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DIFFERENCES BETWEEN WEBROOMING AND SHOWROOMING IN TERMS OF SELECTED CONSUMER PERCEPTION FACTORS*

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Abstract. In order to find out whether customers perceive (any) differences between the types of shopping channels (webrooming or showrooming) when it comes to buying clothes and footwear (given the selected factors), the study used the theoretical framework of the Technology Acceptance Model, the theory of Exploratory Consumer Behavior, and other factors (perceived risk, need for touch and feel, and price perception). The study is based on answers of 208 Slovak consumers (elicited on the basis of a questionnaire). By applying a non-parametric test of differences - the Wilcoxon test of two independent samples (Mann-Whitney U test), the study arrived at a conclusion that the differences between shopping channels are not significant when it comes to technology acceptance determinants (TAM determinants). From the point of view of exploratory behavior, the exploratory information seeking dimension turned out to be insignificant. However, the research showed that webroomers prefer exploratory acquisition. The differences between the purchasing channels in terms of other analysed factors also proved to be significant. In all cases, higher tendencies were identified for webrooming. The paper upholds the idea of integrating purchase channels and highlights the need to track the purchase journey of customers who interact with businesses through many different channels and touchpoints, both online and offline. The paper will serve marketers, as a better understanding of the purchasing behavior of customers will help businesses set up more relevant marketing and business strategies, and thus improve their market position. Towards the end, the paper presents business recommendations and suggest possibilities for further research.

Keywords: webrooming; showrooming; omnichannel consumer behaviour; exploratory behaviour; Technology Acceptance Model (TAM)

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1. Introduction

The current retail environment is going through a change due to the rapid expansion of mobile technologies. Mobile applications have also become one of the basic search tools (Hernández-Garrido et al., 2022) and the dependence of individuals on them has been also increased rapidly since the occurrence of Covid-19 pandemic (Fakunle & Ajani, 2021; Dušek & Sagapova, 2022). These technologies give valuable knowledge that is easy to access by their users (Zamir & Kim, 2022). With the expansion of shopping channels available in the market, the way consumers shop has changed significantly. This is evidenced in changes in the way people search for information, compare products and make purchases (Nam & Kannan, 2020). Understanding the ever-changing consumer shopping journey is therefore an important step in meeting shopping expectations of consumers. Today, the way marketers want to sell their products is no longer important as the way consumers want to shop comes to the forefront. The marketing science is now shifting its focus towards specific determinants decisive in choosing the type of shopping channel (Machova & Vochozka, 2019). In this regard, social media channels and other online-digital marketing platforms are crucial for marketing purposes (Civelek et al., 2020; Antosko et al., 2015) including branding and advertising (Ključnikov et al., 2022; Melnikova et al., 2016) since they provide less costly options for their users (Žufan et al., 2020) developing communication quality, and reducing time that they spend for their operations (Tekin & Turhan, 2020). Firms also use new demand forecasting methods to be competitive in changing environments (Kolková & Ključnikov, 2021; Turisová et al., 2021). Using these methods should be reflected in the level of their profit (Vochozka et al., 2019b). To explain this behavior, previous research made use of various models and theories, including other research variables. For example, Rejon-Guardia & Luna-Nevarez (2017) investigated the adoption of showrooming behavior using the theory of planned behavior. Arora & Sahney (2017) proposed a conceptual model of webrooming acceptance based on the technology acceptance model. Mukherjee & Chatterjee (2021) used consumer purchase decision theories in their research to design a model that identifies showrooming and webrooming as a combination of two decisions, in particular channel selection when searching for information and channel selection during purchase. A study by Aw et al. (2021) proposed a comprehensive research model that includes consumer traits (i.e., need to touch, need for interaction, and price comparison), channel-related factors (i.e., online search convenience, perceived usefulness of online reviews, perceived friendliness of a salesperson, and perceived risk of shopping online) and the perception of smart shopping as precursors to webrooming. A study by Huh & Kim (2021) examined the differences between showrooming and webrooming in terms of exploratory behavior. Based on the epistemic theory of curiosity, this study tested a conceptual model delineating two independent variables (i.e., interest and deprivation–curiosity), two mediating variables (i.e., market mavenism, consumer innovativeness), and two dependent variables (i.e., actual showrooming, actual webrooming).

