PHYSICAL VS. VIRTUAL INFORMATION SEARCH AND PURCHASE IN BUYING BEHAVIOR OF POLISH YOUNG CONSUMERS

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ABSTRACT

This paper investigates selected internal and external to the consumer factors influencing young consumers’ choices of physical or virtual channel for information search and purchase. Situations of channel lock-in and channel change between mentioned phases of buying process are described and their antecedents investigated. Perceived channel characteristics for information search and purchase, consumer decision-making style profile information technology adoption level are considered to influence consumer choices in this case. Structural equation modeling has been used to analyze gathered data – 5 models has been assessed.

Keywords: internet shopping, physical retail, information search, young consumers, Poland

INTRODUCTION

The increasing internet penetration and private usage among consumers created new opportunities for business-to-consumers (B2C) electronic markets, mainly: online shops, internet auction platforms, and virtual services, which gave the sellers new possibilities to reach out to consumers. Many of consumers easily adopted buying in virtual channel, perceiving it as more comfortable and cheaper than conventional retail in physical environment. Buying over the Internet has in many cases also substantial disadvantages – among others the lack of physical contact with product considered to buy, as well as several financial and personal risks are perceived as main of them.

The Internet, being the largest information source and facilitator of social media, gives the consumer opportunities to collect, compare and spread shopping information regarding products and sellers. For consumer typically is much easier to find, compare and choose product with certain characteristics and features online in comparison to offline information search using physical channel sources as well as personal contacts. Information about
products and sellers gathered online is perceived as quicker, more detailed and sometimes more reliable, so it is widely used in purchase decision processes.

Generally, better opinions about the Internet as an information source than as a shopping channel can lead to situation of shopping channel change during consumer decision making process – for instance seeking information in online channel, and buying in physical retail (avoiding i.e. waiting for delivery and its costs). Converse situation – offline information search (i.e. to try on clothes or “feel” keyboard on laptop) – followed with online shopping is also possible and quite popular.

The main goal of paper is to investigate factors influencing young consumers’ choices of physical or virtual channel for information search and buying in case of clothing and consumer electronics. As physical channel, we are treating different formats of physical retail outlets. Virtual channel includes websites commonly used to get information about products, including reviews, personal recommendation, price comparison tools, as well as Internet stores and auctions used by consumers to gather information and to buy – in all cases accessible via computers and/or mobile devices (through web browser or specialized application).

Investigation of channel lock-in and channel change between information search and purchase phases of buying process also has been made, which includes comparison of antecedents of researching online to buy offline and of searching information offline to buy online.

**INTERNET SHOPPING AS A TECHNOLOGY ADOPTION EXAMPLE**

The information technology adoption was extensively studied since over 20 years, leading to different models explaining determinants of IT adoption, both on user and organization levels, starting from the TAM (Technology Acceptance Model) by Davis (1989), up to UTAUT (Unified Theory of Acceptance and Use of Technology) by Venkatesh et al. (2003), and TAM3 by Venkatesh and Bala (2008).

The TAM and its developments became widely used as simple tools to explain and predict computer-usage behavior as the example of technology adoption, firstly in the work usage context (Klopping and McKinney, 2004; Venkatesh et al., 2003; Venkatesh and Davis, 2000). Over the time the TAM model has been used successfully (among others) to explain WWW
usage (Lederer et al., 2000; Magal and Mirchandani, 2001), and to predict online shopping adoption (Lee, Park and Ahn, 2001; Childers et al., 2001; Chen, Gillenson, and Sherrell, 2002; Klopping and McKinney, 2004).

The TAM is theoretically grounded in Fishbein & Ajzen’s (1975) theory of reasoned action (TRA) which states that beliefs influence attitudes, attitudes lead to intentions, and finally intentions are converted to behaviors (Malhotra & Galetta, 1999). The main goal of TAM is to explain the determinants of computer acceptance (Davis, Bagozzi, and Warshaw, 1989). Two major determinants of technology adoption in TAM: perceived usefulness (PU) and perceived ease of use (PEoU) are defined by Davis (1989) respectively as: “the degree to which a person believes that using a particular system would enhance his or her job performance,” (PU) and “the degree to which a person believes that using a particular system would be free of effort” (PEoU) (p. 320). In attitude formation toward information technology use perceived usefulness has been identified as significant in the literature (Davis, 1989; Dishaw & Strong, 1999; Gefen and Keil, 1998; Moon and Kim, 2001; Taylor and Todd, 1995; Venkatesh and Davis, 2000), but the evidence for perceived ease of use has been inconsistent (Lin and Lu, 2000; Teo, Lim and Lai, 1999; Lee et al., 2001). The TAM and its extensions are also often criticized for being to obvious and simple (Bagozzi 2007).

