

Tomasz Czajkowski<sup>1</sup>,  
Grzegorz Szymański<sup>2</sup>

# Analysis of the ROPO Effect amongst Men in the Clothing Industry in Poland

DOI: 10.5604/01.3001.0013.9011

<sup>1</sup> University of Lodz,  
Faculty of Economics and Sociology,  
Institute of Economics,  
Department of World Economy  
and European Integration,  
Lodz, Poland,  
e-mail: tomasz.czajkowski@uni.lodz.pl

<sup>2</sup> Lodz University of Technology,  
Faculty of Management  
and Production Engineering,  
Department of Management Systems  
and Innovations,  
Lodz, Poland,  
e-mail: grzegorz.szymanski@p.lodz.pl

## Abstract

*The aim of the article is to present and analyse the results of research on the extent of the ROPO effect (Research Online, Purchase Offline) amongst men in the clothing industry in Poland. This effect is an important factor limiting the development of the e-commerce sector. The selection of men as an investigated population is determined by the literature gap in the clothing industry. This industry is dominated by women in Poland, who much more often than men purchase this type of product. However, company managers should also take into consideration the habits and attitudes of men. In this study, research was done on a sample of 1303 males who purchased a clothing product in a traditional shop. Analysis of research results allowed the identification of the scale of the ROPO effect in dependence on the age and place of residence of the respondents. An additional aspect investigated was also the subjective assessment of the respondents of selected elements of the purchasing process.*

**Key words:** ROPO effect, e-commerce, clothing industry.

## Introduction

The textile-clothing industry is one of the most important sectors of the EU and, in particular, the Polish Economy [1, 2]. The yearly expenditure on clothing of households in Poland increased by 53% from 2007 to 2015, which was the highest dynamic in the clothing industry of the EU countries [3]. It is predicted that by 2022 the clothing sector in Poland will have reached the value of 43 billion zloty, with an average growth of 5-6% yearly [4, 5]. A very significant share of this market is taken by e-commerce due to the fact that clothing and shoes are the products which are the most preferably bought on the internet by consumers [6]. Although this product group is not the only popular one among Polish internet users, they do spend most money on such products – 82,6 zł monthly on average in 2017 [7]. Polish companies from the textile and clothing industry recognise e-commerce as more and more significant in their operations [8].

However, it is a very important observation that during online shopping, the purchasing attitudes of men differ significantly from those of women [9]. The differences occur in many aspects: reasons, preferences and behaviour. The decision making process is also different. Those differences result not only from gender but also from other determinants such as age, earnings, place of residence, and others. As an example, in Italy men are the largest group of e-customers of shops

with clothing products, while in Poland women are more likely to purchase clothes online. Many researches have been conducted in the area of buying behaviour (e.g. [10, 11]), but not in the area of the ROPO effect among men.

## The ROPO effect

The ROPO effect (Research Online, Purchase Offline) is an element of the purchasing process based on searching for information about products or brands on the internet by potential clients, while the purchasing process itself is done in traditional stores. It is a global phenomenon concerning most industries and countries [12]. The existence of the ROPO effect is confirmed by many studies and reports [13, 14]. Among the many advantages of online shopping, one can indicate lower prices, convenience of purchasing, possibility to compare prices and parameters of products. However, online shopping also has some drawbacks, such as the time of waiting for delivery, which can last even a few days, or the fear of purchasing online due to the lack of data security. Another very important barrier is the lack of possibility to inspect and check the product personally, which is especially vital with respect to clothing. If a customer receives a product, and he/she is not satisfied with it, it has to be returned to an online store, and most often the transportation costs must be covered by the client. Another problem for the e-commerce sector is the unfair practices of dishonest companies. The existence of many factors decreasing the popularity of e-commerce and the very high competition in the sector cause that managers should take great care of