Although previous researchers have tried to best understand the process of choosing a shopping channel, there are still gaps that need to be filled. No studies have yet been conducted that would investigate the behavior of Slovak consumers with regard to switching between online and offline shopping channels. For this reason, an exploratory study based on two theoretical frameworks, similar to Herrero-Crespo's (2021) research, has been proposed. Technology Acceptance Model (TAM) explains how the user accepts the technology. Some researchers also declare the fact that TAM examines how the perceived trust, security and benefits influence individuals' plan to use new tools that are based on new technological developments (Ključnikov et al., 2020a; Petruf et al., 2015). Exploratory Consumer behavior (ECB), in terms of cognitive and sensory stimulation, explains how shoppers select and evaluate information. In addition to these two frameworks, which are widely used in the scientific literature and accepted by researchers, the study also focuses on other variables that may influence the choice of shopping channel - perceived risk, price perception and need for touch and feel. In contrast to the aforementioned analyses, the aim of this study is to find out whether customers prefer certain types of shopping channels when it comes to purchasing products (any type of clothing and footwear). The sample consisted of Slovak consumers. The paper will serve business entities, as a better understanding of the purchasing behavior of customers will help

them set up more relevant marketing and business strategies, and thus improve their market position, increase customer loyalty, conversion rate and bring more sales opportunities at the same time.

The paper consists of several parts. In its first part, the paper presents the theoretical framework of the research, outlines individual researched variables and research assumptions. In the next part, the paper describes data collection process, characterizes the research sample and describes other research methods. In the third part, the paper presents the results of established hypotheses (on the basis of statistical methods). Subsequently, the paper discusses the results and presents implications and suggestions for future research.

2. Theoretical framework and hypothesis development

In the literature, concepts such as showrooming and webrooming are identified as distinct and independent consumer purchasing behaviors (Ailawadi & Farris, 2017; Wolny & Charoensuksai, 2014). According to Mukherjee & Chatterjee (2021), showrooming and webrooming are seen as the result of two different and sequential channel choice decisions. Therefore, consumers with a higher propensity for showrooming or webrooming may show a different attitude when making their decisions. Flavian et al. (2020), characterizes these behaviors as two-phase decision processes that differ in the channels customers use to collect data, research products, and make the purchase. Webrooming is trend in shopping behaviour where consumers search for product information using online channels, but opt to purchase products in brick-and-mortar stores (Awet et al., 2021). On the other hand, showrooming is behavior where search for information in brick-and-mortar stores and then purchase products online (Fiestas & Tuzoiv, 2021; Ziolo et al., 2020). Based on previous studies and based on the theoretical framework of TAM and ECB, the authors of the paper present their own research assumptions in the next chapter.

Technology Acceptance Model (TAM)

The model tries to explain which factors convince users to accept a new technology, for instance using neural networks (Vochozka et al., 2019a, Vochozka et al., 2020). Two main determinants of technology acceptance are: (1) Perceived Usefulness (PU) and (2) Perceived Ease of Use (PEOU). The former refers to the extent to which an individual believes that using a particular system would enhance their job performance, while the latter is defined as the extent to which the user of the technology expects that its use will not require high effort (Davis et al., 1989). Research by Arora & Sahney (2018) confirmed that perceived usefulness has a positive effect on showrooming intentions, while both perceived usefulness and ease of use have a positive yet indirect effect on webrooming (Arora & Sahney 2019). In their study, Blut & Wang (2020) found that consumers engage in webrooming or showrooming only if they believe that the process of purchasing fashion products meets the criteria of “ease of use”. Chimborazo-Azogue et al. (2021) focused on mobile showroomers and hypothesized that mobile showrooming intention will increase when the shopper perceives that using a smartphone contributes to the achievement of shopping trip goals. Herrero-Crespo et al. (2021) also assumed in their research that the use of webrooming / showrooming is determined by the degree to which consumers perceive that this multi-channel shopping is better than single-channel shopping in terms of usefulness and ease of use. Online channels are identified in the literature as search channels offering convenience, ease of navigation, price comparison and tailor-made offers (Dekimpe et al., 2020). Therefore, webroomers, according to Fernández et al. (2018), search and obtain product information online to facilitate the purchase phase in brick-and-mortar stores. Today's empirical strengthening confirms that security is an important multidimensional factor of the quality of society and the life of citizens, which we must systematically investigate, predict, and ensure (Kelemen et al., 2018). In accordance with the TAM model, Arora & Sahney (2019) identified the convenience of online search as an important factor that affects consumers' attitude towards webrooming. Based on the above, the following hypotheses were formulated:

H1: There are statistically significant differences between webrooming and showrooming in perceived usefulness when consumers shop for clothes and footwear.

