Polish Young Consumers’ Attitudes Towards Mobile Phone Brands

Dawid Gajda

University of Warsaw, Faculty of Management
https://orcid.org/0000-0002-4094-0027

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ABSTRACT

Consumers’ attitudes are determined by many factors, one of which is a product brand. The objective of the paper is to present young consumers’ attitudes towards mobile phone brands. The ABC model of attitudes is the theoretical framework for the study. The research method was a paper-and-pencil survey (PAPI) on the sample of 250 respondents aged 18–25. The research showed that it is just the name of the brand that can affect consumers’ attitudes. It is a derivative of associations with the brands. The value of the attitude components is differentiated by brands. The affective component appeared to be the most important and the cognitive component – the least important. The findings show that gender and brand of respondents’ mobile phones also differentiate the importance of components of young consumers’ attitudes on the mobile phone market. Limitations and recommendations for further research are presented as well.

JEL classification: M31, M37

Keywords: brand, brand image, consumer attitude, mobile phone market

1. INTRODUCTION

Brand is one of the key elements of every enterprise and its products, influencing the decisions made by buyers. The brand image exists in perception and awareness of consumers (Liczmańska, 2016). Therefore, ensuring a positive perception of the brand is particularly important (Iglesias et al., 2019). What influences subjective opinions often results from what we know about a brand (Koll & von Wallpach, 2009). We receive this information through the senses, which is why the image is influenced by both the text and the logo of the brand and the message it carries (Mruk, 2012). One of the biggest markets is the mobile phone market (www.idc.com/promo/smartphone-market-share/vendor), on which many strong brands exist. This market should be examined for the concept of consumer behavior, and more specifically – consumer attitudes towards mobile phone brands on this market. Building the right brand image requires knowledge of buyers’ cognitive, emotional and behavioral attitudes towards products. The brand image influences the behavior of buyers on the mobile phone market. It is a factor that can change the consumer’s decision. Brands with a large market share are perceived as better brands. Phone brands can positively influence the purchase of a product or, on the contrary, they can discourage consumers.

The purpose of this article is to compare the importance of components of Polish young consumers’ attitudes towards mobile phone brands. The presence of a brand when discussing a phone model may be more important for their subjective opinions than the absence of it.
The hypotheses set out in the article were verified by a survey researching three dimensions of consumer attitudes on the mobile phone market.

The paper is structured as follows: first there is a theoretical background of brand and consumer attitudes towards brands, then the research methods are presented. The final part of the article covers the research analysis and conclusions.

2. BRAND THEORY

In a decision-making situation, the consumer recognizes the brand as a source of information (Urbanek, 2002). Brand image is understood as brand perception, which is based on information about the brand and previous experience of buyers. It depends on the attitude of consumers, their preferences and beliefs (Assael, 1992). There is a set of five features that can be used to classify the brand personality. They are as follows: sincerity (is it realistic, honest, decent and cheerful), excitement (is it brave, energetic, inventive and still up to date), competence (is it trustworthy, intelligent and effective), sophistication (is it high-end and charming), ruggedness (is it open to the environment and strong) (Aaker, 1997). A big number of studies focus on this issue, also with some modifications of this model (Koebel & Ladwein, 1999; Aaker, Benet-Martínez, & Garolera, 2001; Alvarez-Ortis, & Harris, 2002; Lee & Oh, 2006; Toldos, 2012; Kim, Shim, & Dinnie, 2013). For example, the study by Chung and Park (2015) examined the personality of mobile phone brands through the brand dimension scheme proposed by Aaker. The study examined 4 brands: Samsung, Nokia, Apple and Sony and was conducted in the United Kingdom, Germany and France in the form of online surveys. This study showed that brand personality is positively associated with brand loyalty. The results of this study are also linked to the fact that each of the personality dimensions of brands affect consumer behavior differently. An example is 'sincerity', which was positively associated with the Sony brand, while 'ruggedness' – with the Samsung and Apple brands. Moreover, it has been demonstrated that 'excitement', 'competence' and 'sophistication' were those that were most influential for brand loyalty (Chung & Park, 2015). Brand personality dimensions proposed by Aaker may also affect the characteristics of users of brands, which interested Ajilore K. and Solo-Anaeto M. (2016). In their study, they demonstrated that smartphone users reflect their personality in the personality of the mobile phone brand that they use (Ajilore & Solo-Anaeto, 2016).

