

# *Communication and Consumer Activities of Social Networking Sites Users: Cases from Germany, Poland and Russia*

Malgorzata Bartosik-Purgat

*Poznań University of Economics and Business, Poland*

*m.purgat@ue.poznan.pl*

Oxana Filipchuk

*Plekhanov Russian University of Economics, Russia*

*momidzi@gamil.com*

Michael B. Hinner

*TU Bergakademie Freiberg, Germany*

*hinner@bwl.tu-freiberg.de*

The growth of the Internet heavily influences people's lives every day, especially by the development of Social Networking Sites (SNS), which since their first appearance have been constantly recording a growing number of users. The main purpose of this paper is to identify the significance of SNS in relation to two activities of individual users: communication and consumer behaviour. The study focuses on the three most popular SNS in three neighbouring countries (Germany, Poland, and Russia) namely, Facebook, vkontakte, and YouTube. The methodological approach is two-fold: firstly, the authors developed a theoretical background of the areas of using SNS and formulated research questions; secondly, they applied the PAPI and CAWI methods for the data analysis. Regarding the researched activities, it should be noted that SNS users use these platforms more often for communication than consumer actions. The most useful here is Facebook in comparison to YouTube. This study provides results, which can be useful in the management of the enterprises that use SNS for their marketing communication in Germany, Poland, and Russia.

*Key Words:* communication, consumer behaviour, Facebook, vkontakte, YouTube

*JEL Classification:* M31, M37

*<https://doi.org/10.26493/1854-6935.15.341-363>*

## **Introduction**

The growth of the Internet has had considerable influence on the lives of people in the 21st century (Ngai et al. 2015). In addition, the use of

Social Networking Sites (SNS) has gained considerable relevance in the lives of people as the constantly growing number of users demonstrate. SNS not only help people from different parts of the world communicate faster with one another (Williams et al. 2012; Lee and Ma 2012) but also influences many areas of their lives, such as education (Cassidy et al. 2014), professional work (Williams and Verhoeven 2008; Gerard 2012), shopping and making consumer decisions (Heinonen 2014) as well as entertainment (Tuten and Solomon 2014, 202). The wide range of SNS use probably stems from their characteristic features. Kaplan and Haenlein (2010) point out that SNS are sets of applications, which are technically and ideologically based on the foundations of Web 2.0. They enable the creation and exchange of content amongst their users. Such characteristics of SNS are based on their nature and are associated with connecting people within groups and exchanging information about both their private and their professional lives. SNS are also a valuable source of information about products and services available in a particular market. Furthermore, more advanced internet tools are available through the development of Web 3.0. In order to identify the significance of the needs of a particular individual it is firstly necessary to obtain information, then gather it and process it in order to finally generate an individualised information package (Garrigos-Simon, Lapiedra Alcami, and Barbera Ribera 2012). In other words, in Web 3.0 the technology plays the role of an intelligent provider of selected information packages adjusted to the interests and needs of a recipient (Rudman and Bruwer 2016).

The number of SNS based on the Web 2.0 and 3.0 started to grow along with their popularity amongst regular Internet users. This situation came into being because the way people spend their time has changed. Nowadays people are less likely to spend their time in front of the TV and instead spend their time chatting with their friends on SNS or searching for information in Internet forums. The growth of SNS has contributed to changes in the way people think and act (Khan and Vong 2014). Traditional types and methods of individual and marketing communication are often replaced by modern communication methods which seek to help make lives of people and the operation of enterprises easier because they help save time, with regard to the time saved, reduce efforts, and cut costs (Mangold and Faulds 2009; Kietzmann et al. 2011). Due to the range and frequency of using SNS by individual users, SNS have become an obligatory tool applied in the marketing activity of enterprises both on domestic and international markets (Mangold and Faulds 2009; De Vries

et al. 2012; Tuten and Solomon 2014: 45). However, the type of media and the way they are used differ amongst markets (Zhang and Xueb 2015).

The main purpose of this paper is to identify the significance of SNS in relation to two activities of individual users: communication (C) and consumer behaviour (CB) based on the most popular SNS in three neighbouring countries – Germany, Poland, and Russia (Facebook, YouTube and vkontakte). Communication is considered here in light of the Computer Mediated Communication theory (CMC) which means that it is considered to be the process of communicating among users, keeping contact with friends and families. Consumer behaviour via SNS is considered the process of different user activities undertaken by consumers with particular emphasis on the electronic Word of Mouth theory (e-WoM) (e.g. gathering information about products, getting discounts as a member of fan pages). This has resulted in following three research questions:

- RQ1 *Does the frequency of using the most popular SNS in Germany, Poland, and Russia influence the range of using these SNS in communication and consumer behaviour?*
- RQ2 *Which of the two areas, communication or consumer behaviour, is influenced more by SNS?*
- RQ3 *Which of the analysed SNS (YouTube, Facebook or vkontakte) is used to the greater extent in communication and consumer behaviour?*

The ‘Digital in 2016 Report: We Are Social’s’ (Kemp 2016) lists YouTube, Facebook, and vkontakte as those SNS, which are used most frequently in Germany, Poland and Russia. These three countries were selected in order to identify possible similarities and differences in the use of YouTube, Facebook, and vkontakte.

This paper seeks to cover a gap, which exists in the literature concerning the comparison of the significance of SNS in the C and CB fields. The relevance of communication and e-WoM in marketing is emphasized in many publications (Mangold and Faulds 2009; Barreto 2013); there is, however, not much research that looks into the usage of SNS with regard to different countries. This paper, thus, seeks to identify SNS use in C and CB. The knowledge as to how the researched SNS are used by individuals (potential customers) can provide information for enterprises as to how to use those SNS to become more efficient and competitive in the market.

The structure of this paper is as follows: First, the relevant literature

is reviewed. This is followed by a description of the applied methodology. Then the results of the empirical study are presented and discussed. The managerial implications are described next. The paper ends with a discussion, limitations and suggestions for future research.

