

Main Dependences between Gender, Financial Status and Indicators Predicting Purchase of Mobile Products and Services in Bulgaria

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Abstract. The present study was conducted in order to establish the main relationships between gender and financial status on indicators influencing the purchase of a mobile operator. Basic indicators for measuring consumer behavior are derived, applying analysis of variations, ANOVA, and correlation analyses to check the strength of indicators influence. According to the results of statistical data processing, two groups were identified: the most favorable group for influence – young women who are financially disadvantaged, and one on which it is difficult to achieve advertising impact of mobile operator. The practical applicability of the study is significant, as mobile operators in Bulgaria can have a much more successful impact on the group with a higher propensity to try new, specific products, as well as those who declare greater confidence in a mobile company, built through the influence of advertising.

1 Introduction

In the process of researching the advertising impact, as well as for achieving the pre-set pre-advertising goals, the most appropriate methods, and strategies for attracting and retaining customers are sought. The main criteria for achieving advertising influence are indicated by the researchers: knowledge [1] recognition [2], brand recognition and the advertised products and services [3-4]. In our time, the point of view is shifting - in the direction of influential components of advertising [5-6] to influence consumer behavior when using products and services [5-9]. Marketers and advertisers adapt to changing business conditions and the requirements of targeted groups when it comes to creating new ads [10], exploring the strong emotion of the experience [11-12, 15, 42] receiving post-purchase benefits for the consumer [1, 13, 16-17], as well as the feeling of satisfaction [14, 16], which leads to an increase in the values of consumer interest. Therefore, consumer behavior has always received and will continue to receive so much importance and space in the study of the impact of advertising regarding its effectiveness [19]. In order to identify some basic relationships between the gender and financial status of young consumers and indicators predicting buying behavior in a mobile company, this article should explain some basic concepts about consumer behavior when making a purchase decision, as well as the processes arising before and after that decision.

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2 Theoretical Background

There are many theories, such as that of Green, 1992, developed to present the exact indicators that answer the questions: what, why, how, when and where a person makes a purchase [5]. Studying customer behavior is important because it makes it easier for companies to plan and implement their business strategies [6], with the main focus on consumer behavior both in groups [14-15] and individually [23]. The role of advertising in the media is so strong that they influence the way consumers perceive the world around them [10]. They are the reason why consumers, especially young people, feel part of a certain social class. On the other hand, Elizabeth Noel-Neumann [25] found in her study that the influence of the mass media is determined more by the qualities of the audience than by the content of the media. Therefore, the main question that arises is the following: do the specific features of the audience determine the end-user behavior or the accumulated impact that they have through advertising messages.

This is the reason in social psychology to study the entire consumer cycle or the stages that the buyer goes through in choosing products and services. [8-12]. These processes influence the purchase decision-making process [11-12, 26] and include five main stages: problem detection, information retrieval, evaluation of alternatives, purchase decision, post-purchase behavior [11-13, 23, 26]. When the need exists and has led to the definition of the purchase task in order to satisfy it, the customer enters the stage of "increased attention" [27-28], which does not mean that the consumer of goods and services is fully prepared for The "danger" of distraction after the impact of advertising and "postponement of purchase" [15, 17] is real and is determined by a number of external and internal factors of influence such as the opinion of a friend, the preferences of the social group, to which we belong, the variety of goods and services, etc. [17] In the present case, by conducting advertising communication with consumers of different genders and financial status, mobile companies should stimulate the discovery and awareness of needs that lead to the implementation of In the present study, an attempt is made to derive those indicators that become the engine of behavior of young people using mobile products and services.

The depth of the problem requires consideration of the real, rather than hypothetical, assessment of the indicators that influence consumer behavior such as benefits, strong affective experiences, and awareness of lasting benefits for consumers. The aim is to determine the real reasons for the subsequent behavior of consumers after making a purchase. In one of the last stages, the duration and steps in the shopping process are identified, which are different for different consumers, and other patterns of behavior cannot determine them [27].

Haider [10] and team cited as indicators of consumer behavior - Entertainment, Familiarity, Social Imaging, Spending, related to making a purchase. K. White [23] and team focus on other indicators such as Social Influence, Habit Formation, The Individual Self, Feelings and Cognition, Tangibility, and others, because they are looking for a connection with sustainable consumer behavior to protect the environment.

