Product categories or personal characteristics: which factor drives channel related and retailer related consumer behavior most?

Abstract:

This article provides a holistic view of the drivers of channel related and retailer related consumer behavior in a multichannel retailing environment. The author develop a conceptual model based on the Person-Object-Situation paradigm (Belk, 1975a) and test whether personal characteristics (shopping motives and sociodemographics) or product categories drive consumers' channel related and retailer related behaviors most, and which product categories and personal characteristics specifically influence each behavior. Eight channel related and retailer related consumer behaviors (e.g. cross channel free-riding behavior purchase through the Internet) are considered as the dependant variable. They also test the interaction effect of personal characteristics and product category on these behaviors. The findings reveal that product categories have more impact than personal characteristics. Also, there is no significant interaction effect between product category and personal characteristics. The findings offer managers guidelines for engaging in marketing actions based on ready to use data such as product categories that can predict a tendency toward specific channel- and retailer related behaviors.

Keywords: multichannel consumer behavior, free-riding, Person-Object-Situation paradigm, decision-making process, retailing

INTRODUCTION

Multichannel consumer behavior has received extensive attention by researchers and practitioners in the last decade and still represents a research priority as the Marketing Science Institute (2012) calls attention to *"consumer's journey to purchase online and offline"* and to the understanding of the process that precedes transactions. A large amount of studies have been focused on determining the drivers of channel related consumer behavior across the stages of the decision-making process (Balasubramanian et al., 2005 ; Gensler et al., 2012 ; Konus et al., 2008; Verhoef et al., 2007) and more recently retailer related consumer behavior such as free-riding behavior, consisting in switching retailers during the decision making stages (Chiu et al., 2012 ; Heitz-Spahn, 2013). Such drivers include channel attributes (Gensler et al., 2012 ; Verhoef et al., 2007), attitude toward a channel (McGoldrick and Collins, 2007) ; consumer's shopping motives (Balasubramanian et al., 2005 ; Konus et al., 2008 ; Schroeder and Zaharia, 2008) and product categories (Kushwaha and Shankar, 2013).

None of the existing studies, however, has investigated personal characteristics and product category effects simultaneously and analyzed which of these variables drive channel- as well as retailer related consumer behavior most and also whether an interaction effect between both variables exists. Such knowledge is, however, important for managers (i.e, if product categories have more influence than personal characteristics on a specific channel related and retailer related behavior, segmentation could be based upon product categories rather than consumer personal characteristics) and practitioners

would have ready to use data to implement efficient customer segmentation and marketing actions. Moreover, if an interaction effect exists, both variables need to be taken into account by practitioners simultaneously.

While most studies focus on channel related consumer behavior such as cross-channel behavior, few provide insights into retailer related consumer behaviors such as free-riding and retention behavior although such knowledge is important for practitioners whose objective is to retain their customers into their retailing channels across the decision-making process stages and to limit the financial loss caused by free-riding behavior (Van Baal and Dach, 2005). It is important to consider the number of retailers a consumer visits across his decision-making process. (Wallace et al., 2004)

Our goal is to show that an integrative approach considering types of factors different by nature as well as retailer-related behavior is necessary for a better understanding of how consumer behave and choose channels and retailers in such a complex retailing environment. We also evaluate the relative importance of the different factors on several channel-related and retailer related behaviors.

The Person-Object-Situation paradigm (Punj and Stewart, 1983; Bloch and Richins, 1983 ; Belk, 1974 ; 1975) that considers that any consumer decision or behavior is derived from the interaction of the person (e.g. personal characteristics), the object (e.g. a given product category) and the situation (e.g. decision-making process stages) is well suited to the study of channel related and retailer related behaviors across the different stages of the decision-making process. An understanding of these phenomena is key to

addressing several managerially important questions that arise in a multichannel environment. More specifically, we address two important research questions:

- Which of the object or the person has the most impact on a channel- and retailer related behaviors? In terms of practice, the answer to this question can guide retailers in determining marketing resource allocation between channels and between the stages of the decision-making process more efficiently.

