lie on the line and reflect a perfectly normally distributed data set (Field, 2000). An assessment of the z-values of the CET and deal proneness variables shows that the absolute z-values of skewness and kurtosis of all the variables are within 2.5, except the buy-one-get-one-free deal proneness variable in case of shampoo and the z-value of kurtosis (-3.06) of this variable in case of refrigerator, which fall beyond 2.5. They were subsequently log-transformed, square-root-transformed, and inverse-transformed (Hair et al., 2006). However, no improvement was achieved from these transformations. Since the departure from normality is not so extreme, the original form was retained for further analysis (Hair et al., 2006). This result along with the normal probability plots show that the data of CET and deal proneness variables are normally distributed (Field, 2000).

The collinearity statistics show that no variable depicts tolerance value below 0.1 (all values are greater than .82) or VIF value above 10.0 (all values are less than 1.3), establishing that there is no multicollinearity among the antecedent variables (Field, 2000).

The standardised residual plots and the partial regression plots show that the residuals are randomly distributed around their mean of zero. This implies that the overall equation as well as each independent variable's relationship is linear, thereby establishing that the data are linear and homoscedastic (Hair et al., 2006). The Durbin Watson test statistics show values of 2 or close to 2 (as reported in Table 6) indicating that the errors are uncorrelated (Field, 2000).

An item analysis shows that the respondents have indicated moderate levels of proneness to the various deals. This is somewhat contrary to the argument of Kumar (2009), who states that Indian consumers as part of their culture are usually attracted to deals.

Multiple regression analysis

The regression equations were conducted over the full sample for each of the research hypotheses. The results are depicted in Table 4.

The results of the multiple regression analysis establish that consumers' exploratory tendencies are reported to account for 5.1–16.1% of the variance in their proneness to the eight deals types offered on shampoo and refrigerator. The R-squared values varied from 5.1 to 16.1% in case of the eight different deals. While this result is statistically significant, it clearly shows that CET does not account much for behavioural variation in terms of their deal responsive behaviour. Consumers' exploratory tendencies particularly brand switching, taking risk and innovativeness, exploration through shopping and seeking information to satisfy curiosity show significant positive influence on their proneness to some deal types offered on the purchase of shampoo and refrigerator. Consumers' tendency of interpersonal communication for satisfying curiosity shows no significant effect on their proneness to any type of deal.

Since intention level data have been used in this study, the regression results discussed in this section are compared with the results of a field study where CET is related with consumers' actual deal redemption behaviour as observed in the field. This is discussed subsequently.

Field validation of the findings of this study

Some researchers argue that though purchase intentions can be used to forecast purchase behaviour, there is a possibility of inconsistency between purchase intention and purchase behaviour (Newberry, 2003 and others). Moreover, Hensher, Barnard, and Truong (1988) state that self-reported data collected through survey may be quite unreliable, as respondents' stated preferences might not correspond closely with their actual preferences (Wardman, 1988). Following these arguments, a field study was carried out as part of this research to assess the relationship between CET and their actual deal redemption behaviour and the result of the field study is compared with the findings of the main study.

The field study was conducted with an independent sample of those who were found to purchase goods because they were offered deals and were found to be deal prone after screening. Data collection was carried out at various malls which were selected based on the availability of the products that were on deal offers, as identified from advertisements in newspapers and magazines. Respondents were randomly intercepted after they were observed to have purchased goods that

Table 2 Factor pattern matrix of the 30 items measuring deal proneness variables.

