



Lacka, E. and Yip, N. (2018) Revealing the effect of acculturation process on e-commerce acceptance: the case of intra-European acculturation. *Industrial Management and Data Systems*, 118(6), pp. 1251-1265.

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Deposited on: 3 April 2018

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Revealing the effect of acculturation process on e-commerce acceptance: the case of intra-European acculturation

Abstract

Purpose The popularity of e-commerce has increased significantly over recent years. However, this growth is not shared by all European Union states. One reason for this discrepancy is culture which impacts on e-commerce acceptance. The purpose of this research is to reveal the effect of acculturation process on e-commerce acceptance.

Design/methodology/approach Structural equation modeling is employed to test three research models: Technology Acceptance Model, Theory of Planned Behaviour model and Motivational Model

Findings The findings show that attitudes towards e-commerce change in relation to the perception of control and the influence of subjective norms, which impact intentions to use e-commerce before movement to a host country's culture. However, its effect diminishes after the exposure to the influence of a host culture

Originality/value This is the first study to demonstrate the existence of the effect of acculturation process on mingling and migrating consumers and their changing attitudes towards e-commerce acceptance.

Keywords Technology Acceptance; E-commerce; Acculturation; Culture: Europe

Paper type Research paper

1. Introduction

Online shopping or e-commerce has become a common practice for consumers. In 2015, nearly 1.5 billion consumers worldwide purchased products via e-commerce (Statista, 2017a) and this number is forecasted to be in excess of 2 billion globally by 2019. E-commerce therefore, is a vital shopping channel for consumers worldwide (Chaparro- Pelaez *et. al.*, 2016). Furthermore, it is an important accelerator of global trade (Deng and Wang, 2016) as it generates 3.4 trillion US dollars in B2C e-commerce sales worldwide (Statista 2017b). North America is currently the largest regional market for online shopping, with predicted sales growth of 1.5 trillion US dollars by 2018 (Statista, 2017c). This is followed by China and Europe, where among the 28 European Union member countries (EU), one out of five businesses sell its products via e-commerce (Eurostat, 2017).

To this end, the EU represents an interesting case study. Despite the lack of internal borders ensured by European Single Market policy, there appears a wide variation in the share of e-sales across its member countries. For example, while e-sales in the UK in 2016 exceeded 71.05 billion Euros, e-sales in countries such as Poland and Sweden only amounted to 6.03 billion Euros and 5.74 billion Euros respectively. Furthermore, despite the EU directive of free movement of goods and people, it appears that cross border e-commerce has not been fully exploited by EU businesses. Statistics show only 8% of EU businesses made e-sales to other EU countries (Eurostat, 2014). This implies that although e-commerce, being an unarguably attractive strategy for consumers and businesses, not all EU consumers uniformly use it as a shopping channel. There is evidence to suggest that this discrepancy is due to the effect consumers' culture has on technology acceptance.

Notwithstanding, some significant research attention has questioned the role of culture-related issues on ICT acceptance (Tsatsou, 2012). Previous research on e-commerce acceptance has provided strong evidence confirming that the discrepancy in e-sales across countries is caused by the effect of a country's culture, which affects consumers' attitudes towards e-commerce (Srite and Karahanna, 2006; Yoon, 2009; Herold and de Seta, 2015). This has been further confirmed by Shiu *et. al.*,(2015) who noted the effect of culture on consumers' attitudes towards online environment from seven EU countries. In line with these research findings, Singh *et. al.*(2005) suggested that in order for e-commerce strategy to be successful, it must reflect the country's culture as it has an effect on online shopping consumers.

Yet, we argue that such an approach to e-commerce strategies development in accordance to the requirements of target country's culture may not be adequate anymore. The increased mobility of EU consumers, ensured by the free movement of goods and people EU directive, brings up the possibility of consumers' attitudes towards e-commerce being subject not only to the effect of culture, but possibly the effect of acculturation process. Simplistically, acculturation is defined as 'the general process of movement and adoption to the consumer cultural environment in one country by persons from another country' (Penaloza, 1994; 33). Acculturation implies that consumers' culture-determined attitudes towards e-commerce may change due to the influence of a new, host country's culture which e-businesses need to account for.