- How do specific product categories and personal characteristics affect the likelihood of adopting a specific channel- and retailer related behavior? What types of product categories are associated with a specific channel related and retailer related behavior (e.g. cross-channel free-riding behavior purchase via Internet, single channel online retention behavior)? If I need apparel, I will probably engage in visiting one specific retailer because I like the items it offers (retention behavior) but switch channels because I want to get an easy access to the whole collection via Internet, select some items to try in the store and then purchase through the store (cross-channel purchase through the store). Conversely If I purchase a DVD, I will probably stay online during the information search phase and the purchase stages but switch retailers because a large majority of sellers offer the very same product and switching channels (e.g. store and Internet) will be time consuming. Retailers that offer a specific product category (for instance apparel) would then know what pattern of channel- and retailer related consumer behavior is mostly. Same for multi-category retailers that could fine tune their marketing strategies depending on specific product categories. If

there is a trend towards retailer switching, retailer in a specific industry should implement retention marketing actions so that consumer visiting their store or their website would have incentives to stay during the whole process (search facilitators such as price comparators for price sensitive customers).

By answering these questions, several theoretical and managerial implications could be drawn. Besides the conceptual importance of this interaction between the person, the object and the situation that has never been considered in a retailing context, it is of issue to managers who coordinate marketing actions across channels to know in which channel to allocate a larger portion of their marketing budget for a specific product category and to know which type of factor influence channel- and retailer related behavior most in order to implement retention strategies when free-riding is a tendency for a specific product.

The article is organized as follow. We begin by introducing the Person-Object-Situation paradigm that has received attention in the consumer behavior research stream and we make a review of the multichannel literature, especially the factors explaining cross-channel behavior. Then, we address the research questions in an empirical study by briefly showing the results of an exploratory qualitative research and the results of multinomial regression analysis to determine the effects of personal characteristics and product category and their interaction on channel related and retailer related consumer behavior. We conclude with a discussion of the findings, conceptual implications, methodological implications and the impact for marketing practice and we finish with limits and directions for further research.

CONCEPTUAL FRAMEWORK

Person-Object-Situation paradigm

The interactionist theory developed by psychologist Lewin (1936) suggests that a certain behavior is function of the interaction between the person and the situation. The person considered independently cannot explain a specific behavior since ones behavior can be influenced by the environment (situation) in which one lives. In line with Lewin's interactionist theory, Punj and Steward (1983) use this paradigm to model consumer decision making and mention that task variables, individual variables and the interaction between the task and the individual explain consumer behavior. Citing Bowers (1973), these authors state that "*the absence of any one component results in an incomplete explanation of behavior […] Situations are as much a function of the person as the person's behavior is a function of the situation*".

Considering the Stimulus-Organism-Response model, Belk (1974 ; 1975a ; 1975b) divides the stimulus into an object and a situation, and is the first to mention the Person-Object-Situation paradigm. His empirical studies (Belk, 1974 ; 1975a) as well as Dickson's (1982) show that the interaction between the person, the object and the situation accounts for more variance on consumer preference than the three main effects.

Researchers studying the Person-Situation interaction have considered the situation as the level of distraction (Bitner and Wright, 1973), environmental variables

(Hornik, 1982), purchase situations (Coney and Harmon, 1979) and usages situation such as fast-food consumption (Belk, 1975b ; Bozinoff and Cohen, 1981). In almost every empirical research, the interaction term accounts for more variance than main effects.

In a retailing setting, Gensler et al. (2012) consider usage situation as the different stages of the decision-making process such as gathering information about a specific product and purchasing, two usage situations during which a consumer can choose a specific retailing channel. In line with the definition of Gensler et al. (2012), this research considers the stages of the decision-making process as specific situations where a consumer can choose channels and retailers that ultimately feature a consumer's channel-related and retailer-retailer behavior path. Therefore, we focus on two usage situations: the pre-purchase phase during which a consumer searches for information about a specific product category and chooses an alternative, and the purchase phase.

In order to explain consumer behavior in the pre-purchase and purchase phases (Situation), we need to consider consumer's objective and domain specific characteristics (Person), and the product category a consumer wants to purchase in (Object). We also need to consider the interaction effect of the person and the object on channel- and retailer related consumer behaviors in order to examine whether the interaction effect accounts for more variance than the main effects (Figure 1).

Insert Figure 1 here

Factors explaining channel related and retailer related behavior

Personal Characteristics (Person)