There is a whole series of indicators suitable for making preliminary forecasts [10, 23-24, 30]. Their specific application depends on the specifics of the relationship with the client and the ability to collect information. In the present study, the author focuses on the research of A. Praisner, who is interested in the importance of the client for an organization. The same researcher believes that a database of customer types should be built, very accurately assessing the real value of each customer, according to the loyalty to the company. The group of indicators of A. Praisner can include the following: [30] readiness to incur additional costs - the change of company leads to additional costs associated with the signing of new contract terms, coordination of sales processes between company and customer, as well as testing of new goods, which also leads to risk taking; tendency to try a new product - the emergence of

new opportunities in the emergence of different products and services, leads to the awakening of customer interest, desire to acquire more or different benefits, and the positive side of this situation is to expand the horizons of the consumer and for it to strive for innovation at a later stage; satisfaction with consumption - an extremely important indicator when making a purchase, usually based on previous experience and a remembered sense of satisfaction, but there is also a certain degree of risk of disappointment, which leads to permanent loss of interest; trust in the company - one of the most frequently studied indicators in building a longer relationship between company and customer, as much of the research in this area shows a direct correlation between the increased level of trust affecting the high level of consumption of goods and services; focusing on product specificity - specific goods always lead to consumer interest, which increases the chances of making a purchase. [30]

All these aspects of in-depth study of consumer behavior in purchasing decisions are the subject of this study, and the main focus should be on the main indicators for forecasting the use of mobile products and services among young people in Bulgaria. The main objectives of this paper are to determine the extent to which gender and financial status can determine the specific features of the use of mobile products and services under the influence of advertising by mobile operators.

3 Research Design and Methodology

The respondents are 300 in number, young people aged 18 to 25 years and the only requirement for participation in the survey is the use of mobile products and services. The period is from 2018 to 2020, and the respondents need to be adults in order to be able to take advantage of the contractual terms of the mobile companies. The method for gathering information is two questionnaires, in which the respondents are divided according to basic demographic characteristics, as well as about the degree of use of mobile company's products. The presentation of the data from the empirical study with the indicated parameters aims to illustrate the consumer consumption of mobile products and services in the individual respondents. Based on the theoretical framework, the following hypotheses can be made:

H₀ - The gender and financial status of young people in Bulgaria do not affect the indicators predicting the purchase of a mobile product or service.

H₁ - The gender and financial status of young people in Bulgaria can largely determine the indicators predicting the purchase of a mobile product or service.

The sampling method used in this study is the 'random response method'. The study took into account students in three major cities in Bulgaria - Sofia, Plovdiv and Stara Zagora, and the only requirement for respondents is to have used or use mobile products or services. The age limit was a minimum of 18 years to a maximum of 25 years. Data collection took place from the beginning of 2018 to the end of 2020. A closed survey was used in complete anonymity of the answers, consisting of 25 questions for each questionnaire, and the questions were presented to the respondents and asked to give their opinion.

Table 1. Main Characteristics of the Respondents in the Study.

Gender	Percentage
Male	36.1 %
Female	63.9 %
Age	Percentage
From 18 to 20	44.4 %
From 21 to 24	40.9 %
Over 25	14.7 %
Financial Status	Percentage
Financially Comfortable	38.5 %

Financially Constrained	61.5 %
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4 Data Analysis and Discussion

4.1 Indicators for forecasting the use of mobile products and services

At the initial stage of the survey, the percentage of respondents to the indicators for the use of mobile products and services is displayed, and the participants in the survey are asked about the use of a mobile phone with mobile internet. It is found that 68% of young people declare that they are interested in using the relevant mobile products under the influence of advertising. 27% have used it before or show a tendency to use it, but there are certain circumstances that prevent their use, which can be established through additional questions. (Figure 1)