## **The Theoretical Background on the Use of SNS**

### **DIFFERENTIATING SNS**

The characteristic features of SNS and their use depend first on the needs of people and using particular instruments to meet those needs. For example, the need to share one's travel memories with friends may be met by using a website or communicator such as Facebook, Instagram, or Snapchat (Ryan and Xenos 2011; Nadkarni and Hofmann 2012). YouTube or LinkedIn are less useful here (Kietzmann et al. 2011; Khan and Vong 2014). The SNS, which connect people into the networks of friends that share common features, are Facebook or LinkedIn. With the help of these SNS, users can look for people who are able to provide particular information or help in searching for it (Schouten 2011; Ray 2014). Many people use SNS because these media allow them to express themselves in writing or with video recordings (e.g. blogs, Twitter, Vimeo, YouTube) and because these media allow them to use the information which was placed there by other users (Ward 2006; Munguatoshia et al. 2011; Schouten 2011; Nakagawa and Arzubigiaga 2014; Kim, Sin, and Tsai 2014; Hamid et al. 2015). These SNS are also used for educational (Howard et al. 2015; Hamid et al. 2015; Sheldon 2015) and consumer activities (Habibi, Laroche, and Richard 2016; Erkan and Evans 2016).

### *YouTube*

YouTube was created in 2005 and is one of the rapidly developing media (Madden, Ruthven, and McMenemy 2013) that is visited monthly by over one billion users around the entire globe. It is a very powerful tool (Bonsón, Bednarova, and Escobar-Rodríguez 2014) which allows users to play and share films for free (Chiang and Hsiao 2015; Wendt, Griesbaum, and Kölle 2016). Everyone can become both a producer and consumer of this service. Producers are users who upload their own films and presentations as video recordings; they are called vloggers (Yang and Wang 2015). A prerequisite to do this is to have an account identifying a given user. Vloggers, unlike bloggers, do not describe their ideas in writing but record them as short videos. It is also possible to be a YouTube user

who only watches materials uploaded by others. These viewers can comment on the videos by expressing their own opinion or by subscribing to a channel of their favourite performer (Chiang and Hsiao 2015). YouTube is a very good source of promoting products and services (especially the unusual ones) in the entire world, which is an invaluable advantage of all SNS (Kietzmann et al. 2011; Khan and Vong 2014). Many enterprises use YouTube to place the commercials of their products, and vloggers present new products appearing on the market.

### *Facebook and vkontakte*

Facebook, which is one of the most advanced and popular social networking platform in the world, is used by 1600 million people (Kemp 2016). Registered users can create groups of people or networks of friends with whom they wish to be in contact with through communication (exchange of information), placing photos, films, comments or just *likes on the SNS* (i.e. social interacting functions). Facebook is a place where users usually show the best (the most beautiful, the funniest, the most important, etc.) situations from their lives which they wish to share with their friends (Yang and Lin 2014). It is a platform used not only by individuals but also by enterprises or various institutions, which want to stay in contact with their buyers, customers, clients, or viewers. Facebook is also a source of information about products and services gathered from friends and from enterprises, which use that SNS as a communication tool.

vkontakte is a social medium used primarily by Russian-speaking users and countries. In the world's ranking it is among the ten 'biggest' SNS in the world when it comes to the number of users (Kemp 2016). It enables its users to exchange messages amongst one another, create groups or public pages, share images (photos, videos), or to play games. It offers similar functions and activities to Facebook, which is why it is called the Russian equivalent of Facebook.

### **SNS-TOOLS IN MARKETING COMMUNICATION**

The use of SNS as communication tools by enterprises enhances the processes affecting the market, helps conduct more efficient (quicker and less expensive) marketing research aimed at identifying the needs and preferences of clients and gaining the opinions of consumers on already existing products (Smith and Zook 2011). It also speeds up the identification of changes, which take place in the market, helps create new product and bargain offerings (Chandler and Chen 2015). Applying these instruments

in international activities significantly reduces operating costs, speeds up the enterprise's reaction to changes in markets (message receivers can be reached faster and more effectively which results in making enterprises more competitive) and it helps adjust the offer to different consumer tastes and preferences (Illia and Balmer 2012). Current research on the significance of SNS in the enterprises' activities focuses on several aspects: The analysis of the influence of posts and commentaries in media on the image of a company and its performance (e.g. Muntinga, Moorman, and Smit 2011; Smith, Fischer, and Yongjian 2012), the media's significance in e-WOM (Chen, Fay, and Wang 2011), the analysis of consumer behavioural models in SNS (Steyn et al. 2011), or the role of SNS in advertising in international markets (Okazaki and Taylor 2013). This paper focuses on the use of SNS (Facebook, YouTube, vKontakte) in communication and consumer behaviour from the perspective of individual users. This comparison can be a prompt for enterprises using those tools in their marketing communication and cooperation in Germany, Poland, and Russia.

#### SNS IN COMMUNICATION (C) WITHIN THE CONTEXT OF CMC THEORY

Communication is the process of exchanging information between the sender and receiver through a specific channel (Gudykunst, Ting-Toomey, and Chua 1988; Davies, Musango, and Brent 2016). In individual communication, both sender and receiver are individual units exchanging a message via a communication channel (verbal and non-verbal) and medium. However, in marketing communication, at the place of the sender is usually an enterprise and the place of the receiver is the potential customer (Clow and Baack 2015, 23). Based on the Computer Mediated Communication (CMC) theory, the internet takes a role of a medium in the interpersonal communication process (Walther 1996) and SNS are internet tools used for communication amongst individuals who use that particular medium. They are able to not only text the messages (e.g. Facebook, vKontakte) but also to listen or record it (e.g. YouTube, WhatsApp, Youku). The communication level and type differs according to the chosen medium. CMC participants transfer the message quickly without cost and possibly to many receivers at the same time (Smith and Zook 2011, 11). In the CMC concept, the use of SNS reduces the personal influences and their effects in the communication process (Walther 1996). Within the context of this paper and the CMC theory, both the

sender and the receiver of the communication process are users of SNS.