any potential client. The functional principle of the ROPO effect indicates that e-customers utilise online tools only for gathering information and checking offers. Internet shops prepare a professional description and images of products in order to supply customers with all details and to show a professional approach to the client. A potential customer visiting a website expects comprehensive information in terms of specifications, warranty, total costs and opinions of other users. Such complex information constitutes a competitive advantage of e-shops over their traditional competitors. However, the competitiveness of the e-commerce market and the complexity of the commercial offer cause decision-making paralysis among clients more and more often. The phenomena is called ‘the paradox of choice’, which says that there are a ‘magic’ number of choices that would benefit us rather than harm us [15]. Organising the multitude of choices helps the decision-making process by providing a framework for eliminating the uninteresting options. While clients have almost unlimited options, they can be more dissatisfied with the choices they have made. This dependency was noticed many years ago, and many companies, in order to simplify the choice for clients, purposely limit the choices for them [16]. An example of such actions can be those by Procter & Gamble, which at the end of the twentieth century decreased the number of variations of the popular ‘Head and Shoulders’ shampoo from 26 to 15, which resulted in a 10% growth in sales [17]. That is why one of the reasons of the ROPO effect’s existence is the possibility of using the help of a professional consultant in traditional shops, who will

**Table 1.** Scale of the ROPO effect amongst men with respect to the age of the respondents. *Source:* own work based on study conducted.

	Under 18	18-24 years old	25-33 years old	34-42 years old	43-55 years old	Over 55	Average
Percentage share of the ROPO effect	47.69%	36.36%	27.87%	31.15%	26.21%	30.83%	30.93%
Number of respondents in a given age group	65	143	322	382	248	120	1303

**Table 2.** Scale of the ROPO effect amongst men with respect to the place of residence of the respondents. *Source:* own work based on study conducted.

	Village	Town up to 20 th. inhabitants	20-49 th. inhabitants	50-99 th. inhabitants	100-199 th. inhabitants	200-500 th. inhabitants	Over 500 th. inhabitants
Percentage share of the ROPO effect	30.33%	29.3%	27.84%	39.98%	32.75%	31.94%	28.38%
Number of respondents in a given group	211	157	175	130	144	171	296

guide a potential client through the whole purchasing process.

The ROPO phenomenon can be a big problem for the e-commerce sector, and that is why deep knowledge of it and implementing solutions aimed at decreasing this mechanism are very important for all customer groups. One of such solutions are the actions of personalisation of both the offer and marketing activities, which, in connection with the positive emotions of the recipients, can increase the conversion. Sometimes e-shops start implementing advanced technologies from the range of AR ('augmented reality') [18, 19], which increases the recipients' satisfaction with the presentation of the offer. Another solution to overcome the risk of the ROPO effect is to offer products to clients with the help of an online platform which serves as one of the distribution channels for companies in their multichannel sales strategy. Moreover, transferring online clients to an own channel of traditional sales helps to reduce the negative results of the ROPO effect.

## ■ Research methodology

The research was conducted in June 2016 in cooperation with the Opiniac company (www.opiniac.com) on a group of 19386 Polish users of the internet, out of which 34% were males. For research purposes there were 1303 properly completed questionnaires used, where the population investigated were men of different age who had recently purchased clothes in a traditional shop. The survey questionnaire was distributed on a popular internet portal (www.wp.pl) as well as on other websites from the clothing sector. The questionnaire was a research tool, and in questions concerning con-

sumer assessment, the ordinal, one-pole, five-degree, scale of measurement was used. Such a choice of survey method was determined by the relatively low cost, which was significant due to the large research sample. Moreover, in the case of the subjective assessment of consumers, such a survey method had been used many times in the past by other researchers [20, 21].

For investigation of the dependencies of particular features of the respondents (age, place of residence) on variables corresponding to five basic advantages of shopping (satisfaction with service, convenience of purchasing, speed of purchasing, availability of products, prices of products), the Chi-square test was used. Determination of the correlation strength was done with the V-Cramer coefficient, which measures the strength of the relation between variables, measurements of which are expressed on a nominal scale. The V-Cramer coefficient varies from 0 to 1, and the closer its value gets to 0, the smaller the strength of the relation between the features investigated is. In social sciences a V-Cramer coefficient value between 0 and 0.25 is often considered to indicate a weak association, one between 0.25 and 0.35 – a medium association, and a value above 0.35 – a strong association [22].