Another model, known as The Kapferer Brand Identity Prism, consists of 6 elements: physique (which is important in brand marketing communication), personality (which has already been discussed), culture (most often it is identified with the culture of the country or state), relationship (intangible exchange between the retailer and the brand and between the brand and the service sector), reflection (by buying a product of the brand, buyers desire to express themselves, they try to find their characteristics in the characteristics of the purchased product) and self-image (the buyer creates a certain internal, new relationship with himself using brands, which works towards his development) (Kapferer, 1992). The Kapferer model does not only relate to product brands, but also to other aspects such as political marketing (Bhattacharya, Kumar, & Dutta, 2017) or cultural institutions (Andreea, 2013).

3. CONSUMER ATTITUDES TOWARDS BRANDS

The discussion about the concept of consumer attitudes starts with explaining the impact of emotions on consumer behavior. Despite the fact that emotions usually fade over time, they leave behind a trace that presents itself in the form of our mood. Mood is considered to be the weakest and short-term emotion. Affect, in turn, is stronger (Gasiul, 2007). Emotions can also
shape the attitude towards something and perform some functions, e.g., they control decision-making behavior or inform about the level of arousal (Antonides & van Raaij, 2003). The number of emotions is as large as the number of studies focused on them (Kahn & Isen, 1993; Barone, Miniard, & Romeo, 2000; Isen, 2001; Isen, Labroo, & Durlach, 2004; Mogilner & Aaker, 2009; Zarantonello et al., 2018; Konu et al., 2020).

Within the attitude, there are three components, which is known as the ABC model (Rosenberg & Hovland, 1960; Breckler, 1984). The first one is the cognitive component, referring to beliefs about the object of attitudes derived from the knowledge of a product. The second one is the conative component, which applies to the actions that a person takes in relation to an object, as well as to behaviors associated with it. The last one – the affective component – refers to feelings about the product or brand (Juchnowicz, 2014; Trojanowski, 2013). Interestingly, a particular attitude may refer to more than one component than the other. Usually, there is a relationship between these components. One of the components can be so strongly developed that it will determine the whole attitude and minimize the importance of the other components. Therefore, research on consumer attitudes should focus not only on identifying them, but also on determining the strength and direction of their impact (Aronson, Wilson, & Akert, 1997; Trojanowski, 2013). The ABC model was the theoretical framework for many studies (Kwon & Vogt, 2009; Uddin & Khan, 2016; Chiu et al., 2019).

Brand image is a key factor which often affects consumer choices (Degeratu, Rangaswamy, & Wu, 2000; Sallam, 2016; Foroudi, 2018). This relationship applies to the vast majority of product categories. What buyers pay special attention to is the product brand. The brand attitude has been studied on several markets. Daugherty, Li and Biocca (2008) compared the participants’ attitude towards the brand, their knowledge about the product and their purchase intention. The product was a camera. The first group received a product press advertisement which contained all information about the camera and its photo. The second group received the physical product and the third group could view the product in 3D using a computer. All three examined dimensions obtained the lowest score for the group that received the press advertisement. The highest results were recorded by the group that experienced the product in a virtual way (Daugherty, Li, & Biocca, 2008).

The study conducted by Schemer, Matthens, Wirth and Textor (2008) was aimed at checking whether it is possible to evoke a negative or positive attitude towards a product of an unknown clothing brand by linking it with a rap music performer, depending on what emotions he was evoking in the study (Schemer et al., 2008).

Another study was described by Slaba (2019). The purpose of the study was to analyze consumer behavior towards branded and non-branded goods on the mobile phone market in the Czech Republic. The results showed that consumers who prefer branded phones are more loyal than those who prefer non-branded phones. The respondents with higher income also occurred to be more loyal and less likely to buy cheaper phones. 61% of respondents said that the phone brand was what most influenced their purchasing decision. It is worth mentioning that the most frequently used mobile phone brands owned by respondents in this survey were Samsung (20%), Huawei (16%), Xiaomi (12%) and Apple (11%) (Slaba, 2019).