Regarding the CMC theory, the medium used in the communication process are the different types of SNS. Within the context of this paper, the focus is on Facebook, YouTube, and vkontakte as the tools that are used in CMC. Facebook was designed to permit students to communicate with each other (Aburai, Ishii, and Takeyasu 2013), send materials, and search for different types of information (Krasnova et al. 2012). Ellison, Steinfield, and Lampe (2007) showed that Facebook is an effective tool for communicating amongst friends or family's members, but it is not a significant tool which is used to meet new people. The study showed that 94% of young American Facebook users communicated daily with around 150–200 people from the friend list, and that most of these people were also friends in the offline world (Ellison, Steinfield, and Lampe 2007). Ross et al. (2009) also emphasized the significance of Facebook as far as communicating with friends is concerned. Moreover, the relationships between the various uses of Facebook and personality traits revealed, for example, that extraverts belong to a greater number of Facebook groups than others whilst introverts are more prone to get involved in social activism. In one of the latest studies, Davies, Musango, and Brent (2016) emphasize the significance of Facebook as means of communication for diversified purposes. Their research, however, is focused on the interdependence of using Facebook (time spent on this website) and the quality of interpersonal communication. It seems that Facebook is a valuable tool to develop and differentiate the means of interpersonal communication. Similar results obtained by Ng (2016) show that the main purpose of using Facebook by both Japanese users and those from Hong Kong is communication with friends and entertainment. Hsu et al. (2015) also studied the intention of using SNS, mainly Facebook, in five culturally different countries; namely, Australia, Austria, Japan, Taiwan, and the United States. The results show that for the users from individualistic countries, SNS are primarily the source of information whereas for the users from collectivistic cultures, socialization and self-presentation are the main motivators. YouTube has also some functions, which enable social interactions, e.g. adding comments and likes or sharing videos (Khan and Vong 2014). The YouTube user communicates via other channels than Facebook because they create and watch videos instead of posting and reading texts. Vloggers are senders in the communication process when they upload their videos or various materials, and the receivers are the users who watch this material. Receivers respond in that communi-

cation process usually by commenting on the videos. Both YouTube and vkontakte are not often researched when it comes to communication in the international marketplace. This exploratory study is an attempt to fill this research gap.

#### SNS IN CONSUMER BEHAVIOUR (CB) WITHIN THE CONTEXT OF E-WOM THEORY

The specifics of SNS means that they are also tools used in the consumer behaviour of their users, e.g. by searching for information about particular products that will help their users reach a consumer decision (Iyengar, Han, and Gupta 2009; Barker and Ota 2011), sharing knowledge about the products with other SNS users (Ho 2014), paying attention to advertisements presented in those media (Okazaki and Taylor 2013), and in participating in the competitions announced by enterprises (Barreto 2013; Steyn et al. 2011). Most of the research focuses on the significance of SNS in sharing information about products amongst users and expressing opinions about brands (Wallace, Buil, and De Chernatony 2014). This means of gathering and exchanging information from informal sources (e.g. friends, family, and neighbours) via the Internet is called electronic Word of Mouth (e-WoM) in marketing theory (Kaplan and Haenlein 2011). E-WoM, thus, represents client satisfaction shared via the internet (also SNS). The higher the satisfaction, the more positive the opinion will be of a product, brand, or enterprise (Jalilvand and Samiei 2012). Positive opinions shared amongst customers may contribute to building a good brand and company image (Wallace, Buil, and De Chernatony 2014) while negative comments may contribute to image loss (Balaji, Khong, and Chong 2016) as negative opinions are more effective than positive ones (Grégoire, Salle, and Tripp 2014; Balaji, Khong, and Chong 2016). SNS are the platforms that are used very often for both gathering and exchanging information about products and producers. For example, the research conducted by Ho (2014) amongst Facebook users showed that the positive opinions of friends on a particular product directly influence trust for that particular brand. In other words, the communication between Facebook users (e-WoM) greatly influences the way a brand is perceived and in building brand trust (Kucukemiroglu and Kara 2015; Hudson et al. 2016). YouTube is also a SNS, which is used to a significant extent in e-WoM. It is considered to be a repository of knowledge about markets, consumers, products, and services because information shared on YouTube in the form of videos comes from users who are also

consumers (Pace 2008; Wendt, Griesbaum, and Kölle 2016). Vloggers often record videos and publish them on YouTube in order to recommend products they bought and which are of good quality or warn other users against low quality products. Such videos are commented on by other users. This means that the opinions of many users, often from remote parts of the world, can be collected and accessed (Pace 2008; Madden, Ruthven, and McMenemy 2013). Numerous studies are conducted on the analysis of comments placed on YouTube under a particular video. They show that these comments are related in, for example, language, form of expression and expressed opinions (views). They seek to identify and characterise a potential target for a particular product (Thelwall, Sud, and Vis 2011). Moreover, YouTube is an SNS, which is often used by companies to present the features of new products that are being introduced to the market (Wendt, Griesbaum, and Kölle 2016). This is most often done by popular YouTubers – vloggers – who have received such a product for testing. These videos can often be a good source of information for indecisive consumers who can choose from several products in a particular category. Despite the way YouTube is used in the consumer behaviour context, there is not much research in that field. *vkontakte*, although it is the most popular SNS in Russia, is not as researched as much as Facebook.

## Method

### MEASUREMENT DEVELOPMENT AND DATA COLLECTION

Methodologically, this paper takes a deductive approach; and the aim is to answer the three research questions arising from the literature review. In the exploratory empirical study, the authors used two research methods: *PAPI* (Paper and Pen Personal Interview) and *CAWI* (Computer Assisted Web Interview). The measurement instrument was a standardized questionnaire prepared specifically for the purpose of this research. The questionnaire that was used in the three countries was identical except for the respective language. Before the final questionnaire was used in the study, a back translation procedure was used to eliminate any mistakes stemming from linguistic, lexical, or context differences (Craig and Douglas 2006).

The empirical data were collected in 2016, and the total number of respondents surveyed in the three countries was 566; including 117 respondents from Germany, 296 from Poland, and 153 from Russia. At first,

TABLE 1 Respondent Characteristics Based on Gender and Age (%)

Characteristics		Germany	Poland	Russia
Gender	Women	50.4	70.9	60.6
	Men	49.6	27.7	39.4
	No data	0.0	1.4	0.0
Age	15–20 years	14.5	35.5	45.5
	21–30 years	82.9	63.8	51.5
	31 years and more	2.6	0.7	3.0

a random sampling method was used, but the return rate was very low which is why the authors decided to use non-random sampling. Designated research assistants gathered the questionnaires from the respondents in each market. The different size of the respective groups along with the non-random sampling method influence, of course, the results, which is why it is not possible to fully generalize the results of this study.