## ■ Results and discussion

According to the research, the value of the ROPO effect in the clothing sector amongst men was equal to almost 31% (Table 1), thus nearly every third male surveyed sought information about the selected product on the internet before he purchased it in a traditional shop. Analysis of the results obtained in terms of

age allowed to observe that the youngest respondents (below 18 years old) use the internet in the first stages of the purchasing process much more often (47.69%). The age group that shows the second highest value of the ROPO effect were men in the age of 18-24. The youngest internet users, so-called millennials and of generation Z, were raised surrounded by computer technologies. Internet communication is something natural for them; they trust the tools and information on the internet and are not reluctant to use more and more modern solutions and mobile applications. A smartphone is a work tool for them; they do shopping online, get knowledge, and seek current information about the world, with the results of the research obtained confirming that.

While analysing the results of the research on the ROPO effect with respect to the place of residence (Table 2), it can be noticed that the largest group seeking information on the internet before purchasing are men living in medium-sized cities (50-99 thousand inhabitants). The other groups fall within the range of standard deviation, which in this case is equal to 3.84%.

Another investigated aspect was connected with assessing particular aspects of shopping in traditional shops on scale from 1 to 5, where 5 meant the highest level of satisfaction and 1 the highest dissatisfaction. The average values obtained fall within the range of 3.93 to 4.43, which indicated a generally high satisfaction of the respondents with the purchasing process in the clothing sector analysed. It can indicate that the clothes are presented professionally, that the information provided by shop assistants are adequate,

**Table 3.** Assessment of satisfaction with respective purchasing features in traditional shops with respect to the age of the respondents. *Source:* own work based on study conducted.

	Under 18	18-24 years old	25-33 years old	34-42 years old	43-55 years old	Over 55	Average	Standard deviation
Satisfaction with service	4.44	4.45	4.42	4.38	4.31	4.21	4.37	0.08
Convenience of purchasing	4.61	4.49	4.43	4.38	4.37	4.33	4.41	0.09
Speed of purchasing	4.61	4.48	4.47	4.42	4.34	4.31	4.43	0.09
Availability of products	4.17	4.11	4.15	4.16	4.10	4.13	4.14	0.02
Prices of products	3.88	3.94	3.97	3.98	3.84	3.85	3.93	0.05

**Table 4.** Assessment of satisfaction with respective purchasing features in traditional shops with respect to the place of residence of the respondents. *Source:* own work based on the conducted study.

	Village	Town up to 20 th. inhabitants	20-49 th. inhabitants	50-99 th. inhabitants	100-199 th. inhabitants	200-500 th. inhabitants	Over 500 th. inhabitants	Standard deviation
Satisfaction with service	4.40	4.33	4.33	4.35	4.52	4.35	4.37	0.06
Convenience of purchasing	4.39	4.45	4.42	4.41	4.54	4.40	4.36	0.05
Speed of purchasing	4.44	4.40	4.41	4.37	4.58	4.50	4.35	0.07
Availability of products	4.04	4.20	4.05	4.22	4.27	4.18	4.11	0.08
Prices of products	3.84	4.03	3.76	3.94	4.13	3.93	3.96	0.11

**Table 5.** To what extent information found on the internet influenced the final purchasing decision made by men with respect to the place of residence. *Source:* own work based on study conducted.

	Village	Town up to 20 th. inhabitants	20-49 th. inhabitants	50-99 th. inhabitants	100-199 th. inhabitants	200-500 th. inhabitants	Over 500 th. inhabitants	Standard deviation
Degree of information influence	4.22	3.76	3.93	4.13	3.98	4.08	4.24	0.16

**Table 6.** To what extent information found on the internet influenced the final purchasing decision made by men with respect to the age of the respondents. *Source:* own work based on study conducted.