The study on the mobile phone market was inspired by the study above. The mobile phone market in relation to consumer behavior has attracted many researchers (Turnbull, Leek, & Ying, 2000; Martensen, 2007; Kimiloğlu, Aslıhan Nasır, & Nasır, 2010; Badowska & Rogala, 2016; Śirola & Gallopeni, 2020). The author decided to examine if only the name of the brand can influence the consumers’ attitudes towards the products described.
4. RESEARCH METHODS

The aim of the study is to compare the importance of components of attitudes on the mobile phone market among young consumers. Because each attitude consists of three components, it is worth asking which one is the most important for the attitudes of young people.

**H1:** The affective component of consumers’ attitude towards a mobile phone is the most important component for young consumers.

The associations with brands correspond with emotions (affective component). They have an impact on consumer behavior (conative component), which has been explained in the theoretical background. The cognitive component seems to be the least corresponding to brand associations.

**H2:** The importance of components of consumers’ attitude towards a mobile phone is related to the brand used in the questionnaire.

The emerging question is whether the characteristics of the respondents, such as gender or their phone brand, can affect the results of the survey. These are the features that can differentiate the importance of individual components of attitudes.

**H3:** The importance of components of consumers’ attitude towards a mobile phone is related to the brand of the mobile phone owned by the respondent.

**H4:** The importance of components of consumers’ attitude towards a mobile phone is related to the respondent’s gender.

In order to verify these hypotheses, a quantitative study in the form of PAPI survey was conducted. The questionnaire contained 15 statements which were intended to identify consumers’ attitudes towards mobile phones based on their parameters included at the beginning of the questionnaire. The respondents responded to these statements on a 5-point scale, based on Likert scale. The description of the scale is as follows: 1 – I strongly disagree, 2 – I rather disagree, 3 – neither agree nor disagree, 4 – I rather agree, 5 – I strongly agree. The questionnaire was prepared in 5 versions; however, each respondent could fill in only one version (the one that was given to him/her). In each version, the control variable was the mobile phone brand: Samsung, Huawei, Xiaomi and iPhone (Apple). One version of the questionnaire, treated as the base one, was without the brand listed. The presented parameters of the mobile phone were identical in each version. These were the parameters of the Samsung Galaxy A6 phone, presented under other brands. Data for all the phones were taken from the large online mobile phone catalogue [www.mgsm.pl](http://www.mgsm.pl).

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>internal memory</td>
<td>32 GB</td>
</tr>
<tr>
<td>main camera</td>
<td>16 MP</td>
</tr>
<tr>
<td>display size</td>
<td>5.6”</td>
</tr>
<tr>
<td>display resolution</td>
<td>1480 x 720 (HD+)</td>
</tr>
<tr>
<td>processor</td>
<td>1.6 GHz</td>
</tr>
<tr>
<td>RAM memory</td>
<td>3 GB</td>
</tr>
</tbody>
</table>

Table 1
Telephone parameters presented in the survey questionnaire

Cronbach’s alpha has been analyzed. Internal consistency is the highest for the affective component. The lowest internal consistency is for the cognitive component. These results can be justified by the sample size or by the number and form of structuring statements. For this reason, the statements that underestimate Cronbach’s alpha should be identified.
Table 2
Cronbach’s alpha for individual components after excluding statements lowering this value

<table>
<thead>
<tr>
<th>Component</th>
<th>Cronbach’s alpha</th>
<th>Cronbach’s alpha after excluding statements lowering this value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive component:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I’m interested in issues related to the mobile phone market</td>
<td>0.49</td>
<td>0.58</td>
</tr>
<tr>
<td>Whenever I can, I read almost everything about the mobile phone market</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I’m interested in the latest phone models appearing on the market</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The way the phone is used has a greater impact on its functionality than its parameters</td>
<td>0.75</td>
<td>0.75</td>
</tr>
<tr>
<td>The phone should only be used to fulfill its basic functions (calls, messages, or surfing the Internet)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affective component:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am happy when I get a new phone</td>
<td>0.75</td>
<td>0.75</td>
</tr>
<tr>
<td>I like having a telephone that is “fashionable”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is important for me to have a good quality phone model</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I want to change my phone model when I see that one of my friends has a better one</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am happy when I can boast about my phone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conative component:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>When buying a mobile phone, I pay attention to its parameters</td>
<td>0.63</td>
<td>0.74</td>
</tr>
<tr>
<td>The parameters of the phone presented above prove that it is a good quality phone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The phone with the parameters above meets my requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I often connect the phone to the charger</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would buy a phone with the parameters shown above</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s elaboration.