H2: There are statistically significant differences between webrooming and showrooming in perceived ease of use when consumers shop for clothes and footwear.

Exploratory Consumer Behaviour (ECB)

The authors of this theory are Baumgartner & Steenkamp (1996), who believe that there may be differences in the way consumers search for, select and evaluate information when shopping. For this reason, they defined two dimensions of consumer behavior: (1) Exploratory acquisition of products (EAP) and (2) Exploratory information seeking (EIS). According to the authors, the first dimension is associated with sensory stimulation, suggesting that individuals search for new, complex, surprising, and challenging experiences. They want to try new products more, change merchants they buy products from, and explore new options to avoid routine purchases (Swati & Sandeep, 2012). Research suggests that online channels offer more comprehensive product categories than brick-and-mortar stores, prompting shoppers to search for products online first before heading to brick-and-mortar stores (Kang, 2018). The second dimension reflects cognitive stimulation through acquiring relevant knowledge. In this case, consumers like to browse and watch displays, are interested in advertisements and other promotional materials that provide marketing information (Viejo-Fernandez et al., 2018). It is likely that both types of exploratory behavior support the development of webrooming and showrooming behavior (Herrero-Crespo et al., 2021). In their work, Huh & Kim (2021) researched the differences between showrooming and webrooming in terms of exploratory behavior based on the epistemic theory of curiosity. The results they arrived at suggested that showroomers and webroomers have different characteristics and are driven by different motivational factors. Likewise, Herrero-Crespo et al. (2021) argue that given the characteristics that define webrooming and showrooming, the exploratory behavior has different impact on each of these shopping channels. The decision-making processes of showroomers are less planned than those of webroomers. Research by Viejo-Fernandez et al. (2018) suggests that both dimensions of ECB are found in showrooming, although their relative importance may slightly differ. According to the authors, it is possible that from the point of view of cognitive stimulation, showroomers do not always provide accurate information about the properties of the product, and therefore they project a less consolidated attitude than webroomers. Moreover, the decision-making processes of showroomers are less planned than those of webroomers. It is likely that showroomers will be more intensely attracted by the sensory stimulation of the surroundings when visiting a brick-and-mortar store (Bezès, 2015). Based on the above, the following hypotheses were formulated:

H3: There are statistically significant differences between webrooming and showrooming in exploratory information search when consumers shop for clothes and footwear.

H4: There are statistically significant differences between webrooming and showrooming in exploratory acquisition when consumers shop for clothes and footwear.

Price Perception (PP)

According to Heitz-Spahn (2013), price perception is defined as a consumer's tendency to acquire knowledge about product prices and compare them. Thus, the choice of media and channels in a multi-channel environment is often driven by customers' price expectations (Balakrishnan et al., 2014). Total product cost plays an important factor in channel selection (Trenz, 2015). Research shows that online price comparison sites provide rich market information and influence shoppers' subsequent offline price evaluations, fuelling the growth of web-to-store shopping strategy (Bodur et al., 2015). Other researchers also agree that consumers who are highly price-comparison-oriented will search for information online before purchasing in brick-and-mortar stores, because the Internet makes price comparison easier, faster, and the information obtained facilitates subsequent offline purchase decisions (Flavián et al., 2016; Santos & Goncalves 2019). There is research that confirms that students with a high level of price perception are likely to prefer online shopping (Heitz-Spahn, 2013; Arora et al., 2017). On the other hand, other researchers (Rapp et al., 2015; Rejón-Guardia & Luna-Nevarez, 2017) found that finding

cheaper products online is the main reason why people prefer showrooming. Based on the above, the following hypotheses were formulated:

H5: There are statistically significant differences between webrooming and showrooming in price perception when consumers shop for clothes and footwear. *Need for touch and feel (NTF)*