Considering growing intra-European migration and their steadily increasing disposable income levels of migrants (Marczak, 2011) as well as EU commitment to boost cross-border e-commerce, the examination of the effect of acculturation process on e-commerce acceptance is vital to ensure that e-businesses can effectively target

groups of migrants not only majority culture members, and establish cross-border e-commerce strategies.

In this respect, in an offline environment, the change of culture-determined values, attitudes and consumption patterns due to the exposure to the host country's culture has been extensively studied (see Penaloza, 1994; Oswald, 1999; Penaloza and Gilly, 1999; Alvarez *et. al.*, 2014; Askegaard *et. al.*, 2005; Flower *et. al.*, 2007; Chytкова, 2011; Jamal and Shukor, 2014). Huggins *et. al.*, (2013) and Schau *et. al.*, (2017) demonstrated the possibility of acculturation taking place online. Our study aims to show empirically the effect of acculturation process towards e-commerce acceptance. The study provides theoretical contribution by extending the research stream on the effect of culture on e-commerce acceptance, and derive practical and policy implications that will allow for e-commerce strategies to target migrants group and span across country's cultural boundaries.

2. Background literature

The literature acknowledges that e-commerce acceptance does not occur in a cultural vacuum encouraging numerous research projects that investigate the effect of a country's culture on consumers' acceptance of e-commerce. In this research stream, culture is seen as 'mental programming', which guides consumers' attitudes towards e-commerce (e.g. Srite and Karahanna, 2006, Yoon 2009). As such, e-commerce research seeks to operationalise culture at its aggregate level, assuming that individuals acquire values, attitudes and belief systems as well as learn patterns of behaviour from living within boundaries of a country's culture (Craig and Douglas, 2006). Accordingly, research investigating the effects of culture on consumers'

acceptance of e-commerce adopts the reasoning typified by Srite and Karahanna (2006). Their study acknowledges that culture is primarily defined through values, which are manifested throughout espoused national cultural values. Hence, the investigation of the effect of culture on e-commerce acceptance is accessed through examination of consumers' espoused national cultural values shared within a particular group of people (i.e. society, nation or country). These are commonly identified on the basis of Hofstede's framework, which allows for assessment of the effect of country's culture on values of its residents (Mazaheri *et. al.*, 2014; Shiu *et. al.*, 2015).

Prior research investigating the effect of culture on e-commerce acceptance incorporates Hofstede's cultural framework to study the effect of culture on consumers' acceptance of e-commerce. For example, an early research by Pavlou and Chain (2002) measured the effect of Hofstede's cultural dimensions on consumers' attitudes towards e-commerce in two countries represented by opposite espoused national cultural values (i.e. Chinese and American cultures). They identified the moderating effect of individualism vs. collectivism (IC) and long-term orientation (LTO) on consumers' attitudes towards e-commerce, but they were unable to identify any moderating effect of power distance (PD) on consumers' intentions to use e-commerce. Similar research by Yoon (2009) also failed to ascertain the effect of PD on consumers' e-commerce acceptance. While examining the effect of Hofstede's cultural dimensions on Chinese consumers' intentions to use e-commerce, he identified a moderating effect of LTO on consumers' intention to accept e-commerce, confirming Pavlou and Chain's (2002) findings. This effect, however, is only recorded in studies conducted on Chinese consumers, thus research which primary

interest does not focus on Confucian Chinese culture, does not to examine it at all (Srite and Karahanna, 2006).

As well as the LTO effect, Yoon (2009) also identified some moderating influence of masculinity vs. femininity (MF) on consumers' intention to accept e-commerce. This concurs with earlier studies including Stafford *et. al.*'s (2004) comparison of online shopping behaviour of consumers based in three different countries (US, Turkey and Finland). They identified a positive effect of MF and concluded that consumers from cultures characterised as feminine (i.e. Finland) tend to be less involved in shopping on e-commerce sites than consumers from cultures identified as masculine (i.e. Turkey). They did not, however, note any difference between consumers espoused to the values of Turkish and American cultures in terms of the effect of MF on their intention to accept e-commerce. This indicates that there are espoused national cultural values other than those assessed on the basis of MF, which might affect e-commerce acceptance (Zhou *et. al.*, 2007). Those values are represented by Hofstede's uncertainty avoidance (UA) and IC, which moderating effect on consumers' e-commerce acceptance has been consistently revealed (e.g. Yoon, 2009; Hwang and Lee, 2012). This effect of UA and IC on consumers' attitudes has been recently verified by Shiu *et. al.*, (2015), who conduct their research on consumers from seven EU countries. Specifically consumers whose country's culture is perceived to be collectivistic and high on the UA index have been found to have less favorable attitudes towards e-commerce, while consumers whose culture is identified as individualistic and low on the UA index appear to be more prompt to accept and use online shopping channels. This is continuously confirmed by e-commerce sale and purchase statistics, where significant difference in e-commerce

use is noticeable between country's cultural boundaries identified as individualistic low on AU index and these identified as collectivistic high on UA index.