#### RESPONDENT PROFILE

Regarding the respondents' profile, two factors were revealed: Gender and age. In the German group a similar number of women and men was surveyed; none of the genders predominates. The Polish and Russian groups had an almost similar gender structure. Around 70% of the respondents were women amongst Polish respondents and 27.7% men. The gap between Russian women and men was slightly smaller than in the Polish group. Around 60% of the Russian respondents were women and around 40% were men.

With regard to age, differences that are more significant were recorded. Amongst the German respondents, the age group of 21–30 year olds predominated which was similar in the Polish group. In the Russian group, the number of people in the age group of 15–20 year olds and in the age group of 21–30 year olds was nearly the same. The older respondents ( $\geq 31$  years) were in the minority.

#### VARIABLES OPERATIONALIZATION

The results of the literature review revealed three research questions: Firstly, whether the frequency of using the most popular SNS in the researched countries influences the range of using these SNS in communication and consumer behaviour? Secondly, which area – communication or consumer behaviour – is more influenced by SNS? Thirdly, which

of the analysed SNS (YouTube, Facebook or vKontakte) is used to the greater extent in communication and consumer behaviour?

Measures used in the study were developed by the authors based on research trials conducted by the authors among SNS users. Variables were operationalized in two ways. Firstly, to identify the frequency of using Facebook (FB), YouTube (YT) and vKontakte (VK), the indicators of the structure of the respondents who *use it every day, at least once a week, at least once a month, and have an account but do not use it or do not use it at all*, were analysed. Cronbach's Alpha was used to analyse the reliability of the frequency scale. Since Cronbach's  $\alpha = 0.78$ , it confirms that the proposed scale is a reliable tool for measuring.

Secondly, Spearman's rank correlation coefficient was used to identify the interdependence between the frequency of using the most popular SNS in the communication and consumer behaviour activities. It was applied in order to examine the strength of correlation between quantitative characteristics due to the small number of observations (Yue, Pilon, and Cavadias 2002). The calculation was made separately for every studied group because of their distinctness as well as the intention of identifying any possible differences between them. In order to identify the activities via SNS, the respondents were asked to determine the frequency of the behaviour by indicating the category – *very often, often, from time to time, rarely, very rarely, never* (Cronbach's  $\alpha = 0.689$ , thus confirming that the proposed scale was a reliable tool for measuring). The communication activities developed during the trial measurement are (the most frequent SNS used for these activities were added): Maintaining contacts with friends – FB, VK (C1), maintaining contacts with family – FB, VK (C2), meeting new people with similar interests – FB, VK, YT (C3), exchanging views and opinions on different topics with others – FB, VK, YT (C4), placing photographs and films – FB, VK, YT (C5), recommending interesting sites to other users – FB, VK, YT (C6), inviting friends/acquaintances to various events – FB, VK, YT (C7), placing information I became interested in – FB, VK, YT (C8), making comments on the information placed by other users – FB, VK, YT (C9). The consumer behaviour activities developed during the trial measurement are: Looking for information about different products – FB, VK, YT (CB1), asking friends/acquaintances for advice concerning the purchase of some product – FB, VK (CB2), recommending products for which somebody's opinion is valuable – FB, VK, YT (CB3), placing appropriate information when the bought product is of low quality – FB, VK, YT (CB4), plac-

TABLE 2 The Frequency of Using Facebook/YouTube/vkontakte (%)

Frequency	SNS	Germany	Poland	Russia
At least once a day	FB	88.03	89.86	25.5
	YT	69.6	61.5	50.3
	VK	No data	No data	58.5
At least once a week	FB	11.13	2.33	21.3
	YT	20.5	19.26	27.2
	VK	No data	No data	15.1
At least once a month	FB	2.56	1.01	22.1
	YT	14.5	8.1	18.2
	VK	No data	No data	8.2
I have an account but do not use this platform	FB	0.85	1.35	21.4
	YT	0.85	0.0	2.0
	VK	No data	No data	11.0
I do not use it	FB	5.13	4.73	9.7
	YT	2.56	7.8	2.3
	VK	No data	No data	7.2

ing sell/buy offers – FB, VK, YT (CB5), watching advertisements placed at SNS – FB, VK, YT (CB6), placing advertisements of products and services – FB, VK, YT (CB7), I obtain discounts from the enterprises and shops somebody is a fan of – FB, VK (CB8), taking part in competitions organized by the enterprises – FB, VK (CB9).

## Results

The SNS' frequency usage showed some differences among the respondents. In the Polish and German groups, FB and YT were the SNS indicated as the most frequently used (please see table 2).

FB is used *at least once a day* by around 90% of the Polish and German respondents. In the Russian group, there was a significant difference in the number of people using FB in comparison with the Polish and German respondents. This is due to the presence of VK in the Russian market, which is used daily by 58.5% of the Russian respondents. On the other hand, YouTube is used at least once a day by 69.6% of the German, 61.5% of the Polish, and 50.3% of the Russian respondents surveyed. Many people also use these SNS at least once a week, and a very low percentage of respondents do not use them at all.

TABLE 3 Spearman's Rank Correlation Indicators between the Frequency of Using Facebook/YouTube/vkontakte and Communication Activities

	Facebook			YouTube			vkon- takte
	(P)	(R)	(G)	(P)	(R)	(G)	(R)
C1	0.368**	-0.007	0.444**	0.116	0.119	0.002	0.319**
C2	0.120*	0.136	0.238**	-0.042	-0.067	0.087	0.172*
C3	-0.019	0.209**	0.259**	-0.006	-0.018	0.143*	0.032
C4	0.239**	0.159*	0.390**	0.190*	-0.061	0.106	0.194*
C5	0.263**	0.161*	0.369**	0.125*	0.152**	-0.057	0.221**
C6	0.204**	0.211**	0.279**	0.184*	-0.062	0.174*	0.119
C7	0.103	0.306**	0.335**	0.204**	-0.030	-0.024	0.084
C8	0.185*	0.276**	0.329**	0.170*	0.164**	-0.012	0.205**
C9	0.197*	0.176*	0.307**	0.190*	-0.046	-0.038	0.110

NOTES Column headings are as follows: (P) Poland, (R) Russia, (G) Germany. \* Correlation is significant at the  $p < 0.05$  level. \*\* Correlation is significant at the  $p < 0.01$  level.