Personal characteristics can be divided into objective characteristics (e.g. sociodemographics) and domain specific characteristics (e.g. shopping motives) (Mittal, 1994). These characteristics have demonstrated their influence in explaining cross-channel consumer behavior (Konus et al., 2008 ; Kushwaha and Shankar, 2008 ; Noble et al., 2005 ; Schroeder and Zaharia, 2008). According to Inman et al. (2009) objective personal characteristics such as household size and gender are more impactful than domain specific factors such as shopping motives to explain channel patronage. However, in a multichannel setting, results of the impact of sociodemographics on channel related behavior are contrasted. While Kushwaha and Shankar (2008) have found that higher income and higher educated consumers are more willing to adopt a cross-channel behavior than a single-channel behavior, Konus et al. (2008) have found no significant relationship between age, gender, income, education, household status and urbanicity, and the multichannel shopper segment. Domain specific consumer characteristics such as need for convenience, shopping enjoyment and price comparison have showed consistant explanatory power (Konus et al., 2008 ; Noble et al., 2005 ; Schroeder and Zaharia, 2008). For retailer related behavior though, no research has studied the relationship between sociodemographics and shopping motives, and free-riding or retention behavior. Studying a specific channel- and retailer related consumer behavior, cross-channel free-riding behavior, Heitz-Spahn (2013) has found that price comparison and need for flexibility motives mainly explain this pattern of behavior, however, neither did she study other channel- and retailer related behavior (e.g. within

channel free-riding behavior) nor did she precise the type of purchase channel visited (Internet, store). Therefore, we would suggest that:

H1 : Shopping motives have a direct impact on channel related and retailer related consumer behaviors (H1a) ; Sociodemographics have a direct impact on channel related and retailer related consumer behaviors (H1b).

H2 : Shopping motives have more impact for explaining channel related and retailer related consumer behavior than sociodemographics.

Product categories (Object)

Product category can also explain consumer channel- and retailer choices. Customer behavior fundamentally varies by product category types (Ailawadi et al., 2006; Inman et al., 2009). According to Inman et al. (2004) followed by Gensler et al. (2012), product-channel associations exist such as a given product is more closely associated with one channel than others. The first ones show that product-channel associations have significant main effects and interaction effects with channel type on channel share of volume. Same effects could be expected for channel and retailer switch such that some product categories would induce channel and/or retailer switching during the decision making process.

Prior research has examined the impact of product category on consumer behavior (Inman et al., 2004 ; Inman et al., 2009) and more specifically on channel preference (Kushwaha and Shankar, 2013). While Gensler et al. (2012) focused on usage frequency,

involvement and complexity to distinguish the product categories, Inman et al. (2009) selected two product characteristics whose impacts have been shown in explaining channel preference; utilitarian vs. hedonic nature and high vs. low perceived risk (Yadav and Varadarajan, 2005). Studying the moderating effects of these two product characteristics on the channel preference-monetary value relationship, they state that multichannel customers are the most valuable segment only for hedonic product categories. These authors, however, only focus on the purchase phase and do not study the direct effect of product characteristics on preference-monetary value.

Although research has increased the understanding of the consumer-related characteristics that explains consumer behavior in a multichannel environment (attitude toward a channel, shopping motives, channel perception), it has never explored the direct and indirect influence of product categories across channels in the different stages of the decision process (situation) nor has it focused on retailer-related consumer behavior although such knowledge can give insight into retailer retention strategies.

H3 : product categories influence channel- related and retailer related consumer behavior (H3a).There is an interaction effect between personal characteristics (socio-demographics and shopping motives) and product categories on channel related and retailer related consumer behaviors (H3b).

Channel related and retailer related consumer behavior (Situation)

The multichannel consumer behavior literature as well as the literature on free-riding are relevant to the understanding of channel related and retailer related consumer

behavior. Researchers have either focused on multichannel behavior (vs. single channel behavior) with a specific firm (Konus et al., 2008 ; Verhoef et al., 2007) or on free-riding behavior (vs. retention behavior) (Chevalier, 2002 ; Klein and Ford, 2003) but seldom have they considered both channel related and retailer related consumer behavior together. Channel- and retailer related behavior patterns can be examined along two criteria: consumer channel opportunism (high vs. low) and retailer profitability (high vs. low) (Figure 2). According to Venkatesan et al. (2007), cross-channel shoppers spend more on average than single channel shoppers and are therefore more profitable for a company since they increase their spending when purchasing in different channels. Retention behavior indicates that consumers stay within a specific retailer's channels during the stages of the decision-making process even if competitors offer attractive or lower priced products. Retention can therefore be considered as a form of low channel opportunism and free-riding behavior as high channel opportunism. It has been stated that cross-channel free-riding behavior (a consumer switching channels and retailers during the decision-making process) is the most adopted one in a multichannel retailing environment (Van Baal and Dach, 2005 ; Heitz-Spahn, 2013). Adding purchase channel type (Internet and store) to the study, eight types of behavior patterns can be examined, extending our understanding of channel related and retailer related consumer behavior (Table 1). No research to our knowledge has been focused on determining which of personal characteristics or product categories drive consumer behavior most. Since this research is exploratory in nature, we cannot develop hypotheses for determining which factor explains these channel related and retailer related behavior most.

