Journal of Marketing and Consumer Behaviour in Emerging Markets

JMCBEM 1(7)2018

UNIVERSITY OF WARSAW FACULTY OF MANAGEMENT

University of Warsaw Faculty of Management

WWZ

ISSN 2449-6634

Overview

The Journal of Marketing and Consumer Behaviour in Emerging Markets (JMCBEM) is an open access journal. The submission of manuscripts is free of fee payment. This journal follows a double-blind reviewing procedure. The JMCBEM is indexed in ECONPAPERS and IDEAS/RePEC.

Aims and scope

Understanding consumer behaviour is crucial for the development of effective marketing strategies. The Journal of Marketing and Consumer Behaviour in Emerging Markets (JMCBEM) is an academic journal which aims at the dissemination of studies from a range of areas including marketing, consumer behaviour, consumer research and consumption, In addition, it intends to include case studies, as well as new concepts and practices reflecting managerial research. JMCBEM seeks to blend both theory and practice and thus contribute to the advancement of the field. We expect submitted articles to be theoretically sound, provide significant research findings and implications for existing approaches.

Special Issues

JMCBEM welcomes publication of Special Issues, whose aim is to bring together and integrate work on a specific theme; open up a previously under-researched area; or bridge the gap between formerly rather separate research communities, who have been focusing on similar or related topics. Thematic issues are strongly preferred to a group of loosely connected papers.
Proposals of Special Issues should be submitted to jmcbem@wz.uw.edu.pl. All proposals are being reviewed by the Editorial Team on the basis of certain criteria that include e.g.: the novelty, importance and topicality of the theme; whether the papers will form an integrated whole; and the overall ‹added value› of a Special Issue.

Editorial Board

Editorial Office: Faculty of Management, University of Warsaw, Szturmowa Str. 1/3, Postal Code 02-678 Warsaw, Email: jmcbem@wz.uw.edu.pl

Publisher: Faculty of Management Publishing House, University of Warsaw, Szturmowa Str. 1/3, Postal Code 02-678 Warsaw; Telephone: +48 22 55 34 164; Fax: +48 22 55 34 001; jmcbem@wz.uw.edu.pl

Webpage of Journal of Marketing and Consumer Behaviour in Emerging Markets:
http://www.wz.uw.edu.pl/portale/journal-of-marketing-and-consumer-behaviour-in-emerging-markets/dzial/view-papers

Contents

ISSN 2449-6634

(4–27)

Customers' Perceptions as an Antecedent of Satisfaction with Online Retailing Services

Peter Misiani Mwencha* (Corresponding Author)
School of Business, Kenyatta University,
P.O. Box 53555-00200 Nairobi, Kenya
E-mail: mwencha@hotmail.com

Stephen Makau Muathe
School of Business, Kenyatta University,
P.O. Box 43844 – 00100 Nairobi, Kenya
E-mail: muathesm@yahoo.com

Received: 29 November 2017/ Revised: 21 January 2018/ Accepted: 31 January 2018/Published online: 24 April 2018

ABSTRACT

The assessment of antecedents of customer satisfaction has become very important for the success of online retailing services. This paper reports the results of a study that investigated the antecedent role of customers' perceptions vis-a-vis satisfaction with online retailing services. While the study model conceptualizes customers' perceptions as a composite variable made up of three dimensions (perceived attributes, perceived risk and perceived value) prescribed by four established information systems (IS) and consumer behaviour frameworks, namely the Technology Acceptance Model (TAM), Perceived Risk Theory (PRT), Theory of Consumption Values (TCV) and Expectations-Artifact Model of Satisfaction (EAMS), it does not specify how the different perceptual factors influence online satisfaction; instead it aggregates all three dimensions into a higher-order construct called "customers' perceptions" and tries to understand the nature of relationship between the composite independent variable and the dependent variable. It employed a descriptive, correlational survey design whereby the response data collected from 240 registered users of 6 online retailers was analyzed using both descriptive as well as inferential statistics. The linear regression analyses indicate that the model provides a statistically significant explanation of the variation in consumers' online retailing satisfaction. The study also found empirical support for customers' perceptions as an antecedent of satisfaction with online retailing services.

JEL classification: M00, M31

Keywords: online retailing, customer satisfaction, perceptions, e-commerce, online consumer behaviour

1. INTRODUCTION

The commercial use of the internet has grown tremendously over the last two decades, characterized by a proliferation of various online-based electronic commerce (e-commerce)

DOI: 10.7172/2449-6634.jmcbem.2018.1.1

services. One of these services is online retailing (internet retailing, electronic retailing, or e-tailing), the direct sale from business to consumer (B-2-C) through electronic storefronts, typically designed around an electronic catalogue and shopping cart model (Stair & Rynolds, 2010). Due to its huge popularity, online retailing has had a significant impact on several market segments such as travel, consumer electronics, hobby goods, and media goods across the globe (Weltevrenden & Boschma, 2008). Consequently, online retailing has developed to become an established marketing channel in its own right within the consumer marketplace (Doherty & Ellis-Chadwick, 2010).

In the context of online shopping, the website of an online retailer is the main contact point by which the online retailer and consumers interface in the online shopping process (Ahn, Ryu & Han, 2004). Therefore, the quality of service rendered during the course of the whole online shopping transaction has significant influence on customer satisfaction (Ho & Wu, 1999). While a high level of customer satisfaction does not necessarily guarantee customer loyalty, dissatisfaction will cause customers to take their business elsewhere. In other words, customers who are dissatisfied with the level of service they have received will be less likely to return in the future, or if they do return, they will most likely do so with less frequency than they did in the past. Conversely, customers who are extremely satisfied with their service experience with a given firm will most likely continue to return to that firm at the same frequency or even more frequently (Davis & Heineke, 1998). As a result, electronic satisfaction (e-satisfaction) has become vital for online retailers to attract and retain online shoppers in this virtual environment (Ting, Ariff, Zakuan, Sulaiman & Saman, 2016).

With the ever increasing popularity of electronic commerce, the evaluation of antecedents and of customer satisfaction has become very important for the online shopping store vendors as well as for researchers (Ho & Wu, 1999). This is driven by the fact that customer satisfaction has become a hoped-for business outcome, and therefore focusing discussion on its antecedents is a necessary means to effect the desired outcome (Day & Crask, 2000). However, a review of past research literature suggests that there are various antecedent factors of customer satisfaction, since the researchers chose the variables and factors that best suit each circumstance in their perception (Jiradilok, Malisuwan, Madan, and Sivaraks, 2014). In the online context, a number of studies have shown that satisfaction is mainly affected by customers' perceptions of their user experiences with information technology (IT) (Bhattacherjee, 2001a; 2001b). Therefore, in this study, satisfaction is conceptualized as an outcome of customers' perceived performance of the e-retailing service.

2. LITERATURE REVIEW

The literature review is drawn from past online consumer behaviour and information systems (IS) studies regarding two main variables: the independent variable – customer perceptions and the dependent variable – satisfaction. These variables are discussed in the following sections. The research hypothesis was developed based on theory from the combined literature.

2.1 Customer Satisfaction

Customer satisfaction is often defined as the customers' post-purchase comparison between pre-purchase expectation and performance received (Oliver, 1980; Zeithaml *et al*., 1993). Customer satisfaction is when products and services meet the expectation of the consumers (Kotler, Cunningham & Turner, 2001). Like traditional business, online firms also need to satisfy their customers. Normally, most satisfied customers intend to re-purchase the products if the product performance meets their expectation. Moreover, from a marketing perspective, satisfaction

 DOI: 10.7172/2449-6634.jmcbem.2018.1.1

ensures that customers develop positive emotions towards brands, while dissatisfaction translates into negative brand emotions (Pizam *et al*., 2016).

How one conceptualizes customer satisfaction also affects the modelling and measurement of the construct and its antecedents. Johnson *et al.* (1995) describe two basic conceptualizations of satisfaction, namely: transaction-specific and cumulative. Transaction-specific satisfaction is a customer's transient evaluation of a particular product or service experience (Cronin & Taylor, 1992; Parasuraman *et al.*, 1988). The cumulative model conceptualizes satisfaction as a cumulative construct that describes the total consumption experience with a product or service to date (Johnson and Fornell, 1991; Meeks, 1984; Van Raaij, 1981). Although transaction-specific satisfaction may provide insights into particular product or service encounters, cumulative satisfaction is arguably a better predictor of future behaviour (customer retention) and firm performance (profitability). The approach employed in this study is both aggregate and cumulative, in line with Johnson, Nader & Fornell (1996). Accordingly, this study defined satisfaction as the customer's overall positive evaluation of the online retailing service following initial usage or based on all prior interactions/encounters and shopping experiences.

As demonstrated in past literature, customer satisfaction has been considered one of the most important concepts (McQuitty *et al*., 2000), and one of the main goals in marketing (Erevelles & Leavitt, 1992). Owing to the growing importance of online commerce, a number of studies have focused on online satisfaction (Nusair & Kandampully, 2008) because it helps to build customer trust (Flavian *et al*., 2006), enhances favourable word-of-mouth (Bhattacherjee, 2001), leads to repeat purchases (Kim, 2005), predicts purchase behaviour (McQuitty *et al*., 2000), projects the internet retailer's endurance and success (Evanschitzky *et al*., 2004) and is critical for retaining current users (Bhattacherjee, 2001a; 2001b). It is therefore imperative to be able to understand and measure satisfaction in the context of e-commerce.

According to Davis & Heineke (1998), defining customer satisfaction in service operations has been approached in two general ways: (1) satisfaction as a function of disconfirmation; and (2) satisfaction as a function of perception. Owing to its complexity the disconfirmation model has been criticized by some researchers (Teas, 1994; Goode & Moutinho, 1995) who prefer another approach. Consequently, the alternative approach that appears to be gaining acceptance is that satisfaction depends primarily on the customer's perception of service performance rather than on the disconfirmation between perception and expectation (Cronin & Taylor, 1994; Teas, 1993). This approach is in line with extant research evidence which demonstrates that overall customer satisfaction in a service encounter is influenced by customers' perception (Brocato *et al.*, 2012; Anderson *et al.*, 2008; Sreejesh *et al.*, 2017).

If customer satisfaction is viewed as an outcome, then focusing discussion on its antecedents is necessary to effect the desired outcome (Day & Crask, 2000). This study will use this approach, whereby customers' perceptions are conceptualized as having an antecedent effect on satisfaction with online retailing services.

2.2. Customers' Perceptions

Perceptions are essentially mental maps made by people to give them a meaningful picture of the world on which they can base their decisions (Berelson & Steiner, 1964). Perception occurs when stimuli are registered by one of the five human senses: vision, hearing, taste, smell and touch (Hoyer & MacInni, 2008) via a process of sensing, selecting, and interpreting stimuli in the external, physical world into the internal, mental world (Wilkie, 1994). This perceptual process leads to a response which is either overt (actions) or covert (motivations, attitudes, and feelings) or both.

From a consumer behaviour perspective, perceptions are an attempt by a consumer to obtain and process information about a market situation with a purpose to make himself aware of the

 DOI: 10.7172/2449-6634.jmcbem.2018.1.1

market and market offerings (Sahaf, 2008). Consumers establish and continuously update their perceptions about the alternative products/services that they are considering and based on those perceptions, they determine their attitudes towards the products (preferences). According to Schiffman & Kanuk (2010), perception has strategy implications for marketers because consumers make decisions based on what they perceive rather than on the basis of objective reality. As a result, marketers have realized that understanding the perceptual process of consumers helps them to design better ways to help customers perceive their products and services favourably, especially since products and services that are perceived distinctly and favourably have a much better chance of being purchased than products or services with unclear or unfavourable images

Consequently, both marketing and information systems (IS) researchers have over the years sought to establish how perceptions of an IT innovation influence satisfaction (Lin & Sun, 2009). It is therefore important that an online business understands the perceptions of the customer, as this can help the businesses to get a higher chance of satisfaction of their customers and at the same time attract and maintain their loyal customers (Yee & Yazdanifard, 2014). Consequently, for this study, the customers' perceptions construct serves as the independent variable. It is composed of three constructs (perceived attributes, perceived risk and perceived value) identified in extant service management, consumer behaviour and technology adoption literature as playing an antecedent role via-a-vis satisfaction with online retailing services. However, in this study, the three dimensions are aggregated to form a composite higher-level construct known as "customers' perceptions" in order to investigate the relationship between the composite independent variable and the dependent variable. These variables are discussed in the following sections.

2.2.1. Perceived Attributes

Perceived attributes (PA) refer to the perception towards the primary characteristics of innovations by actual adopters and potential adopters. The behaviour of individuals is predicated by how they perceive these primary attributes. Because individuals might perceive primary characteristics in different ways, their eventual behaviours might differ (Moore & Benbasat, 1991). PAs have been found to influence consumer usage patterns vis-à-vis information and communications technology (ICT), whereby users would perceive the attributes of these innovations favourably, while non-users and rejecters perceive them unfavourably enough not to use them (Rugimbana & Iversen, 1994). In this study, PA is an aggregate variable of three dimensions (perceived usefulness, perceived compatibility and perceived ease of use) drawn from the work of Davis' TAM (1989), Rogers' IDT (1995; 2003), and Moore and Benbasat's PCI model (1991).

2.2.2. Perceived Risk

Perceived risk (PR) is a subjective concept that relates to the uncertainty and consequences associated with a consumer's action. A perception of risk with regard to purchasing or using a product or service dissuades a consumer from taking further action in that regard (Sharma, Durand & Gur-Arie, 1981; Bhatnagar, Misra & Rao, 2000). Due to the personal nature of such assessments, it cannot be objectively determined. PR can vary across individuals, situations and types of products and services (Day & Crask, 2000). In the online retailing context, the intangible nature of online transactions poses a risk for consumers, impeding further use of online purchasing services (Bhatnagar *et al*., 2000; Hansen, 2007). Previous research on its antecedent role also suggests that PR negatively impacts internet shopping (Liebermann & Stashevsky, 2002). By and large, perceived risk is conceptualized as a multi-dimensional construct in several information systems studies (Cox & Rich, 1964; Jacoby & Kaplan, 1972; Bettman, 1973; Bhatnagar *et al*., 2000, Forsythe & Shi, 2003; Zhang, Tan, Xu & Tan, 2012). This study adapted the perceived risk indicators from a review of relevant literature. These are i) financial risk (Jacoby & Kaplan,

DOI: 10.7172/2449-6634.jmcbem.2018.1.1

1972; Bettman, 1973, Bhatnagar *et al*., 2000; Forsythe & Shi, 2003), ii) performance risk (Jacoby & Kaplan, 1972; Bettman, 1973; Forsythe & Shi, 2003) and iii) personal/privacy risks drawn from work by Jarvenpaa & Todd, 1997; Tan, 1999; Forsythe *et al*., 2006.

2.2.3. Perceived Value

Perceived value (PV) is a broad and abstract concept that refers to the benefits ascribed to the purchase/use of a product or service. As Monroe (1990) notes, value is "the trade-off between the quality or benefits [consumers] perceive in a product relative to the sacrifice they perceive by paying the price". Customer value is usually operationalized as a trade-off between quality (benefit) and cost (price) (Bolton & Drew, 1991). Consumers sometimes attribute value to an item because its consumption or usage serves as a means to an end (Day & Crask, 2000), or "value-in-use" (Woodruff & Gardial, 1996). In knowing how to manipulate perceived value, the marketing manager in turn has knowledge essential to satisfying customers (Day & Crask, 2000). The perceived value construct is multi-dimensional in nature (Sheth, Newman & Gross, 1991; Sánchez-Fernández & Iniesta-Bonillo, 2007). In this study, it has four dimensions drawn from relevant literature, namely i) monetary value, ii) convenience value, iii) social value and iv) emotional value. Online customer value can be different from its offline counterpart. In online retailing settings, not only the product itself, but also the web store and the internet channel contribute value to customers (Yunjie & Shun, 2004). Previous research established that perceived customer value is a significant determinant of online transaction behaviour (Chew, Shingi & Ahmad, 2006).

3. THEORETICAL REVIEW

This study is underpinned by four theories commonly used in services marketing and consumer technology adoption research. These are (i) Technology Acceptance Model, (ii) Perceived Risk Theory (iii) Theory of Consumption Values and (iv) Expectations-Artifact Model of Satisfaction.

4.1. The Technology Acceptance Model

The Technology Acceptance Model (TAM) of Davis (1989) and Davis, Bagozzi and Warshaw (1989) is one of the most widely used models of information systems (IS) for explaining or predicting the motivational factors in user acceptance of technology. The TAM states that users' positive perception of usefulness as well as perceived ease of use toward any technology will lead to a positive attitude toward using that particular technology, which in turn leads to the actual system use. In this study, the perceived usefulness (PU) and perceived ease of use (PEOU) indicators are drawn from the TAM. In spite of its efficacy, several researchers have sought to extend the TAM by adding different constructs. For instance, a study by Lin and Sun (2009) that investigated the link between TAM factors and e-satisfaction in the online shopping context found a positive and significant relationship between TAM factors and e-satisfaction. Alternatively, other studies have used the TAM in combination with other frameworks/models in various contexts to test its ability to predict different outcomes. For example, a study by Cho (upcoming) which focuses on consumer satisfaction in online shopping attempts to combine the expectations disconfirmation theory (EDT) with the TAM. Similarly, rather than predicting the acceptance and use of IS, this study investigated how TAM factors amalgamated with other consumer behaviour frameworks might contribute to online satisfaction.

DOI: 10.7172/2449-6634.jmcbem.2018.1.1

4.2. The Perceived Risk Theory

The Perceived Risk Theory was first introduced by Bauer (1960) in studying consumer behaviour. According to this theory, consumers perceive risk because they face uncertainty and potentially undesirable consequences as a result of purchase or usage of products/services. This means that the more risk consumers perceive, the less likely they will purchase/use a product or service (Bhatnagar, Misra & Rao, 2000). The perceived risk construct in this study is derived from the perceived risk theory and adapted to the online retailing context. The core constructs of the theory have been decomposed by researchers into several perceived risk dimensions. For instance, Cunningham (1967) conceptualized six dimensions of perceived risk: performance, financial, opportunity/time, safety, social, and psychological risk, while Bhatnagar *et al*. (2000) argued that two types of risk exist when buying over the internet: product risk and financial risk. These risks are thought to be present in every choice situation but in varying degrees, depending upon the particular nature of the decision (Taylor, 1974). Moreover, different individuals have different levels of risk tolerance or aversion (Bhatnagar *et al*., 2000). Findings from a study by Forsythe and Shi (2003) which examined the relationship between types of risk perceived by internet shoppers and their online patronage behaviours suggested that perceived risk is a useful context to explain barriers to online shopping.

4.3. Theory of Consumption Values

The theory of consumption values (TCV) is a consumer behaviour theory that was developed by Sheth, Newman and Gross (1991a; 1991b). Over the years, TCV has evolved into a popular marketing theory and has been widely applied in various contexts, including IS. The theory focuses on explaining why consumers choose to use or not to use a specific product or service, arguing that consumer decisions are made based on perceived value. The TCV has five core constructs which are conceptualized as five different types of values (Functional value, Social value, Epistemic value, and Emotional value, and Conditional value) that underlie consumer choice behaviour. In this study, the perceived value construct is drawn from the TCV by Sheth *et al.* (1991a; 1991b) and adapted to the online retailing context. Kalafatis, Ledden and Mathioudakis (n.d.) postulate that all or any of the consumption values can influence a decision and can contribute additively and incrementally to choice; consumers weight the values differently in specific buying situations, and are usually willing to trade-off one value in order to obtain more of another. TCV's strong point is its analytical strength, which helps practitioners to understand consumer decision making. This enables them to develop practical strategies that address real market conditions (Gimpel, 2011).

4.4. The Expectations-Artifact Model of Satisfaction

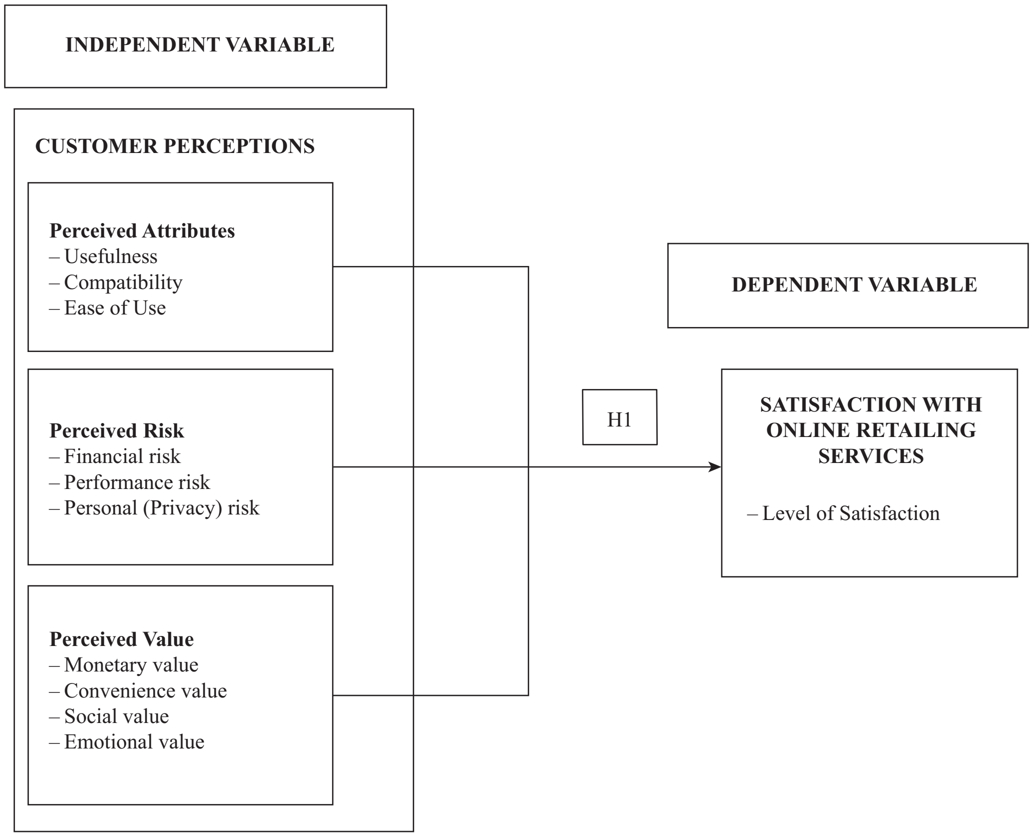
The Expectations-Artifact Model of Satisfaction (EAMS) is a relatively new alternative framework that was first proposed by Johnson, Der and Fornell (1996) as a response to the shortcomings of extant satisfaction models such as the Disconfirmation Model by Oliver (1980) as well as the performance model. It posits that the primary determinant of customer satisfaction should be perceived performance. According to the model, expectations should have no positive or negative effect on satisfaction because they serve as neither an anchor, as in the performance model, nor a standard of comparison, as in the disconfirmation model, for evaluating satisfaction. At the same time, perceived performance should co-vary with customers' stated expectations. Performance gives rise to the expectations that customers report. Accordingly, the model posits a direct positive effect of perceived performance on satisfaction and a positive relationship between performance and expectations, without linking expectations directly to satisfaction, to capture these predictions (Johnson *et al*., 1996).

DOI: 10.7172/2449-6634.jmcbem.2018.1.1

5. CONCEPTUAL FRAMEWORK

The conceptual framework for this study is made up of various service marketing, consumer decision-making and IS constructs; it is based on the premise that customers' perceptions have a direct effect on satisfaction with online retailing services. This study attempts to develop a comprehensive model linking the factors drawn from the TAM model, the PRT, and the TCV to customers' satisfaction with online retailing services, which is drawn from the EAMS. However, the study does not specify how the different perceptual factors influence online satisfaction; instead it aggregates all factors into a composite variable – "customers' perceptions" – and posits the nature of relationships between the independent variables and the dependent variable. The conceptual framework, a graphical representation of how these theoretical constructs are interconnected, is depicted in Figure 1.

Figure 1
Conceptual Model



Source: Researcher, 2017.

6. METHODOLOGY

6.1. Research Design

This research adopted a cross-sectional, descriptive, correlational study design that sought to establish the antecedent role of customers' perceptions with regard to satisfaction with online retailing services in Kenya. Descriptive, correlational studies seek to investigate the studied phenomena but are not able to control or manipulate variables, and thus require the researcher to collect data and determine relationships without inferring causality (Swanson & Holton, 2005).

DOI: 10.7172/2449-6634.jmcbem.2018.1.1

6.2. Empirical Model

The antecedent role of customers' perceptions in satisfaction was ascertained using a linear regression equation in line with Spencer *et al*. (2005). Since the customers' perception variable was computed as a continuous composite/aggregate value made up of three constructs (perceived attributes, perceived risk and perceived value), the study equation was in the form of a simple linear regression, a data analysis technique for identifying underlying correlations among data in research (Nimon, 2010). The simple linear regression (equation 1) is illustrated below:

$$Y = \beta_0 + \beta_1 P_1 + \varepsilon_1 \quad (1)$$

Where:
Y = Customer Satisfaction (Dependent variable)
β_0 = Constant
β_1 = Linear regression coefficient
P_1 = Customers' Perceptions (Composite Value)
ε_1 = Error Term

6.3. Sampling and Data Collection

6.3.1. Sampling

The study respondents were 18,147 registered users drawn from six online retailing firms. A sample of 391 respondents was selected using multi-stage sampling methods including purposive, stratified and simple random sampling. Purposive sampling was employed to select the 6 online retailing firms that were accessible to the researcher. Thereafter, stratified random sampling, a probability sampling technique, was used to select the sample from the 18,147 respondents who were registered users of the online retailing services. Stratified random sampling was employed because the sampling frame was not homogeneous since the sample contained sub-groups, thereby necessitating a fair representation of these sub-groups in the sample size (Ahuja, 2005). This technique ensures that observations from all relevant strata are included in the sample (Lemm, 2010). Stratified sampling also guarantees that every possible sample matches the population distribution on strata-defining characteristics (Mallet, 2006).

To this end, proportional stratification technique was initially employed to arrange the study elements according to the respective strata. In proportional stratified sampling, the population is divided into groups or strata. Samples are then selected (e.g., using simple random sampling) by strata, in proportion to strata sizes (Mallet, 2006). The six online retailing firms in Nairobi, Kenya formed the six strata from which the respondents were drawn. Subsequently, a sample was randomly drawn from each strata and categories using random sampling method. In simple random sampling, every possible combination of population elements is equally likely to be selected (Mallet, 2006), thereby eliminating possible bias. For this study, a computerized random number generator was used to select the respondents out of the whole population. This was aimed at eliminating bias in the sample selection.

6.3.2. Questionnaire Construction

Primary data was collected using a 54-item questionnaire composed of three different sections (A, B & C) based on different scales of measurement. Section A consisted of 3 questions on demographic factors, i.e. age, education level and income level; Section B had 46 close-ended Likert scale type questions with seven-point rating scale ranging from 1 = "strongly disagree" to 7 = "strongly agree"; Section C consisted of 5 close-ended questions with 5-point rating scale

 DOI: 10.7172/2449-6634.jmcbem.2018.1.1

with various ordered responses ("strong yes" – "strong no"; "extremely well" – "extremely poorly"; "very dissatisfied" – "very satisfied"). The measures were adopted from previous studies (Swan *et al*., 1981; Oliver & Westbrook, 1982; Oliver & Bearden, 1983; Thompson *et al*., 1991; Compeau & Higgins 1995b; Compeau *et al*. 1999, Sweeney & Soutar, 2001; Venkatesh *et al*., 2003; Hernández *et al*., 2011) and reworded to suit the context of the current study. Each scale item was modelled as a reflective indicator of its hypothesized latent construct. A sample of the final questionnaire is shown in Appendix 1.