In the light of the above research findings, the understanding of consumer culture determined attitudes towards e-commerce has been one of the most important elements of e-commerce strategy development. These previous studies however, did not account for the possibility of culture-determined attitudes change which acculturation theories expose. Acculturation is defined as 'the general process of movement and adoption to the consumer cultural environment in one country by persons from another country' (Penaloza, 1994; 33). As a process, acculturation is about learning values, attitudes, and consumption patterns from a host country's culture that is different from the one in which an individual grew up. The process causes changes in culture-determined behavioural patterns, which may become more like those of the host country's culture (Penaloza and Gilly, 1999; Alvarez *et. al.*, 2014).

Early research on acculturation by Berry (1980), has shown that the acculturation process comprises three stages; contact, conflict and change. In order for the change of culture-determined behaviour to occur, contact with host culture has to first take place. The contact with the host culture can be physical (i.e. due to movement and relocation) or, it can occur via the online platform Schau *et. al.*, (2017). Second, due to the contact and unfamiliarity with the host country's cultural requirements, the possibility of cultural conflict may occur. And finally, the last stage is the manner on how consumers deal with this cultural conflict. At this stage, consumers can either fully adopt behavioural patterns of the host country's culture (assimilation strategy), or they can reject them while maintaining values of culture in which they grew up (separation strategy). Similarly, instead of assimilation or

separation, consumers may maintain attitudes and values of two countries' cultures, or decide to refuse both cultures and their requirements. Alternatively, literature (Lerman *et. al.*, 2009; Alvarez *et. al.*, 2014) have also argued that cultural groups may not only assimilate with the host country's culture but they may 'over-assimilate', or 'hyper-identify' with the culture in which they grew up (Wallendorf and Reilly, 1983). Some consumers can selectively 'culture swap' (Penaloza, 1994; Oswald, 1999) or they can be subjected to 'hyperfiliation' and strive to develop connections with host country's culture (Bradford and Sherry, 2014). Regardless of these polarized arguments, researchers agree that such a movement between countries will result in behavioral change of culture- determined attitudes, values and consumption patterns which can be described as 'bought, sold, and worn like a loose garment' (Oswald, 1999; 304).

To date, much of these acculturation observations are based in the traditional shopping environment where research on various cultural groups has flourished (Askegaard *et. al.*, 2005; Flower *et. al.*, 2007; Chytкова, 2011; Jamal and Shukor, 2014). Investigation of the acculturation process in the online shopping environment began recently, and it suggest that contact with the host country's culture which initiates a change of culture-determined behavior can also occur through the online platform (Bradford and Sherry, 2014; Li and Tsai, 2015; Schau *et. al.*, 2017). Previous research on consumers' perception of service quality in the context of online self-service encounters (Miyazaki *et. al.*, 2007), as well as online information search and shopping preferences (Becerra and Korgaonkar, 2009) and social media use (Li and Tsai, 2015) after the movement to host country's culture have confirmed this assumption. However, this possibility of change of culture-determined attitudes towards e-commerce due to exposure to host country's culture is still at its infancy.

One of the first study exploring this phenomenon examined the effect of acculturation and cultural confinement of US Hispanic consumers and concluded that consumers' acculturation process indeed plays an important role in influencing consumers' online decision-making process (Huggins et. al., 2013). Recently, Schau et. al., (2017) recognised that online forums can serve as a possible acculturation platform. Therefore, this study aims to extend the emerging stream of research and uncover the effect of acculturation process on consumers' attitudes towards e-commerce acceptance. To the authors knowledge this is the first study examining this phenomenon.