To indicate the correlations between the frequency of using SNS and the range of activities described as communication (C), the authors used Spearman's rank correlation (please see table 3).

Referring to FB, in the Polish group the strongest correlations between the activities in the area of communication and the frequency of use of this SNS were obtained for C1 (maintaining contacts with friends via FB). Also in the German group, the strongest relations were gained when communicating with friends via Facebook (C1). The more often the respondents use FB, the more often they communicate with friends. It needs to be emphasized that in the German group, the authors achieved positive correlations ( $p < 0.01$ ), mostly with medium strength ( $> 0.3$ ) in relation to all the distinguished activities in communication. Similar results were obtained in the Polish group; however here, there are no statistical correlations between the frequency of using FB and contacting new people who share similar interests (C3) and inviting friends via FB to various events (C7). This confirms the results of Ellison, Steinfield, and Lampe's (2009) study, which showed that communication via FB takes place mainly with friends from the offline world. The same number of correlations ( $p < 0.01$  and  $p < 0.05$ ) were obtained in the Russian group where more frequent use of FB is related to inviting friends to events (C7)

and placing interesting information there (C8), recommending interesting websites (C6), and meeting online new people with similar interests (C3), etc. What is interesting is that Russians maintain contacts with friends and family members mostly using VK, not FB (please see table 3). Furthermore, the frequency of using VK is related to C4 ( $p < 0.05$ ), C5 ( $p < 0.01$ ) and C8 ( $p < 0.01$ ). However, it should be noted that the strength of  $R$  in the Polish and Russian groups is smaller when compared to the German group. These results lead to the conclusion that FB is the most important SNS for communication in the German group.

As far as YT is concerned, it needs to be pointed out that positive and statistically significant ( $p < 0.01$ ;  $p < 0.05$ ) correlations referring to the frequency of using this service and the types of communication were obtained from a smaller number of activities. There are relationships between the frequency of YouTube's use and the communication activities amongst Polish respondents in most cases. However, the strength of those relationships is at a weak level ( $< 0.3$ ). In the German and Russian groups, the authors observed two statistically significant correlations between these variables in each group. It should be noted that the strength of the relationships obtained in the Polish group is established at a weak level ( $< 0.3$ ) as well. Based on the results presented in table 3, the partial answer to the third research question can be formulated that the SNS, which is used most often for communication, is FB in Germany and Poland and VK in Russia. All respondents from these three countries communicate more with FB or VK than they do with YT. However, there were some statistically significant relations identified in the Polish group with regard to communication activities and YT. However, the analysis of the strength of these relationships showed that is much higher with regard to FB than it is for YT.

An analysis of the results which were obtained in relation to the area of consumer behaviour (CB), which are determined by the CB1 ... CB9 activities showed a significantly smaller number of statistically significant correlations ( $p < 0.01$  and  $p < 0.05$ ) than is the case for communication (please see table 4).

Regarding FB, it is worth emphasizing that in the German and Russian groups a great number of statistically significant ( $p < 0.01$  and  $p < 0.05$ ) correlations between the frequency of using that SNS and CB were noted. Moreover, Spearman's coefficients denoting the strength of the relationship as a medium were observed ( $> 0.3$ ) for CB4, CB5, CB7, and CB8. What is interesting is that Russian respondents used VK more

TABLE 4 Spearman's Rank Correlation Indicators between the Frequency of Using Facebook/YouTube/vkontakte and Consumer Behaviour Activities

	Facebook			YouTube			vkon- takte
	(P)	(R)	(G)	(P)	(R)	(G)	(R)
CB1	0.127*	-0.044	0.140**	0.175*	0.166*	0.125*	0.136*
CB2	0.165*	-0.119	0.188*	0.125*	0.086	0.035	0.254**
CB3	0.127*	0.112	0.167*	0.157*	0.145*	-0.034	0.044
CB4	0.080	0.379**	0.128*	0.197*	0.069	0.027	0.121*
CB5	-0.031	0.316**	0.106	0.192*	-0.032	0.098	0.076
CB6	0.056	0.287**	0.173*	0.191*	0.045	-0.116	0.030
CB7	-0.008	0.355**	0.044	0.100	-0.081	-0.007	0.192*
CB8	0.119*	0.322**	0.374**	0.109	-0.087	0.035	0.119
CB9	0.036	0.296**	0.362**	0.174*	0.088	0.167	0.077

NOTES Column headings are as follows: (P) Poland, (R) Russia, (G) Germany. \* Correlation is significant at the  $p < 0.05$  level. \*\* Correlation is significant at the  $p < 0.01$  level.

often than FB when looking for information about products (CB1) and asking friends for advice (CB2). This can be correlated to the results obtained for communication. FB is also the SNS, which is often used for consumer activities amongst German respondents. The strongest relationships ( $> 0.3$ ) were identified for CB8 and CB9. Furthermore in the German group, the frequency of FB's use is related to looking for information about products (CB1), asking friends about products (CB2), recommending products when they are worthy of it (CB3), and watching advertisements (CB6).

In the Polish group, the respondents showed a smaller number of consumer activities related to the frequency of using FB. The more often the Polish respondents use this platform, the more often their actions refer to CB1, CB2, CB3 and CB8. Furthermore, all of them represent a small level of strength ( $< 0.3$ ). In addition, an interesting observation is that all the groups (Germany, Poland and Russia) showed a statistically significant positive correlation between the frequency of using FB and receiving discounts at shops of which the respondents are fans (CB8). This is an important message for enterprises, which use FB in their marketing communication activities. The results of this study indicate which activities their potential customers use and are interested in.

The data collected in relation to YT show that the majority of statis-

tically significant ( $p < 0.01$  and  $p < 0.05$ ) correlations between the frequency of using this platform and CB was identified amongst Polish respondents (CB1, CB2, CB3, CB4, CB5, CB6, CB9). Both the Russian and the German respondents use YT when looking for information about different products (CB1). In addition, the Russian respondents use YT more to recommend products, which are of good quality (CB3). The *R* indicators achieved for YT are not very strong ( $< 0.3$ ).

Concluding the results presented above, it can be noted that in the area of CB, FB is a platform used more often than YT in the German and the Russian groups. The Polish respondents showed a greater correlation between CB activities and YT usage than FB.