Items	Factors							
	1	2	3	4	5	6	7	8
	Sale proneness	Proneness to shelf display	Contest deal proneness	Coupon proneness	Buy-one-get-one-free deal proneness	Rupees-off deal proneness	Free-gift deal proneness	Rebate/refund deal proneness
In case of shampoo								
Q24				.83				
Q25				.79				
Q26				.75				
Q27				.61				
Q28				.65				
Q29	.54							
Q30	.81							
Q31	.85							
Q32	.79							
Q33						.81		
Q34						.65		
Q35						.78		
Q36					.76			
Q37					.75			
Q38					.77			
Q39							.58	
Q40							.78	
Q41							.79	
Q42							.64	
Q43		.92						
Q44		.92						
Q45		.75						
Q46								.58
Q47								.78
Q48*								.78
Q49								.88
Q50			.85					
Q51			.82					
Q52			.79					
Q53			.53					
In case of refrigerator								
Q24				.89				
Q25				.76				
Q26				.66				
Q27				.47				
Q28				.42				
Q29	.46							
Q30	.77							
Q31	.83							
Q32	.82							
Q33						−.77		
Q34						−.78		
Q35						−.72		
Q36								.80
Q37								.89
Q38								.79
Q39							−.57	
Q40							−.82	
Q41							−.87	
Q42							−.73	
Q43		−.85						
Q44		−.90						
Q45		−.81						
Q46					−.61			
Q47					−.84			
Q48*					−.89			
Q49					−.86			
Q50			.80					
Q51			.77					
Q52			.68					
Q53			.74					

*This item is reverse scaled.

Table 3 Summary of factor loadings, alpha if item deleted and item-to-total correlation analysis for ETCBS and deal proneness sub-scales.

Sub-scale	Item no.	Factor loadings	α if item deleted	Item-to-total correlations	Cronbach's alpha
Brand switching	1	.75	.75	.60	.80
	2	.62	.80	.50	
	3	.66	.79	.52	
	4	.80	.74	.64	
	5	.86	.71	.73	
Risk taking/innovativeness	6	.75	.56	.51	.67
	7	.67	.55	.50	
	8	.65	.54	.50	
	9	.81	.62	.60	
	10	.67	.54	.50	
	11	.67	.53	.50	
	12	.68	.52	.50	
Exploration through shopping	13	.77	.59	.55	.69
	14	.63	.69	.51	
	15	.73	.63	.52	
	16	.78	.59	.53	
Inter-personal communication	17	.77	.53	.53	.66
	18	.71	.59	.51	
	19	.63	.64	.50	
	20	.71	.58	.51	
Information seeking	21	.88	.23	.51	.54
	22	.87	.26	.51	
	23	.68	.53	.26	
Coupon proneness	24	.74	.79	.58	.82
	25	.79	.77	.65	
	26	.78	.77	.63	
	27	.76	.78	.60	
	28	.73	.79	.57	
Sale proneness	29	.70	.81	.57	.83
	30	.88	.73	.77	
	31	.83	.78	.67	
	32	.85	.77	.69	
Rupees-off deal proneness	33	.86	.84	.69	.86
	34	.90	.77	.77	
	35	.89	.80	.74	
BOGOF deal proneness	36	.86	.76	.67	.83
	37	.92	.75	.78	
	38	.80	.81	.58	
Free gift deal proneness	39	.79	.84	.63	.86
	40	.87	.79	.75	
	41	.83	.56	.68	
	42	.86	.80	.73	
Proneness to shelf display	43	.90	.84	.76	.89
	44	.95	.75	.86	
	45	.86	.87	.70	
Rebate/refund deal proneness	46	.81	.66	.58	.75
	47	.90	.56	.75	
	48	.45	.72	.54	
	49	.84	.64	.61	
Contest deal proneness	50	.88	.77	.75	.85
	51	.92	.74	.81	
	52	.88	.78	.74	
	53	.61	.84	.55	

N = 150.

Table 4 Multiple regression results: unstandardised β value.