3. Research methodology

3.1. Theoretical framework

Researchers have made a significant effort in building theories to examine determinant factors of e-commerce acceptance (Venkatesh et. al., 2003; Chaparro-Pelaez et. al., 2016). The focus of these research have been put on employing previously developed models which explain the relationship between attitudes and intentions, and subsequent consumer actual behaviour and e-commerce use (Taylor and Todd, 1995; Kurnia et. al., 2015). For example, Venkatesh et. al., (2003; 2012), while developing Unified Theory of Acceptance and Use of Technology (UTAUT) model and subsequent UTAUT2, identified eight 'predominant' models used to evaluate e-commerce acceptance. These models are well established and extensively tested, giving assurance of their overall explanatory power (Taylor and Todd, 1995). Neither the models nor their variables, however, have so far generated clear information as to which factors are key in e-commerce acceptance. This might be because the models cannot be used to accurately assess behavior, which involves

uncertainty related to actions beyond the consumers' control (i.e. purchase in the online environment). To overcome this limitation, researchers focused on the behaviour through which goals are accomplished (i.e. intentions to use e-commerce) rather than goals themselves (i.e. actual use) (see Srite and Karahanna, 2006, Yoon, 2009).

For this study 'predominant' models as identified by Venkatesh *et. al.*, (2003) were reviewed, and four models having a direct relationship between attitudes and behavioural intention were identified; Theory of Reasoned Action (TRA), Technology Acceptance Model (TAM), Theory of Planned Behaviour (TPB), Motivational Model (MM). Three models were selected to form the central pillar of this study. These are TAM, TPB and MM (for a summary please see Venkatesh *et. al.*, 2003). TRA was excluded from the investigation, as the remaining three models are direct extension of the original TRA. The variables attached to these models are compatible and their wide range allows to assess the role of acculturation process on both hedonic and utilitarian motives for e-commerce acceptance, where its importance has been highlighted in the literature (e.g. Venkatesh *et. al.*, 2012; Mazaheri *et. al.*, 2014; Ashraf *et. al.*, 2016; Lu *et. al.*, 2017). Additionally, the application of all three models, can provide more specific indication of the occurrence of the acculturation process than an examination of a single model. The models and research hypotheses have been adopted from Venkatesh et al (2003) (see Table 1.), and they are tested following research approach outlined below.

< Insert Table 1 >

3.2. Research approach

To reveal the effect of acculturation process of consumers' attitudes towards e-commerce, research hypotheses were tested following the approach by Douglas and Craig (1997). According to their study, research on acculturation should prioritise the selection of the relevant unit of analysis (i.e. the cultural group) as well as the context in which the unit is situated. They further highlight the importance of evaluation of the research design and recommended the comparative examination of attitudes of the cultural group before and after movement and exposure to host country's culture.

As mentioned in the Introduction, EU-28 provides an interesting context for cross-cultural research, and thus research on EU member states is growing (e.g. Oliveira and Martins, 2010; Shiu *et. al.*, 2015). The European Single Market policy facilitates free movement of people and goods within the boundaries of EU-28. As a result, in 2014, a total of 3.8 million people immigrated to one of the EU-28 Member States, among which 1.3 million people with citizenship of a different EU Member State from the one to which they immigrated (Eurostat, 2016). The UK is the most popular destination for EU migrants following an unprecedented 284,000 EU citizens arriving to live in the UK in 2016 (Office for National Statistics, 2016). Among intra-European migrants to the UK, Polish nationals are the biggest migration group. Furthermore, Polish culture is characterized as high on UA index, while British culture is one of the lowest UA cultures in Europe. Both cultures also differ in their IC scores. As discussed in Section 2., these cultural differences regulate e-commerce adoption rates, which is further verified by statistics, which show significant differences in e-commerce use. Therefore, considering the size of intra-European migration, significant differences in national cultural values and discrepancies e-

commerce use between the UK and Poland, this paper aims to uncover the possible effect of acculturation process on e-commerce acceptance by exploring the case of UK Poles.

As indicated above, the attitudes of UK Poles towards e-commerce, as identified on the basis of TAM, TPB and MM, before movement- Culture A (i.e. Poland), and after exposure to host country's culture- Culture B (i.e. the UK) are examined. Figure 1. summarises our research methodology.