The need for touch refers to consumers' propensity to evaluate product information through the haptic sensory system (Peck & Childers, 2003). Thus, the need to touch and see the product is a variable that influences channel choice and represents the desire for physical interaction with the product (Jin & Phua, 2015). In the research conducted by Orth et al. (2013), it has been found that many purchase decisions require a higher need for touch and feel when evaluating products (this is impossible when using online channels). In such scenarios, consumers prefer to search for products offline, but these needs do not significantly influence the purchase process itself. Earlier studies suggested that the difficulty of physically evaluating product quality affects online product search and online purchase intention (Frasquet et al., 2015; Chocarro et al., 2013). Therefore, consumers with a high need for touch are likely to switch from online to offline channels during their shopping journey. Researchers explain this by the fact that the purchase goal is more pronounced in the purchase phase (Lester et al., 2006) and therefore the need for physical examination and evaluation of products is dominant in webroomers. Some authors argue that the need for touch is more important when purchasing experiential goods such as clothing, as such goods tend to have characteristics that require more intense or direct inspection (Mukherjee & Chatterjee, 2021; Aw, 2019). Some researchers suggest that customers visit brick-and-mortar stores not only to try products, but also for an emotional and personal shopping experience (Sachdeva & Goel, 2015). While both utilitarian and hedonic aspects are present in various shopping channels, hedonic aspects are increasingly associated with offline shopping and utilitarian with online shopping (Chang et al., 2005). A holistic shopping experience with sensory aspects caused by various sensory stimuli is therefore an advantage offline stores have over online stores (Pookulangara et al., 2011). Based on the above, the following hypotheses were formulated:

H6: There are statistically significant differences between webrooming and showrooming in the need to touch and see the product when consumers shop for clothes and footwear.

Perceived Risk (PR)

Consumers may feel uncertain when purchasing products. Most of the time, consumers perceive financial risk and performance risk (Mohseni et al., 2018). Therefore, overall risk perception determines which shopping channel the consumer will choose (Wang et al., 2016). The concept of perceived risk basically characterizes the expected difference in shopping experiences and goals, as well as potential dissatisfaction with the purchase (Pires et al., 2004). There is a degree of risk involved in online shopping, and this makes it a less attractive shopping channel for risk-averse customers. In general, online shopping has been found to entail a higher risk than offline shopping (Bezès, 2016). Moreover, the perceived risk of online shopping is even more pronounced when shopping for experience goods (Lian & Yen, 2013). If such risk perception is high, consumers tend to intensively search for products online due to the easy availability of information, but are more prone to making the final purchase, due to concerns, offline (Mohseni et al., 2018; Lin et al., 2019). On the other hand, the results of the study by Arora et al. (2017) confirm the role of showrooming as a risk reduction mechanism. The authors explain this by the fact that visiting an offline store helps reduce the uncertainty associated with shopping, because the products can be seen and tried on before making a purchase online. Based on the above, the following hypotheses were formulated:

H7: There are statistically significant differences between webrooming and showrooming in risk perception when consumers shop for clothes and footwear.

3. Methodology

Data collection

The presented research can be characterized as quantitative. The inquiry method was a method of choice for data collection, and a questionnaire was chosen as a research tool. The questionnaire was distributed from February to April 2022 via social networks, by email sent to customers of the selected e-shop, and considering that the research also addresses offline purchases, the data was also collected in person at a shopping center (customers were asked to fill-in a questionnaire, no personal data were collected).

In order to identify factors that motivate consumers to prefer certain types of purchasing process, two types of questionnaires were drawn up. The first questionnaire addressed webrooming while the second addressed showrooming. Table 1 shows an overview of the researched factors and their associated manifest variables, which were modified according to the type of purchasing process. Each questionnaire was divided into two parts. The first part consisted of identification items to better understand the structure of the research sample. The second part of the questionnaire consisted of items focusing on the subjective attitudes of the respondents towards the issue. The questionnaire made use of the 5-point Likert scale (1-strongly disagree, 5-strongly agree).

Table 1. Overview of investigated variables

Factor		Manifest variables	Source
Perceived usefulness (PU)	PU1:	Webrooming/showrooming is very useful when shopping.	Herrero-Crespo et al. (2021); Vankatesh et al. (2003)
	PU2:	Webrooming/showrooming makes it easier for me to shop.	Herrero-Crespo et al. (2021); Vankatesh et al. (2003)
	PU3:	Webrooming/showrooming makes my shopping process more efficient.	Herrero-Crespo et al. (2021); Vankatesh et al. (2003)
	PU4:	Webrooming/showrooming speeds up my shopping process.	Herrero-Crespo et al. (2021); Vankatesh et al. (2003)
Perceived ease of use (PEOU)	PEOU1:	Webrooming/showrooming is easy for me.	Herrero-Crespo et al. (2021); Vankatesh et al. (2003)
	PEOU2:	I can quickly navigate in webrooming/showrooming.	Herrero-Crespo et al. (2021); Vankatesh et al. (2003)
	PEOU3:	Webrooming/showrooming does not take much time.	Herrero-Crespo et al. (2021); Vankatesh et al. (2003)
	PEOU4:	Webrooming/showrooming is not difficult for me.	Herrero-Crespo et al. (2021); Vankatesh et al. (2003)
Exploratory acquisition of products (EAP)	EAP1:	Before shopping in a brick-and-mortar/online store, I search for information about clothing and footwear products online/in a brick-and-mortar store.	Herrero-Crespo et al. (2021); Christodoulides & Michaelidou (2010)
	EAP2:	Before buying clothing and footwear in a brick-and-mortar store/online store, I compare prices in different online/ brick-and-mortar stores.	Herrero-Crespo et al. (2021); Christodoulides & Michaelidou (2010)
Exploratory information seeking (EIS)	EIS1:	I browse clothing and footwear in brick-and-mortar/online stores without having to buy anything.	Herrero-Crespo et al. (2021); Christodoulides & Michaelidou (2010)