Table 1
Operationalization and Measurement of Study Variables

Variable	Indicator	Nature	Operationalization	Measure	Question No.
Perceived Attributes	Usefulness	Independent Variable (IV)	The degree to which consumers believe that usingan e-commerce service will enhance their activities.	4 items; 7 point Likert scale. (Davis, 1989; Davis *et al*., 1989)	B1-B4
	Compatibility	Independent Variable (IV)	The degree to which using an e-commerce service is perceived as being consistent with the values, needs, and habits of potential user.	4 items; 7 point Likert scale (Moore & Benbasat, 1991)	B5-B8
	Ease-of-Use	Independent Variable (IV)	The degree to which an e-commerce system is perceived as relatively easy to understand and use.	6 items; 7 point Likert scale (Davis, 1989; Davis *et al*., 1989; Forsythe et al., 2006)	B9-B14
Perceived Risk	Financial risk	Independent Variable (IV)	The degree of anxiety regarding the perceived financial loss as a result of e-commerce usage.	3 items; 7 point Likert scale (Zhang *et al*., 2012; Forsythe *et al*., 2006)	B15-B17
	Performance risk	Independent Variable (IV)	The level of uncertainty regarding the perceived performance of an e-commerce system.	5 items; 7 point Likert scale (Forsythe *et al*., 2006)	B18-B22
	Personal risk	Independent Variable (IV)	The level of anxiety regarding the perceived compromise/ insecurity of personal information as a result of e-commerce usage.	3 items; 7 point Likert scale (Forsythe *et al*., 2006; Tan, 1999)	B23-B25

DOI: 10.7172/2449-6634.jmcbem.2018.1.1

Variable	Indicator	Nature	Operationalization	Measure	Question No.
Perceived Value	Monetary value	Independent Variable (IV)	The financial utility derived from e-commerce usage	4 items; 7 point Likert scale (Sweeney & Soutar, 2001)	B26-B29
	Convenience value	Independent Variable (IV)	The time, place and execution utility derived from usage of the e-commerce system	5 items; 7 point Likert scale; (Chang *et al.*, 2012; Mosavi & Ghaedi, 2012)	B30-B34
	Social value	Independent Variable (IV)	The perceived favourability/ approval derived from one's social milieu regarding e-commerce usage	5 items; 7 point Likert scale (Tan, 1999; Sweeney & Soutar, 2001)	B35-B39
	Emotional value	Independent Variable (IV)	The utility derived from the feelings or affective states that an e-commerce service generates	7 items; 7 point Likert scale (Thompson *et al.*, 1991; Compeau & Higgins, 1995b; Compeau *et al.*, 1999; Sweeney & Soutar, 2001)	B40-B46
Customer Satisfaction	Level of Satisfaction	Dependent Variable (MV)	The level of satisfaction with the e-commerce system	4 item, 5 point Categorical scale (Westbrook, 1980; Oliver & Bearden, 1983; Oliver & Westbrook, 1982; Swan *et al.*, 1981) Ordinal	C1-C5
Demographic Factors	Age	Moderating Variable (MV)	Age group	1 item; Ordinal (Venkatesh *et al.*, 2003)	A1.
	Income	Moderating Variable (MV)	Level of Income	1 item; Ordinal (Hernández, 2011)	A2.
	Education	Moderating Variable (MV)	Level of Education	1 item; Ordinal	A3.

Source: Researcher (2017).

6.3.3. Data Collection

Primary data collection was carried out via an e-mail questionnaire that was administered to the 391 respondents. In order to increase the survey response rate (RR), the e-mail questionnaires were followed up with a self-administered questionnaire that was delivered to non-respondents using the drop-and-pick method as recommended in previous studies (Rojas-Méndez & Davies, n.d., Ibeh *et al.*, 2004), whereby respondents are contacted in person and asked to fill in a questionnaire at their most convenient time. Secondary data was collected from a variety of industry sources including newsletters, directories and trade publications as well as from industry magazines.

6.4. Validity and Reliability of Instrument

6.4.1. Validity

Validity was assessed using two methods: criterion-related and content validity. Criterion-related validity was demonstrated through the questionnaire items which were derived from measures validated in prior research (Nunnally & Bernstein, 1994; Cooper & Schindler, 2008) and standardized and adapted to the context of this study. Content validity was achieved using a panel of five experts in the field who were asked to give their views and suggestions on how to improve the questionnaire (Nunnally & Bernstein, 1994; Cooper & Schindler, 2008). The five experts evaluated the questionnaire and found that the questions were relevant to the study variables.

6.4.2. Reliability

Cronbach's Alpha coefficient (α) was used to assess reliability of the measures. As a rule of thumb, reliability of 0.7 and above is recommended to denote the research instrument as reliable (Roberts, Priest & Traynor, 2006). Using this cut-off value, all but one of the measures exhibited internal consistency by having Cronbach's Alpha values greater than 0.7 with the exception of social value ($\alpha = 0.538$). However, Cronbach's Alpha for social value does meet the guidelines suggested by Hair, Anderson, Tatham and Black (2006), who recommended reliability level of 0.5 and above. Following the guideline developed Gliem & Gliem (2003), low Cronbach's Alpha for social value could be an indicator of a poor scale (but still not unacceptable). This is not surprising since Cronbach's Alpha values are quite sensitive to the number of items in the scale. With short scales (e.g., scales with less than ten items) it is common to find quite low Cronbach values (e.g., .5).

Table 2
Reliability of instruments

Factor	Measure	Number of Items	Reliability (α)
Perceived Attributes (PA)	Usefulness	4 items (B1–B4)	0.954
	Compatibility	4 items (B5–B8)	0.954
	Ease-of-Use	4 items (B9–B14)	0.950
Perceived Risk (PR)	Financial Risk	3 items (B15–B17)	0.801
	Performance Risk	5 items (B18–B22)	0.702
	Personal Risk	3 items (B23–B25)	0.885
Perceived Value (PV)	Monetary Value	4 items (B26–B29)	0.839
	Convenience Value	5 items (B30–B34)	0.954
	Social Value	5 items (B35–B39)	0.538
	Emotional Value	7 items (B40–B46)	0.975
Customer Satisfaction	Level of Satisfaction	5 items (C1–C5)	0.941

Source of data: Survey (2017).

6.5. Data Analysis

Data was analyzed using both descriptive as well as inferential statistics. Descriptive statistics provide a summary of the characteristics of response data (Wilson, 2006). The descriptive statistics that were used in this study include frequency distribution (in terms of counts and percentages) as well as measures of central tendencies (mean) and dispersion (standard deviation). On the other

 DOI: 10.7172/2449-6634.jmcbem.2018.1.1

hand, inferential statistics was performed using binary linear regression. This is a type of analysis that examines the relationship between two variables drawn from the same sample population (Zickmund & Babbin, 2007). Statistical Package for Social Sciences (SPSS) software version 19 was used to conduct the data analysis. Data was presented in the form of tables and narratives.

7. RESULTS AND DISCUSSIONS

The summary of the results is presented in two main sections: (1) descriptive statistics and (2) inferential statistics.

7.1. Descriptive Statistics

7.1.1. Response Rates

From three hundred and ninety-one (391) respondents who are registered as users of 6 online retailing services in Nairobi County, Kenya, two hundred and forty-two (240) were able to participate in the study by completing and returning the questionnaire on time. This was equivalent to a 61.38% response rate and is depicted in Table 3. According to Rubin and Babbie (2011), a 50% response rate is considered adequate for reporting and analysis. This means that the response data was more than adequate for analysis.

7.1.2. Demographic Characteristics

This section shows the summarized responses regarding the demographic characteristics of the sample based on Section A of the questionnaire (Table 3) as well as the descriptive statistics for the composite indexes based on section B of the questionnaire (Table 4).

Table 3
Demographic characteristics of the sample (n = 240)

Variable	Category	Frequency	Percentage
Age	18–23 Years	30	12.5
	24–29 Years	105	43.8
	30–35 Years	77	32.1
	36–41 Years	24	10.0
	42–47 Years	4	1.7
	48 years and above	0	0
	Total	240	100.0
Level of Education	High School Cert.	1	0.4
	Diploma	37	15.4
	Bachelor’s Degree	139	57.9
	Master’s Degree	51	21.3
	Doctorate	8	3.3
	Professional	3	1.3
	Other	1	0.4
	Total	240	100
Monthly Income	Less than KSh24,999	31	12.9
	KSh25,000 – 49,999	45	18.8
	KSh50,000 – 74,999	54	22.5
	KSh75,000 – 99,999	43	17.9
	KSh100,000 – 124,999	32	13.3
	KSh125,000 & above	35	14.6
	Total	240	100.0

Source: Survey data (2017).

DOI: 10.7172/2449-6634.jmcbem.2018.1.1

In terms of the age of the response group (*n* = 240), the majority of respondents (43.8%) were between 24–29 years while the minority (1.7%) were between 42–47 years of age. None of respondents were older than 48 years of age. When it comes to education, the majority of the respondents (57.9%) have a Bachelor's degree, followed by 51 (21.3%) who have a Master's degree and 37 (15.4%) who have a diploma. Only 1 (0.4%) had a high school certificate, while 3 (1.3%) had a professional qualification. With regard to the monthly income of the respondents, the majority (22.5%) earned between KSh 50,000–74,999, whereas the minority (12.9%) had a monthly income of less than KSh 24,999 per month. Taken as a whole, the demographic information showed that the respondents are predominantly young, relatively well educated and with relatively high levels of income. These findings concur with past studies regarding e-shoppers which established that online shoppers are generally younger, with a high level of income and a university education (Li, Kuo & Russell, 1999; Vrechopoulos, Siomkos & Doukidis, 2001; Dholakia & Uusitalo, 2002).

In Table 4, the descriptive statistics for the ordinal data was presented as means and standard deviations.

Table 4
Descriptive statistics results for study constructs

Variable	Measure	Statistic
Perceived Attributes	Mean	4.3899
	Std. Deviation	1.54140
Perceived Risk	Mean	4.1256
	Std. Deviation	1.27855
Perceived Value	Mean	4.2589
	Std. Deviation	1.16118
Customer Perceptions	Mean	4.2585
	Std. Deviation	.62906
Satisfaction	Mean	3.1650
	Std. Deviation	1.0866

N = 240

Source: Survey data (2017).

The results indicate that perceived attribute had the highest mean score (4.389), closely followed by perceived value (4.258) and perceived risk (4.125). This high value concurs with several studies that have empirically established that the perceived attributes is a key element in usage behaviour as regards online services (Parthasarathy & Bhattacherjee, 1998; Bhattacherjee, 2001b). The mean score of the customers' perception variable was also reasonably high (4.26), while the value of customer satisfaction was moderate (3.165). This moderate value could imply that users are not very pleased about their online shopping experience. This is a cause for concern since customers' overall satisfaction is an indication of how well customers like their experience with using the website, and it is probably the best indication of their willingness to return to the site again if they are to make another purchase in the category (Jiang & Rosenbloom, 2005). With regard to the standard deviation, the value was 1.087.

DOI: 10.7172/2449-6634.jmcbem.2018.1.1

7.2. Inferential Statistics

Further to the descriptive statistics, the researcher conducted a simple linear regression analysis so as to (i) examine whether the model provides a statistically significant explanation of the variation in the online retailing consumers' satisfaction, and more importantly to (ii) determine the empirical support for customers' perceptions as an antecedent of satisfaction with online retailing services. This section presents the findings and interpretation of the linear regression analysis.

4.2.1. Normality Tests

Before performing inferential statistics on the data, a diagnostic test was carried out to ascertain the normality of the customers' perceptions distribution. Normality was tested in order to determine whether parametric tests could be performed on the data as it is an important assumption of many statistical procedures such as t-tests, linear regression analysis, discriminant analysis and ANOVA (Razali & Wa, 2011). This study used the formal normality test, specifically the 1-sample Kolmogorov-Smirnov (KS) test, to test for evidence of the normality of the customer perceptions distribution, in line with Razali and Wa (2011). The outcome of the test is shown in Table 5. According to the KS test, if the significance value is less than 0.05, there is a significant difference between the population and sample, implying that the data is not normally distributed.

Table 5
Results of Kolmogorov-Smirnov normality test

Predictor Variable	Significance Value
Perceived Attributes	.000
Perceived Risk	.000
Perceived Value	.000
Customer Perceptions	.200

Source: Survey data (2017).

The study results show that while the KS test values for the three predictors were 0.000, the overall KS test p-value (.200) for the composite customer perceptions distribution was greater than the significance level ($p = 0.05$), thus implying that the customer perception variable data is normally distributed. This means that the customer perception distribution satisfies the assumptions of normality.

7.2.2. Goodness of Fit

Table 6 shows the output measures regarding the "goodness of fit", i.e. how well the model fits the data. The table presents the coefficient of determination (R-Square) which is used to test the goodness-of-fit of the model which reveals what percentage of variability in the dependent variable is accounted for by all of the independent variables.

Table 6
Model summary

Model	R	R-Square	Adjusted R-Square	Std. Error of the Estimate
1	0.728	0.531	0.529	0.74603

a. Predictors: (Constant), Customer Perceptions

Source: Research data (2017).

 DOI: 10.7172/2449-6634.jmcbem.2018.1.1

If the R-Square value is 1, then there is a perfect fit, whereas R-Square value 0 indicates that there is no relationship between the IV & DV. According to Table 4, the adjusted R-Square value = 0.531. This therefore means that there is a moderate relationship since the customers' perceptions variable accounts for 53.1% of the variation in the satisfaction variable, implying that other factors affecting satisfaction that were not studied in this research add up to 46.9.1%. The adjusted R^2 is important as it helps to discourage overfitting of the model (Doane & Seward, 2011).

7.2.3. ANOVA Results

Table 7 reveals the SPSS output for the analysis of variance (ANOVA). The ANOVA table tells us whether or not the model can predict Y using X. It contains the output for determining the statistical significance of the model.

Table 7
ANOVA

Model		Sum of Squares	df	F	Sig.
1	Regression	149.726	1	269.024	0.000
	Residual	132.460	238		
	Total	282.186	239		

a. Predictors: Customer Perceptions
b. Dependent Variable: Satisfaction

Source: Research Data (2017).

The statistical significance of the model was assessed using the following hypotheses:
$\mathbf{H_0}$: $\beta 1 = 0$; i.e. Variation in Y is not explained by variation in X
$\mathbf{H_1}$: $\beta 1 \neq 0$; i.e. Variation in Y is explained by variation in X
According to the $\mathbf{H_{0,}}$ if a coefficient (βi) = 0, then the distribution of the response variable (Y) does not directly depend on the input variable Xi, which can therefore be "dropped" from the model. Therefore, $\mathbf{H_0}$ – the null hypothesis – implies that the model has no predictive value and $\mathbf{H_1}$ – the alternate hypothesis – implies that the model has predictive value. Since the significance value (0.000) is less than 0.05, the null hypothesis that the model is not useful was rejected, implying that the model is statistically significant and is therefore useful in predicting the relationship between customers' perceptions and satisfaction with online retailing services.

7.2.4. Test of Hypothesis

After establishing that the model is useful, the researcher tested the relative significance of the independent variable in predicting the dependent variable. Table 8 shows the linear regression coefficients with the output data.

Table 8
Coefficient table

Variable	β	Std. Error	$t = \beta$/S.E	P-Value
Constant	–2.193	.330	–6.642	.000
Customer Perceptions	1.258	.077	16.402	.000

a. Dependent Variable: Satisfaction

Source: Survey data (2017).

DOI: 10.7172/2449-6634.jmcbem.2018.1.1

The hypothesis that was tested regarded the relationship between customers' perceptions and customer satisfaction with online retailing services.

H_0: There's no relationship between customers' perceptions and customer satisfaction with online retailing services.

As the study results in Table 8 show, the null hypothesis which proposes that customers' perceptions have no statistically significant effect on satisfaction with online retailing services was rejected since $\beta = 1.258$ and p-value = 0.000. Consequently, the null hypothesis was rejected since $\beta \neq 0$ and p-value < a, meaning that customer perceptions have a statistically significant effect on customer satisfaction with online retailing services. This outcome lends support to the findings of Bolton and Drew (1994), who empirically established that customer perceptions have a significant positive relationship with customer satisfaction in the service context. This is in line with Sing (1991), who argued that customer satisfaction can be understood as a collection of multiple satisfactions with various objects that constitute the service system.

8. FINAL CONSIDERATIONS

8.1. Conclusions

The most important conclusion that can be drawn from the findings of this study is that customers' perceptions have an antecedent role with regard to satisfaction. In other words, the study concludes that customers' perceptions are associated with satisfaction with online retailing services.

8.2. Implications of the Study

The empirical findings of this study have implications for scholars, practitioners as well as policy makers.

82.1. Theoretical Implications of the Study

This study makes an important theoretical contribution to the study of online consumer behaviour by proposing and outlining perceptual antecedents of electronic consumer satisfaction. Moreover, by empirically testing the association between the two widely-used IS and consumer behaviour constructs, the study demonstrates that the proposed study model can be used to explain a significant amount of variance in customer satisfaction with e-retailing. The research also shows that customers' satisfaction with e-retailers depends on their perceptions vis-à-vis the website, confirming that online consumer behaviour is subject to individual perceptions. It therefore provides future scholars with a useful framework of how to incorporate both IS and consumer behaviour theories and constructs in their research projects.

8.2.2. Practical Implications of the Study

With the rapid growth of online retailing, customer satisfaction has become a major concern for online retailing managers and practitioners since customers are less likely to search for alternative purchase options when the current website offers satisfaction. The study therefore recommends that online retailing decision makers should put more effort in enhancing the quality of their services as a way of ensuring their customers are satisfied with their services. It is therefore imperative that online retailing firms have a good understanding of their target customers, since

 DOI: 10.7172/2449-6634.jmcbem.2018.1.1

this will not only help in enhancing the desired levels of customer satisfaction, but will also help to increase customer loyalty towards their services in the long term.

8.2.3. Policy Implications of the Study

Due to its ever increasing popularity, online retailing has had a significant impact on several sectors including entertainment, consumer electronics, food and media goods, posing substantial challenges to consumers, industry players and regulators alike in the process. There is therefore a need for a regulatory framework that keeps online users safe while protecting the interest of all stakeholders, including the government. If need be, a quasi-independent multi-sectorial entity could be tasked with overseeing such a programme as is the case in other countries.

8.3. Suggestions for Further Study

Since the model conceptualizes customers' perceptions as a composite variable made up of perceived attributes, perceived risk and perceived value, it does not specify how the different perceptual factors influence online customer satisfaction; instead, it aggregates all factors into one construct called "customers' perceptions". Therefore, as a way of advancing and deepening our understanding of this link, future studies should consider investigating the specific nature of the relationships between perceived attributes, perceived risk and perceived value and electronic satisfaction. In addition, future studies might need to investigate other e-commerce sub-sectors/ context such as online travel reservation, e-entertainment as well as online education/e-learning amongst others for purposes of generalizing the research model.

The current research is one of few studies in the online retailing context that have attempted to examine the relationship between what customers perceive and online satisfaction. However, in spite of the fact that this current empirical study confirms that customer' perceptions are an important factor behind users' satisfaction in the online retailing context, it would be interesting to carry out qualitative, in-depth studies whereby online users detail their experience when shopping online. Such studies would give managers and practitioners deeper insight into what works and what does not insofar as online customer satisfaction is concerned, which will in turn contribute to reducing consumers' reluctance to purchase online.

References

Abadi, H.R.D., Hafshejani, S.N.A., & Zadeh, F.K. (2011). Considering factors that affect users' online purchase intentions with using structural equation modeling. *Interdisciplinary Journal of Contemporary Research in Business*, *3*(8), 463–471.

Adams, D.A., Nelson, R.R., & Todd, P.A. (1992). Perceived usefulness, ease-of-use and usage of information technology: A replication. *MIS Quarterly*, *16*(2), 227–247.

Ahn, T., Ryu, S., & Han, I. (2004). The impact of the online & offline features on the user acceptance of Internet shopping malls. *Electronic Commerce Research & Applications*, *3*(4), 405–420.

Ahuja, R. (2005). *Research methods*. New Delhi: Rawat Publications.

Anderson, S., Pearo, L.K., & Widener, S.K. (2008). Drivers of service satisfaction linking customer satisfaction to the service concept and customer characteristics, *Journal of Service Research*, *10*(4), 365–381.

Barnes, S.J., Bauer, H.H., Neumann, M.M., & Huber, F. (2007). Segmenting cyberspace: A customer typology for the internet. *European Journal of Marketing*, *41*(1/2), 71–93.

Bauer, R.A. (1960). Consumer behavior as risk-taking. In R.S. Hancock (Ed.), *Dynamic Marketing for a Changing World* (pp. 389–98). Chicago, IL: American Marketing Association,

Bearden, W.O. & Teel, J. E. (1983). Selected determinants of consumers' satisfaction and complaint reports. *Journal of Marketing Research*, (XX), 21–28.

Berelson, B. & Steiner, G.A. (1964). *Human behaviour: An inventory of scientific findings*. New York: Harcourt Brace Jovanovich.

 DOI: 10.7172/2449-6634.jmcbem.2018.1.1

Bettman, J. (1973). Perceived risk and its components – A model and empirical test. *Journal of Marketing Research*, 10, 184–90.

Bhatnagar, A., Misra, S., & Rao, H.R. (2000). Online risk, convenience and internet shopping behavior. *Communications of the ACM*, *42*(11), 98–105.

Bhattacherjee, A. (2001a). Understanding information systems continuance: An expectation-confirmation model. *MIS Quarterly*, *25*(3), 351–70.

Bhattacherjee, A. (2001b). An empirical analysis of the antecedents of electronic commerce service continuance. *Decision Support Systems, 32*(2), 201–214.

Bolton, R.N. & Drew, J.H. (1994). Linking customer satisfaction to service operations and outcomes. In R.T. Rust & R.L. Oliver (Eds.), *Service quality: New directions in theory and practice* (pp. 173 – 200). Newbury Park, CA: Sage Publications.

Boscheck, R. (1998). New media economics are transforming consumer relations. *Long Range Planning*, 31, 873–878.

Brocato, E.D., Voorhees, C.M., & Baker, J. (2012). Understanding the influence of cues from other customers in the service experience: a scale development and validation. *Journal of Retailing*, *88*(3), 384–398.

Burns, R.P. & Burns, R. (2009). *Business research methods and statistics using SPSS*. London: Sage Publications.

Carifio, L. & Perla, R. (2008). Resolving the 50 year debate around using and misusing Likert scales. *Medical Education*, 42, 1150–1152.

Chen, Q. & Wells, W.D. (1999). Attitude toward the site. *Journal of Advertising Research*, September/October, 27–37.

Chew, K.-W., Shingi, P.M., & Ahmad, M.I. (2006). TAM derived construct of perceived customer value and online purchase behavior: An empirical exploration. In R. Suomi, R. Cabral, J.F. Hampe, A. Heikkilä, J. Järveläinen & E. Koskivaara (Eds.), *Project e-society: Building bricks – 6th IFIP International Conference on e-Commerce, e-Business, and e-Government (13E 2006)*, *October 11–13, 2006*, 226 (pp. 215–227). IFIP Advances in Information and Communication Technology.

Cho, Y. (Upcoming). A consumer satisfaction model based on the integration of EDT and TAM: Comparative study of Korean and US consumers. *Asia Pacific Journal of Marketing and Logistics*, https://doi.org/10.1108/APJML-07-2016-0127.

Choi, J.H. & Jahng, J.J. (2009). Predictors of e-commerce use of the Internet: A multinational comparative study – the U.S., the Netherlands, and S. Korea. *Seoul Journal of Business. 15*(1), 65–90.

Churchill, G.A. & Surprenant, C. (1982). An investigation into the determinant of customer satisfaction. *Journal of Marketing Research*, (XIX), 491–504.

Cox, D.F., & Rich, S.U. (1964). Perceived risk and consumer decision making – the case of telephone shopping. *Journal of Marketing Research*, 1, 2–39.

Cronin, J.J. & Taylor, S.A. (1992). Measuring service quality: A reexamination and extension. *Journal of Marketing*, 56, 55–68.

Cronin, J.J. & Taylor, S.A. (1994). SERVPERF versus SERVQUAL: Reconciling performance-based and performance-minus-expectations measurement of service quality. *Journal of Marketing*, 58(1), 125–131. doi10.2307/1252256.

Cunningham, S.M. (1967). The major dimensions of perceived risk. In D. Cox (Ed.), *Risk taking and information handling in consumer behavior* (pp. 82–109). Harvard: Harvard University Press.

Davis, F.D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, *13*(3), 319–340.

Davis, F.D., Bagozzi, P.R., & Warsaw, P. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35, 982–1003.

Davis, F.D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, *13*(3), 319–339.

Davis, M.K. & Heineke, J. (1998). How disconfirmation, perception and actual waiting times impact customer satisfaction. *International Journal of Service Industry Management*, *9*(1), 64–73, https://doi.org/10.1108/09564239810199950

Day, E. & Crask, M.R. (2000). Value assessment: The antecedent of customer satisfaction. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behaviour*, 13, 52–60.

Dholakia, R. & Uusitalo, O. (2002). Switching to electronic stores: Consumer characteristics and the perception of shopping benefits. *International Journal of Retail and Distribution Management*, *27*(4), 154–165.

Doherty, N.F. & Ellis-Chadwick, F. (2010). Internet retailing: The past, the present and the future. *International Journal of Retail & Distribution Management*, *38*(11/12), 943–965.

Erevelles, S. & Leavitt, C. (1992), A comparison of current models of consumer satisfaction/dissatisfaction. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 5, 104–14.

Forsythe, S., Chuanlan, N., Shannon, D., & Gardner, L.C. (2006), Development of a scale to measure the perceived benefits and risks of online shopping. *Journal of Interactive Marketing*, *20*(2), 55–75.

 DOI: 10.7172/2449-6634.jmcbem.2018.1.1

Forsythe, S.M. & Shi, B. (2003). Consumer patronage and risk perceptions in internet shopping. *Journal of Business Research*, *56*(11), 867–876.

Gimpel, G. (2011). *Value-driven adoption and consumption of technology: Understanding technology decision making*. Unpublished PhD thesis. Retrieved from: http://openarchive.cbs.dk/bitstream/handle/10398/8326/Gregory%20Gimpel.pdf?sequence=1 (August, 2012).

Gliem, J.A. & Gliem, R.R. (2003). *Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales.* Refereed Paper presented at the Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education on October 8–10, 2003. The Ohio State University, Columbus, OH.

Hansen, T. (2007). Determinants of consumers' repeat online buying of groceries. *The International Review of Retail, Distribution and Consumer Research*, *16*(1), 93–114.

Ho, C.-F. & Wu, W.-H. (1999). Antecedents of customer satisfaction on the Internet: An empirical study of online shopping. *Proceedings of the 32nd Hawaii International Conference on System Sciences – 1999*. Retrieved from: http://www.ieee.org (13/11/2017).

Hoyer, W.D. & MacInni, D.J. (2008). *Consumer Behavior (5th Ed.).* Mason, OH: South Western – Cengage Learning.

Jarvenpaa, S.L. & Todd, P.A. (1996). Consumer reactions to electronic shopping on the world-wide web. *International Journal of Electronic Commerce*, *1*(2), 59–88.

Jarvenpaa, S.L. & Tractinsky, N. (1999). Consumer trust in an internet store: A cross-cultural validation. *Journal of Computer-Mediated Communication*, *5*(2).

Jacoby, J. & Kaplan, L. (1972). The components of perceived risk. In M. Venkatesan (Ed.), *Proceedings, 3rd Annual Conference* (pp. 383–393). Chicago, IL: Association for Consumer Research.

Jiang, P. & Rosenbloom, B. (2005). Customer intention to return online: Price perception, attribute-level performance, and satisfaction unfolding over time. *European Journal of Marketing*, *39*(1/2), 150–174.

Jiradilok, T., Malisuwan, S., Madan, N., & Sivaraks, J. (2014). The impact of customer satisfaction on online purchasing: A case study analysis in Thailand. *Journal of Economics, Business and Management, 2*(1), 5–11.

Johnson, M.D. & Fornell, C. (1991). A framework tot comparing customer satisfaction across individuals and product categories. *Journal of Economic Psychology*, 12, 267–286.

Johnson, M.D., Nader, G., & Fornell, C. (1996). *Expectations, perceived performance, and customer satisfaction for a complex service: The case of bank loans* [Electronic version]. Retrieved from Cornell University, School of Hospitality Administration site: http://scholarship.sha.cornell.edu/articles/692 (15/11/2017).

Joines, J.L., Scherer, C.W., & Scheufele, D.A. (2003). Exploring motivations for consumer web use and their implications for e-commerce. *Journal of Consumer Marketing*, *20*(2), 90–108.

Kalafatis, S.P., Ledden, L., & Mathioudakis, A. (n.d). Re-specification of the theory of consumption values. Retrieved from: http://eprints.kingston.ac.uk/18098/1/Kalafatis-S-18098.pdf (28/02/2014).

Kau, A.K., Tang, Y.E., & Ghose, S. (2003). Typology of online shoppers. *Journal of Consumer Marketing*, *20*(2/3), 139–154.

Kaye, B.K. & Johnson, T.J. (2001). *A Web for all reasons: uses and gratifications of Internet resources for political information*. Paper presented at the Association for Education in Journalism and Mass Communication Annual Conference, Washington, DC, August.