< Insert Figure 1 >

The hypotheses were tested through a questionnaire with items adopted from previous studies. ATB and PBC constructs were developed from the study by Taylor and Todd (1995), IM was adopted in a research by Venkatesh (2000), SN was adopted from Srite and Karahanna (2006) and finally, the constructs of PU, PEOU and IUSE were adopted from the study by Yoon (2009). All items were measured on a seven-point Likert scale. In addition to questions measuring attitudes towards e-commerce, questions aiming to assess demographic characteristics of respondents and to provide an overview of the exposure to host country's culture (Culture B) were developed. In order to ensure a high response rate, the questionnaire was translated into the respondents' native language and the back-translation method is applied to avoid possible linguistic bias. The questionnaires were distributed in two ways. The field version of the questionnaire was delivered in workplaces employing UK Poles; 45 questionnaires were collected. The online version was posted on online forums and social media community groups. This collection method appeared to be most effective, and it resulted in 580 responses. Although there is significant discrepancy in

the number of online and offline questionnaires collected, the respondents to both questionnaires confirmed that they are familiar with e-commerce and that they used e-commerce. Thus, it deems appropriate to include all the responses into the analysis.

4. Analysis and Research findings

4.1. Sample

In total, 625 respondents participated in the study among which 603 provided usable responses. All respondents confirmed that they associate themselves with Culture A, and they have been exposed to Culture B for at least two years, which aimed at ensuring relative familiarity with e-commerce in both cultures. Among the 603 usable respondents 62.5% are female and 37.4% are male. The majority are between 22 and 34 years old (67.8%), 22% is in the age group 35- 44 and 6.4% in the group below 21 years old. 21 (3.4%) were in their mid-30s and 40s, and one respondent (.1%) indicated that he/she is over age 55. All respondents appear to be well educated with 54.8% holding secondary school diploma and 43.7% holding university degrees. Overall, the demographic characteristics of respondents presented in Table 2 reveal that the respondents represent a general migration trend as outlined by House of Commons (2016), confirming the generalisability of the study to the sample population being studied.

< Insert Table 2 >

4.2. Reliability and validity of measured items

In order to test the research hypotheses first psychometric properties of the scale are assessed. Consequently, Cronbach's Alpha test is run. All measured items meet the guidance exceeding the required .70 level (see Table 3).

< Insert Table 3 >

Furthermore, Composite Reliability (CR) and Average Variance Extracted (AVE) are tested to confirm the validity of each item. The tests reveal that all of the items exceed recommended AVE value ($>.50$) and CR value ($>.70$), and thus the reliability and validity of all items is confirmed. (see Table 4).

< Insert Table 4 >

4.3. Statistics for indices of fit

In order to determine model fitness the following indices are examined: Chi-squared (χ^2), degrees of freedom (df), Chi-squared/ degrees of freedom (χ^2/df), goodness of fit index (GFI), the average goodness of fit index (AGFI), the root mean square error of approximation (RMSEA), the comparative fit index (CFI), the Tucker Lewis index (TLI) as well as parsimony normed fit index (PNFI) and parsimony goodness of fit index (PGFI) (see Table 5).

In all tested models, items of means of absolute fit meet the standard with the exception of χ^2/df , where χ^2/df exceeds 3.0 level, which seems to be due to the fact that the χ^2 is subject to the limitation of the sample size (Iacobucci, 2010). Apart from χ^2/df however all indexes meet the guidance in all tested models, hence it can be stated that the overall fitness of all tested models is confirmed.

< Insert Table 5 >

Since common method variance can be a source of measurement error leading to potentially misleading research findings, techniques for common method bias as recommended by Podsakoff *et. al.*, (2003) were employed. Finally, in order to test possible bias statistically, the Harman's single factor test was run to confirm that the bias does not exist in the study. According to the Harman's test one factor explain less than 50% of variance, hence it is confirmed that bias does not exist in the sample.