The analysis of the cognitive component led to the answer that statement ‘The way the phone is used has a greater impact on its functionality than its parameters’ was the one that significantly underestimated Cronbach’s alpha. As for the affective component, its values were acceptable. Relatively low consistency occurs in the conative component. In its case, the statement lowering the most the level of internal consistency was ‘When buying a mobile phone, I pay attention to its parameters’. After excluding these statements from the analysis, Cronbach’s alpha values increased to the level presented in Table 2.

The survey was conducted from February 24 to March 11, 2020. The participants of the study were university and high school students aged 18–25. The mean age of respondents was 20.74. The distribution of respondents by age is shown in Figure 1. The group of respondents of the study was 250 people (50 people for each version of the questionnaire). This relatively representative group and its equal distribution by the 5 variables studied allowed for a direct data comparison between groups. It was ensured that the questionnaires were relatively evenly distributed according to gender. 56% of the respondents were women and 44% were men.
**Figure 1**
The number of respondents by age

![Bar chart showing the number of respondents by age](chart1)

Source: Author’s elaboration.

**Figure 2**
The structure of respondents by gender

![Pie chart showing gender distribution](chart2)

Source: Author’s elaboration.

**Figure 3**
The structure of owned mobile phone brands among the survey respondents

![Pie chart showing mobile phone brand distribution](chart3)

Source: Author’s elaboration.
The structure of owned mobile phone brands among the survey respondents shows that the number one is Apple, with a 39.2% share. Samsung is in the second position with a 23.6% share, followed by Huawei with a 17.2% share and Xiaomi with a 11.6% share. Other brands were treated as the ‘other’ (8.4% share) category. At this point, we can see the young people’s preferences when it comes to mobile phone brands. It should not be forgotten that the study was conducted among young students. Usually, these young people come from a wealthy family, which means that the brands of their phones can also relate to their standard of living.

5. ANALYSIS OF THE RESEARCH RESULTS

To verify the first hypothesis, it has been analyzed which component is perceived as the most important. The data presented in Figure 4 were the result of calculating the mean for each component concerned, i.e. for the pool of statements assigned to each component.

The highest score is reported for the affective component (3.15), while the lowest for the cognitive component (2.29). The ANOVA analysis shows that there is a significant difference between the components (F=64.329; p<0.0001). Therefore, hypothesis 1 is confirmed.

Hypothesis 2 was verified by calculating the mean for the components concerned, i.e. for the pool of statements assigned to each component for each brand (Figure 5). Therefore, it is easy to observe changes in individual values. In the case of the no-brand questionnaire, the mean for the cognitive component was 2.17. The fact that there was no brand could have an impact on the fact that respondents, analyzing the parameters presented to them, believed that they could assess the phone model only on the basis of its parameters. Higher result were recorded for every other brand. The biggest value regarding the cognitive component was noticed for the Xiaomi brand as a variable (2.50).

For the affective component, the no-brand questionnaire also obtained the last result of 3.00. Higher results were recorded for every other brand and the highest result was again recorded for the Xiaomi brand (3.37).

When it comes to the values calculated for the conative component, the no-brand questionnaire also recorded the lowest result – 2.59. This means that each brand has influenced the respondents’ behavior, or at least on their intentions. This time, the Apple brand recorded the highest result (2.92).
Figure 5
Research results on individual components of consumer attitudes on the mobile phone market

In each version of the questionnaire, the highest score is reported for the affective component, while the lowest for the cognitive component. The ANOVA analysis (Table 3) shows that there is not a significant difference between the brands as regards their impact on each component. Therefore, hypothesis 2 is negatively verified.