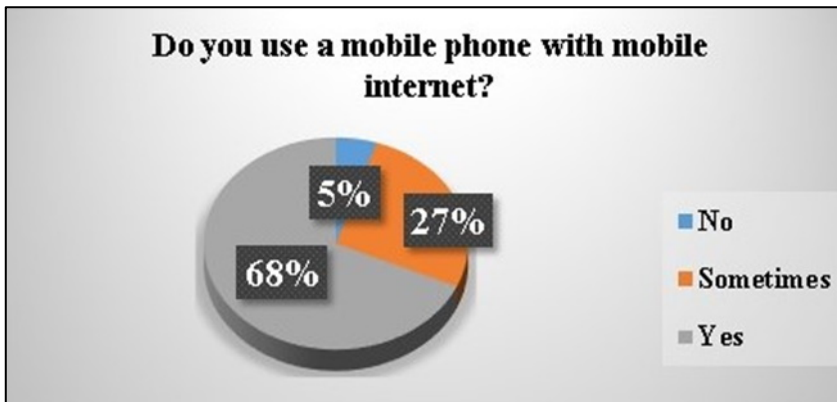


Fig. 1. Using a mobile phone with mobile internet.

The derivation of the main reasons that would stimulate the respondents to use a mobile phone with mobile internet becomes another indicator of consumer interest in goods and services. The purchase of a mobile phone, as well as the conclusion of contractual terms with a mobile operator under the influence of advertising are accurate indicators of consumer stimulation among young consumers. Figure 2 shows that among the first indicators are "convenience" - 2.80, "necessity" - 2.76 and "better access to information" - 2.70, and the long-term impact of advertising can form certain attitudes among young people as "makes me more mobile" - 2, 44. (Figure 2)

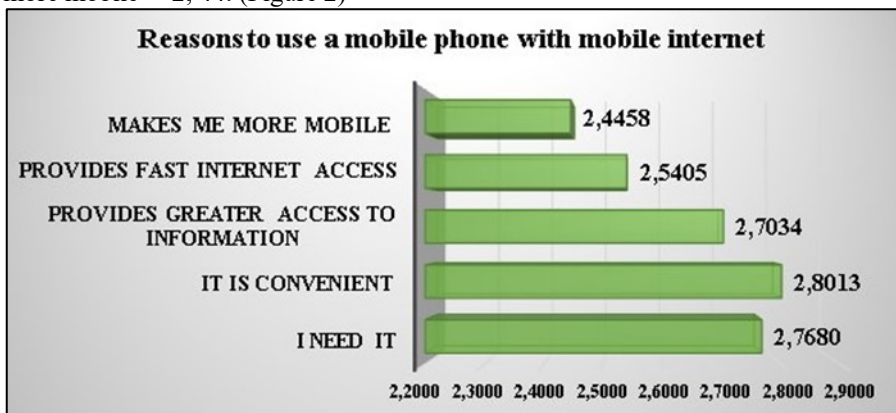


Fig. 2. Reasons to using mobile phones.

Tracking indicators of mobile phone use with mobile internet is an important part of mobile operator advertising research, but they are only an external manifestation of consumer behavior, not reliable indicators of the reasons for making a purchase. In order to check the reliability of the formed factor for the reasons and incentives for making or refraining from buying, the coefficient of internal consistency (Cronbach’s Alpha) was evaluated. According to George and Mallery (2003), a reliability factor of 0.7 is acceptable, above 0.8 is good and above 0.9 is considered excellent [31]. The "Indicators Predicting Purchase" factor has an internal consistency of Cronbach's Alpha 0.79, which we consider to be relatively acceptable [32]. Table 2 shows its structure (Table 2).

Table 2. Factor structure of Factor „Indicators “.

Factor structure	
Willingness to incur additional costs	0.706
Tendency to try a new product	0.712
Satisfaction with consumption	0.845
Trust in the company	0.734
Focus on product specificity	0.882

To establish new dependencies in consumption, as well as reasons for consumer interest in the use of mobile products and services, analysis of variance is applied to the impact of individual demographic characteristics - gender and financial status, on the factor indicators predicting purchase.

4.2 Influence of gender on forecast indicators of consumer behavior

The results of statistically significant analysis of variance show that gender as an independent variable significantly differentiates the responses of participants by the following factors: Willingness to incur additional costs, Tendency to try a new product, Satisfaction with consumption, Trust in the company, Focus on product specificity. (Table 3)

Table 3. Influence of Gender on Indicators.