### **Conclusions and Managerial Implications**

This exploratory study concludes that many consumers use FB, YT, and VK (for the Russian group). The results of our study also revealed similarities and differences amongst German, Polish, and Russian consumers. The literature review indicated that FB is a platform that is used mainly for communication activities – especially for communication with friends and families (Ellison, Steinfield, and Lampe 2007; Ross et al. 2009, Aburrai, Ishii, and Takeyasu 2013; Davies, Musango, and Brent 2016). Our study confirmed these results. In the Polish and the German groups, more frequent use of FB results in more frequent communication with friends and family members. The Russian respondents use VK (instead of FB) more frequently for those purposes. The correlation analysis showed considerably more communication activities via FB than via YT. In all three groups, the majority of the respondents use FB primarily to exchange views and opinions with other FB users, share their photos and videos, share interesting information they found, or comment on the information of others. This is an added value of our exploratory study, which was not researched in most other studies. Our study also revealed that Russian respondents very often use VK for the same purposes. This might prove to be valuable information for enterprises wishing to enter the Russian market because they should create a VK account and place information about themselves on VK. In fact, Baran and Stock (2015) compared VK and FB in terms of ease of use, usefulness, trust, fun, impact and diffusion, and found that Russians actually rank VK higher than FB.

According to Khan and Vong (2014), YT has many functions which enable such social interactions as sharing videos or commenting on sub-

mitted materials. Our study showed that the strongest relationships existed between using YT and placing respondents' photos and videos, recommending websites to the audience, and placing interesting information on YT. This backs up Khan and Vong's (2014) findings. However, C is used less frequently by YouTubers (YT users) than it is by FB and VK users.

When it comes to consumer behaviour, the literature review revealed that FB is an effective and useful tool for exchanging information about products and enterprises (Ho 2014; Grégoire, Salle, and Tripp 2014; Balaji, Khong, and Chong 2016). FB can also be an instrument for building enterprise and product trust when positive opinions are used within the context of e-WoM (Kucukemiroglu and Kara 2015; Hudson et al. 2016). On the one hand, the results of our study confirmed the results of previous research. On the other hand, our study revealed some new areas of FB use. It is interesting that in all three groups the more people use FB, the more they are interested in obtaining discounts from the enterprises and shops of which they are fans. Russian and German customers are also eager to take part in competitions organized by the firms of which they are fans. This can be very useful information for companies that use FB for their marketing communication activity. In fact, such consumer involvement (competitions, sharing information about events and other activities, offering discounts to fans) can be used by enterprises as a great tool in building a loyalty program. Another important factor is that the enterprises should monitor and check all information that appear about them both in FB (also VK) and YT. The results of our study showed that customers are eager to share both positive and negative opinions about products, producers and brands (in all SNS we researched).

When it comes to consumer activities and YT users, it can be concluded that YT is a base of knowledge about consumers and producers. The literature review showed that the analysis of the videos and the comments submitted to that platform and the comments thereof are a good source for recognizing consumers' needs and market trends (Pace 2008; Wendt, Griesbaum, and Kölle 2016). This is also confirmed by our study. For all three groups, YT is considered a good platform for placing information about products, innovations, enterprises, commercials, etc. as noted by Mangold and Faulds (2009). This is especially true for the Polish group.

Summing up the results, it can be concluded that FB and VK are used more than YT for C and CB. When comparing the C and CB activities,

it should be noted that respondents use SNS more often for communication than consumer actions. However, it needs to be stressed that our study revealed differences, which exist between Germany, Poland, and Russia. Furthermore, the general conclusions cannot be standardized for all markets. This study provides results, which can be useful to enterprises when planning and conducting their marketing activities in Germany, Poland, and Russia.

### **Limitations and Suggestions for Future Research**

Conducting empirical studies and using primary methods is usually associated with certain limitations and these only increase when researching in multiple countries. There are some limitations related to the presented research and its scope. Firstly, questionnaires can be problematic because respondent might select answers that are very different from their actual behaviour. The most effective method to minimise this risk is through observational research. Another issue is that the non-random sampling and the sample size create a problem because it is not possible to extrapolate the results for the entire population of the surveyed country. This notwithstanding, research limitations are very often a stimulus to either continue the study or expand it; especially when it comes to international activities. The international scale of research on the utility of SNS could be expanded and improved via random sampling and larger samples. For the future research, it could be useful to identify some products' categories and ask respondents about their behaviour with regard to C and CB activities via SNS. Such findings would bring more managerial implications for producers of specific goods.

### **References**

- Aburai, T., Y. Ishii, and K. Takeyasu. 2013. 'An Analysis of User Attitudes to SNS.' *International Business Research* 6 (5): 69–91.
- Balaji, M. S., K. W. Khong, and A. Y. L. Chong. 2016. 'Determinants of Negative Word-of-Mouth Communication Using Social Networking Sites.' *Information & Management* 53 (4): 528–40.
- Baran, K. S., and W. G. Stock. 2015. 'Acceptance and Quality Perceptions of Social Network Services in Cultural Context: Vkontakte as a Case Study.' *Journal of Systemics, Cybernetics and Informatics* 13 (3): 41–6.
- Barker, V., and H. Ota. 2011. 'Mixi Diary versus Facebook Photos: Social Networking Site Use among Japanese and Caucasian American Females.' *Journal of Intercultural Communication Research* 40 (1): 39–63.