For usage in consumer e-commerce context Klopping and McKinney (2004) modified and simplified the TAM by: dropping PEoU to PU path, dropping attitude toward technology in order to investigate the direct relationship between perceived usefulness and perceived ease of use on intention to use adding direct effect of PU on actual use (Klopping and McKinney, 2004, p. 37). The task of online shopping in study of Klopping and McKinney (2004) has been described as combination of both the purchase and the product information search activities. That point of view has been used also by authors of this paper in previous studies (Mącik and Mącik 2008, 2009), extended by investigating consumer decision-making styles influence on online shopping activities significantly improving simple TAM approach.

**CONSUMER DECISION-MAKING STYLE**

Consumer decision making-style concept, introduced by Sproles & Kendall (1986), used in several more contemporary studies (Walsh et al. 2002, Tai 2005,) proved to be useful to explain outcomes of particular shopping activities and attitudes toward shopping, including usage of online channel (Mącik & Mącik, 2008, 2009).
A consumer decision-making style concept, introduced by Sproles & Kendall (1986), defined as “a mental orientation characterizing a consumer’s approach to making choices” (p. 268). Consumer decision-making styles can be perceived as “basic buying-decision making attitudes that consumers adhere to, even when they are applied to different goods, services or purchasing decisions” (Walsh et al., 2001, p. 121). They are relatively stable constructs, connected to consumer personality (Sproles and Kendall, 1986; Lysonsky, Durvasula and Zotos, 1995), and particular shopping activities and attitudes toward shopping are direct outcomes of consumer’s decision-making style (Tai, 2005).

Original Sproles & Kendall (1986) work organizes consumer personality in eight following dimensions (decision-making styles):

1) perfectionism or high-quality consciousness (PERF),
2) brand consciousness or “price equals quality” (BC),
3) novelty-fashion consciousness (NFC),
4) recreational or hedonistic consciousness (RSC),
5) price-value consciousness or “value for money” (PVC),
6) impulsiveness or carelessness (IMP),
7) confusion from overchoice (CO),
8) habitual, brand loyal orientation toward consumption (HBL).

Authors have updated measurement instrument for decision making-style profile assessment, by adding two new dimensions: tendency to compulsive buying (COMP) (Maćik and Maćik 2008, 2009) and attitude toward “green” consumption (ECO) – latest addition.

It is important is to note, that those styles are not independent – particular person possesses an individual combination of them, creating personal profile of all styles manifesting itself on different levels, from those some are more intense or prominent (Sproles & Kendall 1986).

**CHANNEL LOCK-IN AND CHANNEL CHANGE**

Channel lock-in between information search and product purchase phases means that a consumer searching for product information through specific channel (e.g., the Internet) buys a product through the same channel (Young-Hyuck and Hyung-Jin Park 2008). Channel change situation – so called cross-channel shopping – means that a consumer, who searches for product information through channel A, buys a product at channel B (Young-Hyuck and
Hyung-Jin Park 2008). For this study, there are two situations of cross-channel shopping: searching information in physical retail to buy over the Internet, and searching information over the Internet (using computer and/or mobile device) to purchase offline. Channel change is an effect of realizing by the consumer that channel B has important advantages in terms of future purchase outcomes, after being informed and educated through channel A. Such situation may be perceived as complementarities of both channels (Teering & Huizingh 2005).

Perceived channel characteristics are influencing the choice of channel for both phases: information search, and buying. Mokhtarian and Tang (2009, 2011) are discussing in detail description of physical and virtual retail channel features, describing eight dimensions of it, particularly: Convenience, Enjoyment, Efficiency/inertia, Cost-saving, Store brand independency, Product risk, Financial/identity risk, and Post-purchase satisfaction.