Indicators	Gender	X means different indicators	ANOVA
Willingness to incur additional costs	Female	$x_1 = 2.24$	F = 5,612 $p < 0.05$
	Male	$x_2 = 1.89$	
Tendency to try a new product	Female	$x_1 = 2.31$	F = 4,340 $p < 0.05$
	Male	$x_2 = 2.21$	
Satisfaction with consumption	Female	$x_1 = 1.63$	F = 3. 84 $p < 0.05$
	Male	$x_2 = 2.48$	
Trust in the company	Female	$x_1 = 2.27$	F = 5.63 $p < 0.05$
	Male	$x_2 = 2.20$	
Focus on product specificity	Female	$x_1 = 3.00$	F = 4.48 $p < 0.05$
	Male	$x_2 = 2.52$	

First, it should be pointed out that the null hypothesis, according to which the gender of young people in Bulgaria does not affect the indicators for the use of mobile products and services, can be rejected. In women, statistically significantly higher values are observed for the indicators: Willingness to incur additional costs ($x_1 = 2.24$), Tendency to try a new product ($x_1 = 2.31$), Trust in the company ($x_1 = 2.27$) and focus on product specificity ($x_1 = 3.00$). It is found that women find more reasons to use mobile products and services under

the influence of advertising, which shows a consistently stimulated demand by them for the studied products and services. In men, on the other hand, higher values are observed in the indicator - Satisfaction with consumption ($x_2 = 2.48$), compared to women with lower levels of satisfaction. Another in-depth study on the impact of mobile operator advertising on gender differences found that for respondents of both sexes, the positive response to entertainment effects in advertising was strongly proportional to satisfaction with the use of purchased products. [42] The same authors add that it is possible that the qualities of mobile products are associated with entertainment not only in advertising, but also in their actual use, and subsequent advertising messages provoke positive responses, regardless of gender. [42]

4.3 Influence of financial status on forecast indicators of consumer behavior

The present study also identified the influence of the financial status of the respondents on the indicators for forecasting a purchase. (Table 4).

Table 4. Influence of Financial Status on Indicators

Indicators	Financial Status	X means different indicators	ANOVA
Willingness to incur additional costs	Financially comfortable Financially constrained	$x_1 = 1.69$ $x_2 = 1.78$	$F = 3.317$ $p < 0.05$
Tendency to try a new product	Financially comfortable Financially constrained	$x_1 = 2.37$ $x_2 = 1.97$	$F = 5.762$ $p < 0.05$
Satisfaction with consumption	Financially comfortable Financially constrained	$x_1 = 3.03$ $x_2 = 3.41$	$F = 4.046$ $p < 0.05$
Trust in the company	Financially comfortable Financially constrained	$x_1 = 1.69$ $x_2 = 1.54$	$F = 3.058$ $p < 0.05$
Focus on product specificity	Financially comfortable Financially constrained	$x_1 = 2.38$ $x_2 = 2.19$	$F = 4.361$ $p < 0.05$

According to the statistically significant results presented in Table 4, it is found that financially comfortable respondents are more inclined to try a new product or service ($x_1 = 2.37$), to focus on the specificity of the product ($x_1 = 2.38$), and with them higher values of trust in a mobile company ($x_1 = 1.69$) were also observed, compared to Financially constrained, which showed readiness to incur additional costs ($x_2 = 1.78$) (Table 4). Therefore, the better financial status of young respondents can make them more active customers for these companies.

Regarding the results, for financially constrained respondents show statistically significantly higher consumer satisfaction when using mobile products and services ($x_2 = 3.41$), which explains their tendency to incur additional costs for other products and services ($x_2 = 1.69$). They also found lower values regarding the trust in the company ($x_2 = 1.54$) and the focus on a specific mobile product or service ($x_2 = 2.19$), which can be seen in Table 4.

4.4 Dependences between indicators of consumer behavior

In order to establish the internal relationships between indicators and consumer behavior, Pearson correlation analyzes are performed. Statistically significant positive correlations were found, presented in Table 5.

Table 5. Person’s Correlations between Indicators.