Antecedent variables		Brand switching	Risk-taking/ innovativeness	Exploration through shopping	Inter-personal communication	Information seeking	Model variance explained (R^2)	F-change	Durbin Watson statistic
Dependent variables									
Proneness to shelf display	Shampoo	β = + .32 Sig = .000	β = + .32 Sig = .000	β = + .12 Sig = NS	β = −.03 Sig = NS	β = + .09 Sig = NS	16.1%	14.90*	2.0
	Refrigerator	β = + .32 Sig = .000	β = + .25 Sig = .01	β = + .06 Sig = NS	β = + .01 Sig = NS	β = + .15 Sig = .05	15.0%	13.61*	2.0
Fee gift deal proneness	Shampoo	β = + .25 Sig = .000	β = + .26 Sig = .05	β = + .14 Sig = NS	β = + .05 Sig = NS	β = + .08 Sig = NS	11.2%	9.52*	2.0
	Refrigerator	β = + .26 Sig = .000	β = + .16 Sig = NS	β = + .06 Sig = NS	β = + .02 Sig = NS	β = + .17 Sig = .05	10.6%	8.20*	1.8
Buy-one-get-one-free deal proneness	Shampoo	β = + .23 Sig = .01	β = + .21 Sig = .05	β = + .10 Sig = NS	β = + .06 Sig = NS	β = + .14 Sig = NS	9.1%	7.33*	1.9
	Refrigerator	β = + .18 Sig = .05	β = + .17 Sig = NS	β = −.08 Sig = NS	β = + .13 Sig = NS	β = + .16 Sig = .05	7.4%	4.60*	1.9
Rupees off deal proneness	Shampoo	β = + .21 Sig = .01	β = + .25 Sig = .05	β = + .04 Sig = NS	β = + .06 Sig = NS	β = + .07 Sig = NS	7.5%	5.70*	1.8
	Refrigerator	β = + .26 Sig = .000	β = + .25 Sig = .01	β = + .03 Sig = NS	β = + .08 Sig = NS	β = + .07 Sig = NS	9.0%	7.43*	1.9
Rebate/refund deal proneness	Shampoo	β = + .07 Sig = NS	β = + .29 Sig = .000	β = + .14 Sig = .05	β = −.08 Sig = NS	β = + .01 Sig = NS	8.0%	8.20*	1.8
	Refrigerator	β = + .12 Sig = .05	β = + .32 Sig = .000	β = + .06 Sig = NS	β = −.01 Sig = NS	β = + .05 Sig = NS	9.4%	8.01*	1.8
Contest deal proneness	Shampoo	β = + .05 Sig = NS	β = + .31 Sig = .000	β = + .03 Sig = NS	β = + .02 Sig = NS	β = + .06 Sig = NS	5.8%	4.45*	1.8
	Refrigerator	β = + .06 Sig = NS	β = + .28 Sig = .000	β = + .03 Sig = NS	β = + .09 Sig = NS	β = + .09 Sig = NS	6.3%	5.01*	1.8
Coupon proneness	Shampoo	β = + .16 Sig = .05	β = + .31 Sig = .000	β = + .17 Sig = .05	β = −.01 Sig = NS	β = + .04 Sig = NS	9.0%	7.83*	1.8
	Refrigerator	β = + .09 Sig = NS	β = + .27 Sig = .000	β = + .06 Sig = NS	β = −.02 Sig = NS	β = + .04 Sig = NS	5.1%	4.31*	1.8
Sale proneness	Shampoo	β = + .07 Sig = NS	β = + .42 Sig = .000	β = + .12 Sig = NS	β = + .02 Sig = NS	β = −.08 Sig = NS	8.4%	7.02*	1.9
	Refrigerator	β = + .12 Sig = NS	β = + .34 Sig = .000	β = + .03 Sig = NS	β = + .04 Sig = NS	β = + .01 Sig = NS	7.1%	6.00*	2.0

NS implies not significant; *Significant at 0.000 level.

Table 5 Association tests between CET and actual deal redemption behaviour.

Variables	Chi-square	Symmetric measure	Directional measures	
		Phi	Goodman and Kruskal Tau	Uncertainty coefficient
CET*	14.27**	0.41***	0.17***	0.20***

*Actual deal redemption behaviour as dependent; **Significant at .000 level (2-sided); ***Significant at .000 level.

Table 6 Comparison of the relationship between CET and deal proneness as found in the main study, and CET and actual deal redemption behaviour as found in the field study.

In the main study (R)	In the validation study (φ)
0.43*** (Goodness-of-fit: R^2 = 18.5%; F = 16.7 at .000 sig)	0.41*** (Goodness-of-fit: χ^2 = 14.3 at .000 sig)

*Those that were found to significantly influence deal proneness; **Average of proneness scores to the various deal types in case of R only; ***(Sig. at .000 level).

offered deals. Initial screening of the respondents was done by determining whether the respondents reported looking at the promotion advertisements prior to shopping (Lichtenstein et al., 1997). Response was obtained through a dichotomous "yes or no" measure. Subsequently, personal survey was conducted among consumers who purchased goods by redeeming deals and reported that they had looked for promotion advertisements prior to shopping and had come shopping to purchase those goods that had deal offers. The survey was done using the question—"Do sales promotion offers influence your purchase decisions?", with an ordinal "Usually/Occasionally/Never" response scale, which was developed by Teel, Williams, and Bearden (1980). This scale was converted into a dichotomous scale. Data were obtained from 84 such consumers. Consumers' exploratory tendency was measured in the field study using the 23 items of ETCBS scale (Raju, 1980). Responses obtained in continuum were then converted into dichotomous "agree or disagree" responses for simplicity of computation (Martinez & Montaner, 2006).