- Barreto, A. M. 2013. 'Do Users Look at Banner Ads on Facebook?' *Journal of Research in Interactive Marketing* 7 (2): 119–39.
- Bonsón, E., M. Bednarova, and T. Escobar-Rodríguez. 2014. 'Corporate YouTube Practices of Eurozone Companies.' *Online Information Review* 38 (4): 484–501.
- Cassidy, E. D., A. Colmenares, G. Jones, T. Manolovitz, L. Shen, and S. Vieira. 2014. 'Higher Education and Emerging Technologies.' *The Journal of Academic Librarianship* 40 (2): 124–33.
- Chandler, J., and S. Chen. 2015. 'Prosumer Motivations in Service Experiences.' *Journal of Service Theory and Practice* 25 (2): 220–39.
- Chen, Y., S. Fay, and Q. Wang. 2011. 'The Role of Marketing in Social Media: How Online Consumer Reviews Evolve.' *Journal of Interactive Marketing* 25 (2): 85–94.
- Chiang, H.-S., and K.-L. Hsiao. 2015. 'YouTube Stickiness: The Needs, Personal, and Environmental Perspective.' *Internet Research* 25 (1): 85–106.
- Clow, K. E., and D. E. Baack. 2015. *Integrated Advertising, Promotion, and Marketing Communications*. Harlow: Pearson.
- Craig, C. S., and S. P. Douglas. 2006. 'Beyond National Culture: Implications of Cultural Dynamics for Consumer Research.' *International Marketing Review* 23 (3): 322–42.
- Davies, J., J. K. Musango, and A. C. Brent. 2016. 'A Systems Approach to Understanding the Effect of Facebook Use on the Quality of Interpersonal Communication.' *Technology in Society* 44: 55–65.
- De Vries, L., S. Gensler, and P. S. H. Leeflang. 2012. 'Popularity of Brand Posts on Brand Fan Pages: An Investigation of the Effects of Social Media Marketing.' *Journal of Interactive Marketing* 26 (2): 83–91.
- Ellison, N. B., C. Steinfield, and C. Lampe. 2007. 'The Benefits of Facebook "Friends:" Social Capital and College Students' Use of Online Social Network Sites.' *Journal of Computer-Mediated Communication* 12 (4): 1143–68.
- Erkan, I., and C. Evans. 2016. 'The Influence of eWOM in Social Media on Consumers' Purchase Intentions: An Extended Approach to Information Adoption.' *Computers in Human Behavior* 61:47–55.
- Garrigos-Simon, F. J., R. Lapiedra Alcami, and T. Barbera Ribera. 2012. 'Social Networks and Web 3.0: Their Impact on the Management and Marketing of Organizations.' *Management Decision* 50 (10): 1880–90.
- Gerard, J. G. 2012. 'Linking in with LinkedIn: Three Exercises That Enhance Professional Social Networking and Career Building.' *Journal of Management Education* 36 (6): 866–97.
- Grégoire, Y., A. Salle, and T. M. Tripp. 2014. 'Managing Social Media Crises with Your Customers: The Good, the Bad, and The Ugly.' *Business Horizons* 58 (2): 173–82.

- Gudykunst, W. B., S. Ting-Toomey, and E. Chua. 1988. *Culture and Interpersonal Communication*. Thousand Oaks, CA: Sage.
- Habibi, M. R., M. Laroche, and M.-O. Richard. 2016. 'Testing an Extended Model of Consumer Behavior in the Context of Social Media-Based Brand Communities.' *Computers in Human Behavior* 62:292–302.
- Hamid, S., J. Waycott, S. Kurnia, and S. Chang. 2015. 'Understanding Students' Perceptions of the Benefits of Online Social Networking Use for Teaching and Learning.' *The Internet and Higher Education* 26:1–9.
- Heinonen, K. 2014. 'Consumer Activity in Social Media: Managerial Approaches to Consumers' Social Media Behaviour.' *Journal of Consumer Behaviour* 10 (6): 356–64.
- Ho, C.-W. 2014. 'Consumer Behavior on Facebook: Does Consumer Participation Bring Positive Consumer Evaluation of the Brand?' *EuroMed Journal of Business* 9 (3): 252–67.
- Howard, K. E., M. S. Curwen, N. R. Howard, and A. Colon-Muniz. 2015. 'Attitudes toward Using Social Networking Sites in Educational Settings with Underperforming Latino Youth: A Mixed Methods Study.' *Urban Education* 50 (8): 989–1018.
- Hsu, M.-H., S.-W. Tien, H.-C. Lin, and C.-M. Chang. 2015. 'Understanding the Roles of Cultural Differences and Socio-Economic Status in Social Media Continuance Intention.' *Information Technology & People* 28 (1): 224–41.
- Hudson, S., L. Huang, M. S. Roth, and T. J. Madden. 2016. 'The Influence of Social Media Interactions on Consumer-Brand Relationships.' *International Journal of Research in Marketing* 33 (1): 27–41.
- Illia, L., and J. M. T. Balmer. 2012. 'Corporate Communication and Corporate Marketing: Their Nature, Histories, Differences and Similarities.' *Corporate Communications: An International Journal* 17 (4): 415–33.
- Iyengar, R., S. Han, and S. Gupta. 2009. 'Do Friends Influence Purchases in a Social Network?' Marketing Unit Working Paper 09-34, Harvard Business School, Boston, MA.
- Jalilvand, M. R., and N. Samiei. 2012. 'The Effect of Electronic Word of Mouth on Brand Image and Purchase Intention: An Empirical Study in the Automobile Industry in Iran.' *Marketing Intelligence & Planning* 30 (4): 460–76.
- Kaplan, A. M., and M. Haenlein. 2011. 'Two Hearts in Three-Quarter Time: How to Waltz the Social Media/Viral Marketing Dance.' *Business Horizons* 54:253–63.
- . 2010. 'Users of the World, Unite! The Challenges and Opportunities of Social Media.' *Business Horizons* 53:59–68.
- Kemp, S. 2016. 'Digital in 2016.' *We Are Social*, 27 January. <http://wearesocial.com/uk/special-reports/digital-in-2016>