	EIS2:	I buy clothing and footwear that I didn't plan to buy before visiting a brick-and-mortar /online store.	Herrero-Crespo et al. (2021) Christodoulides & Michaelidou (2010)
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Perceived risk (PR)	PR1:	When browsing products in a brick-and-mortar/online store, I have difficulty evaluating clothing and footwear (e.g. in terms of the amount of information, product quality, assortment...). That is why I prefer buying products in a brick-and-mortar store/ online.	Mukherjee & Chatterjee (2021)
	PR2:	I prefer to pay in a physical/online store because I have/have no doubts about the safety and feasibility of online payment.	Mukherjee & Chatterjee (2021)
	PR3:	When shopping via the Internet, I feel/do not feel concerned about the security of my personal data and therefore make the final purchase of the product in a brick-and-mortar store/via the Internet.	Mukherjee & Chatterjee (2021)
Price perception (PP)	PP1:	Shopping for clothes and footwear in brick-and-mortar/online stores allows me to save money because I don't have to pay shipping/go anywhere.	Mukherjee & Chatterjee (2021)
	PP2:	Shopping for clothes and shoes in brick-and-mortar/online stores allows me to buy the same or similar products at cheaper prices than shopping in online/brick-and-mortar stores.	Mukherjee & Chatterjee (2021)
	PP3:	I think brick-and-mortar /online stores offer better deals and prices compared to online/ brick-and-mortar stores.	Mukherjee & Chatterjee (2021)
Need for touch and feel (NTF)	NTF1:	When shopping, I like to / I don't need to touch and feel clothes and footwear	Mukherjee & Chatterjee (2021)
	NTF2:	Touching and feeling products before buying clothes and footwear is/isn't important to me.	Mukherjee & Chatterjee (2021)

Source: Personal collection

After the end of the data collection process, data cleansing stage followed (due to the incompleteness or irrelevance of questionnaires). For a more accurate comparison of individual shopping channels, the method of random selection was employed. Thus, each shopping channel is represented by 104 questionnaires. The data were encoded using the MO Excel. Mathematical-statistical methods were processed in STATISTICA 13. The next part of the paper presents the results of descriptive statistics and interprets the results of the analysis of differences. The Shapiro-Wilk test was used to assess the normality of the data distribution. The Mann-Whitney U test was used to assess the differences between the shopping channels in question. Boxplot graphs show the tendencies of the differences.

Research sample

In order to create the research set, the random selection method was used while maintaining a proportional distribution of respondents for each shopping channel. After discarding the incomplete or irrelevant questionnaires, a data set with of n= 104 for each shopping channel, which represents a total research sample of n= 208 respondents, was compiled. In the case of webrooming, the research sample consists of 58% women and 42% men. In the case of showrooming, the research sample consists of 54% women and 46% men. Data on education of the research participants – secondary education (41% webrooming, 50% showrooming) and a university education (59% webrooming, 50% showrooming).

3. Results

The following part of the presented paper assesses the existence of differences between shopping channels (showrooming and webrooming) focusing on the customer perception of the following factors - 1. Technology Acceptance Model, 2. Exploratory Buying Behavior and 3. Selected Purchase Motivations (I. Perceived risk, II. Perceived convenience, III Price perception, IV. Need for touch and feel). The above hypotheses were verified using mathematical and statistical analyzes on a sample of main research data (n=208). The hypotheses were verified in three basic steps. Firstly, the assessment of normality was carried out (the Shapiro-Wilk test). Secondly, the difference test was carried out employing non-parametric tests of differences - the Wilcoxon test of two independent samples (Mann-Whitney U test). Thirdly, the sessions of the investigated variables in which the difference was manifested as statistically significant were identified using box plots and descriptive analysis.