Ko, H., Cho, C.-H., & Roberts, M.S. (2005). Internet uses and gratifications. *Journal of Advertising*, *34*(2), 57–70.

Korgaonkar, P.K. & Wolin, L.D. (1999). A multivariate analysis of Web usage. *Journal of Advertising Research*, *39*(2), 53–68.

Kotler, P., Cunningham, M.H., & Turner, R.E. (2001). *Marketing Management*. Pearson Education.

Lee, D., Park, J., & Ahn, J. (2000). *On the explanation of factors affecting e-commerce adoption.* Working Paper. Retrieved online from: http://misrc.umn.edu/workingpapers/fullpapers/2000/0025_120100.pdf. (23/09/2017).

Lemm, K. (2010). Stratified sampling. In N.J. Salkind (Ed.), *Encyclopaedia of research design* (pp. 1451–1454). Thousand Oaks, CA.: Sage Publications.

Liebermann, Y. & Stashevsky, S. (2002). Perceived risks as barriers to internet and e-commerce usage. *Qualitative Market Research: An International Journal*, *5*(4), 291–300.

Limayem, M., Hirt, S.G., & Cheung, C.M.K. (2007). How habit limits the predictive power of intention: The case of information systems continuance. *MIS Quarterly*, *31*(4), 705–37.

Liu, C. & Forsythe, S. (2010). Post-adoption online shopping continuance. *International Journal of Retail & Distribution Management*, *38*(2), 97–114.

Luo, X. (2002). Uses and gratifications theory and e-consumer behaviors: A structural equation modeling study. *Journal of Interactive Advertising*, *2*(2), 44–54.

Mallet, D. (2006). Sampling and Weighting. In R. Grover & M. Vriens (Eds.), *The handbook of marketing research* (pp. 159–177). Thousand Oaks, CA: Sage.

McGuire, W.J. (1974). Psychological motives and communication gratification. In J.G. Blumler & E. Katz (Eds.), *The uses of mass communication*. Beverly Hills, CA: Sage.

 DOI: 10.7172/2449-6634.jmcbem.2018.1.1

McQuitty, S., Finn, A. & Wiley, J. (2000), Systematically varying consumer satisfaction and its implications for product choice. *Academy of Marketing Science Review*. Retrieved from: www.amsreview.org/articles/mcquity10-2000.pdf (June, 2016).

Meeks, J.G.T. (1984). Utility in economics: A survey of the literature. In: C.F. Turner & M. Martin (Eds.), *Surveying subjective phenomena* (vol. 2, pp. 41–91). New York: Russell Sage Foundation.

Moore, G.C. & Benbasat, I. (1991). Development of an instrument to measure the perceptions of adopting an information technology innovation. *Information Systems Research*, 2, 192–222.

Nimon, K. (2010). Regression commonality analysis: Demonstration of an SPSS solution. *Multiple Linear Regression Viewpoints*, *36*(1), 10–17.

Nunnally, J.C. & Bernstein, I.H. (1994). *Psychometric theory*. New York, NY: McGraw-Hill.

Nusair, K. & Kandampully, J. (2008). The antecedents of customer satisfaction with online travel services: A conceptual model. *European Business Review*, *20*(1), 4–19.

Oliver, R.L. (1980). A cognitive model of the antecedents and consequences of satisfaction judgments. *Journal of Marketing Research*, 17, 460–469.

Pallant, J. (2007). *SPSS survival manual: A step by step guide to data analysis using SPSS for Windows* (3rd Ed.). New York: McGraw Hill Open University Press.

Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service. *Journal of Retailing*, 64, 12–40.

Peng, D. W.-J. (2007). Factors affecting consumers' uses and gratifications of the Internet: A cross-cultural comparison among Taiwan, Hong Kong and China. *International Journal of Computer Sciences and Network Security*, *7*(3), 233–242.

Pizam, A., Shapoval, V., & Ellis, T. (2016). Customer satisfaction and its measurement in hospitality enterprises: A revisit and update. *International Journal of Contemporary Hospitality Management*, *28*(1), 2–35.

Rayburn, J.D. (1996). Uses and gratifications. In M.B. Salwen & D.W. Stacks (Eds.), *An integrated approach to communication theory and research* (pp. 145–63). Mahwah, New Jersey: Lawrence Erlbaum.

Razali, N.M. & Wah, Y.B. (2011). Power comparisons of Shapiro-Wilk, Kolmogorov-Smirnov, Lilliefors and Anderson-Darling Tests. *Journal of Statistical Modelling and Analytics*. *2*(1), 21–33.

Rogers, E.M. (1995). *Diffusion of innovations* (4th Ed.). New York: The Free Press.

Rogers, E.M. (2003). *Diffusion of innovations* (5th Ed.). New York: The Free Press.

Roy, S.K. (2008). Determining uses and gratifications for Indian internet users. *CS-BIGS, 2*(2), 78–91. Retrieved online from: http://www.bentley.edu/centers/sites/www.bentley.edu.centers/files/csbigs/roy.pdf (20/07/2016).

Rubin, A. & Babbie, E.R. (2011). *Research methods for social work* (7th Ed). Belmonst, CA: Cengage Learning.

Rugimbana, R. & Iversen, P. (1994). Perceived attributes of ATMs and their marketing implications. *International Journal of Bank Marketing*, *12*(2), 30–35.

Sahaf, M.A. (2008). *Strategic marketing: Making decisions for strategic advantage.* New Delhi: Prentice Hall of India.

Severin, W.J. & Taknard, W.J. (1997*). Communication theories origins, methods, and uses in the mass media* (4th ed.). White Plains, NY: Longman.

Sharma, S., Durand, R.M., & Gurarie, O. (1981). Identification and analysis of moderator variables. *Journal of Marketing Research*, *18*(3), 45–57.

Sheth, J.N., Newman, B.I., & Gross, B.L. (1991a). *Consumption values and market choices: Theory and applications*. Cincinnati: South-Western Publishing Co.

Sheth, J.N., Newman, B.I., & Gross, B.L. (1991b). Why we buy what we buy: A theory of consumption values. *Journal of Business Research*, *22*(2), 159–170.

Schiffman, L.G. & Kanuk, L.L. (2010). *Consumer behavior: Global edition.* London: Pearson Higher Education.

Spencer, S.J., Zanna, M.P., & Fong, G.T. (2005). Establishing a causal chain: Why experiments are often more effective than mediational analysis in examining psychological processes. *Journal of Personality and Social Psychology*, 89, 845–851.

Sreejesh, S., Sarkar, J.G., Sarkar, A., Eshghi, A., & Anusree, M. R. (2017). The impact of other customer perception on consumer-brand relationships. *Journal of Service Theory and Practice*, 2055–6225. https://doi.org/10.1108/JSTP-11-2016-0207.

Swanson, R.A. & Holton, E.F. III. (Eds.). (2005). *Research in organizations: Foundations and methods of inquiry*. San Francisco: Berrett-Koehler.

Taylor, J.W. (1974). The role of risk in consumer behavior. *Journal of Marketing*, *38*(2), 54–60

Teas, R.K. (1993). Expectations, performance evaluation, and consumers' perceptions of quality. *Journal of Marketing*, *57*(10), 18–34.

Ting, O.S., Ariff, M.S.M., Zakuan, N., Sulaiman, Z., & Saman, M.Z.M. (2016). *E-service quality, e-satisfaction and e-loyalty of online shoppers in business to consumer market; Evidence form Malaysia*. Paper presented at the IOP Conference Series: Materials Science and Engineering.

Van Raaij, W.F. (1981). Economic psychology. *Journal of Economic Psychology*, 1, 1–24.

Vrechopoulos, A., Siomkos, G., & Doukidis, G. (2001). Internet shopping adoption by Greek consumers. *European Journal of Innovation Management*, *4*(3), 142–152.

Warmbrod, J.R. (2014). Reporting and interpreting scores derived from Likert-type scales. *Journal of Agricultural Education*, *55*(5), 30–47, doi: 10.5032/jae.2014.05030.

Weltevrenden, J.W.J. & Boschma, R.A. (2008). Internet strategies and the performance of Dutch retailers. *Journal of Retailing & Consumer Services*, 15, 163–178.

Wilkie, W.L. (1994). *Consumer behavior*. New York: Von Hoffman Press.

Wilson, A. (2006). *Marketing research: An integrated approach* (2nd Ed.). Gosport: Prentice Hall.

Woodruff, R.B. & Gardial, S.F. (1996). *Know your customer: New approaches to customer value and satisfaction*. Cambridge, MA: Blackwell.

Yee, C.C. & Yazdanifard, R. (2014). How customer perception shape buying online decision. *Global Journal of Management and Business Research: E Marketing*, *14*(2), 1–9.

Yen, Y.S. (2011). The impact of perceived value on continued usage intention in social networking sites. *Proceedings of the 2nd International Conference on Networking and Information Technology*, 17, 217–223.

Yunjie, X. & Shun, C. (2004). *A conceptual model for customer value in e-commerce*. Retrieved from: http://is2.lse.ac.uk/asp/aspecis/20040178.pdf (20/09/2016).

Zhang, L., Tan, W., Xu, Y., & Tan, G. (2012), Dimensions of consumers' perceived risk and their influences on online consumers' purchasing behavior. *Communications in Information Science and Management Engineering*, *2*(7), 8–14.

Zhou, L., Dai, L., & Zhang, D. (2007). Online shopping acceptance model: A critical survey of consumer factors in online shopping. *Journal of Electronic Commerce Research*, *8*(1), 41–62.

Zikmund, W.G & Babin, B.J (2007) *Exploring marketing research* (9th Ed.). Ohio: Thomson South-Western.

 DOI: 10.7172/2449-6634.jmcbem.2018.1.1

APPENDIX

APPENDIX 1: QUESTIONNAIRE INSTRUMENT

SECTION A. CUSTOMER DEMOGRAPHIC FACTORS

First things first: Tell us a bit about yourself. Please respond to each item by choosing the response that best describes you.

1. Age:
   - ☐ 18 – 23
   - ☐ 24 – 29
   - ☐ 30 – 35
   - ☐ 36 – 41
   - ☐ 42 – 47
   - ☐ 48 years & above
2. Highest Level of Education:
   - ☐ High School Certificate
   - ☐ Diploma
   - ☐ Bachelor's Degree
   - ☐ Masters Degree
   - ☐ Doctorate
   - ☐ Professional
   - ☐ Other
3. Monthly income (gross):
   - ☐ Below KSh 24,999
   - ☐ KSh 25,000-49,999
   - ☐ KSh 50,000-74,999
   - ☐ KSh 75,000-99,999
   - ☐ Ksh 100,000-KSh 124,999
   - ☐ Ksh 125,000 & above

SECTION B. CUSTOMER PERCEPTION MEASURES

Please indicate the extent to which you disagree or agree with each of the following statements by marking with a cross (X) in the appropriate block provided. Please use the following seven-point rating scale ranging from 1 = "strongly disagree" to 7 = "strongly agree".

	CUSTOMER PERCEPTIONS	Value Label						
	Variable Label	1	2	3	4	5	6	7
	Perceived Attributes							
1.	The system enables me to accomplish what I want more quickly							
2.	The system makes me more effective							
3.	The system makes it easier to do what I want							
4.	I find the system useful							
5.	The e-commerce service fits my image well.							
6.	Using the system is compatible with all aspects of my lifestyle.							
7.	I think that using the system fits well with the way I like to do things.							
8.	Using the system fits into my lifestyle.							
9.	I find the system to be clear and understandable.							
10.	It's easy to get the system to do what I want it to do							
11.	It's easy to find what is being sought							
12.	The system has no hassles							

DOI: 10.7172/2449-6634.jmcbem.2018.1.1

	CUSTOMER PERCEPTIONS	Value Label						
	Variable Label	1	2	3	4	5	6	7
13.	Learning to operate the system is easy for me.							
14.	Overall, I believe that the system is easy to use.							
	Perceived Risk							
15.	This service costs more than conventional methods							
16.	I might be overcharged for using this service							
17.	I might not receive the product/service that I paid for							
18.	Inability to touch and feel the item worries me							
19.	One can't examine the actual product							
20.	It's not easy to get what I want							
21.	Information takes too long to come up/load							
22.	The e-commerce service failed to perform to my satisfaction							
23.	My credit card number may not be secure							
24.	My personal information may be sold to advertisers							
25.	My personal information may not be securely kept							
	Perceived Value							
26.	This e-commerce service is reasonably priced.							
27.	This e-commerce service is competitively priced							
28.	This e-commerce service offers value-for-money							
29.	Using this e-commerce service is economical							
30.	I can use this e-commerce service anytime							
31.	I can use this e-commerce service anyplace							
32.	This e-commerce service is convenient for me to use							
33.	I feel that the e-commerce service is convenient for me							
34.	I value the convenience of using this e-commerce service							
35.	This service would help me feel acceptable by others							
36.	This service would improve the way I am perceived							
37.	Using this service would make a good impression on others							
38.	My friends and relatives think more highly of me for using this service.							
39.	This service would give its user social approval							
40.	I enjoy using the system.							
41.	Some aspects of the system make me want to use it							
42.	I feel relaxed about using the system							
43.	Using the system makes me feel good							
44.	Using the system gives me pleasure							
45.	Using the system is fun							
46.	It's exciting to use the e-commerce service							

DOI: 10.7172/2449-6634.jmcbem.2018.1.1

SECTION C. CUSTOMER SATISFACTION MEASURES

Please indicate the extent to which you are satisfied with the e-commerce system by marking with a cross (X) on one of the five blocks provided below the position which most closely reflects your satisfaction with the service.

1.	How satisfied were you with the online retailing service initially?		
	☐ Very Dissatisfied	☐ Slightly Dissatisfied	☐ Neither
	☐ Somewhat Satisfied	☐ Very Satisfied	
2.	To what extent does this online retailer meet your needs?		
	☐ Extremely well	☐ Pleased	☐ Satisfied
	☐ Mixed	☐ Extremely poorly	
3.	My experience with this online retailer was very satisfactory		
	☐ Strong Yes	☐ Yes	☐ Neutral
	☐ No	☐ Strong No	
4.	Overall, I am _ with the service?		
	☐ Delighted	☐ Pleased	☐ Satisfied
	☐ Mixed	☐ Mostly Dissatisfied	
5.	If I could do it all over again, I would still use this service?		
	☐ Strong Yes	☐ Yes	☐ Neutral
	☐ No	☐ Strong No	

Thank you very much for your time.

DOI: 10.7172/2449-6634.jmcbem.2018.1.1

(28–47)

Nostalgia and Culture: The Relationship Between Indicators of Acculturation and Nostalgia

Borsali Awicha Amina[1]
University of TLEMCEN ALGERIA
Email: mina.benosman@gmail.com
Pr Benhabib Abderrezak[2]
University of TLEMCEN ALGERIA
Email: abenhabib1@yahoo.fr

Received: 20 February 2018/ Revised: 27 April 2018/ Accepted: 2 May 2018/Published online: 30 May 2018

ABSTRACT

In this article we test the relationship between indicators of acculturation (language, media, self-identification, religion, food and clothing) and nostalgia. It checks empirically, on a sample of 201, the existence of a significant effect between our independent variables and our dependent variable. The results of analysis of variance, One-Way Anova, reveal that the home language, the food of home country, the media, self-identification with the origin country and the religion of the origin country have a significant impact on nostalgia. This article contributes to new theoretical elements in the field of nostalgia and culture as a complement of several previous studies. The managerial contributions of this study focus on positioning of nostalgic brands and developing marketing strategies for this kind of products.

JEL classification: M30, M31

Keywords: nostalgic brands, positioning, acculturation.

1. INTRODUCTION

Today, the concept of nostalgia has become a topic of *growing* importance and interest to many researchers in marketing. Indeed, nowadays, many practitioners emphasize the usefulness and importance of nostalgia in segmentation and other marketing strategies. Therefore, many research works today attempt to measure the phenomenon of nostalgia. The best-known research on the topic includes Holbrook's nostalgia index (Holbrook, 1990), which is considered a benchmark in the field, and Batcho's inventory (Batcho, 1995). These two essential tools are Anglo-Saxon scales that measure the nostalgic mood. The first study was carried out by Holbrook and Schindler (1989) on the relationship between nostalgia and musical preferences. Next, Holak and Havlena (1992) investigated the nostalgic emotional experience, then Baker and Kennedy (1994) conducted a study on the intensity of nostalgia vis-a-vis advertisement, and finally Sedikides, Wildschut,

[1] PhD student in Marketing, MECAS laboratory
[2] Professor in Economics, Management and Management Science, Director of the MECAS laboratory

DOI: 10.7172/2449-6634.jmcbem.2018.1.2

Arndt and Routledge (2008) made an attempt to define nostalgia and to find its relationship with the past, present and future. On the other hand, it is worth recalling that most of this research was conducted at Southampton University (Great Britain), where a whole research program is devoted to nostalgia. Every year, an appreciable number of new articles are published in this area. Nostalgia is also a fairly popular area of research in France. Indeed, Aurélie Kessous and Elyette Roux are considered pioneers in the field of nostalgia in France. They have conducted numerous studies, especially on brands perceived as nostalgic (Kessous & Roux, 2010). Other researchers were interested in authenticity (Derbaix & Derbaix, 2010), nostalgia in marketing (Robert-Demontrond & Divard, 1997) and nostalgia in consumer behavior (Hallegate & Marticotte, 2017). Moreover, while seeking to measure nostalgia, other practitioners, such as Kessous and Roux (2010) or Alexandra Vignolles (2009), have succeeded in developing and proposing a scale to measure the propensity to be nostalgic. However, few studies have focused on the cultural aspect of nostalgia. The most important one is that conducted by a group of researchers from 18 different countries, spread over five continents (Australia, Cameroon, Chile, China, Ethiopia, Germany, Greece, India, Ireland, Israel, Japan, the Netherlands, Poland, Romania, Turkey, Uganda, the United Kingdom, and the United States). The purpose of this international study was to find out whether people from different cultures conceive nostalgia in the same way. In the end, the researchers involved in the investigation found that nostalgia is a pancultural emotion, it is present in all cultures; nostalgia may be expressed similarly or differently, depending on the culture (Hepper et al., 2014). Researchers Havlena and Holak (2015) focused on nostalgia in Japan; they showed that, for Japanese people, nature is a trigger for nostalgia. The purpose of the present article is to provide new avenues for research on the cultural aspect of nostalgia. It is for this reason that the present study focuses on nostalgia from a different cultural point of view using *indicators of acculturation* (language, food, clothing, media, self-identification and religion) and testing them on *the nostalgia*. The present study is interesting because it provides new directions for future research in the field of nostalgia. Studying nostalgia for the expatriate segment is currently a topic of great significance. It is possible to investigate the probable link between preferences for certain things belonging to the country of origin and others related to the host country.

This study is organized as follows. The presentation of the literature review is given first, and then the methodology of work is described. Next the results obtained are presented and discussed, and finally a conclusion is given.

2. LITERATURE REVIEW

2.1. Concepts of Nostalgia

Nostalgia comes from the Greek words *nostos* (back home or home) and *algos* (pain). The concept of nostalgia is old as it goes back to Johannes Hofer (1934), who described it as a disease or pathology which may be attributed to homesickness (Bolzinger, 1989). Afterwards, definitions of nostalgia quickly evolved. Indeed, according to Holbrook (1991), nostalgia is commonly defined as a preference, a favorable link, a positive attitude, a favorable affect towards objects, people, places or things which were shared by many individuals (popular, in fashion, or widely available) when they were younger (adolescence, childhood or even before birth). It is also considered a double-sided emotion (Bellelli, 1991). For example, the emotion of memory is a situation where the individual relives his memories through his thoughts; it is also the emotion of desire and absence where the individual is aware that certain events and emotions of the past cannot be reached (or relived) again. According to Baker and Kennedy (1994), different levels of nostalgia exist. Some of these are:

 DOI: 10.7172/2449-6634.jmcbem.2018.1.2

- ***Real nostalgia***, which is marked by a direct experience lived by an individual, like a song or an object of the time of high school.
- ***Simulated nostalgia***, which is a kind of nostalgia where the individual has no direct experience with it as a retro object of a time that he did not experience.
- ***Collective nostalgia***, which is a nostalgia that is proper to a culture or a generation, like a sport, a flag, etc.

On the other hand, nostalgia can be real, simulated or collective; it is triggered by different stimuli, such as music (Holbrook, 1993) or smells (Hirsch, 1992), that may be sensorial and/or intangible; they can also be tangible, just like the visual representations of timeless icons (Havlena & Holak, 1996), food products (Baker et al., 2005), and old brands (Kessous & Roux, 2010). The stimulus of the iconic brands of our childhood is the most widespread because today many products of our childhood can be found on the market. Currently, marketers attach great importance to nostalgic emotions and feelings in their marketing activities (Divard & Robert-Demontrond, 1997). Nostalgia can be useful in brand or product strategies; it can also be part of the positioning of the marketing mix (brand name, packaging, communication, etc.). It can also be present in a brand's advertising communications plans and may be included in various elements such as music, slogans, jingles, or images. Nostalgia is also used to relive or reintroduce older products in the market, which means that it can be used for tactical or strategic purposes according to the needs of marketing managers (Divard & Demontrond, 1997).

2.2. Concepts of Acculturation

In general, acculturation refers to *"the changes in attitudes, values or behaviors that members of a cultural group manifest when they are inspired by the standards or another culture, of another group*" (Jolibert & Benabdallah, 2009). Other authors define this concept as *"the general process of intercultural contacts and their results"* (Berry et al., 2006). It is obvious that the greater the contact, the better the acculturation (O'Quinn, Lee, &Faber, 1986). Thus, acculturation can be seen as a process of adaptation to a different environment, or to a different country. A great deal of research has focused on acculturation and consumption. Some researchers concentrated on decision-making (Dato-on, 2000), and others on the perception of advertising and product attributes (Khairullah &Khairullah, 1999) or on price negotiation (Nyer & Gopinath, 2001). This study focuses on nostalgic behaviors. Previous studies have indicated that people who are less adapted to their host culture and very attached to their home culture are often nostalgic (Stamboli, 2011), because nostalgia is a way for people to show their attachment to their country of origin (Jolibert & Benabdallah, 2011). Therefore, it would be interesting for marketers to offer products and services that can help maintain the connection with the country of origin. They can also identify the favorite media of expatriates; they may use beliefs (religion and halal products) and cultural heritage such as music, exploit values or emotional attachment of the individual to his country of origin (Jolibert & Benabdallah, 2013). In order to measure acculturation, it is important to consider the home culture and host culture of the individual. For this, researchers have developed several indicators (Jolibert & Benabdallah, 2009), some of which are:

- *The preference for the native language compared to the language of the host country*: Researchers try to find out which language the expatriates speak every day, at work or with friends and family. Acculturated people tend to use the host language a lot more.
- *Food*: This is an indicator of acculturation. Indeed, individuals who prefer dishes from their home countries are not very acculturated.
- *The media*: Marketers who know the favorite media of an expatriate can adapt the appropriate communication and choose the type of strategy to use to target their customers.
- *The choice of attributes of a product*: Some examples are music, cars, movies, etc.

 DOI: 10.7172/2449-6634.jmcbem.2018.1.2

– *Self-identification*: This should result in the adoption of certain ethnic customs. Acculturated people identify more with their host country.

Acculturation, which is an important phenomenon in consumer behavior, has become an essential segmentation criterion in marketing strategies for many products and services.

2.3. Purpose of the Study

Today, people adopt different modes of consumption due to changes in tastes and to geographical displacements (Sayre, 1994). But nostalgia is also one of the causes of these many changes in consumption patterns. This hypothesis is to be proven later. In fact, moving from one country to another induces a change in certain preferences. Therefore it would be interesting to understand this change through nostalgia, especially now that the percentage of the immigrant population is continually increasing in the world. The purpose of this research is to study the relationship between indicators of acculturation and nostalgia in order to highlight some characteristics of the marketing concept which, to our knowledge, have never been studied before. Thus, it would be interesting to separate the acculturation indicators of the host country from those of the country of origin and then to test them on nostalgia (Appendix A).

3. METHODOLOGY OF THE STUDY

3.1. Measurement of Variables

– *Acculturation*: it was decided to use the Jolibert and Benabdallah (2009) scale, which has been tested on Algerian immigrants in France. This scale is interesting for our study because it allows highlighting the cultural differences which can be grouped under different items, namely language, media, self-identification, religion, clothing and food.
– *Nostalgia*: it was evaluated with the scale of Alexandra Vignolles (2009), who gathered many definitions of nostalgia.
– *Regret*: which represents the negative side of nostalgia, as proposed by Perrusson (2003).
– *Nostalgia as comfort*: which, according to Sedikides et al. (2004), allows individuals to give reassurance to themselves.
– *A lack related to childhood*: heroes and heroines, games and toys, shows, like the inventory previously proposed by Batcho (1995).
– *Products of the past*: which make an individual feel nostalgic when he consumes a product related to the past.
– *Rituals* and *traditions*: are important because they represent everything that brings us closer to our family, our friends, our communities or our country (Havlena & Holak, 1996).
– *Attachment to the past*: nostalgia is the link that exists between the individual and the events of his past, it helps to build one's identity and an image of oneself.

3.2. Method of Data Collection

Sampling

The questionnaire used is composed of two parts. The first one is an assessment of acculturation variables using a Likert scale of 5 points that ranges from *"strongly disagree"* to *"strongly agree"*. The second part gives an evaluation of the variable *nostalgia*; this is done using another Likert scale of 5 points that goes from "*strongly disagree*" to "*strongly agree*".

The questionnaire was distributed to expatriates in France, in dedicated sites. A total number of 102 questionnaires were analyzed. Our sample was composed mainly of men (63.7%), with

 DOI: 10.7172/2449-6634.jmcbem.2018.1.2

young people between 20 and 29 years old (45.1%) and the rest between 30 and 39 years old (27.5%). It is important to note that all individuals in the sample come from Maghreb countries, namely Algeria (32.4%), Morocco (5.9%), also Cameroun and Canada (6.9%).

Table 1
Age

Age	20–29	30–39	40–49	50–59	60–69	70–79	total
Effective numbers	46	28	16	9	2	1	102
Percentages	45.1%	27.5%	15.7%	8.8%	2%	1%	100%

Table 2
Gender

Gender	Men	Women	Total
Effective numbers	65	37	102
Percentages	63.7%	36.3%	100%

Table 3
Native country

Home country	Effective numbers	Percentages
Afghanistan	1	1%
Algeria	33	32.4%
Brazil	1	1%
Bulgaria	3	2.9%
Cameroon	7	6.9%
Caribbean	1	1%
China	1	1%
Congo	1	1%
North Korea	1	1%
Egypt	1	1%
Spain	3	2.9%
Canada	7	6.9%
Ghana	1	1%
Guadeloupe	1	1%
Iran	1	1%
Italy	2	2%
Lebanon	4	3.9%
Mali	2	2%
Morocco	6	5.9%
Pakistan	2	2%
Peru	1	1%
Portugal	3	2.9%
Romania	5	4.9%
Russia	1	1%
Tunisia	5	4.9%
USA	1	1%
Vietnam	1	1%
Zambia	3	3%
Zimbabwe	3	3%
Total	102	100%

DOI: 10.7172/2449-6634.jmcbem.2018.1.2

4. RESULTS

4.1. Descriptive Statistics

In this part, we describe our research sample in terms of descriptive statistics for which we used the SPSS package.