Insert Figure 2 here

METHOD

Exploratory qualitative research

The first step of this research involved 19 open-ended qualitative interviews with consumers. The topic was about relating their channel and retailer choice during the decision-making process for different products recently purchased. Participants reported engaging in specific channel- and related behaviors depending on the product they wanted to purchase. Respondents related their channel selection in each stage of the decision-making process and we found out that channel-related and retailer related behaviors could differ depending on product categories as well as the type of purchase channel. Therefore, we include channel type to the channel related and retailer related behaviors that form the basis for our dependant variable (Table 1).

Insert table 1 here

Sample and data collection

The survey was administered via the Internet and consisted in indicating respondents' behavior in relation to a non-food item they had purchased in the six months prior to data collection. We investigated actual behaviors rather than intended behaviors since it might offer more significant and realistic responses. Moreover, a desirability bias effect may create a gap between consumers' intended and actual behaviors because intentions to switch retailers might be perceived negatively, in that this behavior may hurt

retailers (Chui et al., 2012). Respondents selected one of the six non-food product categories listed (home furnishing, appliances, electronics and computing, home and garden, CD/DVD/Books, apparel) and recalled their shopping process in this category.

Respondents indicated the channel(s) they visited during pre-purchase phase as well as the channel in which they purchased it. Cross-channel behavior involved searching for information in one channel and several channels and then purchasing in one channel (e.g., searching on the Internet, asking questions in the store, and finally purchasing online). Respondents could be classified as either cross-channel (with purchase on the Internet or store) or single-channel store or Internet consumers. Furthermore, questions were ask regarding whether respondents had visited several retailers in order to classify respondents as either free-riders or retention consumers. Table 2 summarizes the sample composition.

Insert Table 2 here

Operationalization of variables

We measure the influence of three sociodemographic variables, age, gender and status which have demonstrated their influence in different channel patronage contexts (Inman et al., 2004 ; Inman et al., 2009). For product categories, we base our selection on the study of Kushwaha and Shankar (2013) who classified 22 product categories along two criteria: utilitarian vs. hedonic and low vs. high risk. Utilitarian products are easy-to-compare products and high on search attributes whereas hedonic products induce unplanned and impulse buying (Novak et ak., 2003). For high perceived risk products, consumers need to process more information than low perceived risk products or verify

the quality systematically; they face uncertainty (Kushwaha and Shankar, 2013). We have selected six products out of the 22 product categories from Kushwaha and Shankar (2013): Home furnishing (hedonic low risk), Electronics and computing (utilitarian high risk), appliances (utilitarian high risk), home and garden (utility low risk), CD/DVD/Books (hedonic low risk) and apparel (hedonic high risk).

Statements about shopping motives were measured using seven-point Likert scales, 1 = “Totally disagree” and 7 = “Totally agree”. The instructions indicated that respondents should provide answers in relation to their shopping process for the same particular product category. The measurement scales were borrowed from prior marketing literature. We used respectively a four-item measure and a three-item measure adapted from Noble et al. (2005) to measure price comparison and variety-seeking. The risk aversion scale was borrowed from Donthu and Gilliland (1996). Finally, to assess shopping enjoyment we have used the three-item shopping enjoyment scale from Schroeder and Zaharia (2008). A pretest with 10 participants checked the comprehensibility of the questions.

EMPIRICAL ANALYSIS & RESULTS

We did exploratory then confirmatory factor analysis to validate the measuring instruments. After refinement, we obtained a satisfactory factorial structure to build the motivations factors according to validity indicators imposed by the literature.

The categorical variable is the dependent measure in all subsequent analyses that is eight channel related and retailer related behaviors. To answer the theoretical

framework hypotheses, a multinomial logit model was used to test relationships with the eight behaviors. 14 items were selected to be put into the model (see Table 3).

To estimate parameters, we used Muthén and Muthén's M*plus* programme (version 7.00) which enables continual and categorical variables to be processed simultaneously with the appropriate *"MLR"* estimator (Muthén and Muthén, 2010).Table 4 displays the results of the multinomial logit model.

Results from multinomial regression analysis show that the price comparison motive impacts two channel related and retailer related consumer behaviors ($\beta = 0.368$, $p < 0.003$ for 3rd category "cross-channel store free-riding"; $\beta = 0.597$, $p < 0.015$ for 6th category "single channel store retention") thereby confirming hypothesis H1a. For sociodemographics, results show that gender negatively affects the 6th category "single channel store retention" ($\beta = -0.023$, $p < 0.036$) thereby confirming H1b.