	Under 18	18-24 years old	25-33 years old	34-42 years old	43-55 years old	Over 55	Average	Standard deviation
Degree of information influence	3.78	4.25	4.08	4.13	3.98	4.03	4.04	0.14

and that they also provide proper customer service. The factor that was assessed as the least satisfying for customers was the level of prices of products. In order to verify the existence of the dependence of the age of men variable and the assessment of the particular features of the purchasing process, the Chi-square test was used, where the dependent variable was the number of males in a given age group that assessed the given purchasing aspect as the highest (grade 5). A value of  $p = 0.002397$  at the assumed significance level of 0.05 indicates the existence of the dependence. However, the strength of this correlation calculated with the use of the V-Cramer test was equal to 0.04593, which indicates a weak correlation. It can be observed, however, that in each element assessed, the highest level of satisfaction was exhibited by the youngest respondents (below 18 years old) – see **Table 3**. In order to identify the reasons for such results, deeper research should have been done. However, the higher level of satisfaction with traditional shopping of clothes amongst the young

in comparison to the older respondents seems surprising.

While analysing the assessment of satisfaction with particular aspects of shopping in traditional shops with respect to the place of residence of the respondents (**Table 4**), the existence of a dependence was not identified ( $p = 0.939895$ ). However, it can be observed that the availability of products was assessed as the lowest among the residents of rural areas, which is probably connected with the low amount of stationary shops.

The last survey question was aimed at identification of the level at which the information found on the internet influenced the final purchasing decision of men. The average value at the level of 4.04 indicates that the respondents regarded the influence of information found online as very significant. The results show that the residents of the biggest cities and also the smallest villages perceived the information from the internet as the most important for them (**Table 5**).

Analysis of the results in terms of age shows that the youngest respondents indicated that information found on the internet influences their decisions less significantly than in case of older men (**Table 6**). This is an unexpected result, especially taking into consideration that among the youngest men the ROPO effect was the highest (**Table 1**). It can indicate that although the young often use the internet as a source of information in the clothing sector, the knowledge they find is not the most important determinant for them.

## ■ Conclusions

The study presented examined the phenomenon of the ROPO effect amongst men in the clothing sector. Although in the group of clients of this industry in Poland women are predominant, the companies should not focus only on them. Attitudes and trends are determined not only by gender but also by age, place of residence, income and country of origin. The analysis of the research done



on a group of 1303 men who purchased clothes in a traditional clothing shop in Poland shows that the youngest respondents (below 18 years old) check information about products on the internet most often. However, it is not the most important information that influences their purchasing decision in traditional clothing stores. The average value of the ROPO effect at the level of almost 31% shows that every third male customer seeks information on the internet before purchasing products from a traditional clothing shop. The respondents assessed the convenience of purchasing (4.41) and speed of purchasing (4.43) as the most significant factors for purchasing in traditional stores, while the least significant was the price of products (3.93). An important limitation of the results obtained is the subjective character of the survey method selected, in which the results can differ from the real intentions of the clients. What is more, it is also not possible to determine the motives that stand behind such decisions of the respondents. In order to draw more interesting conclusions, additional deeper research should have been done in the context of the reasons and character of information sought by men on the internet.