Figure 1
Home language/ the language of the host country

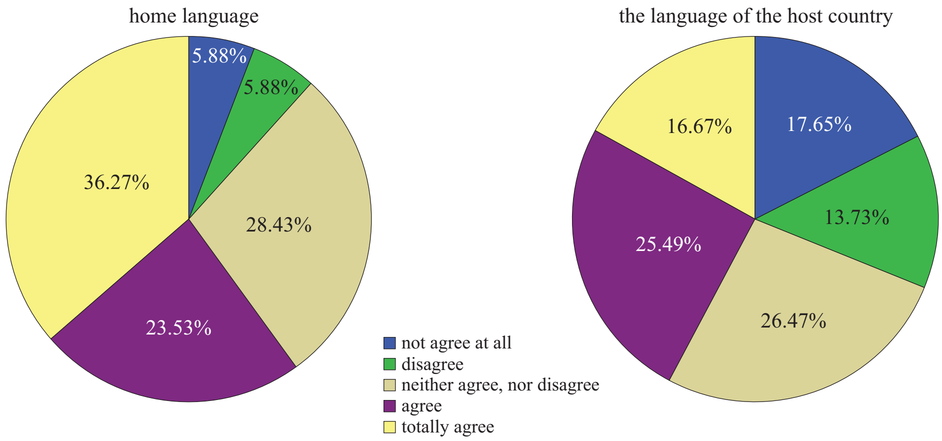
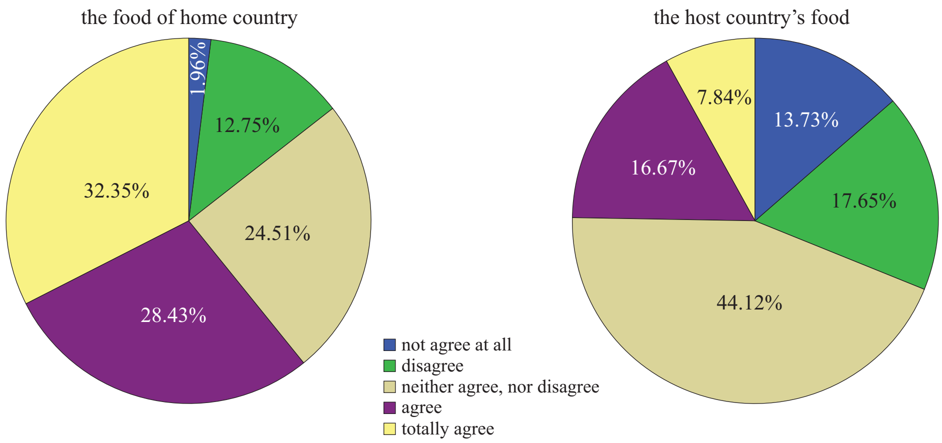


Figure 1 shows that most of our respondents practice the language of their country of origin with their family or friends. But we also see that the language of the host country is also used but in a more moderate way than the language of origin.

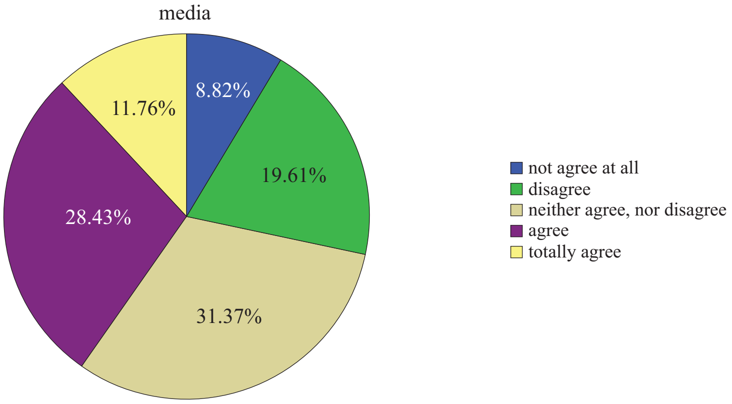
Figure 2
The food of home country/ the host country's food



In Figure 2, the diagrams show that respondents are more attracted to the food of their origin than the food of the host country.

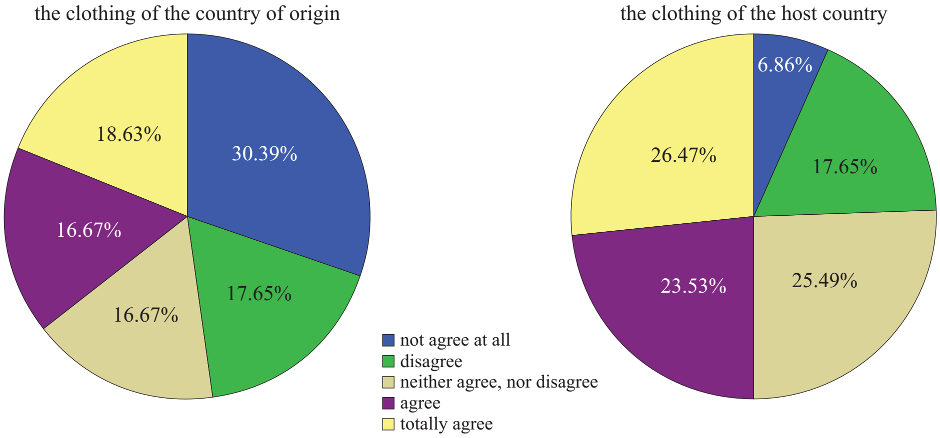
 DOI: 10.7172/2449-6634.jmcbem.2018.1.2

Figure 3
Media



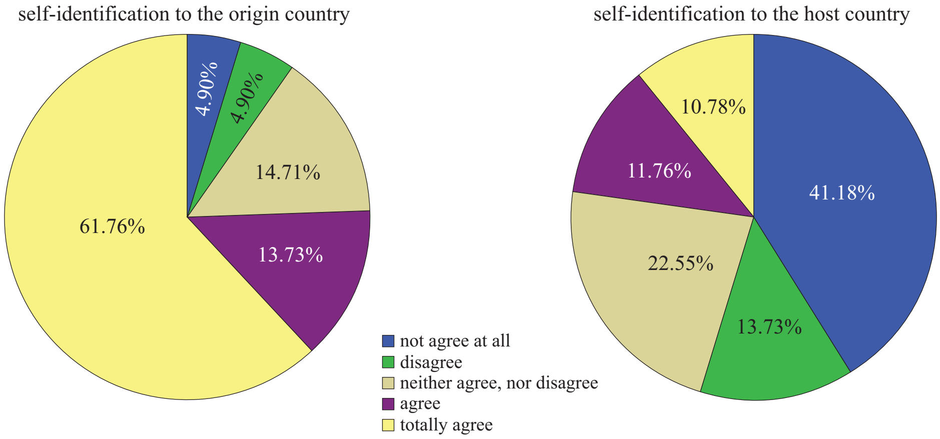
We observed in Figure 3 that expatriates use the media to learn about their culture and country of origin.

Figure 4
The clothing of the country of origin/ the clothing oh the host country



Unlike the other variables, we see in Figure 4 that respondents follow rather the fashion of the host country than that of their country of origin.

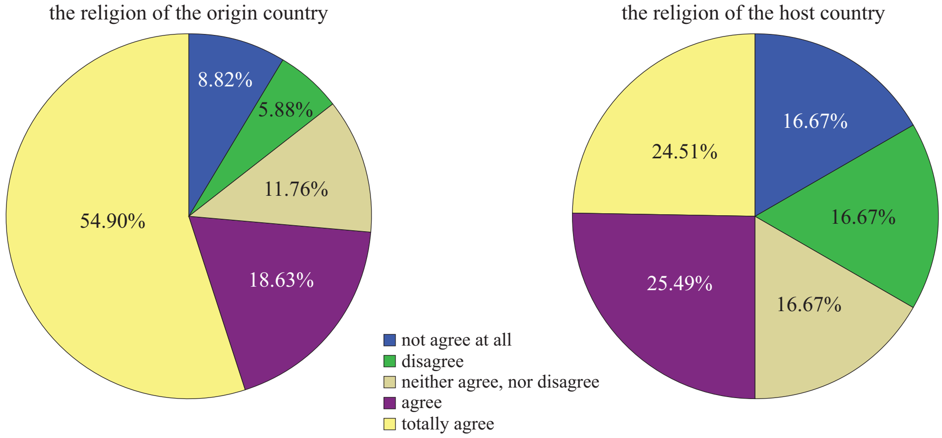
Figure 5
Self-identification to the origin country/ Self-identification to the host country



In Figure 5, we notice that the expatriate respondents identify strongly with their country of origin and practically not with the host country.

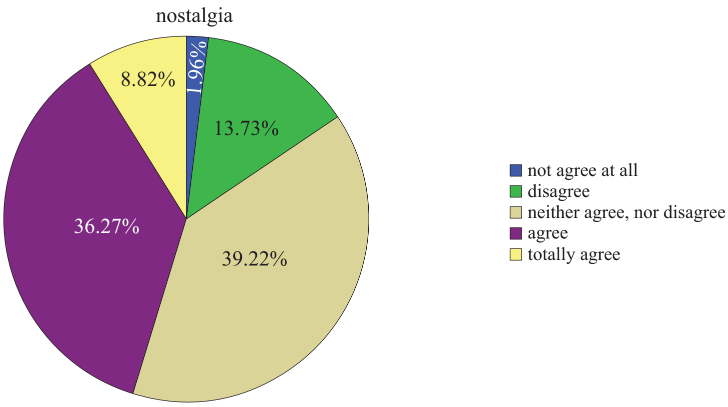
 DOI: 10.7172/2449-6634.jmcbem.2018.1.2

Figure 6
The religion of the origin country/ the religion of the host country



The diagrams in Figure 6 show that respondents celebrate the traditional festivals of their country but also those of the host country.

Figure 7
Nostalgia



In Figure 7, most of our expatriate respondents feel nostalgia.

4.2 Analysis of Variance: One-Way ANOVA

The analysis of variance is used to check if indicators of acculturation have an effect on nostalgia. The summary of results is given in Appendix B. These results indicate that: the home language, the food of the home country, the media, self-identification with the origin country, and the religion of the origin country have a significant effect on nostalgia, and that the language of the host country, the food of the host country, self-identification with the host country, the clothing of the host country and the religion of the host country do not have an effect on nostalgia.

One-way Anova is done in two steps:

1) Levene homogeneity test: the Levene test must be > 0.05; if this is the case, the homogeneity assumption is accepted. Therefore, we can analyze the results of the ANOVA.

2) In the analysis of variance we have two hypotheses:

H0: There is no significant difference between averages.

H1: There is a significant difference between the average results of nostalgia and the different groups created on the basis of the answer to questions about the inducers of acculturation.

P must be as small as possible, the significance level is always set at $p < 0.05$.

If P is significant, the null hypothesis is rejected.

 DOI: 10.7172/2449-6634.jmcbem.2018.1.2

Table 4
Home language / nostalgia

Test of homogeneity of variances			
Nostalgia			
Levene statistics	df1	df2	Sig
1.951	8	93	.061

The Levene test is significant (0.061> 0.05) and the hypothesis of homogeneity of the samples is accepted. We can analyze the results of the ANOVA.

Anova					
Nostalgia					
	Sum of squares	df	Mean squares	F	Sig
Between groups	15.277	8	1.910	2.784	.008
Within groups	63.804	93	.686		
Total	79.081	101			

Here the averages are very different ($F = 2.78$, $p = 0.008<0.05$). The null hypothesis is rejected, there is a significant difference between the average results of nostalgia and the different groups created on the basis of the answer to the question on the state of the language of origin. Therefore, individuals who speak and practice their native language have a higher average level of nostalgia than those who practice the host language.

Table 5
The language of the host country / nostalgia

Test of homogeneity of variances			
Levene statistics			
	df1	df2	Sig
.837	8	93	.572

The Levene test is significant (0.572> 0.05) and the sample homogeneity assumption is accepted. We can analyze the results of the ANOVA.

Anova					
Nostalgia					
	Sum of squares	df	Mean squares	F	Sig
Between groups	3.662	8	.458	.565	.804
Within groups	75.419	93	.811		
Total	79.081	101			

The averages are ($F = 0.56$, $p = 0.804>0.05$). The null hypothesis is accepted, there is no significant difference between means.

DOI: 10.7172/2449-6634.jmcbem.2018.1.2

Table 6
The food of home country / nostalgia

Test of homogeneity of variances			
Nostalgia			
Levene statistics	df1	df2	Sig
1.797	8	93	.087

The Levene test is significant (0.087>0.05) and the hypothesis of homogeneity of the samples is therefore accepted. We can analyze the results of the ANOVA.

ANOVA					
Nostalgia					
	Sum of squares	df	Mean squares	F	Sig
Between groups	14.111	8	1.764	2.525	.016
Within groups	64.970	93	.699		
Total	79.081	101			

The averages are ($F = 2.52$, $p = 0.016<0.05$). The null hypothesis is rejected, there is a significant difference between the average results of nostalgia and the different groups created on the basis of the answer to the question on the food of the country of origin. Therefore, individuals who consume food from their home country have a higher average level of nostalgia than those who consume food from their host country.

Table 7
The host country's food

Test of homogeneity of variances			
Nostalgia			
Levene statistics	fd1	df2	Sig
1.651	8	93	.121

The Levene test is significant (0.121>0.05) and the hypothesis of homogeneity of the samples is therefore accepted. We can analyze the results of ANOVA

ANOVA					
Nostalgia					
	Sum of squares	df	Mean squares	F	Sig
Between groups	6.712	8	.839	1.078	.385
Within groups	72.369	93	.778		
Total	79.081	101			

The averages are ($F = 1.07$, $p = 0.385>0.05$). The null hypothesis is accepted, there is no significant difference between means.

 DOI: 10.7172/2449-6634.jmcbem.2018.1.2

Table 8
Media / nostalgia

Test of homogeneity of variances			
Nostalgia			
Levene statistics	df1	df2	Sig
.667	12	89	.779

The Levene test is significant (0.779>0.05) and the hypothesis of homogeneity of the samples is therefore accepted. We can analyze the results of ANOVA

ANOVA					
Nostalgia					
	Sum of squares	df	Mean squares	F	Sig
Between groups	18.247	12	1.521	2.225	.017
Within groups	60.834	89	.684		
Total	79.081	101			

The averages are (F = 2.22, p = 0.017<0.05). The null hypothesis is rejected, there is a significant difference between the average results of nostalgia and the different groups created on the basis of the answer to the question on the use of the media concerning their country of origin. Therefore, individuals who use the media to learn about their country of origin have a higher average level of nostalgia than those who do not use them.

Table 9
The clothing of the country of origin / nostalgia

Test of homogeneity of variances			
Nostalgia			
Levene statistics	df1	df2	Sig
3.688	4	97	.008

The Levene test is significant (0.008<0.05) and the hypothesis of homogeneity of the samples is rejected. We cannot analyze the results of the ANOVA.

Table 10
The clothing of the host country / nostalgia

Test of homogeneity of variances			
Nostalgia			
Levene statistics	df1	df2	Sig
.848	8	93	.563

The Levene test is significant (0.563>0.05) and the hypothesis of homogeneity of the samples is therefore accepted. We can analyze the results of ANOVA

 DOI: 10.7172/2449-6634.jmcbem.2018.1.2

ANOVA					
Nostalgia					
	Sum of squares	df	Mean squares	F	Sig
Between groups	6.747	8	.843	1.084	.381
Within groups	72.334	93	.778		
Total	79.081	101			

The averages are (F = 1.08, p = 0.381>0.05). The null hypothesis is accepted, there is no significant difference between means.

Table 11
Self-identification with the origin country / nostalgia

Test of homogeneity of variances			
Nostalgia			
Levene statistics	df1	df2	Sig
.465	4	97	.761

The Levene test is significant (0.761>0.05) and the hypothesis of homogeneity of the samples is therefore accepted. We can analyze the results of ANOVA

ANOVA					
Nostalgia					
	Sum of squares	df	Mean squares	F	Sig
Between groups	22.069	4	5.517	9.387	.000
Within groups	57.013	97	.588		
Total	79.081	101			

The averages are (F = 9.38, p = 0.000<0.05). The null hypothesis is rejected; there is a significant difference between the average results of nostalgia and the different groups created on the basis of the answer to the question on identification at country of origin. Therefore, individuals who identify with their country of origin have a statistically higher average level of nostalgia than those who identify with their host country.

Table 12
Self-identification to the host country / nostalgia

Test of homogeneity of variances			
Nostalgia			
Levene statistics	df1	df2	Sig
2.351	4	97	.059

The Levene test is significant (0.059>0.05) and the homogeneity assumption of the samples is accepted. We can analyze the results of ANOVA

 DOI: 10.7172/2449-6634.jmcbem.2018.1.2

ANOVA					
Nostalgia					
	Sum of squares	df	Mean squares	F	Sig
Between groups	4.437	4	1.109	1.441	.226
Within groups	74.644	97	.770		
Total	79.081	101			

The averages are (F = 1.44, p = 0.226>0.05). The null hypothesis is accepted, there is no significant difference between means.

Table 13
The religion of the origin country / nostalgia

Test of homogeneity of variances			
Nostalgia			
Levene statistics	df1	df2	Sig
1.982	4	97	.103

The Levene test is significant (0.103>0.05) and the hypothesis of homogeneity of the samples is therefore accepted. We can analyze the results of ANOVA.

ANOVA					
Nostalgia					
	Sum of squares	df	Mean squares	F	Sig
Between groups	15.747	4	3.937	6.029	.000
Within groups	63.335	97	.653		
Total	79.081	101			

The averages are (F = 6.02, p = 0.000<0.05). The null hypothesis is rejected; there is a significant difference between the average results of nostalgia and the different groups created on the basis of the answer to the question on the religion of the country of origin. Therefore, individuals who practice the religion of their country of origin have a higher average level of nostalgia than those who practice the religion of their host country.

Table 14
The religion of the host country / nostalgia

Test of homogeneity of variances			
Nostalgia			
Levene statistics	df1	df2	Sig
2.327	4	97	.062

The Levene test is significant (0.06>0.05) and the sample homogeneity assumption is accepted. We can analyze the results of ANOVA.

 DOI: 10.7172/2449-6634.jmcbem.2018.1.2

ANOVA					
Nostalgia					
	Sum of squares	df	Mean squares	F	Sig
Between groups	1.284	4	.321	.400	.808
Within groups	77.797	97	.802		
Total	79.081	101			

The averages are (F = 0.40, p = 0.808>0.05). The null hypothesis is accepted, there is no significant difference between means.

5. DISCUSSION AND MANAGERIAL IMPLICATIONS

Acculturation is defined as the change in attitudes, values or behaviors that members of a cultural group manifest in order to be inspired by the standards of another culture (Jolibert & Benabdallah, 2009). This concept has already been studied in the field of nostalgia. In a previous study, it was found that consumers who are least adapted to their host culture often express nostalgic feelings, particularly towards their culture of origin. This usually results in the consumption of products from their home country. Therefore, managers need to consider nostalgia in their marketing strategies by making interesting offers that help maintain and strengthen the connection with the culture of origin (Benabdallah & Jolibert, 2013).

In our study, we investigate whether the variables of acculturation put in place by Jolibert and Benabdallah (2009) and classified according to six criteria namely language, media, self-identification, religion; clothing and food have an impact on nostalgia.

After conducting the analysis of a one-way Anova, we reached the following conclusions:

Language:

Language is one of the indicators of culture and several studies before have proved that it is related significantly to nostalgia (Rousseau, 1999). This study indeed proves that the language of the country of origin has a significant effect on nostalgia. This is reflected in the fact that our respondents who practice the language of their home country are more often more nostalgic than those who practice only the language of the host country (the language of the host country has no impact on nostalgia).

We have proved that language is the link that unites an expatriate with his past, with his traditions, his memories, even with the bitter side of nostalgia as the regret, but it also triggers feelings of comfort.

Therefore, we suggest that managers use this option in their advertising. We can play with several elements such as music, slogans, and jingles or on the image. Some brands have already used it before on advertising posters, using a short slogan but with several languages. The goal is to create a link between the brand and the consumer by triggering a nostalgic impulse.

Food:

According to Baker et al. (2005), food and nostalgia are related through *culinary recipes.* As a matter of fact:

- *Culinary recipes* play a symbolic role in rituals; they represent the link with time and events.
- *Culinary recipes* strengthen family ties.
- *Culinary recipes* help to construct self-identity; they are linked to memorable events of childhood. Thus, it can be concluded that food and nostalgia are closely linked.

 DOI: 10.7172/2449-6634.jmcbem.2018.1.2

This study shows us that the food of the home country has a significant effect on nostalgia.

Therefore, we suggest that brands use nostalgia in a more sensory way by communicating about a nostalgic food product in a different way based on other elements such as its authenticity or origin. The goal is to create physical but especially emotional proximity between the consumer and the food, like the brand "Bonne maman", which uses the option of childhood and products that used to be consumed. Others have decided to focus on the cultural origin of the food product as the "world products" rays found in supermarkets.

We also found non-significance between the host country's food and nostalgia. This proves that some expatriates are probably experiencing some lack of their original food.

Media:

The media are one of the strongest links between an expatriate and his origins. Indeed, they have a significant impact on nostalgia. In short, all indicators of acculturation. In addition, brands often use the media to promote their products. We suggest that they go through specific media that target a specific audience, like for example "Beur FM", which is a radio which targets mainly the Maghreb. The goal is to trigger a nostalgic feeling through specific media but broadcast in the host country.

Clothing:

Fashion is a more complicated concept in the field of nostalgia. Even if the Levene test was inconclusive and we were not able to perform the analysis of variance. The answers from our samples show that it is rare to see expatriates dress traditionally in everyday life. Expatriates mainly follow the fashion of the host country, even if the latter does not make them nostalgic (as evidenced by our results).

Therefore, it is interesting for brands to play the nostalgia card subtly, combining modernity and ethnicity. We can call this standardized adaptation to unconsciously trigger the nostalgic emotion among expatriates in search of connection with their childhood, their traditions and their past.

Self-identification:

According to the results, expatriates who identify with their country of origin feel more nostalgia (P significant). What makes these individuals interesting nostalgic consumers? Indeed, they will seek their identity from their cultural community, because this community will favor social connections primarily (Wildschut et al., 2010). Then we suggest using nostalgia in the virtual sphere by creating discussions on nostalgic brands to attract these cultural communities and promote interaction between them.

The results also show non-significance between self-identification with the host country and nostalgia. This proves once again that nostalgic expatriates are those who identify least with their host country and more with their roots.

Religion:

The use of the term religion in the study refers to the celebration of holidays and culture in general. The results show us that the religion of the country of origin has an impact on nostalgia.

Therefore, we suggest that managers use nostalgic brands that can trigger cultural connections. They can also use iconic and reassuring brands for the expat (Holak, 2014), or brands in connection with celebrations, parties, or with the history of the country of origin; it is important to create an affective and sentimental relationship with the brand. We can also suggest launching retro products with strong cultural roots (Kessous, 2015). Therefore, the brand will establish with the expatriate consumer a relationship of trust, which will promote his loyalty. And even if expatriates are more in touch with the religion of the host country, this one has no connection with nostalgia.

 DOI: 10.7172/2449-6634.jmcbem.2018.1.2

Nostalgia is an interesting marketing tool. It gives an authentic and quality image of the brand (Sierra & McQuitty, 2007). It also provides a sense of credibility (Merchant, LaTour, Ford, & LaTour, 2013; Zeitlin & Westwood, 1986). Nostalgic cultural brands are a way for the expatriate consumer to relive some important events from his past. They can be happy or sad; it is up to the brand to make sure to alleviate the sad feelings.

In the end, our results suggest that the culture of origin strongly influences the nostalgic feeling. Culture is the link with childhood, the past and traditions.

6. CONCLUSION – LIMITS AND IMPLICATIONS FOR FUTURE RESEARCH

First, this research contributes to answering the problem: Does acculturation of expatriates have an impact on nostalgia?

But it also contributes on different levels:

Theoretically: This study confirms and enriches the theories that have been developed on nostalgia and culture, in particular that of Kessous (2015) and his theory on the impact of culture on the attitude of consumers towards nostalgic brands. Therefore, our research follows the current and valid theories of nostalgia.

Methodologically: Culture is often observed and measured qualitatively. But in our study, it is approached differently. Indeed, we used the quantitative method. This contributed to enriching the methodology on the cultural aspect.

On the managerial level, we talked about several managerial contributions in our "discussion" part. In summary, nostalgia is a powerful sales tool. It touches the sentimental and emotional side of the consumer, and today emotional marketing is an undeniable asset for marketing.

This study has presented interesting results, but it has many limitations. First, our sample is made up of more men than women and the majority are of North African origin. Therefore, we could not do some analysis. Future research can carry out the same study but comparing men and women or cultures between people, because each culture has its traditions and its ideals. The results may be interesting in this respect. Then, collecting questionnaires from expatriates was difficult. In some places expatriates are inaccessible because of the legal laws which stipulate that surveys should not refer to ethnic origin.

In this study, we represented culture through the concept of acculturation, but culture is vast and has many facets. Future research can explore other theories like Hofstede's dimensions.

Finally, we used the scales of Jolibert and Benabdallah (2009) for acculturation and the scale of Alexandra Vignolles (2009) for nostalgia. These scales have been validated by the authors, but other scales could yield other results. It is therefore interesting for future research to create a new scale for culture and nostalgia, more current and more precise.

References

Auenbrugger, L. (1808). *Nouvelle méthode pour reconnaître les maladies internes de la poitrine par la percussion de cette cavité*. Meguignon-Marvis.

Batcho, K.I. (1995). Nostalgia: A psychological perspective. *Perceptual and Motor Skills*, *80*(1), 131–143.

Belk, R.W., Wallendorf, M., & Sherry Jr, J.F. (1989). The sacred and the profane in consumer behavior: Theodicy on the odyssey. *Journal of Consumer Research*, *16*(1), 1–38.

Belk, R.W. (1990). The role of possessions in constructing and maintaining a sense of past. In M.E. Goldberg, G. Gorn, & R.W. Pollay (Eds.), *NA – Advances in consumer research* (Vol. 17, pp. 669–676). Provo, UT: Association for Consumer Research.

Belk, R.W. (1992). Attachment to possessions. In I. Altman, & S. M. Low (Eds.), *Place attachment* (pp. 37–62). Springer.

Bellelli, G. (1991). Une émotion ambiguë: la nostalgie. *Cahiers Internationaux de Psychologie*, *11*, 59–76.

 DOI: 10.7172/2449-6634.jmcbem.2018.1.2

Bolzinger, A. (1989). Jalons pour une histoire de la nostalgie. *Bulletin de psychologie*, *42*(389), 310–321.

Robert-Demontrond, P., & Bougeard, C. (2008). *Proposition d'une échelle de mesure du degré d'enracinement d'un consommateur dans sa région* (No. halshs-00359103).

Boulbry, G. (2003). *L'impact du vieillissement cognitif sur l'efficacité publicitaire: le cas de la publicité à évocations nostalgiques*. PhD thesis, Rennes 1.

Brown, B.B., & Werner, C.M. (1985). Social cohesiveness, territoriality, and holiday decorations: The influence of cul-de-sacs. *Environment and behavior*, *17*(5), 539–565.

Davis, F. (1979). *Yearning for yesterday: A sociology of nostalgia*. Free Press.

Di Méo, G. (2001). Le sens géographique des fêtes/the geographical meaning of festivities. In *Annales de géographie* (pp. 624–646).

Divard, R., & Robert-Demontrond, P. (1997). La nostalgie: un thème récent dans la recherche marketing. *Recherche et Applications en Marketing* (French Edition), *12*(4), 41–62.

Dovey, K. (1985). Home and homelessness. In *Home environments* (pp. 33–64). Springer.

Feldman, R.S. (1990). *The social psychology of education: Current research and theory*. Cambridge University Press.

Fried, M., & Gleicher, P. (1961). Some sources of residential satisfaction in an urban slum. *Journal of the American Institute of planners*, *27*(4), 305–315.

Guàrdia, J., & Pol, E. (2002). A critical study of theoretical models of sustainability through structural equation systems. *Environment and Behavior*, *34*(1), 137–149.

Hallegate, D., & Marticotte, F. (2014). *Does Holbrook's nostalgia index measure nostalgia proneness?*

Havlena, W.J., & Holak, S.L. (1991). "The good old days": Observations on nostalgia and its role in consumer behavior. *Advances in consumer research*, *18*(1).

Hepper, E.G., Wildschut, T., Sedikides, C., Ritchie, T.D., Yung, Y.F., Hansen, N., & Gebauer, J.E. (2014). Pancultural nostalgia: Prototypical conceptions across cultures. *Emotion*, *14*(4), 733.

Hirsch, A.R. (1992). Nostalgia: A neuropsychiatric understanding. In *Advances in Consumer Research* (Vol. 19, pp. 390–395).

Hofer, J. (1934). Medical dissertation on nostalgia. *Bulletin of the History of Medicine*, *2*, 376–391.

Hofstede, G., & Bond, M.H. (1984). Hofstede's culture dimensions: An independent validation using Rokeach's value survey. *Journal of cross-cultural psychology*, *15*(4), 417–433.

Holbrook, M.B., & Schindler, R.M. (1991). Echoes of the dear departed past: Some work in progress on nostalgia. *ACR North American Advances*.

Holbrook, M.B. (1993). Nostalgia and consumption preferences: Some emerging patterns of consumer tastes. *Journal of Consumer research*, *20*(2), 245–256.

Holbrook, M.B. (1994). Nostalgia proneness and consumer tastes. *Buyer Behavior in Marketing*, *2*, 348–364.

Holbrook, M.B., & Schindler, R.M. (1996). Market segmentation based on age and attitude toward the past: Concepts, methods, and findings concerning nostalgic influences on customer tastes. *Journal of Business Research*, *37*(1), 27–39.