4.4. Structural Equation Modeling (SEM)

This study used SEM to test the research hypotheses. SEM has been commonly applied in research examining TAM, TPB, MM and other models in the context of technology adoption (e.g. Venkatesh et al, 20103; 2012), as well as in studies examining the effect of culture on e-commerce adoption. (Strite and Karahanna, 2006; Yoon, 2009). Based on SEM of TAM, it has been revealed that the relationship between PU and IUSE is statistically significant in Culture A at $p < .001$ and Culture B at $p < .001$, hence H1 is supported indicating the perception of e-commerce usefulness is a significant factor impacting consumers intentions to use e-commerce regardless of the country's culture consumers are exposed to. This relationship has been additionally verified while testing the MM model, where the relationship between PU and IUSE is also found to be significant in both cultures at $p < .001$. The impact of perception of ease of use on e-commerce acceptance however, has not been confirmed neither in Culture A not in Culture B. The relationships between PEOU and IUSE is insignificant in Culture A and in Culture B, hence H2 is

rejected. Finally, the relationship between PEOU and PU is statistically significant in both Culture A and Culture B at $p < .001$, which supports H3. Therefore, based on the examination of variables of TAM it can be confirmed that consumers' attitudes towards e-commerce in relation to perceived usefulness remain unchanged after movement to host country's culture. Thus, PU is equally important factor driving consumers' intentions to use e-commerce before and after movement to the host country's culture.

Applying SEM to the TPB model, the analysis revealed that there is significant relationship between PBC and IUSE in Culture A at $p < .05$, which confirms H4 in Culture A. Such a relationship however was not significant in Culture B (H4 is rejected in Culture B). This indicates that consumers' perception of behavioural control is a factor driving intentions to use e-commerce in Culture A, but this factor is not a significant driver for e-commerce acceptance in Culture B. Furthermore, the relationship between ATB and IUSE is found to be insignificant in both Culture A and B, which rejects H5. The relationship between SN and IUSE in Culture A has been found to be significant at $p < .01$, but while examined in Culture B it has been found as insignificant. Thus, H6 is confirmed in Culture A, but it is rejected in Culture B indicating that consumers' attitudes towards e-commerce are subject to the influence of the reference group in Culture A only. Finally, there is statistically significant relationship between SN and ATB as well as ATB and PBC in both Culture A and Culture B at $p < .001$. Thus H7 and H8 are supported in both cultures. Based on the SEM of TPB, it can be confirmed that the effect of acculturation process exists as consumers' attitudes towards e-commerce change. Such a change is observed in relation to the consumers' perceived behavioural control and subjective norms, both of which have significant impact on e-commerce

acceptance decision before movement to host country's culture. While espoused to national cultural values of host country (Culture B) however, the impact of those factors on intentions to use e-commerce diminished, as the relationships between PBC and IUSE as well as SN and IUSE were not confirmed.

Finally, while testing the MM model no changes in terms of hedonic motivators were observed. Specifically, the relationship between IM and IUSE in Culture A and Culture B was insignificant, thus H9 is rejected. Furthermore, the relationship between IM and PU was significant at $p < .001$ in both Culture A and Culture B, which supports H10. Consequently similarly to TAM, results of the SEM of MM did not reveal any change in attitudes towards e-commerce acceptance. The results are presented in Table 6 below.

< Insert Table 6 >

Based on the above SEM results, some change in consumers' intention to use e-commerce has been revealed while moving from Culture A to Culture B. Specifically, the change in consumers' attitudes related to behavioural control over e-commerce and impact of subjective norms on intentions to use e-commerce has been observed. While exposed to Culture A consumers' intentions to accept e-commerce are subject to their perception of control as well as evaluation of the opinion the reference group whether or not consumers should accept and use e-commerce. After the movement and exposure to host country's culture such an impact of PBC and SN on IUSE was not confirmed. This change of attitudes after movement to the host country's culture is accounted for in the effect of the acculturation process on consumers' attitudes towards e-commerce.

5. Discussion and research contribution

Applying three intention-based models; TAM, TPB and MM, this comparative study addresses the research gap and it reveals that there is an effect of acculturation process on consumers' attitudes towards e-commerce. Specifically, the results show that perceived behavioral control and subjective norms 'can be bought, sold, and worn like a loose garment'. This is because consumers' attitudes towards e-commerce can change as a result of movement to a host country's culture characterised as highly individualistic and with a low UA index.