Results from multinomial model confirm H3a. Product categories are positively related to channel related and retailer related consumer behaviors (Table 4).

Interaction effect. We also examined the interaction effect between product categories and personal characteristics on channel related and retailer related behaviors. We added this interaction into the model. Within the sets, there are few significant interactions. Furthermore, a comparison of goodness-of-fit measures for augmented and non-augmented models indicated no significant increase in fit from adding the sets interactions which invalidates hypothesis H3b.

A structural equation model was used to test the overall model, that is, the relationships between channel related and retailer related consumer behaviors, shopping motives, product categories and personal characteristics. Channel related and retailer

related behaviors were analysed as a continuous variable into the structural equation. To estimate parameters, we used Muthén and Muthén's M*plus* programme (version 7.00) which enables continual and categorical variables to be processed simultaneously with the appropriate *"MLR"* estimator. Adjustment indices for the structural equations model were χ^2=207, ddl =69, p=0.0015; CFI=0.979; TLI=0.966; RMSEA=0.056; MLR=1.09.

Results from causal analysis of the structural model show that shopping motives and personal characteristics are positively linked to the channel related and retailer related consumer behavior but results are non significant (shopping motives such as price comparison : β = 0.063, t = -1.519, p < 0.129); age β = 0.099, t = 0.336, p < 0.737) which invalidates hypothesis H2. Above all, we can notice that the product category variable is positively linked and is also the variable that impacts channel related and retailer related consumer behaviors most (β = 0.214, t = 4.754, p < 0.000).

To test H2, a structural equation model was used to test weather shopping motives have more impact than demographics for explaining channel related and retailer related consumer behaviours. Adjustment indices for the structural equations model were χ^2=172, ddl =121, p=0.0015; CFI=0.989; TLI=0.986; RMSEA=0.023; MLR=1.04.

insert Table 3 here

insert Table 4 here

DISCUSSION

The key research question was about determining which type of factor (personal characteristics or product categories) drives consumer channel related and retailer related

consumer behaviors most. The study sheds light on the influence of characteristics of the person and characteristics of the object together to get a better understanding of the factors that drive different channel related and retailer related consumer behaviors in a multichannel environment. It also provides an exploratory investigation of the specific shopping motives, sociodemographics and product categories that might explain different channel related and retailer related consumer behaviors. To our knowledge, this research is the first one that adds retailer related behaviors (free-riding/retention) to the understanding of consumer channel behavior in a multichannel context. Former studies have either focused on channel related consumer behaviors (cross-channel/single-channel behaviors) or on a specific channel related and retailer related behavior (e.g. cross-channel free-riding behavior). Furthermore, this study considers as a dependent variable, eight channel related and retailer related behaviors and test which product categories and which personal characteristics specifically influence each behavior.

Results of structural equation modeling suggest that product categories have the most significant explanatory power on those behaviors whereas shopping motives and sociodemographics have no significant impact. Then, results of multinomial logit analysis show that consumers' channel- and retailer related behavior tendencies can be based on product categories. It gives insights for retailers that offer a specific product category into patterns of channel- and retailer related consumer behaviors that are mostly adopted in their industry. Interestingly, multi-category retailers could fine tune their marketing campaigns depending on specific product categories. Tendencies for four out of six product categories can be drawn.

For home furnishing (hedonic low risk products), the tendency goes toward cross-channel with purchase through the store and free-riding behavior. Since home furnishing products differ across retailers (high product differentiation), a consumers needs to free-ride and visit different channels to see each retailer's offerings. Moreover, purchasing through the store is less risky than on the Internet, as those products are heavy and have to be handled with care.

For the appliances product category and the electronics product category (utilitarian/high risk products), the same tendency can be drawn: a cross-channel-purchase-through-store-retention behavior is mostly adopted. Contrary to home furnishing, there is little product differentiation among those two product categories (homogenous products). Also, this product is rather purchased through the store than on the Internet because of the high perception risk related to product delivery and after-sales.