Holbrook, M.B., & Schindler, R.M. (2003). Nostalgic bonding: Exploring the role of nostalgia in the consumption experience. *Journal of Consumer Behaviour*, *3*(2), 107–127.

Jagannathan, M. (2005). *South Indian Hindu festivals and tradition*. Abhinav Publications.

Kessous, A. &.Roux E. (2010). Les marques perçues comme «nostalgiques»: conséquences sur les attitudes et les relations des consommateurs à la marque. *Recherche et Applications en Marketing* (French Edition), *25*(3), 29–56.

Kessous, A., &. Roux E. (2014). Nostalgie: de l'optique des consommateurs à celle des marques/nostalgia: From the perspective of the consumers to that of brands. *Décisions Marketing*, *75*, p. 117.

Kusumi, T., Matsuda, K., & Sugimori, E. (2010). The effects of aging on nostalgia in consumers' advertisement processing. *Japanese Psychological Research*, *52*(3), 150–162.

Lalli, M. (1992). Urban-related identity: Theory, measurement, and empirical findings. *Journal of Environmental Psychology*, *12*(4), 285–303.

Legge, J. (1971). *Confucian analects* (trans.).

Leung, K., Bhagat, R.S., Buchan, N.R., Erez, M., & Gibson, C.B. (2005). Culture and international business: Recent advances and their implications for future research. *Journal of International Business Studies*, *36*(4), 357–378.

Lewicka, M. (2005). Ways to make people active: The role of place attachment, cultural capital, and neighborhood ties. *Journal of Environmental Psychology*, *25*(4), 381–395.

Little, J.W., III. (1987). Nipple-areolar reconstruction. *Advances in Plastic and Reconstructive Surgery*, *3*, 43–79.

Loveland, K.E., Smeesters, D., & Mandel, N. (2010). Still preoccupied with 1995: The need to belong and preference for nostalgic products. *Journal of Consumer Research*, *37*(3), 393–408.

 DOI: 10.7172/2449-6634.jmcbem.2018.1.2

Low, S.M., & Altman, I. (1992). Place attachment. In: *Human Behavior and Environment* book series (Hube, Vol. 12, pp. 1–12). Boston, MA: Springer. University of Utah, Salt Lake City, USA. Graduate School and University Center, City University of New York, New York USA. Springer, Boston, MA. Springer Book Archive.

McAndrew, F.T., Akande, A., Turner, S., & Sharma, Y. (1998). A cross-cultural ranking of stressful life events in Germany, India, South Africa, and the United States. *Journal of Cross-Cultural Psychology*, *29*(6), 717–727.

McCann, W.H. (1941). Nostalgia: A review of the literature. *Psychological Bulletin*, *38*(3), 165.

McCracken, G. (1990). The evocative power of things: Consumer goods and the preservation of hopes and ideals. In *Culture and consumption: New approaches to the symbolic character of consumer goods and activities* (1st Midland Book ed., pp. 104–117). Bloomington, Ind., Indianapolis, Ind.: Indiana University Press.

Moore, R.L., & Graefe, A.R. (1994). Attachments to recreation settings: The case of rail-trail users. *Leisure Sciences*, *16*(1), 17–31.

Perrusson, C. (2003). *Contribution à une meilleure compréhension des effets de la nostalgie évoquée dans l'annonce publicitaire: une application aux messages televises.* PhD thesis, Paris.

Pol, E., & Castrechini, A. (2002). City-identity-sustainability research network: Final words. *Environment and Behavior*, *34*(1), 150–160.

Porchet, J. (1979). La nostalgie. A partir de jeunes militaries. Thesis of medicine, Lille.

Proshansky, H.M., Fabian, A.K., & Kaminoff, R. (1983). Place-identity: Physical world socialization of the self. *Journal of Environmental Psychology*, *3*(1), 57–83.

Rivlin, L.G. (1982). Group membership and place meanings in an urban neighborhood. *Journal of Social Issues*, *38*(3), 75–93.

Robert-Demontrond, P., & Boulbry, G. (2003). Marketing mémoriel: attraits et dangers du phénomène nostalgique. *Gestion 2000*, (2), 31–47.

Robert-Demontrond, P. (2008). Entre compromis, compromissions ou entrée en dissidence: les avenirs du commerce équitable. *Décisions marketing*, 27–38.

Robert-Demontrond, P. (2010). *Nouveaux mouvements sociaux, ancien esprit: une étude des structures anthropologiques de l'imaginaire des amapiens* (Technical report).

Rose, A.A. (1948). The homes of homesick girls. *The Journal of Child Psychiatry*, *1*(2), 181.

Rothenberg, R. (1989). The past is now the latest craze. *The New York Times.*

Rousseau, G.G., & Venter, D.J.L. (1999). The influence of nostalgia on consumer preference. *SA Journal of Industrial Psychology*, *25*(1), 36–42.

Schindler, R.M., & Holbrook, M.B. (2003). Nostalgia for early experience as a determinant of consumer preferences. *Psychology & Marketing*, *20*(4), 275–302.

Shumaker, S.A., & Taylor, R.B. (1983). Toward a clarification of people-place relationships: A model of attachment to place. *Environmental Psychology: Directions and Perspectives*, *2*, 19–25.

Sierra, J.J., & McQuitty, S. (2007). Attitudes and emotions as determinants of nostalgia purchases: An application of social identity theory. *Journal of Marketing Theory and Practice*, *15*(2), 99–112.

Spearman, C. (1927). *The abilities of man.*

Stern, B.B. (1992). Historical and personal nostalgia in advertising text: The fin de siecle effect. *Journal of Advertising*, *21*(4), 11–22.

Trilling, R.R. (2009). *Aesthetics of nostalgia: Historical representation in Old English verse*. University of Toronto Press.

Uzzell, D., Pol, E., & Badenas, D. (2002). Place identification, social cohesion, and enviornmental sustainability. *Environment and Behavior*, *34*(1), 26–53.

Vignolles, A. (2010). *Influence de la perception nostalgique sur l'attachement à la marque, sur l'attitude à l'égard du produit et sur l'attitude à l'égard de la marquee*. PhD thesis, Toulouse 1 Capitole.

Williams, D.R., Patterson, M.E., Roggenbuck, J.W., & Watson, A.E. (1992). Beyond the commodity metaphor: Examining emotional and symbolic attachment to place. *Leisure sciences*, *14*(1), 29–46.

 DOI: 10.7172/2449-6634.jmcbem.2018.1.2

APPENDIX A

Indicators of acculturation / nostalgia

Indicators of origin country/ nostalgia	Indicators of host country/ nostalgia
R1 : home language / nostalgia	R7 : the language of the host country/ nostalgia
R2 : the food of home country / nostalgia	R8 : the host country's food / nostalgia
R3 : the media of the country of origin/ nostalgia	R9 : the clothing of the host country / nostalgia
R4 : the clothing of the country of origin / nostalgia	R10 : self-identification with the host country / nostalgia
R5 : self-identification with the origin country/ nostalgia	R11 : the religion of the host country / nostalgia
R6 : the religion of the origin country/ nostalgia	

DOI: 10.7172/2449-6634.jmcbem.2018.1.2

APPENDIX B

Independent variable	Dependent variable	Levene Test Sig	Anova Sig	Comments
Home language	Nostalgia	0.061>0.05	0.008< 0,05	– Levene test is significant – P of Anova is significant – Home language ↗ → nostalgia ↗
The language of the host country	Nostalgia	0.572>0.05	0.804> 0.05	– Levene test is significant – P of Anova in not significant – there is no significant difference between means
The food of home country	Nostalgia	0.087>0.05	0.016 <0.05	– Levene test is significant – P of Anova is significant – the food of home country ↗ →nostalgia ↗
The host country's food	Nostalgia	0.121>0.05	0.385> 0.05	– Levene test is significant – P of Anova in not significant – there is no significant difference between means
The media of the country of origin	Nostalgia	0.779>0.05	0.017 <0.05	– Levene test is significant – P of Anova is significant – The media ↗ → nostalgia ↗
The clothing of the country of origin	Nostalgia	0.008<0.05		– Levene test is not significant – We cannot analyze the results of the Anova
The clothing of the host country	Nostalgia	0.563>0.05	0.381> 0.05	– Levene test is significant – P of Anova in not significant – The clothing of the host country has no impact on nostalgia – there is no significant difference between means
Self-identification with the origin country	Nostalgia	0.761>0.05	0.000 <0.05	– Levene test is significant – P of Anova is significant – Self-identification with the origin country ↗ → nostalgia ↗
Self-identification with the host country	Nostalgia	0.059>0.05	0.226> 0.05	– Levene test is significant – P of Anova in not significant – there is no significant difference between means
The religion of the origin country	Nostalgia	0.103>0.05	0.000 <0.05	– Levene test is significant – P of Anova is significant – The religion of the origin country ↗ → nostalgia ↗
The religion of the host country	Nostalgia	0.06> 0.05	0.808> 0.05	– Levene test is significant – P of Anova in not significant – there is no significant difference between means

 DOI: 10.7172/2449-6634.jmcbem.2018.1.2

(48–65)

The Impact of Social Media Usage on Employee and Organization Performance: A Study on Social Media Tools Used by an IT Multinational in Malaysia

Grace Shalini A/P Radhakrishnan
School of Accounting and Business Management
FTMS COLLEGE, MALAYSIA
Email: grace_shalin@hotmail.com

Abdul Basit
School of Accounting and Business Management
FTMS COLLEGE, MALAYSIA
Email: abdulbasit@ftms.edu.my

Zubair Hassan
School of Accounting and Business Management
FTMS COLLEGE, MALAYSIA
Email: zubai7@gmail.com

Received: 25 June 2018/ Revised: 1 August 2018/ Accepted: 8 August 2018/Published online: 9 October 2018

ABSTRACT

The purpose of this research is to examine the impact of social media usage on employee and organization performance. The research was done on one multinational IT Company. Social media usage was measured using knowledge sharing, decision making and communication. Organizational performance was measured using employee and organization performance. Questionnaires were developed and the items were measured using a Likert scale ranging from 1 to 5. This research takes on an explanatory approach and the sample consisting of 206 employees working in call center departments was recruited. The data was analyzed using SPSS 21 and AMOS 22 software. The results showed that only decision making has a positive and significant impact on employee high performance and organizational performance. We found no significant impact of the other two dimensions of social media usage (knowledge sharing and communication) on employee high performance and organizational performance. Therefore, this study suggests that top management in MNC companies as well as employees should consider social media usage for effective decision making to increase employee performance and organizational performance. This research contributes to existing studies on this topic, and future research could put emphasis on extending this research to another country or industry.

JEL classification: M31, M37, M39

Keywords: knowledge sharing, communication, decision making, employee high performance, organization performance.

 DOI: 10.7172/2449-6634.jmcbem.2018.1.3

1. INTRODUCTION

The era of social media started in 1997 on its first popular site called SixDegree.com allowing users to create personal profiles and a friends list online (Boyd & Ellison, 2007) followed by blogging platforms like Blogger and LiveJournal in 1999 and the rest such as Wikipedia in 2001, Myspace in 2003, etc. As the acceptance of these technologies widely grew, social media has moved quickly from the tech-savvy domain to the mainstream (Shirky, 2008) penetrating into organizations at a rapid pace. A survey done by McKinsey reported that 65% of organizations use social media based technologies to motivate and enhance performance (Bughin & Chui, 2010).

However, in the past, few studies combining employee high performance and organizational performance simultaneously were carried out on the topic of social media usage in the context of Malaysia and other parts of the world. For instance, some studies examine the influence of social media on employee work performance in China (Cao et al., 2016), knowledge sharing through social media to enhance job performance in Korea (Kwahk & Park, 2016), the link between social media and work, leadership, and work-life conflict among professionals (Jiang, Luo, & Kulemenka, 2017), the relationship between social media usage and employee performance (Shami, Nichols, & Chen, 2014) in the United States, and a similar study was carried out to examine the impact of social media usage on employee performance in Europe (Ouirdi et al., 2014). The number of studies carried out to examine such impact in Malaysia is considered as zero or very few. One of the recent studies on social media and its influence on employees was carried out in the oil and gas industry by Omar, Dahalan and Yusoff (2016) while another study focuses on examining the influence of social media usage on organizational performance (Parveen, Jaafar, & Ainin, 2015). This leaves a certain gap, namely none of the studies focus on examining the impact of social media usage on employee and organizational performance. Similarly, despite the growth in the interest in social media in Malaysia, the potential value that social media gives to an organization and high rates of individual usage, studies conducted to determine social media usage and its impact within an organization are limited (Wamba & Carter, 2013). Most of the studies carried out on social media in general focus on understanding the individual level of usage (Lundblad, 2003; Häggman, 2009). Furthermore, studies carried out in Malaysia to determine the factors affecting social media usage such as knowledge sharing, communication, decision making that enables high performance at the employee and organizational levels are considered very limited.

Therefore, the problem statement is '*what is the impact of social media usage on employee and organizational performance*?' To attain the aim of the study, the following objectives were formulated:

– To examine the impact of knowledge sharing on employee high performance
– To examine the impact of communication on employee high performance
– To examine the impact of decision making on employee high performance
– To examine the impact of knowledge sharing on organization performance
– To examine the impact of communication on organization performance
– To examine the impact of decision making on organization performance

This paper is organized as follows: the introduction is the first area covered as discussed above, followed by a literature review, which mainly focuses on reviewing past research, followed by the research design and methodology, followed by findings and analysis and finally the conclusion and recommendations for future research directions.

 DOI: 10.7172/2449-6634.jmcbem.2018.1.3

2. LITERATURE REVIEW

Review of Key Concepts

Social media usage

In general, the use of social media and the interest in it in the workplace have grown in the last few years (Lovejoy & Saxton, 2012). The very first use of the term 'social media' is believed to have occurred in 1997, when Ted Leonsis, AOL executive, stated that organizations should provide consumers with "social media, places where they can be entertained, communicate and participate in a social environment" (Bercovici, 2010). However, according to Kaplan and Haenlein (2010), the era of social media started probably in the early 1990s, when the founders of 'Open Diary', Bruce and Susan Abelson, created an online social site which invited diary writers into one community.

Kaplan and Haenlein (2010) defined social media as a group of Internet-based applications that build on the technological and ideological foundations, which allows the creation and exchange of User-Generated Content (UGC). Similarly, Steenkamp and Hyde-Clarke (2014) defined social media as a platform which enables users of the media to exchange and share information. Also, Ouirdi et al. (2014) defined social media as a web-based and mobile platforms that allow users to share and add geographical information to user-generated content.

Employee high performance

To enable employee high performance or a high performance employee, it was argued that an organization must engage in practices for managing employee relationships to increase competencies, motivations, commitments, communication, involvement and flexibility (Sofijanova & Zabijakin-Chatleska, 2013). It was also argued that employee high performance is achieved through basic elements such as (1) increasing employees' knowledge, skills and abilities, (2) employee empowerment and participation in decision making and problem solving and (3) motivating employees through incentives to make an additional discretionary work effort (Huselid, 1995; Mac Duffie, 1995).

Employee performance is related to the activities that are expected of a worker and how well the worker executes those activities (BusinessDictionary, 2017). Shaw (2017) stated the characteristics of high performance employees as those focused on quality as a priority in their work, concentrated on improving their skills and taking the lead when it comes to making decisions. Burks (2017) also quoted that high performers find ways to improve their performance including finding resources that they need to excel.

Organization performance

An organization is defined as a social unit comprising a group of people that is managed or structured to pursue collective goals (BusinessDictionary, 2017). In turn, performance is an exchange of non-financial and financial indicators which gives information on the achievement of the objectives and results (Lebas & Euske, 2006). Organization performance is the outputs from the invested inputs (goals or objectives) (Lebas & Euske, 2006)

Knowledge sharing

Alvin (1990) stated that the essence of power in the current information age is knowledge. Ryu, Ho and Han (2003) defined knowledge sharing as an act of diffusing acquired knowledge of a member to another member in an organization. Omar et al. (2016) define knowledge sharing as communicating the knowledge within a group of people whether in a formal place like the

 DOI: 10.7172/2449-6634.jmcbem.2018.1.3

workplace or an informal place like among friends. On the flip side of the coin, Kwahk et al. (2016) state that knowledge sharing requires active interaction between more than one individual who has the necessary knowledge and does not depend on a single person's efforts.

Communication

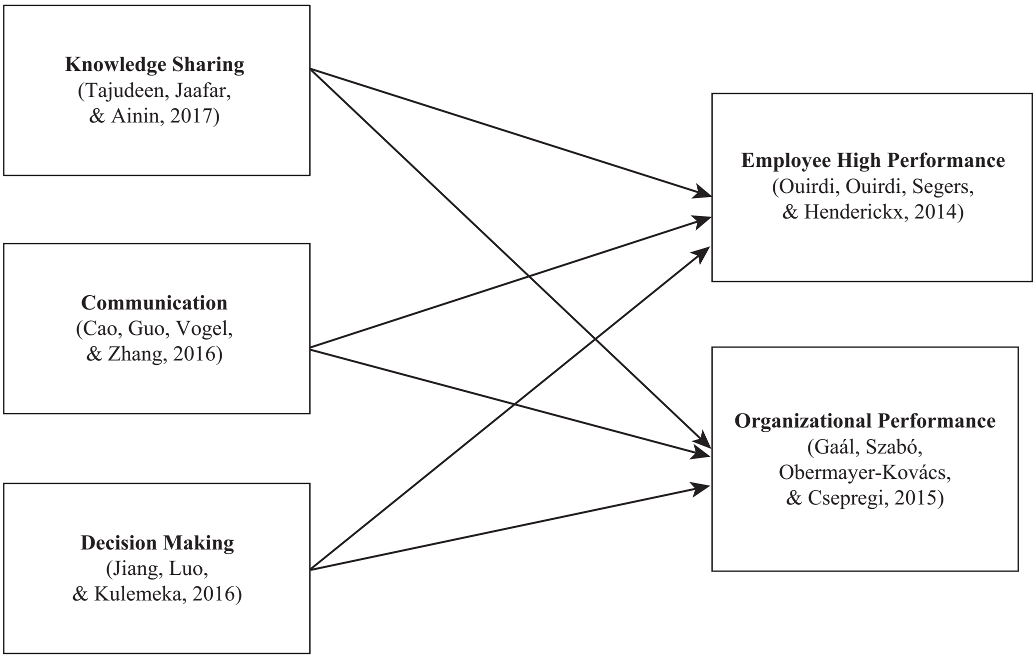
Communication originated from the Latin word 'communicare' meaning "to make common" or "to share" (Weekley, 1967). Further to this, DeVito (1986) added that communication is an act or process of transmitting a message from a sender to a receiver via a channel with noise interference. Merriam Webster (2017) defines communication as an act of transmitting a verbal or written message. Team FME (2013) in their article defined communication as a two-way process which involves several interactions towards achieving mutual understanding. Bel, Smirnov and Wait (2017) state that communication is an important precursor which provides information on what to be done for a prospective change within an organization.

Decision making

Harris (2012) defines decision making as the study to identify and choose substitutes based on preferences and values of the decision maker. He also added that it is a process of adequately minimizing uncertainty and doubt about substitutes to give way to a reasonable choice to be made among them. CIMA (2007) described decision making as the steps through which alternatives are chosen and managed to achieve an organization's objectives. Chand (2016) states that a decision is a choice made by a person to conclude about a situation, while decision making is the selection of choices which involves a choice making activity that determines the person's action or inaction. According to Talley (2011), decision making includes a variety of processes that are medium steps between actions and thought which ideas are expressed.

Theoretical Framework

Figure 1
Theoretical framework for the study



DOI: 10.7172/2449-6634.jmcbem.2018.1.3

Knowledge Sharing Through Social Media Usages

Social media usage is becoming more important as these tools are being used for knowledge sharing, communication and decision making in organizations. According to Yesil and Dereli (2013), knowledge has become an important resource and a significant driver of organizational performance. By sharing knowledge, an employee in an organization can learn from other employees' experiences which in return contribute to the organization and employee job performance (Kang, Kim, & Chang, 2008). It can also positively encourage positive team performance (Srivasta, Bartol, & Locke, 2006) and strengthens collaboration and coordination between employees of an organization (Mathieu et al., 2000), which results in high job performance. Park and Im (2001) found that knowledge sharing does improve employees' job performance within the government sector. Sigalaa and Chalkiti (2015) explored the relation between employee creativity and social media use. They found that the use of social media for disseminating and externalizing information discussed with other peers within various social media platforms encourages employees to generate and share new knowledge. As a result, it can further expand employees' cognitive abilities through innovation and give them the opportunity to generate and create new ideas/knowledge (Sigalaa & Chalkiti, 2015).

H1: *Knowledge sharing through social media usage affects employee high performance and organizational performance*

Communication Through Social Media Usage

Social media has extended itself to the communication world which gives organizations the opportunity to share information and interact frequently with their customers (Papasolomou & Melanthiou, 2012). It has also enabled a dynamic and interactive process to occur in daily communication both internally and externally between employees and the organization (Langer, 2014). Leornardi et al. (2013) argued that using social media allows employees to broadcast or communicate messages to everyone within the organization and to view the connections, text and messages posted or edited by any individual in the organization at any point of time. Also, they argued that social media platforms are digital, unlike traditional physical offices such as conference rooms, and members in the organization can communicate and participate from anywhere at any time (Leornardi et al., 2013). A recent study by Babiker (2017) found that the speed of communication via social media made the flow of information and correspondence faster.

H2: *Communication through social media usage affects employee high performance and organizational performance*

Decision Making Through Social Media Usage

Effective decision making depends on an individual's ability to draw from and gain access to reliable sources, which requires evaluation skills (Burclaff and Johnson, 2016). Burclaff and Johnson (2016) stated that connecting across networks with the use of social media gives the ability to make meaningful decisions on whether to acquire existing knowledge either internal or external or acquire new information. Similarly, Culnan, McHugh and Zubillaga (2010) argued that various platforms of social media give the opportunity for the organization to make a good decision on which platform to adopt and how it should be used. According to Baker et al. (2011), using social media gives leaders an opportunity to contact their subordinates fast. Papageorgiou (2015) found that employees will demonstrate high commitment to their organizations when they

 DOI: 10.7172/2449-6634.jmcbem.2018.1.3

are given the opportunity to interact with other employees via internal social media platforms. This encourages employees to participate in the decision making process whereby they can voice out their concerns and issues (Papageorgiou, 2015).

H3: *Decision making through social media usage affects employee high performance and organizational performance*

3. RESEARCH DESIGNS AND METHODS

Subject and Procedure Details

The target population of this research is employees from one multinational company in Malaysia. There were almost 2006 employees working in the organization at the time of data collection.

Convenience sampling, which is a non-probability sampling method, was selected for this research as it is easy in terms of sample collection and financially cheaper as well as less time is taken to get the data; furthermore, it is a widely use technique in most research (Neuman, 2002). Within the study, 230 survey questionnaires were distributed to all the employees in the call center department. Out of 230 surveys, only 225 surveys were received back and incomplete questionnaires were eliminated. A final sample of 206 survey questionnaires that had no missing information was utilized for data analysis. This means that only 91% of the collected survey forms were usable.

Table 1 shows that 53.4% of respondents are male and the rest, that is 46.6%, are female. 59.2% of respondents were within the 26–35 age group and the fewest (11.2%) were within the age group of 36–50. 78.6% of respondents earned a salary ranging from US$ 500 to 1000. 68.4% of respondents were university graduates, followed by college graduates (29.1%) and the fewest had completed secondary level education, accounting for 2.4% of all respondents.

Table 1
Demographic analysis

		Frequency	Percentage (%)	Valid Percentage (%)	Cumulative Percentage (%)
Gender	Female	96	46.6	46.6	46.6
	Male	110	53.4	53.4	100
	Total	206	100	100	
Age	18–25	61	29.6	29.6	29.6
	26–35	122	59.2	59.2	88.8
	36–50	23	11.2	11.2	100
	Total	206	100	100	
Education Level	Secondary	5	2.4	2.4	31.6
	College	60	29.1	29.1	29.1
	University	141	68.4	68.4	100
	Total	206	100	100	

DOI: 10.7172/2449-6634.jmcbem.2018.1.3

Research Instrument

The researchers developed a set of questionnaires from the theoretical framework studied for this research. It was firstly tested and then utilized as primary data.

The researchers constructed the questionnaire using a Likert scale ranging from 1 to 5, where 1 is strongly disagree and 5 indicates strongly agree for each statement (Likert, 1932). A total of 29 items or statements were developed and included in the scale construction. The research instrument, namely the questionnaire, consists of five groups of variables. Table 2 below shows the detailed construction of the questionnaire used. A sample of 50 respondents was recruited to participate in pilot testing, which was used to test the reliability and validity of the construct. As shown in Table 2 below, Cronbach's Alpha reliability test proved high reliability of all the variables as regards internal consistency since the values are above 0.8 and can be used in this research (George & Mallery, 2003)

Table 2
Scale construction

<table>
<tr><th>Variables</th><th>Q</th><th>Factors</th><th>Pilot Testing (Cronbach's Alpha Reliability Test)</th><th>Source</th></tr>
<tr><td rowspan="5">Knowledge Sharing</td><td>KS1</td><td>Tacit and explicit knowledge</td><td rowspan="5">0.863</td><td rowspan="5">Hsu et al. (2007); Davenport and Prusak (1998); Kwahk and Park (2016); Jiang, Luo and Kulemeka (2017); Dhanaraj et al., (2014)</td></tr>
<tr><td>KS2</td><td>Collaboration</td></tr>
<tr><td>KS3</td><td>Share and exchange knowledge</td></tr>
<tr><td>KS4</td><td>Motivation</td></tr>
<tr><td>KS5</td><td>Innovatively create ideas and knowledge</td></tr>
<tr><td rowspan="5">Communication</td><td>C1</td><td>Internal and external communication</td><td rowspan="5">0.924</td><td rowspan="5">Papasolomou and Melanthiou (2012); Langer (2014); Farrell, Kellogg and Thomas (2008); Divya and Regi (2014); Leornardi, et al. (2013); Batikas and Van Bavel (2013); Babiker (2017)</td></tr>
<tr><td>C2</td><td>Frequency and amount of interaction</td></tr>
<tr><td>C3</td><td>Speed of communication</td></tr>
<tr><td>C4</td><td>Broadcast or communicate messages</td></tr>
<tr><td>C5</td><td>Easy use of social media tool to communicate</td></tr>
<tr><td rowspan="5">Decision Making</td><td>DM1</td><td>Evaluate alternatives</td><td rowspan="5">0.926</td><td rowspan="5">Burclaff and Johnson (2016); Majchrzak et al. (2013); Sanders (2007); Leornardi (2014); Nkwe and Cohen (2017); Papageorgiou (2015); Trimi and Galanxhi (2014)</td></tr>
<tr><td>DM2</td><td>Create decision conversations leading to diverse opinions</td></tr>
<tr><td>DM3</td><td>Make meaningful and good decisions</td></tr>
<tr><td>DM4</td><td>Make fast decisions in timely manner</td></tr>
<tr><td>DM5</td><td>Feel encouraged to take part in making decision</td></tr>
</table>

DOI: 10.7172/2449-6634.jmcbem.2018.1.3

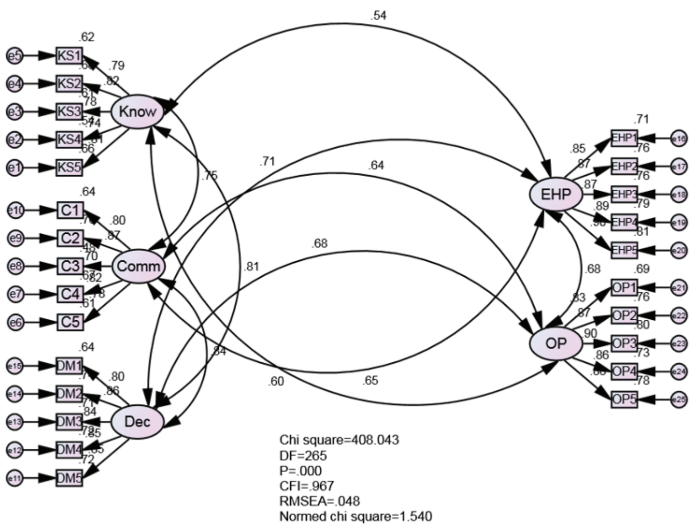
Variables	Q	Factors	Pilot Testing (Cronbach's Alpha Reliability Test)	Source
Employee High Performance	EHP1	Perform better than acceptable level	**0.959**	Williams and Anderson (1991); Kwahk and Park (2016); Ali-Hassan, Nevo and Wade (2015); Kuvaas (2006); Cao et al. (2016)
	EHP2	Reliability of job performance		
	EHP3	Ability to perform job duties		
	EHP4	Increased quality of work		
	EHP5	Put extra effort to complete tasks on time		
Organization Performance	OP1	Improve client service	**0.950**	Wu (2016); Tajudeen, Jaafar and Ainin (2017); Parveen et al. (2016)
	OP2	Introduce new social media tool		
	OP3	Seek new ways to do things		
	OP4	Interact with employees and clients		
	OP5	Encourage use of social media		

4. RESULTS AND ANALYSIS

This part of the paper will discuss the validity, reliability of the research instrument and findings through appropriate data analysis methods. The validity test of the item construction is done through a confirmatory factor analysis. The reliability test is conducted using Cronbach's alpha via SPSS. The path analysis is conducted using Structural Equation Modeling (SEM).