Table 3
ANOVA analysis for each component of consumers’ attitudes towards mobile phone brands

<table>
<thead>
<tr>
<th>Component</th>
<th>F value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>cognitive</td>
<td>1.605</td>
<td>0.173</td>
</tr>
<tr>
<td>affective</td>
<td>1.946</td>
<td>0.103</td>
</tr>
<tr>
<td>conative</td>
<td>0.719</td>
<td>0.579</td>
</tr>
</tbody>
</table>

Hypothesis 3 assumes that phone brands owned by respondents differentiate the importance of individual components of attitudes towards mobile phones (Figure 6). There is a change in the importance of components value in the case of Xiaomi mobile phone brand users. The conative component is the most important, but its value is not significantly higher than the affective component value.
Research results on individual components of consumer attitudes on the mobile phone market among respondents’ mobile phone brands

<table>
<thead>
<tr>
<th>Component</th>
<th>F value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>cognitive</td>
<td>1.690</td>
<td>0.152</td>
</tr>
<tr>
<td>affective</td>
<td>8.607</td>
<td>0.0001</td>
</tr>
<tr>
<td>conative</td>
<td>1.217</td>
<td>0.303</td>
</tr>
</tbody>
</table>

Source: Author’s elaboration.

The relationship between phone brands owned by respondents and the value of components was investigated using the ANOVA test (Table 4). Only the importance of the affective component is significantly differentiated by the mobile phone brands owned by respondents. Therefore, hypothesis 3 is only partially supported. For the Apple mobile phone users, the affective component was the most important. Huawei and Samsung mobile phone users are following this result, whereas for Xiaomi and other mobile phone brands users, the importance of the affective component was the least.

Hypothesis 4 assumes that gender differentiates the importance of individual components of attitudes towards mobile phones (Figure 7). It is a cognitive component that is more important for men than for woman. On the other hand, the affective and conative components are more important for women. These differences are significant, which the results of t-test in Table 5 show.


Figure 7
The mean for the components of young male and female consumers’ attitudes towards mobile phones

<table>
<thead>
<tr>
<th>Component</th>
<th>t value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>cognitive</td>
<td>–3.118</td>
<td>0.001</td>
</tr>
<tr>
<td>affective</td>
<td>1.869</td>
<td>0.031</td>
</tr>
<tr>
<td>conative</td>
<td>2.355</td>
<td>0.009</td>
</tr>
</tbody>
</table>

Source: Author’s elaboration.

6. CONCLUSIONS AND STUDY LIMITATIONS

The study showed that the importance of the components of attitudes towards mobile phone brands is significantly different. It has been found that the brand exerts a smaller influence on consumers’ knowledge (cognitive component), bigger on their behavior (conative component), and the biggest on the felt emotions (affective component) associated with a brand. Furthermore, the brands of mobile phones differentiated the importance of components of attitudes in a different way, but it was not significant.

The brands of respondents’ mobile phones significantly differentiate the importance of the affective component of Polish young consumers’ attitudes on the mobile phone market, but not the cognitive and conative components. The observation made for the gender of respondents proved that gender significantly influences the components of attitudes towards mobile phone brands.

The author has not found any studies that relate to Polish young consumers’ attitudes towards the mobile phone brands. The conclusions can be used by marketing specialists or brand managers to take care about better brand perception.

The described study was carried out in less than a month; it is worth extending this period or conducting research in various periods of the year and observe any changes that may occur. What is more, the survey results could have been influenced by the structure of respondents by field of study. People from science fields may have had more knowledge about the market concerned.
The research has some limitations. The sample size of the research was relatively representative, but it is worth conducting a similar survey on a larger sample. What is more, it is worth conducting a survey on respondents in other age ranges, which may show generational differences in this area. The aspect studied by the author can be raised in the case of many other industries and products, not just mobile phones, because the results presented in the article cannot be translated into other markets. It also seems to be better to compare only two brands, which can bring us to more substantial conclusions. The number of variables should be in correlation with the sample size. In addition, the examined variable can be not only the brand, but any other feature that interests us, such as the price or packaging presented in the photograph included in the questionnaire. It is also worth adding the income or education scale to the characteristics, which can bring us to more specific conclusions. The PAPI type of the survey was the reason why its conduct was time-consuming. The CAWI type could be a better solution for this. Moreover, the direction of the answers given should be predicted while preparing a questionnaire.

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**Internet sites**