Since the data obtained were nominal they were subjected to cross-tabulation (Field, 2000). The results of the cross tabulation are shown in Tables 5 and 6.

Phi was used for assessing symmetric measure as the variables were dichotomous (Field, 2000). For assessing directional measures Goodman and Kruskal Tau, and Uncertainty coefficient statistics were used as these are useful for conservative estimates (Reinard, 2006). Lambda was not used as the categorical variables were restricted to two levels (Reinard, 2006).

As seen in Table 5, CET was found to have a moderate (φ = 0.41, sig. at .000 level) but significant (χ^2 = 14.27, sig. at .000 level) positive relationship with actual deal redemption behaviour. Both Goodman and Kruskal τ (0.17; sig. at .000) and uncertainty coefficient statistics (0.20; sig. at .000) indicate that CET modestly yet significantly predicts their actual deal redemption behaviour. Thus, it can be expected that consumers with higher exploratory tendencies were more likely to respond positively to sales promotion campaigns. In order to compare the findings of the validation study with the main study, the overall mean of the exploratory tendencies was correlated with the overall mean of deal proneness construct (Martinez & Montaner, 2006).

Table 6 shows that the relationship coefficients of the validation study (Phi (φ) = 0.41) and that of the main study (Pearson's correlation coefficient (R) = 0.43) are similar. This implies that the finding pertaining to the influence of CET on deal redemption intentions is similar to the finding pertaining to the influence of CET on actual deal redemption behaviour. The slight discrepancy between the two results may be due to the survey itself (Chardon, Morowitz, & Reinartz, 2005), or bias in measuring and reporting intentions (Mittal & Kamakura, 2001), or differences in product evaluation (Sweeny, Soutar, & Johnson, 1999) and that intentions almost always provide biased measures of purchase propensity, either underestimating or overestimating actual purchase (Young, 1998). However, the discrepancy may also be because data were obtained from different samples in the two studies.

Conclusions and implications

According to the regression results, CET accounts for 5.1% to 16.1% of the variance in consumers' proneness to deals offered on shampoo and refrigerator. This level of explanatory power is comparable to other studies assessing psychological antecedents of deal proneness. While this result is statistically significant, clearly much behavioural variation was not accounted for. Nevertheless, the directional results were consistent with prior notions. Though the coefficient of determination values are not large, the following issues have emerged: (1) Consumers' exploratory tendencies particularly brand switching, taking risk and innovativeness, exploration through shopping, and seeking information to satisfy curiosity, positively and significantly influence their proneness to certain deals offered on purchase of shampoo and refrigerator. This implies that consumers with higher exploratory tendencies were more likely to respond positively to sales promotion offers. This is congruent with the expectation that Indian consumers who are low on risk-taking/innovativeness scale, that is, have higher tendency of seeking risk-taking/innovative behaviour to reach their OSL are expected to be more prone to deals. Consumers' tendency of interpersonal communication for satisfying curiosity has no significant influence on their proneness to deal. This is congruent with the expectation that

Indian consumers being a part of a collectivist society are high on interpersonal communication, so deals are not required for them to achieve OSL, that is, they are less deal prone. It is interesting that while proneness to shelf display is expected to be strongly related to exploration through shopping, satisfying curiosity motivated behaviour, in this study relationship with exploration through shopping is found to be insignificant. (2) Consumers with different exploratory tendencies have different levels of proneness to deals offered on particular product types such as shampoo or refrigerator.

Implications of the research findings

The research findings discussed in the previous sections have implications for theory and practice. These are discussed in the sections that follow.