Confirmatory Factor Analysis (CFA)

Figure 2
Measurement model (CFA)



DOI: 10.7172/2449-6634.jmcbem.2018.1.3

According to Holmes-Smith (2006) and Hair et al. (2010), the model fitness indices indicate the level of acceptance for the confirmatory factor analysis. The analysis for most items must be within the construct and loading factors must have a score above 0.5 to show good reliability of the model (Holmes-Smith, 2001). Thus, in Figure 2, the estimates of above 0.6 for all the variables show that the overall model is valid for further analysis. According to Hair et al. (2010), the Comparative Fit Index (CFI) should exceed 0.90 to achieve a good model fit and in this research the CFI value is 0.967, which is considered as good fit. To indicate the statistics fitness, the normed chi-square ratio should be below 3.0 according to Kline (2011) and in this research, it is 1.54. The Root Mean Square Error (RMSEA) value is 0.048 and is below the recommended max value level of 0.08 indicating a good fit (Hooper et al., 2008).

Overall, the RMSEA value of 0.048 and CFI value of 0.967 show that the model is accepted as a good fit (Themessl-Huber, 2014). To ensure the model fitness, the convergent validity is established to measure social media usage, which measures employee high performance (EHP) and organization performance (OP).

According to Hair et al. (2010), the rule of thumb for factor loadings must be 0.5 and above while the best is 0.7 and above.

Table 3
Divergent validity measurement

	Knowledge Sharing	Communication	Decision Making	Employee High Performance	Organization Performance
KS1	.790				
KS2	.824				
KS3	.783				
KS4	.737				
KS5	.815				
C1		.798			
C2		.873			
C3		.696			
C4		.820			
C5		.784			
DM1			.800		
DM2			.860		
DM3			.844		
DM4			.851		
DM5			.850		
EHP1				.845	
EHP2				.874	
EHP3				.871	
EHP4				.889	
EHP5				.898	
OP1					.833
OP2					.869
OP3					.896
OP4					.857
OP5					.881
Reliability	**0.892**	**0.892**	**0.924**	**0.942**	**0.938**

 DOI: 10.7172/2449-6634.jmcbem.2018.1.3

As in the table above (Table 3), all the factor loadings (independent and dependent variables) are above 0.5, which confirms the model fitness as good fit, and the reliability of the constructs is above 0.60 for KS, C, DM, EHP and OP. As for the reliability, the acceptable value of Cronbach's alpha is a minimum value of 0.7 (Nunnally & Bernstein, 1994), which indicates that the variables in this study are highly reliable in internal consistency as they are above 0.8 and are best suited for further analysis.

Discriminant validity determines the measure of how much factors are different and the level of how much they are swerved. In theory, the constructs must not correlate with each other. According to Hair et al. (2010), the correlation values must not exceed 0.85. Likewise, discriminant validity indicates the squared correlations whereby all the values are lesser than 1 indicating that the construct validity is acceptable (Hair et al., 2010). Discriminant validity cannot be established when the factor analysis is miscalculated or misunderstood (Bajpai & Bajpai, 2014). Therefore, in the table below (Table 4), the data in this research satisfies discriminant validity and the factors indicate a good correlation as the values are below 0.85.

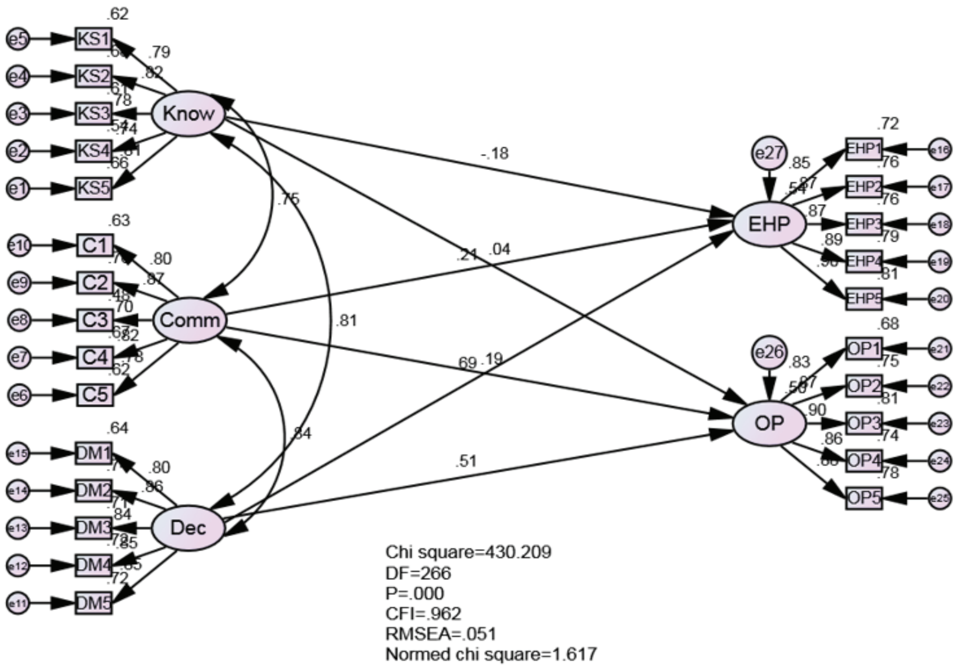
Table 4
Discriminant validity measurement

	Knowledge Sharing	Communication	Decision Making	Employee High Performance	Organization Performance
KS	1	.749	.811	.541	.602
C	.561	1	.840	.651	.638
DM	.657	.705	1	.711	.679
EHP	.292	.423	.505	1	.678
OP	.362	.407	.461	.459	1

Significant Level at p = 0.001. Values above the diagonals are correlations among constructs. Diagonal elements are construct variance and values below the diagonal are squared correlations

Structural Equation Model

Figure 3
Path analysis of SEM



 DOI: 10.7172/2449-6634.jmcbem.2018.1.3

The measurement model of confirmatory factor analysis plays an important role to confirm the structural model analysis. In the structural model, the chi-square value is 430.209 while the DF value is 266. The normed chi-square value is 1.617, below the recommended threshold value of 3.0, revealing a good fit model (Hair et al., 2010). The RMSEA value of 0.051 is at the required threshold of less than 0.08. CFI is 0.962, above the rule of thumb of 0.90 (Hair et al., 2010; Kline, 2011). Hence, the structural model is considered as an acceptable model.

Table 5
Comparison of measurement and structural model

	Chi-Square	DF	Normed Chi-Square	CFI	RMSEA	P-value
Rule of Thumb			<3	>0.900	<0.08	>0.05
Measurement Model (MM) CFA	408.043	265	**1.540**	**0.967**	**0.048**	**0.0001**
Structural Model (SM)	430.209	266	**1.617**	**0.962**	**0.051**	**0.0001**

According to Hair et al. (2010), there is an alternative way to confirm the model validity by observing the entire structural model loadings and measurement model loadings. The parameter estimates must show a similar likeness in both models (Hair et al., 2010). In Table 5 above, there are almost close readings indicating only a slight difference in both models, p-value is 0.000 for both, RMSEA is 0.048 (MM); 0.051 (SM), CFI is 0.967 (MM); 0.962 (SM), normed chi-square is 1.540 (MM); 1.617 (SM), DF is 265 (MM); 266 (SM) and chi-square is 408.043 (MM); 430.209 (SM). Therefore, the SEM confirms the validity of the model as the loadings on both CFA and SEM are similar and there is no significant variation (Hair et al., 2010).

Table 6
Comparison of factor loadings

	Construct	Measurement Model	Structural Model
KS1	Knowledge Sharing	.790	.790
KS2	Knowledge Sharing	.824	.824
KS3	Knowledge Sharing	.783	.783
KS4	Knowledge Sharing	.737	.737
KS5	Knowledge Sharing	.815	.815
C1	Communication	.798	.798
C2	Communication	.873	.873
C3	Communication	.696	.696
C4	Communication	.820	.820
C5	Communication	.784	.784
DM1	Decision Making	.800	.800
DM2	Decision Making	.860	.860
DM3	Decision Making	.844	.844
DM4	Decision Making	.851	.851
DM5	Decision Making	.850	.850
EHP1	Employee High Performance	.845	.845

 DOI: 10.7172/2449-6634.jmcbem.2018.1.3

	Construct	Measurement Model	Structural Model
EHP2	Employee High Performance	.874	.874
EHP3	Employee High Performance	.871	.871
EHP4	Employee High Performance	.889	.889
EHP5	Employee High Performance	.898	.898
OP1	Organization Performance	.833	.833
OP2	Organization Performance	.869	.869
OP3	Organization Performance	.896	.896
OP4	Organization Performance	.857	.857
OP5	Organization Performance	.881	.881

The above Table 6 shows the factor loadings of the structural model and measurement model as all values are above 0.50 and resemblance of 100% is achieved between the two models. This indicates that the model is valid and a good fit model.

Hypothesis Testing

The table below (Table 7) presents the results of hypothesis testing of Estimate, S.E. (Standard Errors), C.R (Critical Rations) and the p-value. P-value indicates the significance level of each hypothesis (Hair et al., 2010).

Table 7
Hypotheses

Hypothesis				Estimate	S.E.	C.R.	P	Accepted or Rejected
H1	Employee High Performance	←	Knowledge Sharing	-.178	.115	-1.548	.122	Rejected
H2	Employee High Performance	←	Communication	.227	.136	1.662	.097	Rejected
H3	Employee High Performance	←	Decision Making	.689	.148	4.639	.0001	**Accepted**
H4	Organization Performance	←	Knowledge Sharing	.043	.119	.367	.714	Rejected
H5	Organization Performance	←	Communication	.215	.143	1.504	.133	Rejected
H6	Organization Performance	←	Decision Making	.515	.151	3.406	.0001	Accepted

Knowledge Sharing is the only variable that has an insignificant negative impact on employee high performance. It is also the only variable that has a positive and significant impact on Employee High Performance and Organization Performance. All the other variables (Knowledge Sharing and Communication) identified in the conceptual framework are found to be insignificant due to the significance value that exceeds the threshold of 0.05 meaning that the assumed Hypotheses 1, 2, 4 and 5 are rejected. This is in accordance with the rule of thumb that the p-value should be 0.05 and below; thus, each time when the value is more than 0.05, the hypothesis is rejected (Hair et al., 2010).

DOI: 10.7172/2449-6634.jmcbem.2018.1.3

The 1st hypothesis of this research is that there is a positive and significant impact of knowledge sharing on employee high performance based on the research done by Sigalaa and Chalkiti (2015) in Greece, Huang, Singh and Ghose (2015) on Fortune 1000 companies in the USA, Europe, Asia and North America as well as Mohamed et al. (2017) in Malaysia, finding that innovative learning and creating new ideas/knowledge, sharing tacit and explicit knowledge, motivating and collaborating are important factors in knowledge sharing through the use of social media and have a positive impact on employee performance. However, the result of this study conflicts with the hypothesis set by this study as it is rejected with the standardized estimate of -0.178 and the p-value of 0.122. The findings show that knowledge sharing has an insignificant negative impact on employee high performance, which contradicts the past research (Sigalaa & Chalkiti, 2015; Huang, Singh, & Ghose, 2015; Mohamed et al., 2017). This research is done on call center agents in an IT based multinational in Malaysia, where the nature of work by the agents is more oriented towards attending calls and it takes time and effort for them to engage in knowledge sharing activities with other peers. However, the statistical analysis of this study finds no significant impact of knowledge sharing on employee performance.

The 2nd hypothesis of this research is that there is a positive and significant impact of communication on employee high performance, which is in accordance with past research done by Divya and Regi (2014) in India, Babiker (2017) in UAE, Kaur (2015) in Lynas and Mohamed et al. (2017) in Malaysia. It was found that social media assist internal and external communication by broadcasting messages and increasing the speed of communication causing a positive impact on employee performance. However, our result is inconsistent with the above mentioned studies. We found a positive but not significant impact of communication elements of social media on employee performance.

The 3rd hypothesis of this research is that there is a positive and significant impact of decision making on employee high performance. The results of this research supported the hypothesis with the standardized estimate of 0.689 and p-value of less than 0.05 indicating a highly significant positive impact on employee high performance. These results support the studies done by Papageorgiou (2015), Nkwe and Cohen (2017), Burclaff and Johnson (2016), who found that the usage of social media across networks enables employees to make meaningful and fast decisions and evaluate alternatives. These elements are visible through the usage of social media tools whereby the call center agents can use various social media tools available in the IT based multinational in Malaysia to make fast decisions and evaluate available alternatives. Among peers, they can create decision conversations and diverse opinions enable them to perform better than the acceptable level (Omar, Dahalan, & Yusof, 2016).

The 4th hypothesis of this research is that there is a positive and significant impact of knowledge sharing on organizational performance. According to the research done by Hung et al. (2011) on 10 organizations in Taiwan, organizational culture motivates employees to share knowledge, indirectly increasing organizational performance. Park and Im (2001) as well as Kang, Kim, and Chang (2008) found that organizational performance increases when employees are encouraged to share knowledge and collaborate to develop new ideas, solve problems and implement processes toward success of the organization. However, our finding conflicts with the stated hypothesis as it is rejected with the standardized estimate of 0.043 and the p-value of 0.714. The findings show that knowledge sharing has an insignificant positive impact on organization performance. This could be because the management team within the IT based multinational's call center department does not encourage the employees or the management itself to undertake knowledge sharing activities or takes less initiative in this respect. Successful organizations frequently engage in knowledge sharing activities via their technologies, services and products (Gaál et al., 2008; Gottschalk, 2006).

The 5th hypothesis of this research is that there is a positive and significant impact of communication on organization performance in parallel with the studies done by Papasolomou and Melanthiou (2012) finding that the usage of social media gave organizations the opportunity

 DOI: 10.7172/2449-6634.jmcbem.2018.1.3

to share information and interact frequently with their customers thus increasing organization performance, while McQuail (2013) found that those organizations which use multiple social media to communicate with their customers have higher propensity to attract more customers and can improve organizational performance. However, the results of this research found that communication has an insignificant positive impact on organization performance with a standardized estimate of 0.215 and the p-value of 0.133. Although the standard estimate of 0.215 indicates a positive impact, it is not considered as an important factor in contributing to organization performance. This could be because communication via social media has been a norm in almost all organizations as organizations are now moving from traditional offices such as conference rooms and their members can communicate and participate from anywhere at any time (Leornardi et al., 2013). Hence, it does not give any special advantage for an organization to perform better than others; neither is it an important factor that contributes to the success of the organization.

The 6th hypothesis of this research is that there is a positive and significant impact of decision making on organization performance. The results of this research supported the hypothesis with the standardized estimate of 0.515 and the p-value of less than 0.05 indicating a significant positive impact on organization performance. This further supports past research results such as Culnan, McHugh and Zubillaga (2010), who noted that in the various platforms of social media, it gives the opportunity for the organizations in the USA to make a good decision on which platform to adopt and how it should be used. Besides, Baker et al. (2011) found that using social media gives leaders an opportunity to contact their subordinates fast. If there is an issue that requires quick attention, managers can contact their employees through social media tools and acquire the information they need to make a fast decision. Employees can also make a fast decision using social media, which in turn increases their productivity. This indirectly improves organization performance as issues can be solved within a short frame of time (Baker et al., 2011). Further, the IT based multinational in Malaysia encourages its employees to take part in making decisions via its social media tools as well as suggest solutions and voice out their concerns through a social media platform (Nkwe & Cohen, 2017).

Table 8
Hypothesis acceptance or rejection

Hypothesis	Research Result	Past Research Result	Source	Accepted or Rejected
Knowledge Sharing > Employee High Performance	Insignificant negative impact	same result > opposite result>	Gaal et al. (2015) Kwahk and Park (2015)	Rejected
Communication > Employee High Performance	Insignificant positive impact	same result > opposite result>	Leornardi et al. (2013) El Ouirdi et al. (2016)	Rejected
Decision Making > Employee High Performance	Significant Positive Impact	same result > opposite result>	Papageorgiou (2015) Stollak et al. (2014)	Accepted
Knowledge Sharing > Organization Performance	Insignificant positive impact	same result > opposite result>	Kromhout (2011) Razmerita, Kirchner and Nielsen (2016)	Rejected
Communication > Organization Performance	Insignificant positive impact	same result > opposite result>	Juang et al. (2015) Kwakh and Park (2016)	Rejected
Decision Making > Organization Performance	Significant Positive Impact	same result > opposite result>	Nkwe and Cohen (2017) Culnan, McHugh and Zubillaga (2010)	Accepted

 DOI: 10.7172/2449-6634.jmcbem.2018.1.3

5. CONCLUSION AND RECOMMENDATIONS

The main objective of this research was to examine the impact of social medial usage on employee high performance and organization performance. From the empirical research, three major determinants that have an impact on employee high performance and organization performance were identified: knowledge sharing, communication and decision making. Two research objectives related to decision making were the spotlight in this research as it resulted with a positive influence on both dependent variables. The findings reflect decision making as an important factor that contributes to employee high performance and organization performance. Overall, management in organizations who aims to increase employee and organization performance should consider using social media for decision making.

Recommendations

Further to the conclusions above, recommendations to raise the bar of social media usage and perceived effectiveness in employee and organization performance are as below.

Firstly, as social media continues to expand due to the rapid change of technology and many organization are jumping on its bandwagon, it is expected that the influence of social media on organizations and their employees will direct firms towards embracing social media due to increased importance of its use. Hence, firms that use social media due to its influence within the industry must also be aware of its technical applications to reap its benefits by achieving better employee and organizational performance.

Secondly, the results obtained from this research will give a broader understanding to employees in general and the management of MNCs in Malaysia of the impact of social media usage on employee and organization performance. With the growing social media trend and challenging business environment, organizations and employees must be able to keep up with the trend and utilize social media in their daily work to avoid being left behind and submerged in the competitive environment. Therefore, using social media is a key contributor for employees and organizations to attaining the peak of their performance for competitive advantage.

Lastly, the findings of this study are highly recommended to HR departments, managers and those in top management in MNCs to engage in developing social media practices for high performance. This will enable employees to engage in and focus on decision making to enable organizations and their employees to achieve better performance.

Future Research Directions

This research dealt with the impact of social media usage on employee high performance and organization performance, specifically focusing on an IT based multinational in Malaysia. The following suggestions can be made for future research.

Firstly, sample respondents of this research were recruited from among call center agents in an IT based multinational in Malaysia. As the nature of their work differs from that of other employees in the IT based multinational in Malaysia, the results do not fully represent that IT based multinational in Malaysia, hence future research can focus on employees from various department as well as from other countries, for example Asian or Western countries like India or the USA.

Secondly, research can also be done on other industries than MNCs to evaluate how effectively the usage of social media influences employee and organization performance in other industries.

Thirdly, the sample size should increase to get more accurate data according to Comrey and Andrew (1992), 1000 respondents and above are accepted as an excellent and perfect sample size.

Fourthly, future studies could test other dimensions of social media which are more prevalent among users.

DOI: 10.7172/2449-6634.jmcbem.2018.1.3

Lastly, future research should consider adapting a longitudinal design approach to observe the changes in the impact of social media usage on employee and organization performance over time using the organizational and employee performance measures used in this study.

References

Ali-Hassan, H., Nevo, D., & Wade, M. (2015). Linking dimensions of social media use to job performance: The role of social capital. *The Journal of Strategic Information Systems*, *24*(2), 65–89.

Alvin, T. (1990). *Power shift. Knowledge, wealth and violence at the edge of the 21st century*.

Babiker, M.E.I. (2017). *An evaluation of the use of social media and how it affects productivity/cost effectiveness at the workplace* (Doctoral dissertation). Cardiff Metropolitan University.

Bajpai, S. & Bajpai, R. (2014). *Goodness of measurement: Reliability and validity*.

Baker, D., Buoni, N., Fee, M., & Vitale, C. (2011). *Social networking and its effects on companies and their employees*.

Batikas, M. & Van Bavel, R. (2013). *Assessing the benefits of social networks for organizations* (No. JRC85669). Joint Research Centre (Seville site).

Bel, R., Smirnov, V., & Wait, A. (2018). Managing change: Communication, managerial style and change in organizations. *Economic Modelling*, 69, 1–12.

Bercovici, J. (2010, December 9). *Who coined "social media"? Web pioneers compete for credit*. Retrieved from http://blogs.forbes.com/jeffbercovici/2010/12/09/ who-coined-social-media-web-pioneers-compete-for-credit/ (14 October 2017).

Boyd, D.M. & Ellison, N.B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13, 210–230.

Bughin, J. & Chui, M. (2010, December). The rise of the networked enterprise: Web 2.0 finds its payday. *McKinsey Quarterly* (online). Retrieved from http://www.mckinsey- quarterly.com (27 December 2017).

BusinessDictionary. (2017). Definition of organization (online). Retrieved from http://www.businessdictionary.com/definition/organization.html (11 October 2017).

Burclaff, N. & Johnson, C.R. (2016). *Teaching information literacy via social media: An exploration of connectivism*.

Burks, F (2017). *What distinguishes a high-performing employee from an average performer?* (online). Retrieved from http://smallbusiness.chron.com/distinguishes-highperforming-employee-average-performer-39432.html (11 October 2017).

Cao, X., Guo, X., Vogel, D., & Zhang, X. (2016). Exploring the influence of social media on employee work performance. *Internet Research*, *26*(2), 529–545.

Chand, S. (2016). *Decision making in management: Definition and Features – Explained!* (online). Retrieved from http://www.yourarticlelibrary.com/decision-making/decision-making-in-management-definition-and-features-explained/25657/ (6 October 2017).

CIMA. (2007) *Effective decision making* (online). Retrieved from http://www.cimaglobal.com/Documents/ImportedDocuments/40_Effective_Decision_Making.pdf (5 October 2017).

Comrey, A.L. & Lee, H.B. (1992). *A first course in factor analysis* (2nd ed.). Hillsale, New Jersey: Erlbaum.

Culnan, M.J., McHugh, P.J., & Zubillaga, J.I. (2010). How large US companies can use Twitter and other social media to gain business value. *MIS Quarterly Executive*, *9*(4).

Davenport, T.H. & Prusak, L. (1998). *Working knowledge: How organizations manage what they know*. Harvard Business Press.

DeVito, J.A. (1986). The communication handbook: A dictionary. Harpercollins.

Dhanaraj, C., Lyles, M.A., Steensma, H.K., & Tihanyi, L. (2004). Managing tacit and explicit knowledge transfer in IJVs: The role of relational embeddedness and the impact on performance. *Journal of International Business Studies*, *35*(5), 428–442.

Divya, S. & Regi, B. (2014). An empirical study on effectiveness of social media as a marketing tool. *International Journal of Current Research and Academic Review*.

Farrell, R.G., Kellogg, W.A., & Thomas, J.C. (2008). The participatory web and the socially resilient enterprise. In *Proceedings of CSCW* (pp. 64–74). IBM TJ Watson Research Center.

Gaál, Z., Szabó, L., Obermayer-Kovács, N., & Csepregi, A. (2015). Exploring the role of social media in knowledge sharing. Electronic Journal of Knowledge Management, 13(3).

George, D. & Mallery, M. (2003). *Using SPSS for Windows step by step: A simple guide and reference*.

Gottschalk, P. (Ed.). (2006). *CIO and corporate strategic management: Changing role of CIO to CEO*. IGI Global.

Häggman, S.K. (2009). Functional actors and perceptions of innovation attributes: influence on innovation adoption. *European Journal of Innovation Management, 12*(3), 386–407.

 DOI: 10.7172/2449-6634.jmcbem.2018.1.3

Hair Jr., J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2010). *Multivariate data analysis – A global perspective* (7th ed.). Upper Saddle River: Pearson Education.

Harris, R. (2012). *Introduction to decision making* (online). Retrieved from http://www.virtualsalt.com/crebook5.htm (5 October 2017).

Holmes-Smith, P. (2001). *Introduction to structural equation modeling using LISREL*. Perth: ACSPRI-Winter training program.

Holmes-Smith, P., Coote, L., & Cunningham, E. (2006). *Structural equation modeling: From the fundamentals to advanced topics*. Melbourne: SREAMS.

Hsu, M.H., Ju, T.L., Yen, C.H., & Chang, C.M. (2007). Knowledge sharing behavior in virtual communities: The relationship between trust, self-efficacy, and outcome expectations. *International Journal of Human-Computer Studies*, *65*(2), 153–169.

Huang, Y., Singh, P.V., & Ghose, A. (2015). A structural model of employee behavioral dynamics in enterprise social media. *Management Science*, *61*(12), 2825–2844.

Hung, S.Y., Lai, H.M., & Chang, W.W. (2011). Knowledge-sharing motivations affecting R&D employees' acceptance of electronic knowledge repository. *Behaviour & Information Technology*, *30*(2), 213–230.

Jiang, H., Luo, Y., & Kulemeka, O. (2017). Strategic social media use in public relations: Professionals' perceived social media impact, leadership behaviors, and work-life conflict. *International Journal of Strategic Communication*, *11*(1), 18–41.

Kang, Y.J., Kim, S.E., & Chang, G.W. (2008). The impact of knowledge sharing on work performance: An empirical analysis of the public employees' perceptions in South Korea. *Intl Journal of Public Administration*, *31*(14), 1548–1568.

Kaplan, A.M. & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*, *53*(1), 59–68.

Kaur, K. (2015). Social media creating digital environmental publics: Case of Lynas Malaysia. *Public Relations Review*, *41*(2), 311–314.

Kline, R. B. (2011). *Principles and practice of structural equation modeling*. New York: Guilford Press.

Kromhout, P.J. (2011). *The effect of media usage, trust, and relations on the productivity, innovativeness and flexibility of teleworkers, and how knowledge sharing and telework frequency influences these relationships*. Erasmus Universiteit.

Kuvaas, B. (2006). Work performance, affective commitment, and work motivation: The roles of pay administration and pay level. *Journal of Organizational Behavior*, *27*(3), 365–385.

Kwahk, K.Y. & Park, D.H. (2016). The effects of network sharing on knowledge-sharing activities and job performance in enterprise social media environments. *Computers in Human Behavior*, 55, 826–839.

Langer, E. (2014). What's trending? Social media and its effects on organizational communication. *Journal of Undergraduate Research*, 17, 1–14.

Lebas, M., & Euske, K. (2004). A conceptual and operational delineation of performance. In A. Neely (ed.), *Business performance measurement. Theory and practice* (pp. 65–79). Leonardi, P.M. (2014). Social media, knowledge sharing, and innovation: Toward a theory of communication visibility. *Information Systems Research*, *25*(4), 796–816.

Leonardi, P.M., Huysman, M., & Steinfield, C. (2013). Enterprise social media: Definition, history, and prospects for the study of social technologies in organizations. *Journal of Computer-Mediated Communication*, *19*(1), 1–19.

Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology*.

Lovejoy, K. & Saxton, G.D. (2012). Information, community, and action: How nonprofit organizations use social media. *Journal of Computer-Mediated Communication*, *17*(3), 337–353.

Lundblad, J.P. (2003). A review and critique of Rogers' diffusion of innovation theory as it applies to organizations. *Organization Development Journal*, *21*(4), 50–64.

Majchrzak, A., Faraj, S., Kane, G.C., & Azad, B. (2013). The contradictory influence of social media affordances on online communal knowledge sharing. *Journal of Computer-Mediated Communication*, *19*(1), 38–55.

Mathieu, J.E., Heffner, T.S., Goodwin, G.F., Salas, E., & Cannon-Bowers, J.A. (2000). The influence of shared mental models on team process and performance. *Journal of Applied Psychology*, *85*(2), 273–283.

Merriam Webster. (2017). Definition of employee (online). Retrieved from http://smallbusiness.chron.com/characteristics-high-performance-employee-41338.html (9 October 2017).