The empirical evidence show significant impact of perceived behavioural control and subjective norms before movement to host country's culture, but this impact was found to be insignificant while exposed to individualistic, low AU host culture values. This observed change in consumers' attitudes towards e-commerce in relation to perceived behavioural control and subjective norms before and after movement to host country's culture is accounted for by the effect of acculturation process. Furthermore, this study confirms previous research findings, which stressed the importance of perceived usefulness in e-commerce acceptance regardless of the culture consumers are exposed to (Venkatesh *et. al.*, 2012; Mazaheri *et. al.*, 2014; Ashraf *et. al.*, 2016)

The specific findings of research further contribute to e-commerce literature on two levels. First, this research contributes to the extensive stream of literature on the effect of culture and consumers' e-commerce acceptance. The findings extend this research stream and they demonstrate that consumers' attitudes towards e-commerce

are not culture bound. This research shows that the effect of acculturation process on consumers' attitudes towards e-commerce exists. The results of empirical research prove that culture determined attitudes towards e-commerce are subject to the acculturation process and therefore they can change. This is particularly true in reference to perceived behavioural control caused by cultures' UA index, and subjective norms which impact on e-commerce is directly related to country's IC dimension. Moreover, this study reveals that regardless of the culture consumers are subject to their e-commerce acceptance decision is strongly influenced by their perception of e-commerce usefulness deriving from e-commerce use.

In addition to contribution to e-commerce acceptance literature, this study addresses the concerns of Jamal (2003) and Askegaard *et. al.*, (2005) with regards to the limited academic research on acculturation of immigrants in Europe. This study reveals the effect of acculturation process on e-commerce acceptance while exploring the case on intra-European migrants. Specifically this study, while comparing and contrasting perceptions towards e-commerce of UK Poles before and after movement, reveals change of attitudes towards online shopping. Hence, this study contributes to acculturation research by investigating the case of intra-European acculturation.

In addition to theoretical contributions, this study derives managerial and policy implications. This study shows that consumers' culture determined attitudes towards e-commerce can change, and therefore e-businesses do not have to be restrained in their e-commerce strategies to target one culture, they can effectively target growing group of migrants. This can be achieved by increasing migrant's perception of control over e-commerce activities, and increased general opinion of others about e-commerce. This can be achieved by highlighting terms and conditions of e-retailer as well as country specific and EU online shopping regulations. Equipped

with formal, structured rules and regulations consumers may be more willing to accept e-commerce and use it. The positive experience with e-commerce in turn, may generate word of mouth, which will influence e-commerce acceptance decision of others in the collectivistic society.

Furthermore, the findings imply that e-businesses do not have to be restrained to one country's culture. On the contrary, they can design cross-border e-commerce strategies that will address different cultural requirements. This study demonstrates that regardless of the culture that consumers are exposed to, their intentions to accept e-commerce are determined by the perception of e-commerce usefulness. E-businesses therefore have to design e-commerce strategies highlighting the usefulness of online shopping over shopping in traditional, brick-and-mortar shops.

To support e-businesses in their efforts, the EU-28 while reinforcing its Digital Single Market strategy across the EU should focus not only on improvements of e-commerce parcels delivery and increasing consumers trust in e-commerce (European Commission, 2015), but they should also reinforce other motives which drive consumers e-commerce acceptance. This study reveals that these motives refer to consumers' perception of control over their e-commerce activities, opinion of others about e-commerce and overall perception of usefulness of online shopping platforms.

5.1. Study limitations and further research

This study is subject to the following limitations and this opens additional avenues for further research. First, to study the effect of acculturation we collected quantitative data at one point in time. However, further research is encourage to employ longitudinal approach to study the effect of acculturation on e-commerce

acceptance, which may provide new insights into the phenomenon. Second, this study reveals the effect of acculturation process of e-commerce acceptance while exploring the case of UK Poles. Polish consumers residing in the UK were chosen as a group to be studied due to the following reasons; (1) significant discrepancy between Poland and the UK in e-sale, (2) significant differences in exposed national cultural values as identified by Hofstede's framework, as well as (3) increased migration of Poles to the UK. The focus of this research on one cultural group limits the generalisability of the findings to other groups of immigrants. Thus, further research is encouraged which will examine the existence of the effect of acculturation process on other cultural groups. Second, the aim of this research is to reveal the effect of acculturation process on e-commerce acceptance. This has been achieved by employing previously developed and extensively tested models (TAM, TPB and MM). This study however, does not contribute to the research with new attitudes impacting e-commerce acceptance and use. To address this limitation, exploratory research is therefore encouraged to provide in-depth understanding of the revealed effect. Finally, although the study establishes that the change in the consumers' attitudes towards e-commerce is subject to perceived behavioural control and subjective norms, further research should focus on assessing the extent to which time spent in the host country's culture might impact on the consumers' acceptance of e-commerce.