Finally for DVD, CD and Books (hedonic/low risk products), four types of channel related and retailer related behaviors are significant, however, we will focus on the most significant one, which is single channel Internet free-riding. The highest tendency for those low risk hedonic products is to stay on the Internet for searching information and purchasing because it is more convenient to listen to one artist's songs and to read the first pages of a book on the Internet (minimum investment of time and physical effort). Moreover, since little product differentiation exists across products and because of low perceived risk, a free-riding behavior on the Internet is the most efficient way to find the best deal. For DVD, CD and books as for electronics and appliances, retention strategies should focus on other aspects that go beyond the product itself such as one-day delivery or warrantees that would favor retailer retention. A multi-level loyalty

program that rewards the most valuable consumers with free movie or concert tickets, access to an event backstage and meeting book authors could also be an option.

Multinomial logit analysis results shed light on the influence of characteristics of the person on channel related and retailer related consumer behaviors. More specifically, it shows that females have a tendency to behave more opportunistically and to be a more profitable segment than men (upper right quadrant in figure 2) since they benefit from the store and the Internet attributes during the decision-making stages (cross-channel) but also from different retailers (free-riding). Probably are females more concerned than men about enjoying shopping environments and taking time to shop (cross-channel free-riding is time costing per se).

For shopping motives, price comparison oriented consumers tend to free-ride and purchase in the store which is in line with expectations (cross-channel free-riding store and single channel free-riding store behaviors). Conversely, consumers who look for shopping enjoyment seem to be more likely to realize the whole shopping process through the store and with one specific retailer (single channel store retention). In terms of managerial implications, these findings suggest that retailers should focus on enjoyable and recreational aspects related to the retailer's shopping experience (store/website design, entertainment, trial, complementary services) to orient retention behaviors. It also means that a marketing strategy oriented toward savings and promotions gives the consumer a focus on price which in the end explains a cross-channel free-riding tendency.

On a theoretical perspective, we contribute to the literature in several ways. We applied the Person-Object-Situation paradigm to the context of retailing but contrary to the results of Belk (1975a ; 1975b), only direct effects of the object (product categories) and the person (sociodemographics and shopping motives) have demonstrated a significant impact on channel related and retailer related behaviors. There is no interaction effect between both variables.

We also offer new insights into the direct role of product categories on consumer behavior in a multichannel environment. For product categories, we have tried to apply Kushwaha and Shankar's (2013) product category characteristics classification (hedonic vs. utilitarian; high perceived risk vs. low perceived risk) to the product categories selected. It seems that this classification is not applicable in the context of the study. For instance, home furnishing and CD/DVD/Books are both considered to be hedonic low risk products, however, the tendency in terms of channel- and retailer related behavior differ for both (cross-channel free-riding purchase through the store for home furnishing and single-channel through the Internet free-riding behavior for CD/DVD/Books). Thus, two assumptions could be made: either other product criteria should be used to classify products (e.g. purchase frequency, financial value, product implication) or focusing on product categories instead of product category classifications is a better option.

LIMITATIONS AND FUTURE RESEARCH

This study offers insights into eight channel related and retailer related behaviors; however it has limitations that further research could address. First, we used a survey to

collect information about channel choice and retailer choice in each stage of the decision process. We do not have observed information for search and purchase behaviors. We only rely on respondent's path to purchase memory. Combining observed and survey-based study would extend knowledge by forming a more accurate picture on the channels selected by a firm's customer for pre-purchase and purchase but also knowledge about what the customer has done beyond the scope of the firm (their retailer switching behavior during the decision-making process.

The second limitation involves external validity. This research is exploratory by nature, therefore results cannot be generalized for further product categories or industries. Third, this research only considers two channels (Internet and store) whereas catalog or with its growing use, mobile phone, might engender even more consumer channel choice complexity (checking simultaneously one retailer's store offerings while checking on the Smartphone the offerings of a competitor). Fourth, results from the structural equation model indicate that the shopping motive variable has no impact on channel related and retailer related behavior. Results could have been different when integrating shopping motives such as need for convenience or need for social interactions. Finally, future research should identify the reasons why a consumer is free-riding (failures to provide an adequate product assortment, failure to deliver specific service outputs, competitive price) even if he seems to be overall satisfied with the retailer's product and services.

CONCLUSION

As consumer behaviors in the multichannel retailing context become increasingly more complex, retailers currently face new challenges to retain their customers in their channels during the entire decision-making process. Insights into these multiple channel and retailer related behaviors need to be found. Based on the Person-Object-Situation paradigm (Belk, 1975a ; 1975b), this research aimed at identifying the relative importance of two types of drivers, personal characteristics (objective and domain specific characteristics) and product categories, as well as their interaction effect on eight channel related and retailer related consumer behavior. Results show that only main effects of personal characteristics and product categories explain some of the eight channel- and retailer related consumer behaviors. More importantly, this research suggests that product categories have more exploratory power than personal characteristics. One theoretical contribution to this research is to apply the Person-Object-Situation paradigm to the context of multichannel retailing and to test the main effects and interaction effects of person-object variables. For practitioners this means that they still should use personal characteristics data but above all, product categories data to predict channel related and retailer related behaviors of their customers. Thus, we conclude that an integrative approach is necessary for understanding consumer channel- and retailer related consumer behavior a multichannel environment.