McQuail, D. (2013). Communication research paradigms-reflections on paradigm change in communication theory and research. *International Journal of Communication, 7(2013)*, 216–229. Retrieved from ijoc.org/index.php/ijoc/article/download/1961/850 (19 September 2018).

Mohamed, S., Safiah, S., Kudus, N., Hassan, M.A., & Izharrudin, S.Z. (2017). The instrument used in measuring employee productivity based on social media usage: A review. *Journal of Human Capital Development* (JHCD), *10*(1).

Neuman, L.W. (2002). *Social research methods: Qualitative and quantitative approaches*.

 DOI: 10.7172/2449-6634.jmcbem.2018.1.3

Nkwe, N. & Cohen, J. (2017). *Impact of social network sites on psychological and behavioural outcomes in the work-place: A systematic literature review*.

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (McGraw-Hill Series in Psychology, Vol. 3). New York: McGraw-Hill.

Omar, M.K., Dahalan, N.A., & Yusoff, Y.H.M. (2016). Social media usage, perceived team-efficacy and knowledge sharing behaviour among employees of an oil and gas organisation in Malaysia. *Procedia Economics and Finance*, 37, 309–316.

Ouirdi, M.E., El Ouirdi, A., Segers, J., & Henderickx, E. (2014). Social media conceptualization and taxonomy: A Lasswellian framework. *Journal of Creative Communications*, *9*(2), 107–126.

Papageorgiou, D.S. (2015). *Employees' perspectives on social media internal communication platforms' use and its impact on affective commitment. A qualitative case study in the hospitality industry*.

Papasolomou, I. & Melanthiou, Y. (2012). Social media: Marketing public relations' new best friend. *Journal of Promotion Management*, *18*(3), 319–328.

Park, H.S. & Im, B.C. (2001). Test of causal model for the efficient of the servants knowledge in the local administration. *Korean Policy Studies Review*, *10*(1), 111–135.

Parveen, F., Jaafar, N.I., & Ainin, S. (2015). Social media usage and organizational performance: Reflections of Malaysian social media managers. *Telematics and Informatics*, *32*(1), 67–78.

Parveen, F., Parveen, F., Jaafar, N.I., Jaafar, N.I., Ainin, S., & Ainin, S. (2016). Social media's impact on organizational performance and entrepreneurial orientation in organizations. *Management Decision*, *54*(9), 2208–2234.

Ryu, S., Ho, S.H., & Han, I. (2003). Knowledge sharing behavior of physicians in hospitals. *Expert Systems with Applications*, *25*(1), 113–122.

Razmerita, L., Razmerita, L., Kirchner, K., Kirchner, K., Nielsen, P., & Nielsen, P. (2016). What factors influence knowledge sharing in organizations? A social dilemma perspective of social media communication. *Journal of Knowledge Management*, *20*(6), 1225–1246.

Sanders, N.R. (2007). An empirical study of the impact of e-business technologies on organizational collaboration and performance. *Journal of Operations Management*, *25*(6), 1332–1347.

Shami, N.S., Nichols, J., & Chen, J. (2014, April). Social media participation and performance at work: A longitudinal study. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 115–118). ACM.

Shirky, C. (2008). *Here comes everybody*. New York: Penguin

Sigalaa, M. & Chalkiti, K. (2015) Knowledge management, social media and employee creativity. *International Journal of Hospitality Management*, *45*, 44–58.

Sofijanova, E., & Zabijakin-Chatleska, V. (2013). *High performance work practices and organizational performance: an analysis of the Macedonian food and beverage industry*. Presented at XI International Scientific Conference "Management and Engineering '13" on 23–26 June 2013, Sozopol, Bulgaria.

Srivastava, A., Bartol, K.M., & Locke, E.A. (2006). Empowering leadership in management teams: Effects on knowledge sharing, efficacy, and performance. *Academy of Management Journal*, *49*(6), 1239–1251.

Steenkamp, M. & Hyde-Clarke, N. (2014). The use of Facebook for political commentary in South Africa. *Telematics and Informatics*, *31*(1), 91–97.

Stollak, M., Vandenberg, A.S., Felhofer, N., & Sutherland, P. (2014). How social media is influencing the job search process. *Journal of Management and Marketing Research*, *15*, 1–7. Retrieved from http://www.aabri.com/manuscripts/141817.pdf (March 2018).

Tajudeen, F.P., Jaafar, N.I., & Ainin, S. (2017). Understanding the impact of social media usage among organizations. *Information & Management*.

Talley, J.L. (2011). *Decision making in organizations*, 1–24. Retreived from http://www.jltalley.com/presentations/Decision%20Making.pdf (January 2018).

Team FME. (2013). *Effective communication* (online).Retrieved from www.free-management-ebooks.com/dldebk-pdf/fme-effective-communication.pdf (5 October 2017).

Themessl-Huber, M. (2014). Evaluation of the $\chi 2$ statistic and different fit-indices under misspecified number of factors in confirmatory factor analysis. *Psychological Test and Assessment Modeling*, *56*(3), 219–36.

Trimi, S. & Galanxhi, H. (2014). The impact of Enterprise 2.0 in organizations. *Service Business*, *8*(3), 405–424.

Wamba, S. & Carter, L. (2013). *Twitter adoption and use by SMEs: An empirical study in system sciences (HISS)*. In Proceedings of 46th Hawaii International Conference on System Sciences (pp. 2052–2049).

Weekley, E. (1967). *An etymological dictionary of modern English* (Vol. 1). New York

Williams, L.J. & Anderson, S.E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of management*, *17*(3), 601–617.

Wu, C.W. (2016). The performance impact of social media in the chain store industry. *Journal of Business Research*, *69*(11), 5310–5316.

Yesil, S. & Dereli, S.F. (2013). An empirical investigation of the organizational justice, knowledge sharing and innovation capability. *Procedia, Social and Behavioral Sciences*, 75, 199–208.

DOI: 10.7172/2449-6634.jmcbem.2018.1.3

(66–83)

An Empirical Investigation of Adopters' Perceptions Toward M-Commerce: The Case of Bulgarian University Students

Nora Milanova
Postgraduate Student, City College, International Faculty of the University of Sheffield, Thessaloniki, Greece
Email: nmilanova@citycollege.sheffield.eu

Vaggelis Saprikis*
Assistant Professor,
Western Macedonia University of Applied Sciences,
Department of Business Administration, Kozani, Greece
Emails: saprikis@gmail.com & saprikis@teiwm.gr

Received: 18 July 2018/ Revised: 27 September 2018/ Accepted: 1 October 2018/Published online: 31 October 2018

ABSTRACT

Mobile commerce (m-commerce) is a fact. Nowadays, numerous transactions take place via mobile devices. At the same time, m-commerce is considered as one of the fastest growing subgroups of e-commerce. Characteristically, it is estimated that about 45% of mobile users have made at least one purchase via a wireless hand-held device. Therefore, it plays and will continue to play a vital role in the global economy. The aim of this research paper is to investigate the perceptions of mobile commerce users focusing on Bulgarian University students. Specifically, it intends to reveal the perceived advantages and disadvantages of m-commerce, the factors that motivate students to make online transactions via a hand-held device, as well as the issues that hinder them from doing so more often. The paper is expected to provide tangible results to both academia and the industry about a developing economy.

JEL classification: M15, M390

Keywords: mobile commerce, m-commerce intention, mobile shopping adoption.

1. INTRODUCTION

The technological advancement during the last decades has definitely left its impact on humanity and our way of living. Various aspects of our daily life have dramatically changed due to the technology and innovations (Patil, 2017). Because of these technological advancements and Information Technology (IT) infrastructure, even more people use more and more IT solutions. As a consequence, companies are increasingly reaching out to customers through newer channels such as electronic commerce (e-commerce) and more recently mobile commerce (m-commerce) (Khare & Sadachar, 2014; Liang & Wei, 2004; Maity & Dass, 2014). Mobile commerce is related

DOI: 10.7172/2449-6634.jmcbem.2018.1.4

to activities connected to buying or generally making transactions via mobile devices, including using mobile applications and adapted websites to shop mainly via a smartphone, tablet, netbook or notebook (Ciprian & Vlad, 2016; Hillman & Neustaedter, 2017).

Since the smartphone invasion into our lives, people have been inseparable from these technologies (Narang & Arora, 2016). People carry them and use the wireless network connection for mobile banking, browsing information, mobile advertising, entertainment, trading, social networking, and of course shopping (Gao et al., 2014; Hsi-Peng & Su, 2009; San-Martín et al., 2016). Mobile phones are even assumed to be inseparable from the purchasing process, with 9 out of 10 consumers looking for a product or service on a mobile device and 45% of them shopping with their wireless hand-held devices (IAB, 2014). That is the reason why many retail companies with different product categories have changed their strategies and provided mobile-optimized sites or developed applications which are comfortable and user-friendly (Ratcliff, 2015). Moreover, they are capable of personalizing the provided services and the search of each customer, getting every level of detail of his/ her interest, with the aim to lure him/her into a purchase (Georgiadis & Stergiopoulou, 2008).

The advantages of m-commerce have recently led to a trend which shows that m-commerce is starting to outgrow e-commerce. One of the main reasons for this recent change has been the growing popularity of smartphone usage (Chang et al., 2014) resulting from the inexpensiveness of mobile smartphones, better mobile broadband connectivity and the opportunity for people to access goods and services at any time from any place (OECD, 2013). Thus, it is expected that m-commerce will soon become the mainstream and by 2020 it will be 45% of the whole e-commerce in the USA (Meola, 2016). However, there are many factors that slow the development of m-commerce and detain its full success. Among them are the small screen size, the slow speed of mobile connection (Meola, 2016), and also trust and security issues of the users (Eastin et al., 2016). Other factors that could negatively affect the m-commerce adoption are social factors or demographic characteristics, such as age, income and level of education (Saritas et al., 2016). Obviously, the development of m-commerce is somewhat different in every country (Zhang et al., 2012) as these factors exert dissimilar influence around the globe. According to Yadav et al. (2016), in order to boost m-commerce, it is substantial to have a greater understanding of the factors that prevent mobile phone users from pursuing the various m-commerce activities.

Regarding Bulgaria, statistics have mentioned that the smartphone usage in the country went up from 33% to 48%, while the computer usage increased by only 1% (from 69% to 70%) in the 2014–2016 period (Statista, 2016). The mobile connectivity is getting better and faster with three main telecommunication enterprises, Telekom Austria's M-Tel, Telenor's local unit, and the incumbent Vivacom, providing competitive services (Lancaster, 2016). Furthermore, the proportion of formal university graduates using mobile devices to access the internet on the move has increased from 41% in 2013 to 71% in 2016 (a 30% increase in about 3 years) (Eurostat, 2016). Individuals in Bulgaria are starting to adopt mobile shopping practices and buy more goods and services via their mobile devices as a preferred method, even if it is at a slower pace compared to the rest of the European countries (Tairov, 2014). This could be because commercial banks in Bulgaria operate in an environment that is full of challenges stemming from changes in regulations and accounting rules which interfere with mobile payments and thus the m-commerce development (Grigorova, 2015). Nevertheless, m-commerce transactions in Eastern European countries, including Bulgaria, increased considerably by 68.7% in 2015 compared to the previous year (Ecommerce News Europe, 2016). On the contrary, up to the end of 2016, 89% of online shoppers in Bulgaria shopped online via a desktop computer; only 5% and 3% of them bought via a smartphone or a tablet respectively. Based on the aforementioned fact as well as a review of the literature on mobile shopping behavior, a significant gap has been identified as no empirical study has been undertaken to analyze the current situation and future intentions as regards m-shopping in Bulgaria. Clearly, this new phenomenon is worth closer examination and research for academic

 DOI: 10.7172/2449-6634.jmcbem.2018.1.4

and public purposes. Therefore, the aim of this research paper is to reveal m-commerce adopters' perceptions in the country and provide vital information to the academic community and the IT industry focused on university students.

2. LITERATURE REVIEW

The differentiation of m-commerce from other channels of trade is a debatable topic (Jimenez et al., 2016). According to numerous past studies, m-commerce is often perceived as an extension of e-commerce with the difference that transactions are made through a hand-held device and via a wireless connection (Chong, 2013). Others believe that m-commerce is not only an extension of e-commerce but rather it is a new innovative business channel which has overcome the barriers of location and time and has extremely changed the way in which people interact with the surrounding environment (Faqih & Jaradat, 2015). Furthermore, Zhang et al. (2012) argue that m-commerce has the advantages of "instantaneity, ubiquity, localization, personalization and identification" (p. 1902) and is a market with great potential. In fact, the number of mobile phone subscribers is overtaking the number of internet users in some countries and at the beginning of 2014, the number of global users of mobile phones has outgrown the number of global desktop computer users (Chaffey, 2017). Moreover, m-commerce applications are generating significant profits (Bhatty, 2015).

Since mobile commerce has been increasing at a fast pace for the last few years, it is highly important to examine specific factors, such as technological and consumer characteristics which can predict and affect directly and indirectly the adoption of this new way of retail. By a further analysis of these characteristics, it would be much easier to understand the differences in the consumer adoption of mobile shopping (Yang, 2012). The success of mobile shopping depends on consumers' willingness to adopt the new technology and change their previous shopping habits (Shang & Wu, 2017). That is why it is highly important to find out how consumers' attitudes and beliefs affect their use of m-commerce services and identify the factors that influence the adoption of mobile shopping (Lu & Su, 2009).

Factors Considered Important for the M-Commerce Adoption

Previous research connected to m-commerce users and adoption has been based on numerous theories such as the Technology Acceptance Model (TAM) and the Diffusion of Innovation (DOI) model (Chong, 2013). Furthermore, the Theory of Planned Behavior (TPB), which extends the Theory of Reasoned Action (TRA), also played its part in many studies on m-commerce (Zhang et al., 2012). All of them have a great value in the understanding of m-commerce adoption but they also have their limitations. Zhang et al. (2012) state that TAM concentrates on internal perceptions, TPB implies external influences and the Innovation Diffusion Theory (IDT) focuses on innovation characteristics.

Most of the adopters, whether they are early adopters or find the benefits of mobile commerce at a later point, seek to find a positive outcome and the usefulness of buying via a hand-held device. This factor is called performance expectancy by Venkatesh et al. (2003). It generalizes the factors perceived usefulness, extrinsic motivation, job-fit, relative advantage, and outcome expectations (p. 447). Furthermore, when consumers are confident that mobile shopping is useful, they are positive about the mobile shopping adoption (Zarmpou et al., 2010).

In the UTAUT (Unified Theory of Acceptance and Use of Technology) theory, the variables such as perceived ease of use, complexity and ease of use are also summarized under one factor – effort expectancy (Venkatesh et al., 2003). In a study, Yang (2012) stated that the perception of ease of use is extremely close in meaning to perceived usefulness and should not be considered

 DOI: 10.7172/2449-6634.jmcbem.2018.1.4

separately. Other research argues for the opposite and states that the perceived ease of use is defined as the degree to which an individual believes that the use of technology would be free of effort or would require a less effort (Davis, 1989). A more recent study by Agrebia and Jallaisb (2015) reveals that the ease of use was found insignificant for both previous purchasers and non-purchasers when making the decision to adopt m-commerce. This might be explained by the fact that many people are accustomed to using smartphones for e-mails, online search, etc., and are experienced enough. Even though Agrebia and Jallaisb (2015) found that perceived ease of use is insignificant for the adoption of m-commerce, their study was not conducted in the context of Bulgaria, where the conditions are different.

In a study, Yang (2012) points out that a very important factor for the adoption of m-commerce is the perceived behavioral control. It refers to the belief that an individual is capable of performing something which is in mind and is connected to previous experience and perceptions (San-Martín et al., 2016). This belief is very important when adopting a new technological trend as it includes the knowledge and technological infrastructure to make mobile shopping transactions (mobile internet connection, speed, data service availability and data processing capability). The perceived behavioral control can be connected to the ease of access. Lu and Su (2009) see the ease of access as a significant factor that has an influence on the adoption of m-commerce. It refers to the degree to which a customer believes that accessing the internet via a mobile phone will be free of effort.

Users often gather information from and imitate actions of people who are in their surroundings and who are significant to them (San-Martín et al., 2016). When a user is a part of a particular social group, he/she is inevitably affected by others' opinions and experiences and usually, the individual intends to comply with the social influences (Venkatesh et al., 2003). That is why the subjective norm has a direct and positive effect on the intention to do mobile shopping (Yang, 2012). Furthermore, when it comes to decision making and adoption of any kind of new technology, the attitude toward the technology has an important role. The attitude is explained as the consumers' positive or negative feeling about executing a particular action (Yang, 2012). When it comes to purchasing items via a smartphone or a tablet, perceived enjoyment really reflects the attitude of mobile shopping users. It is referred to as the belief that the use of technology is pleasure and fun (Agrebia & Jallaisb, 2015). As a result, Yang (2012) states that the perceived enjoyment is related to the attitude toward doing mobile shopping in a positive way and the attitude will have a direct and positive effect on the users' intentions to adopt mobile shopping practices. In addition, another factor affecting the attitude of consumers when making a purchase decision online is anxiety. It refers to negative emotions in the cognitive process and has a significantly negative influence on information systems adoption (Lu & Su, 2009). A factor that also has an effect on the emotional and cognitive process of mobile purchase is satisfaction. According to Dužević et al. (2016), five variables are important for the satisfaction of m-commerce users – convenience, reliability, price, visibility, and functionality. Most often, satisfaction has an influence after the first use of mobile commerce channels and can be a positive factor for future purchases (Agrebia & Jallaisb, 2015). Another factor with significance in the studies on the m-commerce adoption is the level of experience of use, also called familiarity (Zarmpou et al., 2010). It has a tremendous impact on the adoption of mobile shopping practices and is explained as the consumer experience in using a new technology for a specific continued period (Yang, 2012).

However, Min et al. (2008) believe that trust is one of the most important factors in the studies on both e-commerce and marketing and earning users' trust is critical for the success of m-commerce. Trust is definitely a factor that should not be ignored when talking about the m-commerce adoption (Zhang et al., 2012). According to a study by Nassuora (2013), perceived trust and perceived privacy have a positive impact on the decision to buy via a hand-held device and if there is trust in the channels of purchase and the technology, then transactions will be more likely to take place. Other important factors that encourage users to adopt m-commerce are content quality, system quality, support and personalization factors (Dužević et al., 2016).

 DOI: 10.7172/2449-6634.jmcbem.2018.1.4

As every user has his/her own characteristics and differences in the perception of technology, the process of adoption of mobile shopping practices might really differ. Yang (2012) believes that demographic differences are not that significant when trying to understand the behavioral intention to purchase a product or service. On the other hand, other research has proven that the demographic profiles of consumers are important predictors of the m-commerce adoption. The most significant demographic factor is age followed by education. Both of them have been proved to have an influence on the mobile shopping adoption. Younger and higher educated consumers have a positive attitude to mobile shopping, while gender was found to be of non-significant relevance for the adoption of m-commerce (Chong, 2013). Later, a study by Faqih and Jaradat (2015) finds gender as a non-significant factor in the adoption of m-commerce. They proved that both genders are equally comfortable about using the features of mobile devices and m-commerce. However, Chen et al. (2015) state that gender differences influence the attitude toward online shopping; men and women have different perceptions of risk. The study by Faqih and Jaradat (2015) contributes to the literature so far as it explains that there is a great difference in the adoption of m-commerce when it comes to cultural values and traditions. Even though it was proven that the better educated a person is, the more likely he/she is to use the internet (Rhee and Kim, 2004), not enough research has been done on the connection between education and technology adoption. A special survey which was conducted in 2013 by the Pew Research Center proved that the biggest group of tablet owners is the group of graduating people or those who have already obtained a higher education level degree (Zickuhr, 2013). The Pew Research Center has proven the same for smartphone ownership where the biggest group using and owning a smartphone is also higher educated people (Anderson, 2015). Chong (2013) also states that educational level is positively related to the usage of m-commerce. Thus, it is highly important to fill this gap in the academic research on the topic and investigate Bulgarian higher education students and their response to m-commerce.

An interesting thing to follow up when it comes to the adoption of mobile commerce processes is to see what happens when users are already using mobile devices for online purchases. According to Wang et al. (2015), when customers adopt m-commerce, their order size and order rate increase. Also, as customers continue to find value in mobile shopping and increase their mobile shopping occurrences, their spending and likelihood of making a purchase again will increase. As for the products or services they purchase, Wang et al. (2015) state that customers usually purchase products that they have bought previously or products from brands that they are highly loyal to.

Based on the aforementioned literature review, the demographics and the activity features of mobile adopters among Bulgarian university students are to be examined. Specifically, possible connections and differences between these characteristics and advantages/disadvantages, perceived benefits and attitudes toward m-commerce will be investigated. Therefore, the research questions in the paper are as follows:

1. What are the demographic characteristics of m-commerce adopters?
2. Are there any relationships between age and the period of m-commerce use, monthly m-amounts spent and the number of annual m-transactions?
3. What are the preferred products and services for m-shopping among Bulgarian university students?
4. Are there any differences in perceived advantages and disadvantages of m-commerce among Bulgarian university students based on their demographics and mobile activity?
5. What are the perceived benefits of m-commerce among Bulgarian university students?
6. Are there any connections between perceived benefits and the number of m-transactions among Bulgarian university students?
7. Are there any differences in m-commerce attitudes among Bulgarian university students based on their demographics?

 DOI: 10.7172/2449-6634.jmcbem.2018.1.4

3. RESEARCH METHOD

The research is primarily descriptive in nature, as apart from descriptive statistics, only simple statistics, namely chi-square and t-tests, were used in order to statistically examine m-commerce adopters' perceptions. Data was collected by means of an electronic questionnaire administered from 10.07.2017 to 13.08.2017. The sample consists of Bulgarian higher education students with different specializations and spheres of expertise for the purposes of comprehensiveness. The respondents are also diverse in terms of gender and age. Even though the sample is not a good representative group of the whole Bulgarian population, the students have the highest technology adoption rate (Hitt & Frei, 2002), thus, the responses were expected to be more numerous and more valuable. Furthermore, the selection of student respondents for primary research has been successfully used in many studies (e.g., Saprikis, 2013; Shead et al., 2012).

The study used a single random sample and the first part of the questionnaire aimed to identify the frequency of use of m-commerce, the number of transactions made, the main products and services purchased and the amounts of money spent with a smartphone/tablet. Six of the questions were designed to help identify the advantages and disadvantages that respondents see in m-commerce. The variables used were Time, Cost, Access, Level of Complexity, Communication and Social Contact. A question was developed to analyze the intentions to buy via a mobile phone in the future. The research questions were mainly connected to the respondents' perceptions of different factors that determine m-commerce. These questions were presented with the 5-point Likert scale. Table 1 summarizes the "perceptions" questionnaire items and the scientific sources that they are based on. All research items were adopted from the sources mentioned in Table 1.

Table 1
Scale items of the "perceptions" questions

Variable	Scale item statements	Source
Trust	I feel using m-services in monetary transaction is safe.	Zarmpou et al., 2012
	I feel my personal data are in confidence while using m-service.	
	I feel the terms of use are strictly followed while using m-services.	
Attitude	Shopping by mobile phone is a good idea.	Yang, 2010
	I am positive about mobile shopping.	
Subjective norm	I would shop by phone because of the proportion of my friends who do mobile shopping.	Yang, 2012
	People who are important to me think that I should use mobile shopping.	
Perceived benefits of mobile commerce	It is useful as it provides information based on location.	Lee & Lee, 2007
	I can use it anywhere.	
	I can use it anytime.	
	It is convenient.	
	It is enjoyable.	
	It provides me with a rapid response.	
	It is useful as it provides information based on location.	

The last part of the questionnaire gathers the demographic information needed for the study. The questionnaire contained demographic measures for age, gender, educational level and educational background. The fields of education were based on the research entitled "SCED

 DOI: 10.7172/2449-6634.jmcbem.2018.1.4

Fields of Education and Training 2013 (ISCED-F 2013)" from UNESCO Institute for Statistics, which categorizes them in ten main groups of education and training fields.

The whole sample consists of 400 responses. 390 students stated that they own an internet-enabled hand-held device (smartphone, tablet) for accessing the internet. More than 1/4 of them, who own a mobile device, stated that they do not take part in m-commerce, however, around half of them intend to become part of mobile shopping in a near future. On the other hand, 287 (73.6%) students declared that they use their smartphones/tablets for online shopping and they will be used in the research results (research sample).

4. RESULTS

This section presents the results regarding m-commerce adopters. It includes their demographic characteristics and their m-commerce habits and preferred products and services. Furthermore, their perceived advantages and disadvantages along with their perceived benefits and attitude toward m-commerce are presented based on their demographics and m-commerce activity.

4.1. Demographic Characteristics of M-Commerce Adopters

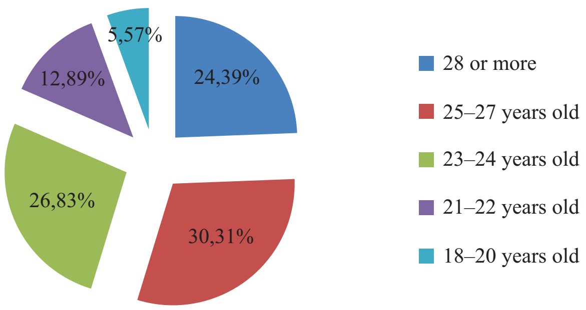
Female adopters account for 65.85% of the total sample, whereas males were the rest, i.e. 34.15%. Specifically, the greatest part of the adopters was female postgraduate students (39.37%) and the smallest part was male undergraduates (13.24%) (Table 2).

Table 2
Gender and education level

Gender	Undergraduate students		Postgraduate students	
	No	%	No	%
Male	38	13.24%	76	26.48%
Female	60	20.91%	113	39.37%

Overall, the age of the respondents ranged from 18 to 28 or more. The group with most respondents is 25- to 27-year-olds (30.31%), followed by 23- to 24-year-olds (26.83%) (Figure 1).

Figure 1
Age of respondents



Most of the respondents of the survey were women, a bit above 65%. When it comes to age compared to gender of the respondents, it became clear that a majority of females in the survey are from 23 to 27 years old; similarly, most of males are aged from 25 to 27 years.

The education level of the respondents who have adopted m-commerce is mostly postgraduate. The participants in the survey had various educational backgrounds and qualifications. 41.1%

 DOI: 10.7172/2449-6634.jmcbem.2018.1.4

of the respondents study business, administration and law followed by Information and Communication Technologies (ICTs) (11.5%) and engineering, manufacturing and construction (9.8%) (Table 3).

Table 3
Educational background

Educational background	Gender		Total
	Male	Female	
Business, administration and law	13.6%	27.5%	41.1%
Other	4.2%	8.4%	12.5%
Information and communication technologies	6.3%	5.2%	11.5%
Engineering, manufacturing and construction	3.8%	5.9%	9.8%
Arts and humanities	2.4%	3.5%	5.9%
Social sciences, journalism and information	1.7%	3.8%	5.6%
Education	2.1%	2.4%	4.5%
Natural sciences, mathematics and statistics	2.8%	1%	3.8%
Health and welfare	2.1%	1.7%	3.8%
Services	0.3%	0.7%	1%
Agriculture, forestry, fisheries and veterinary	0.3%	0%	0.3%
	114	**173**	**287**
	39.7%	**60.3%**	**100%**

4.2. Age and M-Commerce Habits

The respondents of the survey have used m-commerce services for different periods of time. Most of the students have used their hand-held devices to shop online for 1–2 years (37.6%) and 25.1% of the students have used them for 3–4 years. Furthermore, 5.9% of all men and 10.5% of the women are new m-commerce adopters. However, no statistically significant dependency on both variables – gender and the period of use – was found ($p>0.05$).

When it comes to money spent on m-commerce, most of the students spent €30-59 during the last year. This is normal as many of the students do not have stable incomes and cannot afford to spend much money online. After analyzing the variables: gender and money spent during the last month, it becomes clear that 23% of all men and 30.3% of all women spent less than €30. In contrast, the total percentage of people who spent more than €60 is exactly 15%. As the p value is greater than 0.05 ($p>0.05$), it can be stated that there is no relationship between gender and money spent during the last month, and the two variables are independent from one another (Table 4).