**HYPOTHESES**

This study is focused on exploring shopping channel perception and previous experiences on channel choice for information search and buying, so main hypotheses are formulated to check if physical or virtual channel choice comes from attitude toward particular channel. There is expected that channel advantages will influence choosing it, as well as channel-connected risks and its disadvantages will lead to preference of another one (Mokhtarian and Tang, 2011). According to Klopping & McKinney (2004) it is expected that some TAM constructs will be connected with channel choice. As long the consumer’s decision-making style in Sproles & Kendall meaning is important his/her characteristic, and particular consumer shopping activities are direct outcomes of his/her own consumer decision-making styles profile, there should exist at least some styles related to channel choice by consumer.

Therefore, for this study the set of seven main hypotheses has been formulated on the base of literature review and authors’ preliminary qualitative and quantitative studies on small samples of undergraduate students. The hypotheses are as follows:

H1: Virtual channel perception and experience influences channel choice for information search and purchasing.

H1a: Perceived virtual channel advantages are positively related with virtual channel usage for information search.
H1b: Perceived virtual channel advantages are positively related with virtual channel usage for purchasing.
H1c: Perceived risks of virtual channel usage are negatively related with virtual channel usage for purchasing.
H1d: Perceived risks of virtual channel usage are positively related with physical channel usage for purchasing.
H1e: Experience with virtual channel shopping is positively related with virtual channel usage for purchasing.

H2: Physical channel perception and experience influences channel choice for information search and purchasing.
H2a: Perceived physical channel advantages are positively related with physical channel usage for information search.
H2b: Perceived physical channel advantages are positively related with physical channel usage for purchasing.
H2c: Perceived risks of physical channel usage are negatively related with physical channel usage for purchasing.
H2d: Perceived risks of physical channel usage are positively related with virtual channel usage for purchasing.
H2e: Experience with physical channel shopping is positively related with physical channel usage for purchasing.

H3: Usage of particular channel for information search is positively related with its usage for purchasing (channel lock-in effect).
H3a: Usage of virtual channel for information search is positively related with virtual channel usage for purchasing.
H3b: Usage of physical channel for information search is positively related with physical channel usage for purchasing.

H4: Channel change from virtual to physical between information search and purchasing is influenced by preference to purchase in physical channel.
H4a: Perceived physical channel advantages are positively related with channel change from virtual to physical between information search and purchasing.
H4b: Perceived physical channel risks are negatively related with channel change from virtual to physical between information search and purchasing.
H4c: Perceived virtual channel advantages are negatively related with channel change from virtual to physical between information search and purchasing.
H4d: Perceived virtual channel risks are positively related with channel change from virtual to physical between information search and purchasing.

H5: Channel change from physical to virtual between information search and purchasing is influenced by preference to purchase in virtual channel.

H5a: Perceived virtual channel advantages are positively related with channel change from physical to virtual between information search and purchasing.

H5b: Perceived virtual channel risks are negatively related with channel change from physical to virtual between information search and purchasing.

H5c: Perceived physical channel advantages are negatively related with channel change from physical to virtual between information search and purchasing.

H5d: Perceived physical channel risks are positively related with channel change from physical to virtual between information search and purchasing.

H6: Consumer’s decision-making styles profile predict, influencing directly and indirectly the usage of particular channel for information search and purchasing.

H7: Consumer’s decision-making styles profile predict, influencing directly and indirectly the channel change between information search and purchasing.

METHODS

Subjects and procedures
The participants of presented study were 201 Polish consumers, aged between 18 and 35 years old (with largest group being full-time and part-time students – about 81%). Data were collected using Computer Assisted Web Interview (CAWI) questionnaire (with response paths between 26 and 35 screens long, lasting about 20-30 minutes) was utilized. Invitations has been sent by e-mail to 324 participants of previous author research from 2010, who agreed to participate in next research - response rate was about 62%. For modeling has been taken responses of 92 participants, who responded completely. From initial 201 participants incomplete responses were excluded, as well as responses from participants who consequently responded regardless the proper scaling direction. Effective response rate was about 28,4%. Effective sample size is rather small, which is considered as this study important limitation.

The choice of mentioned group as study subjects takes into account more frequent buying of consumer electronics and clothing than average ones, as well as greater involvement with such purchases and better information technology adoption, resulting with more complicated buying processes, more often including shopping channel changes. Consumer electronics and
clothing choice is influenced by their wide distribution across physical and virtual retail, and by higher popularity of buying them over the internet in Poland. It is worth to mention that about 42% of internet users in Poland declaring buying over the internet bought some clothing this way in 2009, and consumer electronics created at the same time about 39% of virtual retail turnover (Internet Standard 2010).