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Figure 1: the Person-Object-Situation paradigm in the context of channel- and retailer related consumer behavior in a multichannel setting

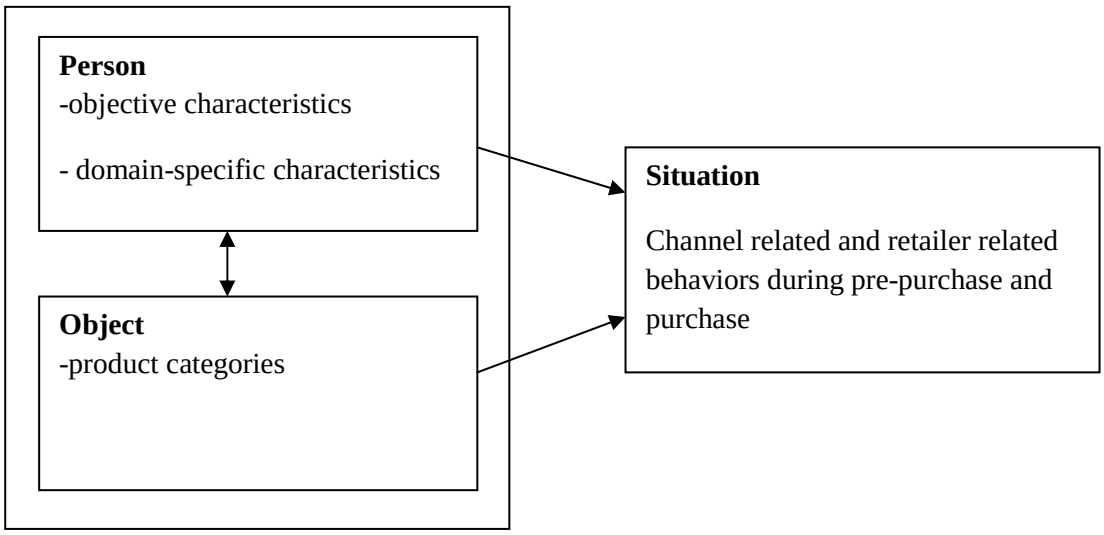

Figure 2: channel related and retailer related consumer behavior matrix

	Low channel opportunism	**High channel opportunism**
High profitability	Cross-channel retention	Cross-channel free-riding
Low profitability	Single Channel retention	Single Channel free-riding

Table1: Channel related and retailer related consumer behaviors (dependent variable)

Dependent variable : channel related and retailer related consumer behaviors	Description
1 = cross-channel retention purchase on the Internet	**1** = consumers switching channels and visiting one retailer during pre-purchase and purchase phases and purchasing on the retailer's Internet website.
2 = cross-channel free-riding purchase on the Internet	**2** = consumers switching channels and switching retailers during pre-purchase and purchase phases and purchasing on a retailer Internet website.
3 = cross-channel retention purchase in store	**3** = consumers switching channels and visiting one retailer during pre-purchase and purchase phases and purchasing through the retailer's store.
4 = cross-channel free-riding purchase in a store	**4** = consumers switching channels and switching retailers during pre-purchase and purchase phases and purchasing through a retailer store.
5 = single-channel through the Internet retention	**5**= consumers visiting one retailer and staying on the Internet for pre-purchase and purchase and purchase and finally purchasing on the retailer's Internet website.
6 = single-channel through the Internet free-riding	**6**= consumers switching retailers and staying on the Internet for pre-purchase and purchase and purchase and finally purchasing on a retailer Internet website.
7= single-channel through the store retention	**7**= consumers visiting one retailer and staying in the store for pre-purchase and purchase and purchase and finally purchasing through the retailer's store.
8= single-channel through the store free-riding	**8**= consumers switching retailers and staying in store for pre-purchase and purchase and purchase and finally purchasing through a retailer store.