Table 2. The results of the normality test

	Webrooming			Showrooming		
	Statistic	df	Sig.	Statistic	df	Sig.
PU1	0.830368	104	5.87E-10	0.864241	104	2.30E-08
PU2	0.848711	104	2.80E-09	0.872126	104	4.83E-08
PU3	0.871577	104	2.34E-08	0.889557	104	2.76E-07
PU4	0.852547	104	3.94E-09	0.890113	104	2.93E-07
PEOU1	0.843088	104	1.71E09	0.863918	104	2.23E-08
PEOU2	0.828426	104	5.01E-10	0.847204	104	5.04E-09
PEOU3	0.895093	104	2.70E-07	0.892353	104	3.760E-07
PEOU4	0.823750	104	3.43E-10	0.872310	104	4.91E-08
EIS1	0.857251	104	6.03E09	0.777264	104	2.56E-11
EIS2	0.774834	104	9.37E-12	0.804326	104	1.70E-10
EAP1	0.843003	104	1.70E-09	0.747851	104	3.87E-12
EAP2	0.895154	104	2.72E-07	0.821472	104	6.18E-10
PP1	0.879776	104	5.32E-08	0.891077	104	3.24E-07
PP2	0.822562	104	3.12E-10	0.842835	104	3.48E -09
PP3	0.795393	104	3.97E-11	0.858369	104	1.35E -08
NTF1	0.865784	104	1.34E-08	0.873148	104	5.33E-08
NTF2	0.792456	104	3.21E -11	0.757036	104	6.86E -12
PR1	0.858733	104	6.92E-09	0.872269	104	4.90E-08
PR2	0.871290	104	2.28E-08	0.861774	104	1.38E-08
PR3	0.873174	104	2.74E-08	0.881873	104	1.26E-07

Source: Personal collection

Table 2 shows the results of the normality test outputs. In all investigated latent variables, the p-value is less than 0.05, which means that the conditions of normality are not met. Therefore, non-parametric test was carried out for each investigated factor.

Table 3. Results of the test to assess the existence of differences

	Mann-Whitney U	Z	p-value
PU1	551.500	0.838	0.402
PU2	520.000	0.564	0.573
PU3	382.000	0.532	0.595
PU4	276.500	1.694	0.090
PEOU1	267.000	-0.919	0.358
PEOU2	212.000	-1.507	0.132
PEOU3	181.500	1.885	0.059
PEOU4	396.000	-1.462	0.059
EIS1	685.000	-0.512	0.609
EIS2	656.500	0.312	0.755
EAP1	39.500	1.998	0.046
EAP2	71.000	0.439	0.661
PP1	74.500	-2.146	0.032
PP2	304.500	0.417	0.676
PP3	418.000	0.853	0.394
NTF1	124.000	2.648	0.008
NTF2	511.000	-2.479	0.013
PR1	218.500	1.991	0.046
PR2	200.000	0.685	0.493
PR3	131.500	0.907	0.364

Source: Personal collection

Table 3 shows the results of the difference test. If the p-value takes on a value lower than the significance level of 0.05, it is possible to speak of a statistically significant difference. On the basis of the above, it can be concluded that the significant difference between webrooming and showrooming in the latent variable Perceived usefulness (PU) was not manifested in any item. Therefore, H1 is rejected. The same results were observed in the case of Perceived ease of use (PEOU), where in all investigated manifest variables the p-value is > 0.05. Therefore, H2 is rejected. Thus, it could be stated that there is no statistically significant difference between webrooming and showrooming in the perception of ease of use when shopping for clothes and footwear.

The test did not show any statistically significant difference in the Exploratory information seeking (EIS) factor, because the p-value is higher than the level of significance in both variables. Therefore, H3 is rejected. Looking at the XY table, it can be seen that the item EAP_1 acquires the p-value (0.046) lower than the significance level, which indicates that H4 could be accepted. Thus, it could be stated that there is a statistically significant difference between webrooming and showrooming in Exploratory acquisition of products (EAP). Based on the

descriptive analysis and the boxplot graph, it is obvious that the measured value of the median of this item is significantly higher for webrooming.

The results of the difference test showed that the p-value for item PP1 (0.032) takes on a value lower than the significance level of 0.05. Thus, H5 is accepted - there is a statistically significant difference between webrooming and showrooming in Price perception when shopping for clothes and footwear. The median values are the same for both shopping channels, however, the trends indicate that the upper quartile is significantly higher on the side of webrooming.