DOI: 10.7172/2449-6634.jmcbem.2018.1.4

Table 4
Habits and preferences

Adopters' habits and preferences	Male		Female		Chi-square test
	N	%	N	%	
Period of use					
Less than a year	17	5.90%	30	10.50%	df = 3
1–2 years	41	14.30%	67	23.30%	p = 0.495
3–4 years	27	9.40%	45	15.70%	
More than 4 years	29	10.10%	31	10.80%	
Money spent last month					
Less than €30	66	23.00%	87	30.30%	df = 4
€30–€59	32	11.10%	59	20.60%	p = 0.749
€60–€99	8	2.80%	14	4.90%	
€100–€150	4	1.40%	5	1.70%	
Over €150	4	1.40%	8	2.80%	
Number of m-transactions (past year)					
None	3	1.00%	9	3.10%	
1–5	53	18.50%	61	21.30%	df = 5
6–10	27	9.40%	50	17.40%	p =0.275
11–25	16	5.60%	33	11.50%	
26–50	7	2.40%	13	4.50%	
Over 50	8	2.80%	7	2.40%	

Another interesting result is that students made from 1 to 5 transactions via a hand-held device during the last year (18.5% of males and 21.3% of females). 26.8% of all students made between 6 and 10 transactions and only 5.2% of them made over 50 purchases. Only 12 of the mobile commerce adopters did not buy anything with their hand-held device during the last 12 months. Analogically, no relationship between gender and number of online transactions in the last year was estimated. Furthermore, the same analyses were done between the level of education and the variables: period of use, money spent in the last month and number of online transactions during the last year, and no connection or dependencies were observed.

Unlike gender and level of education, age is connected to the total amount that is spent online as with age people tend to get more income and become more experienced in mobile shopping. This can be proven by the fact that mostly students above 25 years old tend to spend more than €60 online a month. This close connection between age and money spent on mobile commerce is directly proportional.

4.3. Preferred Products and Services for M-Shopping

This study confirms the findings from past research and concludes that respondents buy mostly clothing, apparel and accessories with their mobile devices. Specifically, almost 30% of the

 DOI: 10.7172/2449-6634.jmcbem.2018.1.4

respondents who buy clothes were male and above 70% were female mainly at the age of 23–24. Other categories of products and services chosen by the respondents as preferred for mobile shopping are travel services, vouchers, online coupons and entertainment services (Table 5).

Table 5
Products and services purchased

Products and services purchased	Percent
Clothing, apparel and accessories	22%
Travel services	12.90%
Books, music, video	11.30%
Vouchers, online coupons	11.10%
Computer and consumer electronics	8.50%
Entertainment services	8.10%
Food and beverages	7%
Toys and hobby	6.30%
Health and personal care	5.40%
Auto and parts	3.90%
Furniture and home furnishing	2.40%
Insurance, financial services	1.10%

4.4. Perceived Advantages and Disadvantages of M-Commerce Across Demographic Characteristics and Mobile Activity

With the help of the 5-point Likert scale and the independent sample T-test, the research examined the perceptions of the students on six main variables which can determine some of the advantages or disadvantages of m-commerce. By analyzing the mean and the standard deviation, we can approximately estimate with 95% accuracy the answers chosen by the respondents (Table 6).

DOI: 10.7172/2449-6634.jmcbem.2018.1.4

Table 6
Perceived advantages and disadvantages of m-commerce

Disadvantage/advantage	Gender	N	Mean	Std. deviation	Std. err. mean	t-test value
Time-consuming or time-efficient	Male	114	4.24	0.97	0.09	1.83
	Female	173	4.01	1.05	0.08	
Expensive or inexpensive	Male	114	3.86	0.84	0.08	2.12
	Female	173	3.64	0.90	0.07	
Slow access or immediate access	Male	114	4.25	0.79	0.07	1.27
	Female	173	4.12	0.89	0.07	
Complex or easy to use	Male	114	3.97	0.81	0.08	0.02
	Female	173	3.97	0.99	0.08	
Ineffective communication or effective communication	Male	114	4.01	0.86	0.08	0.13
	Female	173	3.99	0.94	0.07	
Lack of social contact or intensive social contact	Male	114	3.19	1.14	0.11	–1.11
	Female	173	3.36	1.30	0.10	

A majority of the male and female students in the sample believes that m-commerce is time-efficient. Overall, no dependency between gender and the perceptions of time was found. Furthermore, as males, females also believe that access to m-commerce is immediate and there is no statistically significant difference between the opinions about accessibility of m-commerce. To continue, communication with sellers and businesses is important when shopping online, as it leads to satisfaction and more future transactions. The analyses point out that male and female students in Bulgaria are mostly fond of communication when being part of m-commerce and see it as effective. On the contrary, it was proven that there is a statistically significant difference between the perceptions of males and females when it comes to the cost of m-commerce. Women perceive it as a more expensive service than men, thus, cost is seen as a disadvantage. Another disadvantage according to the results can undisputedly be the lack of social contact in m-commerce.

Furthermore, by applying Analyses of Variance (ANOVAs), we compared the aforementioned advantages/disadvantages of m-commerce with the number of m-transactions. This analysis intended to reveal if the level of m-transactions did impact on the perceived advantages/disadvantages. The results showed that none of the aforementioned was statistically influenced by the number of m-transactions.

ANOVAs were also conducted with the aim to compare the aforementioned advantages/disadvantages of m-commerce with the period of m-commerce use and the money spent on m-commerce during the last month. The results showed no statistically differences either.

4.5. Perceived Benefits of M-Commerce

Table 7 presents seven statements which aim to help evaluate the students' opinion about the real benefits from m-commerce. As all the mean scores for the questions are more than 3.9, the respondents believe that the above variables are an incentive to use m-commerce. Indeed, the stronger motivators for the students are the fact that they can use m-commerce anywhere they are and at any time. They claim its convenience and the enjoyment. The highest score of the standard deviation ~1.04 suggests that some of the respondents do not see that much benefit in the information based on location, compared to the other benefits of m-commerce.

DOI: 10.7172/2449-6634.jmcbem.2018.1.4

A step that needs to be taken to guarantee the validity and accuracy of the interpretation of the data is the implementation of the Cronbach's alpha test. This test is usually used to measure the internal consistency of a test or scale and is expressed as a number between 0 and 1 (Tavakol & Dennick, 2011). After running the test for the seven questions above, the result of α=0.934 shows highly consistent data (an acceptable range from 0.70 to 0.95).

Table 7
Perceived benefits of mobile commerce

Statements:	Mean	Std. deviation
I can use it anywhere.	4.2787	1.00645
I can use it anytime.	4.3240	0.95138
It is convenient.	4.1010	1.03449
It is enjoyable.	3.9721	0.93826
It provides me with a rapid response.	3.9129	0.95130
Information based on location.	3.8780	1.03561
It is beneficial.	3.9094	0.97458

4.6. Perceived Benefits and Number of M-Transactions

By applying ANOVAs, the perceived benefits were also examined in relation to the number of m-transactions. The results (Table 8) revealed that with the exception of the use-anywhere opportunity, all benefits are greatly influenced by the number of m-transactions. Therefore, adopters who utilize m-commerce to a greater extent get much more advantages of mobile technology.

Table 8
Perceived benefits of mobile commerce in relation to the number of m-transactions

Statements:	F value	Sig.
I can use it anywhere.	1.858	0.102
I can use it anytime.	4.147	0.001
It is convenient.	2.980	0.012
It is enjoyable.	4.741	0.0
It provides me with a rapid response.	2.493	0.031
Information based on location.	4.332	0.001
It is beneficial.	2.525	0.030

4.7. M-Commerce Attitudes of Undergraduate and Postgraduate University Students

Furthermore, it is important to understand the students' attitudes toward m-commerce, as positive attitudes can lead to the m-commerce adoption and negative attitude to the m-commerce denial. This research concludes that both undergraduate and postgraduate students are positive about m-commerce and it seems as a good idea to them (mean ~ 4.00) (Table 9).

The subjective norm can help understand if students are influenced by their surroundings in the decision to be part of m-commerce. Both undergraduate and postgraduate students disagree with the statement that they would shop with a smartphone because their friends do so. They also state that no one in their surroundings is responsible for their decision to be part of m-commerce.

 DOI: 10.7172/2449-6634.jmcbem.2018.1.4

Furthermore, no difference in the opinions of undergraduate and postgraduate students when it comes to trust was found. They mostly hold from a neutral to negative position when it comes to perceptions of confidentiality of personal data. When it comes to trust in the payments and monetary transactions, undergraduates and postgraduates feel safe, even though there is a certain hesitation. Meanwhile, undergraduates are more positive than postgraduates when it comes to the perception that the terms of use are strictly followed while using m-services. Additionally, no t-test revealed statistically differences between undergraduate and postgraduate students.

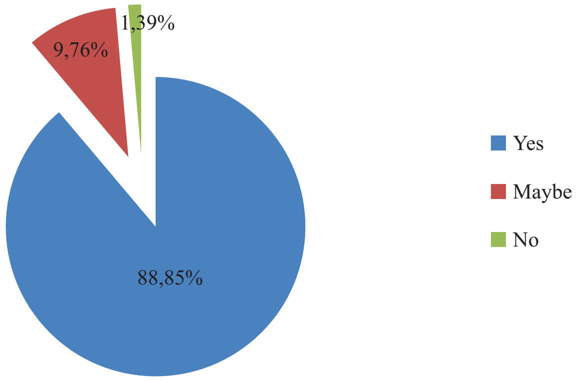
Table 9
Satisfaction with m-commerce and future intentions to use it – Education level

Variable	Questions	Education level	Mean	Deviation	Std error mean	t-test value
Attitude	I am positive about mobile shopping.	Undergraduate	4.000	0.786	0.079	0.10
		Postgraduate	3.989	0.869	0.063	
	Shopping via a mobile is a good idea.	Undergraduate	4.000	0.862	0.087	0.0
		Postgraduate	4.000	0.899	0.065	
Subjective norm	I would shop with a smartphone because my friends do so.	Undergraduate	2.939	1.156	0.117	–0.24
		Postgraduate	2.974	1.173	0.085	
	People who are important to me think I should use mobile shopping.	Undergraduate	2.949	1.205	0.122	–0.14
		Postgraduate	2.968	1.081	0.079	
Trust	I feel my personal data are in confidence while using m-services.	Undergraduate	3.143	1.103	0.111	–0.31
		Postgraduate	3.185	1.098	0.080	
	I feel using m-services in monetary transactions is safe.	Undergraduate	3.337	0.973	0.098	0.76
		Postgraduate	3.238	1.082	0.079	
	I feel the terms of use are strictly followed while using m-services.	Undergraduate	3.531	0.864	0.087	1.38
		Postgraduate	3.365	1.015	0.074	

The research aimed to compare undergraduate and postgraduate students at the gender level and their satisfaction with the m-commerce usage. Consequently, it was concluded that most of the respondents are satisfied with m-commerce and the students are ready to switch from laptop, desktop computer, etc., to smartphone usage. As satisfaction is at a high level and the students have already started to shift their preferences to smartphones/tablets as a preferred technology to use, it is no wonder that most respondents have the intentions to continue shopping via their mobile phones and tablets (Figure 2).

DOI: 10.7172/2449-6634.jmcbem.2018.1.4

Figure 2
Intentions to use m-commerce in the future



4.8. M-Commerce Attitudes of Males and Females

Furthermore, we tested the m-commerce attitude questionnaire items again in order to reveal possible differences between males and females (Table 10). With the exception of two out of three trust questions, no statistical differences were revealed. However, males perceived that money transactions in the m-commerce environment are more trustworthy compared to females. The same results came up regarding the perceived terms of use followed in m-services. Based on the aforementioned information, we allege that males in Bulgaria are much more receptive to m-services as trust issues are of great concern and one of the most important factors of the adoption and level of m-commerce use.

Table 10
Satisfaction with m-commerce and future intentions to use it – Gender

Variable	Questions	Gender	Mean	Deviation	Std error mean	t-test value
Attitude	I am positive about mobile shopping.	Male	4.05	0.80	0.075	0.98
		Female	3.95	0.87	0.066	
	Shopping via a mobile is a good idea.	Male	4.05	0.85	0.079	0.82
		Female	3.95	0.91	0.069	
Subjective norm	I would shop with a smartphone because my friends do so.	Male	2.94	1.24	0.117	–0.27
		Female	2.98	1.11	0.085	
	People who are important to me think I should use mobile shopping.	Male	3.07	1.19	0.111	1.33
		Female	2.89	1.08	0.082	
Trust	I feel my personal data are in confidence while using m-services.	Male	3.46	1.09	0.102	1.49
		Female	3.14	1.10	0.083	
	I feel using m-services in monetary transactions is safe.	Male	3.56	1.00	0.094	2.56
		Female	3.33	1.06	0.080	
	I feel the terms of use are strictly followed while using m-services.	Male	3.531	0.96	0.089	2.00
		Female	3.365	0.97	0.073	

DOI: 10.7172/2449-6634.jmcbem.2018.1.4

5. CONCLUSIONS

The research leads to the conclusion that Bulgarian students have adopted the use of smartphones and tablets and use them for different purposes. It also becomes clear that most of non-adopters of m-commerce have intentions to start using m-commerce in a near future. Moreover, it was found that more people with higher education buy via hand-held devices as shopping "anytime, anyplace" is really convenient for them. Another conclusion is that students in Bulgaria are new adopters of m-commerce and most of them have used it for a year or two. Last but not least, the more m-transactions students conduct, the more the perceived benefits of the m-commerce technology.

Meanwhile, males and females, regardless of whether they are undergraduates or postgraduates, spend similar amounts of money and make similar numbers of transactions. The products and services which are mostly bought by students are clothing, apparel and accessories. On the contrary, they do not have much trust in insurance and financial services yet.

The respondents state that m-commerce is time-efficient, easy to access and easy to use. Another advantage for male students is the perceived low cost. However, the results show that women find m-commerce more expensive than men. On the other hand, male students seem to trust m-commerce transactions to a greater extent than female ones. Also, students are fond of communication when being part of m-commerce. Hence, students believe that the process from a purchase request to the final step is coordinated and communicated by the seller. A drawback of m-commerce is the lack of social contact. If more businesses work on their platforms and provide a channel of communication between their customers where they can share opinions, this perception might change.

One of the strongest motivators for the students is the fact that they can use m-commerce anywhere and anytime. They claim its convenience, enjoyment and benefits. An interesting finding is that respondents do not see that much benefit from information based on location, compared to the other benefits of m-commerce. Obviously, there is a gap in the market that prevents students from seeing the convenience and profit from location-based information. Being aware of the location of the user is a significant advantage for m-commerce over wired e-commerce as it can help businesses better receive and send information relevant to a specific location (Mahatanankoon et al., 2005); businesses need to make sure that they take advantage of it.

The attitude toward m-commerce has emerged as a strong predictor of its adoption. Also, the research confirms that there is a significant correlation between trust and behavioral intentions of the user and trust is a factor that can predict the m-commerce adoption. Both undergraduates and postgraduates trust their monetary transactions to be safe, even though they are afraid about their personal data. This survey has found that the subjective norm has no influence on the Bulgarian students' decision making and the process of m-commerce adoption. An explanation can be found in the specific Bulgarian mentality and way of thinking as Bulgarians are a very proud nation with specific understandings (Tzvetkova, 2015). This could be considered as a drawback for the m-commerce adoption, as the subjective norm and positive comments from others might lead to/foster the m-commerce adoption.

To summarize, undergraduate and postgraduate students are mostly satisfied with the m-commerce transactions that they have previously made. The fact that satisfaction is at a high level in the perception of Bulgarian students and the students' readiness to switch from laptops to hand-held devices can surely lead to better future adoption. Admittedly, this research can be of great value to the business and academic world as it shows that Bulgarian students are ready to switch from e-commerce to m-commerce. Inevitably, companies' strategies need to be adapted to the current situation on the market.

 DOI: 10.7172/2449-6634.jmcbem.2018.1.4

Recommendations and Limitations

Many questions concerning m-commerce adopters in Bulgaria and higher education students in particular were answered. However, a suggestion for further research could be to mix quantitative and qualitative research and to include not only simple statistics like t-tests, chi-squares and ANOVAs. Administering the same questionnaire in another country and making a cross-country analysis is also a very good opportunity for comparisons. Also, future research should aim for no restrictions on respondents to select a more diverse sample and draw more general conclusions.

Furthermore, other factors-predictors of m-commerce adoption such as anxiety about the use of technology and perceived behavioral control can be included for a more complete and consistent analysis. Another part which can be further investigated is a group of respondents who are not m-commerce adopters. They can be also included in future studies. If the reasons for not being part of m-commerce are evaluated, then the industry and the academia will have much to elaborate on. Emphasizing specific cultural characteristics of Bulgarians for better reliability and certainty can also lead to significant findings.

References

Agrebia, S. & Jallaisb, J. (2015). Explain the intention to use smartphones for mobile shopping. Journal of Retailing and Consumer Services, 22(1), 16– 23. https://doi.org/10.1016/j.jretconser.2014.09.003

Anderson, M. (2015). The demographics of device ownership. Pew Research Center Internet, Science & Tech. Retrieved from http://www.pewinternet.org/2015/10/29/the-demographics-of-device-ownership/ (21 April 2017).

Chaffey, D. (2017). Mobile marketing statistics 2017. Smart Insights. Retrieved from http://www.smartinsights.com/mobile-marketing/mobile-marketing-analytics/mobile-marketing-statistics/ (28 Mar. 2017).

Chang, J.M., Williams, J. & Hurlburt, F.G. (2014). Mobile commerce. IT Professional, 16(3), 4–5. https://doi.org/10.1109/MITP.2014.36

Chen, Y., Yan, X., Fan, W., & Gordon, M. (2015). The joint moderating role of trust propensity and gender on consumers' online shopping behavior. Computers in Human Behavior, 43(1), 272–283. https://doi.org/10.1016/j.chb.2014.10.020

Chong, A. (2013). Mobile commerce usage activities: The roles of demographic and motivation variables. Technological Forecasting and Social Change, 80(7), 1350–1359. https://doi.org/10.1016/j.techfore.2012.12.011

Chong, A. (2013). Predicting m-commerce adoption determinants: A neural network approach. Expert Systems with Applications, 40(2), 523–530. https://doi.org/10.1016/j.eswa.2012.07.068

Ciprian, P. & Vlad, F. (2016). Trends in the evolution of mobile commerce.

Davis, F. (1989). Perceived usefulness, perceived ease of use and user acceptance of information technology. MIS Quarterly, 13, 319–340. https://doi.org/10.2307/249008

Dužević, I., Delić, M., & Knežević, B. (2016). Customer satisfaction and loyalty factors of Mobile Commerce among young retail customers in Croatia. Gestão e Sociedade, 10(27), 1476. https://doi.org/10.21171/ges.v10i27.2129

Eastin, M.S., Brinson, N.H., Doorey, A., & Wilcox, G. (2016). Living in a big data world: Predicting mobile commerce activity through privacy concerns. Computers in Human Behavior, 58, 214–220. https://doi.org/10.1016/j.chb.2015.12.050

Ecommerce News. (2016). Mobile shopping behaviors in Europe. Retrieved from https://ecommercenews.eu/mobile-shopping-behaviors-europe/ (22 Aug. 2017).

Eurostat.com. (2016). Tables, Graphs and Maps Interface (TGM) table. Individuals using mobile devices to access the internet on the move. Ec.europa.eu. Retrieved from http://ec.europa.eu/eurostat/tgm/refreshTableAction.do?tab=table&plugin=1&p code=tin00083&language=en (16 Feb. 2017).

Faqih, K. & Jaradat, M. (2015). Assessing the moderating effect of gender differences and individualism-collectivism at individual-level on the adoption of mobile commerce technology: TAM3 perspective. Journal of Retailing and Consumer Services, 22, 37–52. https://doi.org/10.1016/j.jretconser.2014.09.006

Gao, Y., Li, L., & Yang, Y. (2014). Application of smart phone in mobile commerce and development tendency. Information Technology Journal, 13(6), 1054–1061. https://doi.org/10.3923/itj.2014.1054.1061

 DOI: 10.7172/2449-6634.jmcbem.2018.1.4

Georgiadis, C.K. & Stergiopoulou, S.H. (2008). Mobile commerce application development: Implementing personalized services. 7th International Conference on Mobile Business, 201–210. https://doi.org/10.1109/ICMB.2008.35

Grigorova, K. (2015). Growth in mobile commerce and online sales.

Hillman, S. & Neustaedter, C. (2017). Trust and mobile commerce in North America. Computers in Human Behavior, 70, 10–21. https://doi.org/10.1016/j.chb.2016.12.061

Hitt, L. & Frei, F. (2002). Do better customers utilize electronic distribution channels? The case of PC banking. Management Science, 48(6), 732–748. https://doi.org/10.1287/mnsc.48.6.732.188

Hsi-Peng, L. & Su, P. (2009). Factors affecting purchase intention on mobile shopping web sites. Internet Research, 19(4), 442–458. https://doi.org/10.1108/10662240910981399

IAB (Interactive Advertising Bureau). (2014). VI study IAB Spain about mobile marketing. Retrieved from www.iabspainnet/wp-content/uploads/downloads/2014/09/VI_Estudio_Anual_Mobile_Marketing_ve rsion_abierta1.pdf (19 Aug. 2017).

Jimenez, N., San-Martin, S., & Azuela, J.I. (2016). Trust and satisfaction: The keys to client loyalty in mobile commerce. Academia Revista Latinoamericana de Administración, 29(4), 486–510. https://doi.org/10.1108/ARLA-12-2014-0213

Khare, A. & Sadachar, A. (2014). Collective self-esteem and online shopping attitudes among college students: Comparison between the U.S. and India. Journal of International Consumer Marketing, 26(2), 106–121. https://doi.org/10.1080/08961530.2014.878203

Lancaster, H. (2016). Bulgaria – Mobile infrastructure, broadband, operators – Statistics and analyses. Budde.com.au. Retrieved from https://www.budde.com.au/Research/Bulgaria-Mobile-Infrastructure-Broadband-Operators-Statistics-and-Analyses (16 Feb. 2017).

Liang, T.P. & Wei, C.P. (2004). Introduction to the special issue: Mobile commerce applications. International Journal of Electronic Commerce, 8(3), 7–17. https://doi.org/10.1080/10864415.2004.11044303

Lu, H. & Su, P. (2009). Factors affecting purchase intention on mobile shopping web sites. Internet Research, 19(4), 442–= 458. https://doi.org/10.1108/10662240910981399

Mahatanankoon, P., Wen, H. J., & Lim, B. (2005). Consumer-based m-commerce: Exploring consumer perception of mobile applications. Computer Standards & Interfaces, 27(4), 347–357. https://doi.org/10.1016/j.csi.2004.10.003

Maity, M. & Dass, M. (2014). Consumer decision-making across modern and traditional channels: E-commerce, m-commerce, in-store. Decision Support Systems, 61, 34–46. https://doi.org/10.1016/j.dss.2014.01.008

Meola, A. (2017). The rise of m-commerce: Mobile shopping stats & trends. Business Insider. Retrieved from http://www.businessinsider.com/mobile-commerce-shopping-trends-stats-2016-10 (22 Feb. 2017).

Min, Q., Ji, S., & Qu, G. (2008). Mobile commerce user acceptance study in China: A revised UTAUT model. Tsinghua Science & Technology, 13(3), 257–264. https://doi.org/10.1016/S1007-0214(08)70042-7

Narang, B. & Arora, J. (2016). Present and future of mobile commerce: Introduction, comparative analysis of m commerce and e commerce, advantages, present and future. In S. Madan & J. Baatra Arora, Securing transactions and payment systems for m-commerce (pp. 1–16). IGI Global. https://doi.org/10.4018/978-1-5225-0236-4.ch015

Nassuora, A. (2013). Understanding factors affecting the adoption of m-commerce by consumers. Journal of Applied Sciences, 13(6), 913–918. https://doi.org/10.3923/jas.2013.913.918

OECD. (2013) Electronic and mobile commerce. OECD Digital Economy Papers, (228). Paris: OECD Publishing. Retrieved from http://dx.doi.org/10.1787/5k437p2gxw6g-en (16 Feb. 2017). https://doi.org/10.1787/5k437p2gxw6g-en

Patil, P. (2017). Technological advancements and its impact on humanity. Academia.edu. Retrieved from http://www.academia.edu/346486/Technological_Advancements_and_Its_Imp act_on_Humanity (22 Aug. 2017).

Ratcliff, Ch. (2015). 10 of the finest mobile ecommerce sites. Econsultancy. Retrieved from https://econsultancy.com/blog/66647-10-of-the-finest-mobile-ecommerce-sites/ (14 Jun. 2017).

Rhee, K. & Kim, W. (2004). The adoption and use of the Internet in South Korea. Journal of Computer-Mediated Communication, 9(4). https://doi.org/10.1111/j.1083-6101.2004.tb00299.x

San-Martín, S., Prodanova, J., & López Catalán, B. (2016). What makes services customers say "buy it with a mobile phone"? Journal of Services Marketing, 30(6), 601–614. https://doi.org/10.1108/JSM-02-2015-0081

Saprikis, V. (2013). A longitudinal investigation on Greek University students' perceptions toward online shopping. Journal of Electronic Commerce in Organizations, 11(1), 43–62. https://doi.org/10.4018/jeco.2013010103

Saritas, O., Gokhberg, L., Bakhtin, P., & Kuzminov, I. (2016). Weak signals on the future of mobile commerce in Russia. National Research University of Higher School of Economic Research Paper Series, 1–17. https://doi.org/10.2139/ssrn.2857108

Shang, D. & Wu, W. (2017). Understanding mobile shopping consumers' continuance intention. Industrial Management & Data Systems, 117(1), 213–227. https://doi.org/10.1108/IMDS-02-2016-0052

 DOI: 10.7172/2449-6634.jmcbem.2018.1.4

Shead, W., Derevensky, J., Fong, T., & Gupta, R. (2012). Characteristics of internet gamblers among a sample of students at a large, public University in Southwestern United States. Journal of College Student Development, 53(1), 133–148. https://doi.org/10.1353/csd.2012.0005

Statista.com. (2016). Connected device usage rate in Bulgaria from2014 to 2016, by device. Statista Online Database. Retrieved from https://www.statista.com/statistics/346669/connected-device-usage-bulgaria/ (15 Feb. 2017).

Tairov, I.L. (2014). Mobile commerce and its' problems. Computerworld, (1), 96–109. Retrieved from http://computerworld.bg/47198_samo_rast_pri_mobilnata_targoviya_i_onlajn_ prodazhbite (19 Sep. 2017).

Tavakol, M. & Dennick, R. (2011). Making sense of Cronbach's alpha. International Journal of Medical Education, 2, 53–55. https://doi.org/10.5116/ijme.4dfb.8dfd

Tzvetkova, J. (2015). Bulgaria – Culture smart!: The essential guide to customs & culture. London: Kuperard.

UNESCO UIS. (2017). ISCED fields of education and training 2013 (ISCED-F 2013). Retrieved from http://www.uis.unesco.org/Education/Documents/isced-fields-of-education-training-2013.pdf (17 Jun. 2017).

Venkatesh, V., Morris, M.G., Davis, G.B., & Davis, F.D. (2003). User acceptance of information technology: Toward a unified view. MIS Qarterly, 27(3), 425–478. https://doi.org/10.2307/30036540

Wang, R.J., Malthouse, E.C., & Krishnamurthi, L. (2015). On the go: How mobile shopping affects customer purchase behavior. Journal of Retailing, 91(2), 217–234. https://doi.org/10.1016/j.jretai.2015.01.002

Yadav, R., Sharma, S.K., & Tarhini, A. (2016). A multi-analytical approach to understand and predict the mobile commerce adoption. Journal of Enterprise Information Management, 29(2), 222–237. https://doi.org/10.1108/JEIM-04-2015-0034

Yang, K. (2012). Consumer technology traits in determining mobile shopping adoption: An application of the extended theory of planned behavior. Journal of Retailing and Consumer Services, 19(50), 484–491. https://doi.org/10.1016/j.jretconser.2012.06.003

Zarmpou, T., Saprikis, V., Vlachopoulou, M., & Tsiotsou, R. (2010). Predicting the adoption of mobile transactions: An exploratory investigation in Greece.

Zhang, J., Liu, Y., & Nie, L. (2009). A review for the risks and challenges of mobile commerce development. International Conference on E-Business and Information System Security, 1–4. https://doi.org/10.1109/EBISS.2009.5137895

Zhang, L., Zhu, J, & Liu, Q. (2012). A meta-analysis of mobile commerce adoption and the moderating effect of culture. Computers in Human Behavior, 28(5), 1902–1911. https://doi.org/10.1016/j.chb.2012.05.008

Zickuhr, K. (2013) Tablet ownership 2013. Research Center Internet, Science & Tech. Retrieved from http://www.pewinternet.org/files/old-media/Files/Reports/2013/PIP_Tablet%20ownership%202013.pdf (21 April 2017).

 DOI: 10.7172/2449-6634.jmcbem.2018.1.4