Table 2: Summary sample statistics

	Frequency
Behavior : channel related and retailer related consumer behaviors	
1 = cross-channel retention purchase on the Internet	4.2%
2 = cross-channel free-riding purchase on the Internet	15.8%
3 = cross-channel retention purchase in store	11.6%
4 = cross-channel free-riding purchase in a store	39.3%
5 = single-channel through the Internet retention	5.2%
6 = single-channel through the Internet free-riding	5.1%
7= single-channel through the store retention	11.2%
8= single-channel through the store free-riding	7.7%
Product Category	
-1. Home furnishing	10.9%
-2. Appliances	14.6%
- 3. Electronics	34.1%
- 4. Home and garden	2.8%
-5. DVD/CD/Books	14.5%
-6. Apparel	23.2%
Customer Characteristics	
Gender (% female)	58.6%
Age :	
1 = less than 21	2.3%
2 = between 21 and 30	47.5%
3 = between 31 and 50	39.0%
4 = more than 50	11.2%
Status	
1 = Entrepreneurs	5.3%
2 = Executive/Managers	45.8%
3 = Employees	31.1%
4 = Students	11.0%
5 =Unemployed	1.9%
6 = Labors	1.6%
7 = Retirees	3.2%

Table 3: Measures of the variable of interest

<u>Dependant Variable</u> **The item represent channel and retailer related consumer behavior :** **8 categories (VARY, VARY1,VARY2,VARY3, VARY4,VARY5, VARY6, VARY7)**
<u>Objective Factors</u> **Sociodemographics :** **Age** **Gender:** The field coded the shopper's gender as 2 if female and 1 if male. (GENDER [?]) **Status :** (PROF1, PROF2, PROF3, PROF4, PROF5, PROF6, PROF7, PROF8, PROF9)
<u>Domain specific Factors</u> **Consumer shopping motives** - Risk aversion (RA) - Price comparison (PC) - Variety-seeking (VS) - Shopping enjoyment (SE)
Product categories - 1. Home furnishing (PCAT1) - 2. Appliances (PCAT2) - 3. Electronics (PCAT3) - 4. Home and garden (PCAT4) - 5. DVD/CD/Books (PCAT5) - 6. Apparel (PCAT6)

Table 4: Results of multinomial Logit Analysis for 8 types of behaviors

	1 = cross-channel Internet / free-riding (1)	2 = cross-channel store / retention	3 = cross-channel store / free-riding	4 = single channel Internet / retention	5 = single channel Internet / free-riding	6= single channe store / retention	7 = single channel store / free-riding
Personal Characteristics **1.**Age **2.** Gender **Male (REF)Female**	**1.** n.s. **2.** n.s.	**1.** n.s. **2.** n.s.	**1.** n.s. **2.** n.s..	**1.** n.s. **2.** n.s..	**1.** n.s. **2.** n.s..	**1.** n.s. **2.**-1.023/.036	**1.** n.s. **2.** n.s..
Shopping Motives 3. RA 4. PC 5. VS 6.SE	**3**. n.s. **4**. n.s. **5**. n.s.. **6**. n.s.	**3**. n.s. **4**. n.s. **5**. n.s. **6** . n.s.	**3**. n.s. **4**. 368/.003 **5.** n.s. **6.** n.s.	**3**. n.s. **4**. n.s. **5.** n.s. **6.** n.s.	**3.** n.s. **4.**.597/.015 **5.** n.s. **6**. n.s.	**3.** n.s. **4.** n.s. **5.** n.s. **6.** .457/.023	**3.** n.s. **4.** n.s. **5.** n.s. **6.** n.s.
Product Categories 1 = Home furnishing 2 = Appliances 3 = Electronics 4 = Home and garden 5 = CD/DVD/Books **6 = Apparel (REF.)**	**1**. n.s. **2**. n.s. **3**. n.s. **4**. n.s. **5**.=.723/.015 **6**.= REF	**1.** n.s. **2.** .432/.001 **3.** .191/.000 **4.** n.s. **5.** .686/.019 **6.** REF	**1.** .463/.008 **2.** n.s. **3.** n.s. **4.** n.s. **5.**. n.s. **6.** . REF	**1.** -.426/.004 **2.** n.s. **3.** .549/.000 **4.** n.s. **5.** n.s. **6.** . REF	**1.** . n.s. **2.** n.s. **3.** n.s. **4.** n.s. **5.** .414/.000 **6.** . REF	**1.** n.s. **2.** .520/.029 **3.** n.s. **4.** n.s. **5.** n.s. **6.** . REF	**1.** n.s. **2.** n.s. **3.** n.s. **4.** n.s. **5.** .414/.013 **6.** . REF
	Note : (1) : the base line category is the first behavior n.s. = non significant REF = base line category of item						