- Khan, G. F., and S. Vong. 2014. 'Virality over YouTube: An Empirical Analysis.' *Internet Research* 24 (5): 629–47.
- Kietzmann, J. H., K. Hermekens, I. P. McCarthy, and B. S. Silvestre. 2011. 'Social Media? Get Serious! Understanding the Functional Building Blocks of Social Media.' *Business Horizons* 54:241–51.
- Kim, K. S., S. C. J. Sin, and T. I. Tsai. 2014. 'Individual Differences in Social Media Use for Information Seeking.' *The Journal of Academic Librarianship* 40:171–78.
- Krasnova H., S. Spiekermann, K. Koroleva, and T. Hildebrand. 2012. 'Online Social Networks: Why We Disclose.' *Journal of Information Technology* 25 (2): 109–25.
- Kucukemiroglu, S., and A. Kara. 2015. 'Online Word-of-Mouth Communication on Social Networking Sites: An Empirical Study of Facebook Users.' *International Journal of Commerce and Management* 25 (1): 2–20.
- Lee, C. S., and L. Ma. 2012. 'News Sharing in Social Media: The Effect of Gratifications and Prior Experience.' *Computers in Human Behavior* 28 (2): 331–9.
- Madden, A., I. Ruthven, and D. McMenemy. 2013. 'A Classification Scheme for Content Analyses of YouTube Video Comments.' *Journal of Documentation* 69 (5): 693–714.
- Mangold, W. G., and D. J. Faulds. 2009. 'Social Media: The New Hybrid Element of the Promotion Mix.' *Business Horizons* 52 (4): 357–65.
- Munguatasha, G. M., P. B. Muyinda, and J. T. Lubega. 2011. 'A Social Networked Learning Adoption Model for Higher Education Institutions in Developing Countries.' *On the Horizon* 19 (4): 307–20.
- Muntinga, D. G., M. Moorman, and E. G. Smit. 2011. 'Introducing COBRAS: Exploring Motivations for Brand-Related Social Media Use.' *International Journal of Advertising* 30 (1): 13–46.
- Nadkarni, A., and S. G. Hofmann. 2012. 'Why do People Use Facebook?' *Personality and Individual Differences* 52 (3): 243–9.
- Nakagawa, K., and A. E. Arzubaga. 2014. 'The Use of Social Media in Teaching Race.' *Adult Learning* 25 (3): 103–10.
- Ng, M. 2016. 'Factors Influencing the Consumer Adoption of Facebook: A Two-Country Study of Youth Markets.' *Computers in Human Behavior* 54:491–500.
- Ngai, E. W. T., K. K. Moon, S. S. Lam, E. S. K. Chin, and S. S. C. Tao. 2015. 'Social Media Models, Technologies, and Applications.' *Industrial Management & Data Systems* 115 (5): 769–802.
- Okazaki, S., and C. R. Taylor. 2013. 'Social Media and International Advertising: Theoretical Challenges and Future Directions.' *International Marketing Review* 30 (1): 56–71.

- Pace, S. 2008. 'YouTube: An Opportunity for Consumer Narrative Analysis?' *Qualitative Market Research: An International Journal* 11 (2): 213–26.
- Ray, D. 2014. 'Overcoming Cross-Cultural Barriers to Knowledge Management Using Social Media.' *Journal of Enterprise Information Management* 27 (1): 45–55.
- Ross, C., E. S. Orr, M. Sisic, J. M. Arseneault, M. G. Simmering, and R. R. Orr. 2009. 'Personality and Motivations Associated with Facebook Use.' *Computers in Human Behavior* 25 (2): 578–86.
- Rudman, R., and R. Bruwer. 2016. 'Defining Web 3.0: Opportunities and Challenges.' *The Electronic Library* 34 (1): 132–54.
- Ryan, T., and S. Xenos. 2011. 'Who Uses Facebook? An Investigation into the Relationship between the Big Five, Shyness, Narcissism, Loneliness, and Facebook Usage.' *Computers in Human Behavior* 27 (5): 1658–64.
- Schouten, P. 2011. 'Using Social Media in Study Abroad.' *Higher Education Administration with Social Media* 2:127–45.
- Sheldon, P. 2015. 'Understanding Students' Reasons and Gender Differences in Adding Faculty as Facebook Friends.' *Computers in Human Behavior* 53:58–62.
- Smith, A. N., E. Fischer, and C. Yongjian. 2012. 'How Does Brand-Related User-Generated Content Differ across YouTube, Facebook, and Twitter?' *Journal of Interactive Marketing* 26 (2): 102–13.
- Smith, P. R., and Z. Zook. 2011. *Marketing Communications: Integrating Offline and Online with Social Media*. London: Kogan Page.
- Steyn, P., M. T. Ewing, G. van Heerden, L. F. Pitt, and L. Windisch. 2011. 'From Whence it Came: Understanding Source Effects In Consumer-Generated Advertising.' *International Journal of Advertising* 30 (1): 133–60.
- Thelwall, M., P. Sud, and F. Vis. 2011. 'Commenting on YouTube Videos: From Guatemalan Rock to El Big Bang.' *Journal of the American Society for Information Science and Technology* 6 (3): 616–29.
- Tuten, T. L., and M. L. Solomon. 2014. *Social Media Marketing*. Los Angeles, CA: Sage.
- Wallace, E., E. Buil, and L. De Chernatony. 2014. 'Consumer Engagement with Self-Expressive Brands: Brand Love and WOM Outcomes.' *Journal of Product & Brand Management* 23 (1): 33–42.
- Walther, J. B. 1996. 'Computer-Mediated Communication: Impersonal, Interpersonal, and Hyperpersonal Interaction.' *Communication Research* 23 (1): 3–43.
- Ward, R. 2006. 'Blogs and Wikis: A Personal Journey.' *Business Information Review* 23 (4): 235–40.
- Wendt, L. M., J. Griesbaum, and R. Kölle. 2016. 'Product Advertising and

- Viral Stealth Marketing in Online Videos: A Description and Comparison of Comments on YouTube.' *Aslib Journal of Information Management* 68 (3): 250–64.
- Williams, D. L., V. L. Crittenden, T. Keo, and P. McCarty. 2012. 'The Use of Social Media: An Exploratory Study of Uses Among Digital Natives.' *Journal of Public Affairs* 12 (2): 127–36.
- Williams, S., and H. Verhoeven. 2008. 'We-Find-You or You-Find-Us? Internet Recruitment and Selection in the United Kingdom.' *International Review of Business Research* 4 (1): 374–84.
- Yang, H.-L., and C. L. Lin. 2014. 'Why do People Stick to Facebook Web Site? A Value Theory-Based View.' *Information Technology & People* 27 (1): 21–37.
- Yang, H. C., and Y. Wang. 2015. 'Social Sharing of Online Videos: Examining American Consumers' Video Sharing Attitudes, Intent, and Behavior.' *Psychology & Marketing* 32 (9): 907–19.
- Yue, S., P. Pilon, and G. Cavadias. 2002. 'Power of the Mann-Kendall and Spearman's Rho Tests for Detecting Monotonic Trends in Hydrological Series.' *Journal of Hydrology* 259 (1–4): 254–71.
- Zhang, Z., and Y. Xueb. 2015. 'An Investigation of How Chinese University Students Use Social Software for Learning Purposes.' *Procedia: Social and Behavioral Sciences* 186:70–8.



This paper is published under the terms of the Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0) License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).