**Scales development**

To measure perceived physical and virtual channel characteristics scales adapted from Mokhtarian and Tang (2009) used. Scales items have been translated into Polish and adapted using experimental statements, considering possible cultural and language differences. Used form has been obtained using reliability analyses made on data from preliminary sample of 48 undergraduates. From original eight dimensions of it, particularly: Convenience, Enjoyment, Efficiency/inertia, Cost-saving, Store brand independency, Product risk, Financial/identity risk, and Post-purchase satisfaction, seven constructs has been used – Store brand independency items has been dropped as not clearly understandable by participants.

During the analysis – regarding low effective sample size – items from those 7 constructs were grouped into two larger groups: channel advantage (including: Convenience, Enjoyment, Efficiency, Cost-saving, and Post-purchase satisfaction), and channel risks (including: Product risk and Financial/identity risk). Channel experience has been measured as declared shopping frequency in 10 physical retail formats, and 3 virtual ones (including informal sales on Internet communities and social media).

Scales measuring usage of particular channel for information search and purchasing are constructed by authors, for virtual channel loosely resembling items from Klopping & McKinney (2004) version of TAM for Internet shopping, particularly from IU and AU constructs. Authors own alteration of typical TAM items regarding personal Web usage was also used in the questionnaire. Reliability analyses were performed on preliminary sample of 48 undergraduates.

The PCS scale by Sproles and Kendall (1986) was reconstructed earlier by authors of this paper using two samples of 212 and 324 undergraduate students respectively. Our polish adaptation of PCS consists of 30 items selected using factor and reliability analyses in 10 dimensions. Eight dimensions are styles present in original Sproles and Kendall (1986) works. The ninth dimension – compulsiveness (COMP) – has been added on the base of previous
authors research on unplanned buying and its determinants, using Unplanned Buying Scale (UBS) by Mącik and Mącik (2005), which is a reception of hedonic, impulsive and compulsive buying tendencies described by Hausman (2000), Rook and Fisher (1995), and Faber and O’Guinn (1992). At the second stage the tenth dimension – attitude toward “green” consumption (ECO) has been added.

All mentioned constructs were measured using Likert-type scale of 1-5 with end points worded “strongly agree” and “strongly disagree” with exceptions in channel experience items and channel change frequency, using for both frequency descriptions.

Internal consistency and construct validity

Internal consistency of individual scales for measuring particular construct has been assessed by using Cronbach’s Alpha coefficient (Cronbach, 1951) – see Table 1. Internal consistency of all constructs meets typical requirements to be above 0.6 for short scales, being in many cases above usual limit of 0.7 suggesting enough internal consistency, so those scales can be used for analysis. Intercorrelations (not reported in text) between constructs are rather low (not exceeding 0.5 in absolute terms), which indicates measuring different constructs, and suggests good discriminant validity.

For 15 used scales dimensions Alphas are over acceptable minimum for short scales of 0.6, which signalizes the need to improve their wording.

Next step in assessing construct validity was exploratory factor analysis using principal component extraction method with varimax rotation. This procedure has been performed to confirm that all scales are measuring distinct constructs. For all scales constructs desired factor structures were confirmed, with extracting at least 63% of the total variance, with no cross loadings >0.50, which indicates good discriminant validity.