Theoretical implications

This empirical study establishes that consumers' exploratory tendencies, including brand switching, taking risk and innovativeness, exploration through shopping and information seeking, partly motivate their proneness to certain types of deals. Thus, it can be expected that consumers with higher levels of the above exploratory tendencies are more likely to respond positively to deal offers on shampoo and refrigerator. However, it is also evident from the review of previous research that deal proneness can be motivated by various factors other than consumers' exploratory tendencies like economic benefit, demographic characteristics and hedonic benefits. The results in the Indian context were expected to be different from earlier studies carried out in the U.S. and European contexts. Research models developed in Western regions may not be useful to depict consumer behaviour in non-Western societies (Huff & Alden, 1998) because consumers living in different societies may respond differently to a specific marketing programme (Peter & Olson, 2002). However, no considerable difference is found in the U.S. and Indian context pertaining to the CET–deal proneness relationship. However, though Indian consumers are expected to figure high on deal proneness scale, they were not found to be so in this study. This may be because consumers do not perceive sales promotion schemes favourably (Manalel, Jose, & Zacharias, 2007). The results are consistent with similar studies undertaken in Western socio-economic and cultural contexts.

The results of this research support the hypotheses in literature that brand switchers are expected to be more sensitive to promotions because they stimulate brand switching (Dodson et al., 1978), and that innovative people may show a favourable attitude to promotions since these actions encourage them to try new products (Teel et al., 1980). The results are also consistent with earlier empirical findings that indicate that variety seeking (brand switching) positively influences consumers' response to deals (for example, Bawa et al., 1997; McCann, 1974; Wakefield & Barnes, 1996; Webster, 1965) and innovativeness positively influence consumers' response to deals (Martinez & Montaner, 2006). Findings pertaining to possible influences of other exploratory tendencies could not be found in extant literature. These in-

fluences are reported in the previous section of this report. The results are also similar to earlier studies assessing psychological antecedents of response to deals in terms of the variance explained by such antecedents (Lichtenstein et al., 1997; Martinez & Montaner, 2006; Montgomery, 1971; Schneider & Currim, 1991), which ranged from 4 to 12%. Though the hypotheses in this study were based on strong theoretical grounds, modest coefficient of determination values are obtained maybe because deal responsive behaviour is a function of many causes (Reinard, 2006), that is, deal responsive behaviour is multiply motivated by normative, psychological, demographic, socio-economic, situational and other variables (Lichtenstein et al., 1997). Only psychological variables, that is, CET variables were assessed as antecedents in this study.

Managerial implications

As deals partially act as a source of stimulation (Kahn & Raju, 1991), enabling consumers to reach their OSL, it can be expected that consumers with higher exploratory tendencies are more likely to respond positively to deal offers. Therefore, offering price reductions in the form of price-oriented deals rather than merely reduced prices can result in higher sales.

Consumers' exploratory tendencies can be used to profile them and to predict to some extent whether they will respond to deal offers. More specifically, it can be predicted to some extent about which particular deals can be used effectively to attract consumers with specific high exploratory tendencies. For example:

(i) Brand switchers are most likely to switch to a brand of shampoo with good shelf display, free gift offer, buy-one-get-one-free offer, rupees-off offer and coupon in that order. They are likely to switch to a brand of refrigerator that is well displayed on shelf, or with rupees-off offer, free gift offer, buy-one-get-one-free offer, and rebate/refund offer in that order. Shelf display proneness was found to be popular probably because it reduced search cost as the brand was more visible at the point of purchase (POP). In situations when promoted brands were displayed on shelf, both proneness to shelf display and the other deals could cumulatively manifest themselves in deal responsive behaviour. Also, the fact that consumers' brand switching tendency positively influences their proneness to deals might mean that such consumers may attribute their decisions to the deals rather than to their liking (thereby loyalty) to the product/brand.

(ii) Risk-takers/innovative consumers are most likely to buy a new and/or unknown brand of shampoo that is on sale offer, is well displayed on shelf, offers contest, coupon, rebate/refund, free gift, rupees-off and buy-one-get-one-free offer, in that order. They are most likely to buy a new or unknown brand of refrigerator that is on sale, offers rebate/refund, contest, coupon, rupees-off, or is displayed well on shelf, in that order.