Differences were also manifested when examining the manifest variables NTF1 (0.008), NTF2 (0.013). Therefore, H7 is accepted, as there is a statistically significant difference in Need for touch and feel. The values of the median as well as the upper and lower quartile in both items indicate a higher need tendency in webroomers than in showroomers.

Differences were also evident when examining the Perceived risk factor. Based on the results of the difference test (the p-value lower than the level of significance for item PR1 (0.046)) H8 is accepted. Differences were shown also for the Perceived risk factor in the PR1 item (0.046), where the median value for webrooming is higher than in the case of showrooming. With regard to the results of the tests, it can be concluded that showroomers have a higher tendency to feel a sense of risk when shopping.

3. Discussion

The results of the analyzes showed that the factors forming the TAM model do not play an important role in the choice of shopping channel in the omnichannel shopping behavior of consumers. Nowadays, consumers seem to be fully integrated with online shopping platforms and have embraced the technology to make better purchasing decisions. Consumers are likely to experience the same purchase benefits when they first search online and then complete the purchase offline, and also when they first go to a brick-and-mortar store to try on a product and then complete the purchase online (for various reasons). In relation to perceived ease of use, the results of the study can be explained by the fact that young people, who made up the majority of the research sample, have no problems working with new technologies (Ključnikov et al., 2020b), because they are not only digitally savvy and motivated to develop their digital capabilities (Civelek & Krajčák, 2022) but also are considered the driving force of online business (Hall et al., 2017; Ladhari et al., 2019) and innovation (Civelek et al., 2021; Ključnikov et al., 2021). With regard to ease of purchase, younger generations do not perceive much difference between shopping online (mobile applications, social networks, etc.). This idea is also supported by the research of Chimborazo-Azogue et al. (2021), in which the authors researched the behaviour of mobile showroomers based on the UTAUT2 model. The results they arrived at showed that variables such as expected performance (as well as perceived usefulness from the TAM model) and expected effort (as well as perceived ease of use from the TAM model) do not lead to showrooming preference. According to the authors, this is probably because it is natural for users to use the technology.

From the point of view of exploratory behavior, it was shown that in the search for information (EIS) the differences in the preferences of individual shopping channels are not significant, which may be caused by the fact that in both types of shopping channels (online and offline), consumers perceive certain (although different) advantages. However, when it comes to sensory stimulation (a variable related to exploratory acquisition), the results indicate that the tendencies are higher on the side of webroomers. Thus, it appears that consumers who like to search for products they are not yet familiar with, those that are willing to try new products, those appreciative of variety in product selection, and those willing to change their shopping behavior in order to achieve stimulating consumer experiences will search for products online but, quite surprisingly, will make the actual purchase in offline stores. For this type of consumers, retailer advice and consumer services play a significant role (Bezes,

2015). Research by Herrero-Crespo et al. (2021), however, demonstrated important differences between webrooming and showrooming shopping behavior in both dimensions of exploratory consumer behavior. The results of their study also showed that consumers were more prone to search for product information while webrooming

The research showed that consumers reporting a higher level of perceived risk when shopping tend to prefer webrooming. Such consumers probably feel more confident when they use online platforms to search for product information, but make the actual purchase offline. Also, previous research has found that consumers who fear the misuse of their personal and financial information when shopping online tend to exhibit more webrooming behavior (Frasquet et al., 2015). In addition, consumers reporting a high level of risk perception develop a distrust of online merchants and therefore tend to purchase products from brick-and-mortar stores (Ahmad & Sun, 2018; Hassan & Lee, 2021) or transport services (Stehel & Vochozka, 2016). This phenomenon can also be explained by the fact that consumers shopping offline prefer touching goods before the purchase as well as the sense of immediate ownership, socialization and assistance from sales staff (thus reducing uncertainty and eventual dissatisfaction with the purchase).

Further results of our study indicate that the need for touch and feel also plays a significant role in choosing a shopping channel, with higher tendencies measured for webrooming. Research by Mukherjee & Chatterjee (2021) found that people with a higher need for touch and feel tend to search for products more offline (in the showrooming mode). However, results of their study did not prove any significant effect on channel choice (not even when making the actual purchase). Therefore, understanding at which stage of the purchase journey a consumer feels the need to touch a product seems key - whether it is in the phase product information gathering phase or in the phase where the consumer has already decided to buy the product but wants to make sure that his choice is right. Some research, contrary to the results presented hereunder, suggests that consumers verify product characteristics using touch and feel in showrooming because it is difficult to do “product diagnosis” offline (Balakrishnan et al., 2014; Arora et al., 2017).