## References

1. Sułkowski Ł., Kaczorowska-Spychalska D. Social Media in the Process of Marketing Evolution in Polish Textile-Clothing Industry. *FIBRES & TEXTILES in Eastern Europe* 2016; 24, 5(119): 15-20. DOI: 10.5604/12303666.1215521.
2. Dziuba R., Jabłońska M., Sulak K., Ławińska K. Textile Sector of the Visegrad Group Countries in Trade with the European Union. *FIBRES & TEXTILES in Eastern Europe* 2018; 26, 6(132): 24-29. DOI: 10.5604/01.3001.0012.5160
3. Clothing branch, an increase of significance of Polish exporters in the world, PKO BP report, 2017; p. 3, [https://wspieramyeksport.pl/api/public/files/1068/PKO\\_BRANZA\\_ODZIEZOWA.pdf](https://wspieramyeksport.pl/api/public/files/1068/PKO_BRANZA_ODZIEZOWA.pdf), (accessed on 02.06.2019).
4. 'The fashion market in Poland', KPMG report, 2018, p. 10
5. <https://www.money.pl/gospodarka/wiadomosci/artykul/rynek-modowy-w-polsce-branza-odziezowa,75,0,2394443.html>, (accessed on 13.05.2019).
6. CBOS, (2017), Communication from research nr 49/2017, Using internet, [https://www.cbos.pl/SPISKOM.POL/2017/K\\_049\\_17.PDF](https://www.cbos.pl/SPISKOM.POL/2017/K_049_17.PDF), (accessed on 12.05.2019).
7. 'E-commerce', Interaktywnie.com report, 2018; p. 19, <https://interaktywnie.com/download/180-raport-interaktywnie-com-e-commerce-2018>, (accessed on 02.06.2019).
8. Czajkowski T. Electronic Commerce and Business in the Polish Textile and Clothing Sector. *FIBRES & TEXTILES in Eastern Europe* 2011; 19, 2(85): 7-9.
9. The truth about online consumers, 2017 Global Online Consumer Report, KPMG, [www.kpmg.com/onlineconsumers](http://www.kpmg.com/onlineconsumers).
10. Sarkar R., Sabyasachi D. Online Shopping vs Offline Shopping : A Comparative Study, *International Journal of Scientific Research in Science and Technology* 2017; 3, 1: 424-431.
11. Sunil. Trends and practices of consumers buying online and offline. *International Journal of Commerce and Management* 2015; 25, 4: 442-455, <https://doi.org/10.1108/IJCoMA-02-2013-0012>.
12. Seitz S. An analysis of the ROPO effect in the field of agricultural insurance in Germany, Grin Publishing, 2015, p. 20.
13. Omnichannel 2018 Fashion industry in Poland, YourCX report, 2018, <https://yourcx.io/download/omnichannel-2018-en-fashion/>, (accessed on 01.06.2019).
14. Gemius. E-commerce w Polsce 2017. Gemius for e-Commerce Polska, report', (accessed on 12.05.2019).
15. Kurien R, Paila AR, Nagendra A. Application of Paralysis Analysis Syndrome in Customer Decision Making. *Procedia Economics and Finance*, vol. 11, 2014: 323-334.
16. Iyengar SS. Lepper MR. When Choice is Demotivating: Can One Desire Too Much of a Good Thing? *Journal of Personality and Social Psychology* 2001; 79: 995-1006.
17. Osnos E. Too many choices? Firms cut back on new products, *Philadelphia Inquirer*, 1997, September 27.
18. Yim M, Yi-C, Chu S-C, Sauerc PL. Is Augmented Reality Technology an Effective Tool for E-commerce? An Interactivity and Vividness Perspective. *Journal of Interactive Marketing* 2017; 39: 89-103.
19. Dacko SG. Enabling smart retail settings via mobile augmented reality shopping apps. *Technological Forecasting and Social Change* 2016; 124: 243-256.
20. Durmaz Y. The Influence of Cultural Factors on Consumer Buying Behaviour and an Application in Turkey. *Global Journal of Management and Business Research: E Marketing* 2014; 14, 1: 37-44.
21. Stávková J, Stejskal L, Toufarová Z. Factors influencing consumer behavior. *Agric. Econ.* 2008; 54(6): 276-284.
22. Waal Ton de. Statistical matching: Experimental results and future research questions. *Statistics Netherlands* 2015: 12.

Received 08.05.2019 Reviewed 26.09.2019



15-17 October 2020

Istanbul Expo Center

5<sup>th</sup> International Dyestuff, Pigments, Textile Chemicals, Digital Textile Printing, Dyeing and Printing Technologies Exhibition

## ICBPC-2020



*Attractions of Venice, Italy*