Table 1: Internal consistency of used scales

<table>
<thead>
<tr>
<th>Construct</th>
<th>Description</th>
<th># of items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>VC_ADV</td>
<td>perceived virtual channel advantages</td>
<td>17</td>
<td>0.77</td>
</tr>
<tr>
<td>VC_RISK</td>
<td>perceived virtual channel risk</td>
<td>8</td>
<td>0.74</td>
</tr>
<tr>
<td>Variable</td>
<td>Description</td>
<td>Mean</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>VC_EXP</td>
<td>virtual channel experiences</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PC_ADV</td>
<td>perceived physical channel advantages</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>PC_RISK</td>
<td>perceived physical channel risk</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>PC_EXP</td>
<td>physical channel experiences</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>VC_IU</td>
<td>virtual channel information search usage</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>VC_PURCH</td>
<td>virtual channel purchasing usage</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>PC_IU</td>
<td>virtual channel information search usage</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PC_PURCH</td>
<td>virtual channel purchasing usage</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>V2P</td>
<td>virtual to physical channel change frequency</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>P2V</td>
<td>physical to virtual channel change frequency</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>TAM_PU</td>
<td>perceived usefulness of private Internet usage</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>TAM_Peou</td>
<td>perceived ease of use of private Internet usage</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>TAM_IU</td>
<td>intention toward of private Internet usage</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>TAM_AU</td>
<td>actual of private Internet usage</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PERF</td>
<td>perfectionism or high-quality consciousness</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BC</td>
<td>brand consciousness or “price equals quality”</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>NFC</td>
<td>novelty-fashion consciousness</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>RSC</td>
<td>recreational or hedonistic consciousness</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PVC</td>
<td>price-value consciousness</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>IMP</td>
<td>impulsiveness or carelessness</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CO</td>
<td>confusion from overchoice</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HBL</td>
<td>habitual, brand loyal orientation</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COMP</td>
<td>compulsive buying tendency</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECO</td>
<td>“green” orientation toward consumption</td>
<td>3</td>
<td></td>
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</tbody>
</table>

**Data analysis**

Presented analyses have been made using SPSS 17.0PL (for preliminary purposes and descriptive statistics) and AMOS 17.0 structural equation modeling software (to identify and test causal relationships). So called “path analysis” approach to structural equations modeling...
has been utilized. “Path analysis is a method of measuring the influence of explanatory variables along each separate path in a system and finding the degree to which variation of a given effect is determined by each particular cause” (Teo, Lim & Lai, 1999, p. 30). This approach allowed to calculate measures of fit for models reported in the paper, and made comparisons across those models.

RESULTS

Channel lock-in models

First estimated model describes hypothesized relationships between information search and purchasing at particular channel (model 1a – figure 1). Paths predicted by hypotheses H1 through H3 are included. As many hypothesized relationships in this model are not significant – those paths has been excluded to build model 1b. Both models are acceptable in terms of fit measures, while model 1b performs better (table 2).

a) Model 1a

b) Model 1b

Figure 1: Initial model (model 1a) and improved model 1b structures
In model 1a supported are only hypotheses H1a, H1b, H2a, H2d and H2e, also significant is not hypothesized path between information seeking in virtual channel and physical one (signalizing channel synergy). For better in terms of fit model 1b, hypotheses H1a, H1c, H1e, as well as H2a, H2d and H3a are supported. Choosing virtual channel for information search depends on perceived advantages of virtual channel and perceived risk of physical channel. Choosing virtual channel is connected positively with: that channel previous experiences, usage of that channel for information search, perceived risk of physical channel as well as negatively with perceived risk of virtual channel (those 4 variables are explaining about 32% of variance of virtual channel usage. Physical channel usage for information search depends only on that channel perceived advantages, while using physical channel for purchasing is not significantly connected with that channel usage for information search. So channel lock-in effect is present on virtual channel, but not in the physical one.

At next step to model 1b constructs measuring consumer decision-making styles has been added creating model 2 (figure 2) to check hypothesis H5. In terms of fit model 2 is comparable to model 1b (table 2).
Connections between 6 styles and constructs from model 1 has been found, which supports hypothesis H6. Buying in virtual channel is positively connected with compulsiveness and negatively - with confusion form over choice, also indirect influence of recreational shopping orientation is present (trough virtual channel information usage), as well as ecological orientation toward consumption (trough perceived risk of physical channel). Information seeking in physical channel depends on price-value orientation (positively) and compulsive buying tendency (negatively). Buying in physical channel is positively connected with habitual brand-loyal orientation.
**Channel change models**

First channel change model describes relationships causing channel change as has been hypothesized in H4 and H5 (model 3 – figure 3). Paths predicted by hypotheses H4 and H5 are included. Some hypothesized relationships in this model are not significant – those paths has been excluded and are not shown on figure 3. Model 3 in form shown on figure 3 fits data very well (table 2).