(iii) Consumers who investigate products, price and availability through shopping are most likely to buy a brand of shampoo that offers coupons and rebate/refund in that order.

(iv) Consumers who are interested in knowing about various products and brands are most likely to buy a brand of refrigerator that offers free gift and buy-one-get-one-free offer followed by one that was displayed well on the shelf in that order.

Thus, we see that sales promotions predominantly stimulate brand switching and risk-taking/innovative purchase behaviour by providing stimulation to reach OSL. Also, some deal types (for example contests and coupons) appeared to be perceived as more atypical than others (for example shelf display, sale). In addition, marketers employing a variety of sales promotion types should note that consumer proneness levels reported in this study, suggest higher levels of proneness for some deal types (for example shelf display, free gift, rupees off, sale, buy-one-get-one-free) than others (for example, contests and coupons). The results are indicative of how important it is for marketers to understand the influence of individual traits on the promotional process, particularly segmenting consumer markets according to the significant exploratory tendencies would allow marketers to select deals more efficiently. For instance, identifying the variety seeking consumer segments among the store patrons will dictate which type of sales promotion should be implemented.

When no deals are offered, brand switchers may switch to any brand within his/her familiar set and risk-taking/innovative consumers may purchase any new and/or unknown brand. But if a brand offers the above-mentioned preferred deals, then these consumers are expected to buy that brand to redeem the deal. When deals are offered by multiple brands, the consumers are expected to switch to the brands offering the more preferred type of deal (that is, that which provides maximum stimulation). This serves the purpose of attracting new customers, increasing sales, and optimising promotional expenditure by increasing efficiency of promotional campaign. For defensive marketing, the preferred deals need to be offered on pulsing basis, as continued offers will yield below optimum stimulation.

The findings are expected to enable marketers to choose the most appropriate type of deal among the entire range of deals launched in the Indian marketplace for best results. This also implies that a limited number of deals may achieve effective reach within the deal prone segment, thereby proving to be the most cost-effective.

The results show that the influence of consumers' exploratory tendencies on their deal proneness differs across deal types, that is, one segment of consumers is more likely to redeem certain deal types, but less likely to redeem others, as compared to other consumer segments. This provides empirical evidence that proneness to deals differs across consumers and deal types (as also contended by Henderson, 1987), which implies that deal proneness is specific to the deal type. This is similar to findings of Schneider and Currim (1991) and Mayhew and Winer (1992) but conflicts with that of Lichtenstein et al. (1997). This implies that psychological processes underlying deal proneness may depend on the particular deal type. This suggests that studies testing theoretical relationships between possible correlates of deal proneness should consider the type of deal to which their theory relates as alternative theories applicable to deal proneness may not be appropriate across all deal types.

The results in some instances show that the influence of consumers' exploratory tendencies on their deal proneness differs across product categories, i.e. while consumers may redeem a deal offered for a shampoo, they may not redeem the same deal offered for a refrigerator. This implies that deal proneness is product category specific. This is similar to results of Bawa et al. (1997) and others but conflicts with that of Ainslie and Rossi (1998).

The examination of the broader domain of promotion types examined across product categories enhances generalisability to some extent across product categories and offers results comparing consumers' proneness that may be relevant to researchers and marketers concerned with sales promotion.

Limitations of this research

The limitations of this study have been outlined below.

1. This study assesses the effect of psychological variables on consumers' deal proneness. However, the effect of other influencing variables including normative, behavioural, socio-economic and demographic variables could not be ruled out as they were not considered in explanatory research.

2. As a census of the large population was not required, sampling method was used to collect data. Judgment and snowball sampling was used to identify respondents belonging to the sampling frame. The non-probability sampling techniques used in this study limited the generalisability of the conclusions of this research to some extent.

3. Self-reported intention data were used in this research which may give biased measures of actual purchase, either underestimating or overestimating it (Young, 1998).

4. The validation study has been done with an independent sample and not with those who were included in the main study, due to limitations of scope.

Scope of future research

Since explanatory power of antecedents studied in this research are found marginal, other potential antecedents of deal responsive behaviour need to be studied. Also, studies need to include different types of products for cross-product validation of findings. Moreover, the theories need to be tested in other countries to make the findings more generalisable for use by marketers.

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