The differences between webrooming and showrooming were also shown in relation to price perception. In this case, it has been found that the higher tendencies were found for webrooming, mainly due to the fact that if the consumer searches for the product online but buys it offline, he saves the shipping costs. However, the results of previous studies are contradictory. Flavián et al. (2020) found that when consumers are motivated to save money, they prefer showrooming. It is also generally known that prices in brick-and-mortar stores are higher than prices in online stores. Therefore, consumers are expected to be reluctant to webroom and instead complete their shopping journey online, i.e. in showrooming mode (Aw, 2019; Manss et al., 2019).

Conclusions and Implications

Theoretical implications

The phenomenon of webrooming and showrooming, as part of omnichannel shopping behavior, are currently gaining popularity among consumers. The presence and availability of multiple contact points throughout the customer's shopping journey enables the customer to enjoy a simpler, smoother and more attractive product search process, as well as the actual purchase. The results of the research hereunder showed that the differences between purchase channels (webrooming vs. showrooming) are not significant in terms of the determinants of Technology Acceptance Model. From the perspective of the theory of Exploratory Consumer Behavior, the exploratory information seeking dimension also appears to be insignificant. However, in the case of exploratory acquisition, it was found that webroomers showed higher preferences. With regard to the factors “perceived risk, need for touch and feel, and price perception”, the differences between the purchase channels proved to be significant, while in all cases they proved to be more pronounced in webrooming.

These results may also be affected by the ongoing COVID-19 pandemics – at the time of data collection, COVID-19-related restrictions were being gradually lifted and people were returning to brick-and-mortar stores to browse clothing and footwear. During the periods of strict lockdowns, consumers got used to the fact that the only way to buy clothing and footwear is to shop online. We believe that as a result of the pandemic, the trend of searching for products on the Internet will continue. However, after anti-pandemic measures and restrictions were lifted, people wanted to satisfy their need to touch and feel products and took brick-and-mortar stores by storm. For that reason, webrooming prevailed in terms of omnichannel behavior. Thanks to the employment of TAM model and the ECB theory, this research offers information that will be helpful in the field of omnichannel shopping behavior of Slovak consumers. The results research hereunder arrived at support the findings of previous research in the field.

Managerial implications

Several managerial implications also emerge from the research results. It is generally known that consumers today are not limited to online or offline channels, but obtain information and purchase products using both sources, which means that the shopping process is becoming increasingly fragmented, blurring the lines between online and offline channels. Merchants should therefore offer their customers a holistic, or "phygital" (i.e. physical and digital) shopping experience. In order to attract customers to brick-and-mortar stores, merchants should make benefits of the online stores available directly in brick-and-mortar stores. Implementation of new technologies, such as interactive panels, tablets, free Wi-Fi connection, etc., might be key to ensuring this. The same applies to online merchants. Online merchants should make more use of technologies based on artificial intelligence to eliminate the lack of physical contact with the product. Haptic technologies such as 3D product photos, videos, virtual or augmented reality are great tools that can improve the interactive shopping experience, reduce the perceived risk of online shopping, and thus influence the behavior of webroomers.

Limitations and future research

The research presented hereunder has several limitations that must be taken into account when interpreting the results. As has already been stated, the research is of cross-sectional nature. The initial euphoria associated with lifting anti-pandemic restrictions has already passed, and consumers are slowly getting back to the so-called new normal, that is online shopping. Another limitation of the research is the statistical methods used, as these only assessed the existence of differences between two shopping channels, but may not sufficiently reflect the actual behavior of consumers in connection with switching between online and offline shopping channels. Due to the lower number of observations and the non-representative research sample, it is not possible to generalize the research results to the entire population of Slovakia. The results can only be applied to research participants and the so-called experience products (fashion).

These limitations indicate the need to deepen scientific knowledge in this field. In future, the research will focus on examining the preferences of purchase channels and touchpoints in the post-pandemic period. The aim of the research is to explore and find out whether trends that were popular during the pandemic period remain valid or whether the purchase journey has changed once more. In an effort to better explain consumer purchasing behavior and switching between purchasing channels, future research will investigate at which stage of the purchasing journey the consumer feels the need to touch the product - whether it is in the phase product information gathering phase or in the phase where the consumer has already decided to buy the product but wants to make sure that his choice is right.

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