Correlations						
Indicators		Willingness to incur additional costs	Tendency to try a new product	Satisfaction with consumption	Trust in the company	Focus on product specificity
Willingness to incur additional costs	Pearson Correlation	1	.456*	.338	.421	.511**
	Sig. (2-tailed)	.000	.001	.003	.165	.002
	N	300	300	300	300	300
Tendency to try a new product	Pearson Correlation	.456*	1	.654**	.543**	.471**
	Sig. (2-tailed)	.001	.000	.006	.007	.001
	N	300	300	300	300	300
Satisfaction with consumption	Pearson Correlation	.338	.654**	1	.493*	.621*
	Sig. (2-tailed)	.003	.006	.000	.002	.020
	N	300	300	300	300	300
Trust in the company	Pearson Correlation	.421	.543**	.493*	1	.521*
	Sig. (2-tailed)	.165	.007	.002	.000	.000
	N	300	300	300	300	300
Focus on product specificity	Pearson Correlation	.511**	.471**	.621*	.521*	1
	Sig. (2-tailed)	.002	.001	.020	.000	.000
	N	300	300	300	300	300
**. Correlation is significant at the 0.01 level (2-tailed).						
*. Correlation is significant at the 0.05 level (2-tailed).						

The highest correlation coefficients are between the following indicators: Tendency to try a new product and Satisfaction with consumption - ($R = 0.654$; $p < 0.01$), Satisfaction with consumption and Focus on product specificity - ($R = 0.621$; $p < 0.05$), Trust in the company and Tendency to try a new product - ($R = 0.543$; $p < 0.05$), as the first two correlations indicate that satisfaction with the use of mobile products and services may increase the propensity of young consumers to try new products. Regarding the results of the correlation - Tendency to try a new product and Trust in the company, it is found that the tendency of consumers to try a new product lead to greater trust in a mobile company and vice versa, therefore consumer satisfaction with mobile products and services in Bulgaria it can also determine the building of trust in the surveyed companies. The results obtained support the statement that the feeling of satisfaction [14], [16], [34] leads to an increase in consumer interest.

Statistically significant dependences were also found for other indicators:

Willingness to incur additional costs and focus on product specificity - ($R = 0.511$; $p < 0.01$), as well as Tendency to try a new product and Focus on product specificity - ($R = 0.471$; $p < 0.01$). The tendency of the young consumer to incur additional costs when changing a company, as well as his desire to try new products is an important manifestation of consumer interest and it can be manifested when trying new products that offer more specific

benefits. The indicators, Satisfaction with consumption and Trust in the company, are on average statistically significant correlation ($R = 0.493$; $p < 0.01$).

In addition, it should be noted that Product specificity is an indicator that is being studied by other researchers [35] to derive the reasons for consumer interest. In addition, higher values of Satisfaction with consumption, focus on product specificity may lead to Tendency to try a new product, and this claim is supported by other research [36] for wider social use of products and business economic benefits. as an important part of the use of mobile phones.

5 Conclusion and Summarized Inferences

The presented research attempts to empirically establish the influence of gender and financial status on indicators predicting the behavior of the consumer of mobile products and services. The results obtained from ANOVA and the correlation analyzes between gender, financial status and indicators show that they have an influence through advertising of a mobile operator in Bulgaria.

As a result of the above analysis, the following main conclusions can be drawn: indicators such as Willingness to incur additional costs, Tendency to try a new product, Trust in the company, Focus on product specificity are more strongly predictable purchase for women, in comparison are men. For men, on the other hand, user satisfaction is a more predictive purchase than women.

For financially comfortable are less affected by the indicators: Willingness to incur additional costs, as well as Satisfaction with consumption, which means that the behavior of buying under the influence of advertising of these respondents is determined by the strength of other indicators. Therefore, in financially comfortable through the impact of advertising is achieved trying new products or services, trust in a mobile company, focusing on the specifics of the product, as opposed to financially constrained. In addition to financially comfortable respondents declaring a tendency to try a new product and focusing on product specificity, these indicators are more predictive about making a purchase. Satisfaction and willingness to incur additional costs are indicators of stronger performance in financially constrained respondents. This result shows a desire to follow fashion trends with better financial opportunities. For their part, financially constrained respondents seek satisfaction as well as a desire to incur additional costs due to a lack of trust in the company.

Limitations of the Study:

The study does not delve into additional studies of other demographic characteristics and is conducted only in three major cities in Bulgaria. In addition, it is possible to study and analyze other indicators that would affect the consumer behavior of young people in Bulgaria.

Future Searches:

As a recommendation for new future research, it can be stated that studies on the impact of advertising must take into account the specifics of the advertised products and services, as well as the possibilities of advertising media reaching consumers. All this would help to bring out new indicators that determine the purchase of a mobile product or service.

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