![Diagram](attachment:image.png)

Figure 3: Model 3 – explanation of channel change

Channel change from virtual to physical relies on physical channel perceived advantages and this channel connected risk, and also on frequent physical channel choice for purchasing (in all cases positively), as well as virtual channel risk (negatively) and perceived ease of use of the virtual channel (positively). Those connections are rather surprising, only H4a is partially supported in this case, and different signs of relationships described in H4b and H4d has been found. Channel change from physical to virtual is significantly negatively connected with
perceived risk of using virtual channel, which supports hypothesis H5b. Other hypotheses under H5 group were not supported.

As adding consumer decision-making style to channel choice was promising, to model 3 paths suggested in model 2 were added creating model 4 to check hypothesis H7.

Figure 4: Model 4 - consumer decision-making styles extension to model 3

Direct positive influence of price-value consciousness on virtual to physical has been found, suggesting that virtual channel has disadvantages for price-value oriented consumers. Indirect influence of habitual brand-loyal orientation (through preference for purchasing at physical channel), and mentioned confusion from over choice as well as compulsive buying tendency (through virtual channel purchasing preference) is present in the model 4. Overall fit of model 4 is comparable do model 3, and good (table 2).
DISCUSSION

This study finds support for the use of channel perceived characteristics and consumer decision-making styles in explaining consumer channel choice for information seeking and purchasing, as well as for channel change. Channel characteristics are influencing channel choice and eventual change more substantially than other considered factors. Consumer decision-making styles profile are helping to improve modeling of those factors.

Our approach made possible to characterize constant factors influencing channel choice and change. Unfortunately predicting channel choice is much easier for virtual channel, also channel change from virtual to physical is easier to describe. So this study has important shortcoming – estimated models do not perform very well for explaining physical channel choice and change from physical to virtual channel.

Table 2 contains comparison of fit measures for all estimated models. Models 1b and 2 explained quite well virtual channel purchasing and physical channel information search. In models 3 and 4 attempts to explain virtual to physical channel is rather successful. Model 4 linking models 2 and 3 shows better whole system of relationships. Consumer decision-making style paths, added in models 2 and 4, allow to explain additional 5-7% of variance of virtual channel purchasing, physical channel information search, and change from virtual channel to physical one.

Table 2: Estimated models fit comparisons

<table>
<thead>
<tr>
<th>Measures of fit</th>
<th>Models</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1a</td>
</tr>
<tr>
<td>Variance Explained: Virtual channel information search (VC_IU)</td>
<td>0.143</td>
</tr>
<tr>
<td>Variance Explained: Virtual channel purchasing (VC_PURCH)</td>
<td>0.313</td>
</tr>
<tr>
<td>Variance Explained: Physical channel information search (PC_IU)</td>
<td>0.220</td>
</tr>
<tr>
<td>Variance Explained: Physical channel purchasing (PC_PURCH)</td>
<td>0.053</td>
</tr>
</tbody>
</table>
Variance Explained: Virtual to physical channel change (V2P)  
n/a  n/a  n/a  0.251  0.313
Variance Explained: Physical to virtual channel change (P2V)  
n/a  n/a  n/a  0.084  0.085
χ²/df (below 2 or 3 better)a  1.191  0.989  1.104  1.212  1.166
P (not significant better)b  0.226  0.475  0.470  0.224  0.127
GFI (above .9 is good fit)  0.938  0.952  0.895  0.940  0.867
AGFI (above .8 is good fit)  0.873  0.901  0.846  0.877  0.813
NFI (above .9 good fit)  0.800  0.856  0.708  0.783  0.592
RMSEA (.05 or less better)  0.046  0.000  0.006  0.048  0.043
PCLOSE (not significant better)c  0.510  0.727  0.888  0.478  0.624

Notes:

b for larger samples it is often unreasonable to have significant p value (Jöreskog, 1969, p. 200).
c “p value” for testing the null hypothesis that the population RMSEA is no greater than .05 indicating close fit (Browne and Cudeck, 1993).

CONCLUSION

The goal of this study was to explore whether perceived channel characteristics and consumer decision-making styles can explain consumer channel choice for information search and purchasing, as well as for channel change. This was quite successful – estimated models were performing very well in terms of fit.

Unfortunately many findings from the models are rather surprising, not supporting some of hypotheses. Other important limitation of this study is relatively small and not diversified sample. To deal with this limitation the authors are suggesting replication of results on larger and more diversified sample.

The effects of this research (despite mentioned limitations) have several practical implications for physical and virtual retail management, including possibilities of better market segmentation, marketing planning and positioning.
REFERENCES