References

Alvarez, C., Dickson, P., and G., Hunter, 2014. The four faces of the Hispanic consumer: An acculturation-based segmentation. *Journal of Business Research*, 67: 108-115

Askegaard, S., Arnould, E., and D., Kjeldgaard, 2005. Postassimilationist Ethnic Consumer Research: Qualifications and Extensions. *Journal of Consumer Research*, 32: 160- 170,

Ashraf, A., Razzaque, M., and N., Thongpapanl, 2016. The role of consumer regulatory orientation and fit in online shopping across cultural contexts. *Journal of Business Research*, 69: 6040-6047

Becerra, E., and P., Korgaonkar, 2009. Hispanic's information search and patronage intentions online. *Journal of Electronic Commerce Research*, 10(2)

Berry, J.W., eds 1980. Social and cultural change. In H.C. Traditions and R Brislin Handbook of cross-cultural psychology, Boston, Allyn and Bacon

Bradford, T. W., and J.F., Sherry, 2014. Hyperfiliation and cultural citizenship: African American aconsumer acculturation. *Journal of Business Research*, 67: 418-420

Chaparro-Pelaez, J., Agudo-Peregina, F., and F., Pascual-Miguel, 2016. Conjoint analysis of drivers and inhibitors of e-commerce adoption. *Journal of Business Research*, 69:1277-1282

Chytkowa, Z., 2011. Consumer acculturation, gender, and food; Romanian women in Italy between tradition and modernity. *Consumption Markets and Culture*, 12 (3): 267- 291,

Craig, S., and S., Douglas, 2006. Beyond national culture; implications of cultural dynamics for consumer research. *International Marketing Review*, 23(3):323-342,

Deng Z., and Z., Wang 2016. Early mover advantages at cross-border business-to-business e-commerce portals. *Journal of Business Research*, 69: 6002-2011

Douglas, S. & C., Craig, 1997. The changing dynamic of consumer behaviour; implication for cross-cultural research. *International Journal of Research in Marketing*, 14: 379-395

European Commission (2015) A Digital Single Market Strategy, Brussels, 6.5.2015

Eurostat, 2014. [http://ec.europa.eu/eurostat/statistics-explained/index.php/File:VIE-commerce_sales_to_own_country_and_other_EU_countries_2014_\(%25_enterprises\).png](http://ec.europa.eu/eurostat/statistics-explained/index.php/File:VIE-commerce_sales_to_own_country_and_other_EU_countries_2014_(%25_enterprises).png) accessed on 1st February 2017

Eurostat. 2016. http://ec.europa.eu/eurostat/statistics-explained/index.php/Migration_and_migrant_population_statistics accessed on 1st February 2017

Eurostat. 2017. http://ec.europa.eu/eurostat/statistics-explained/index.php/E-commerce_statistics accessed on 1st February 2017

Flower, D., Wesley, S., & M., Vazques, 2007. Simpatico in store retailing: How immigrant Hispanic emic interpret U.S. store atmospherics and interactions with sales associates. *Journal of Business Research* 60(1): 50-59

Girard, J., & A., Bertsch, 2011. Exploring cross-cultural differences in social knowledge creation and exchange: A preliminary examination. *International Journal of Management and Information Systems*, 15(1): 97–104

Herold D., and G., de Seta 2015. Through the looking glass: Twenty years of Chinese internet research. *Information Society*, 31(1):, 68-82,

Hofstede, G., 1980. *Culture's consequences: international differences in work-related values*. Beverly Hills CA, Sage Publications,

House of Commons, 2016. Polish population of the United Kingdom, Brief Paper Number CB7660 researchbriefings.files.parliament.uk/documents/CBP-7660/CBP-7660.pdf accessed 25th February 2017

Huggins, K., Holloway, B., and D., White, 2013. Cross-cultural effects in e-retailing; the moderating role of cultural confinement in differentiating Mexican from non-Mexican Hispanic consumers. *Journal of Business Research*, 66: 321- 327

Hwang, Y., and K., Lee, 2012. Investigating the moderating role of uncertainty avoidance cultural value on multidimensional online trust. *Information and Management*, 49: 171- 176,

Jamal, A., 2003. Marketing in a multicultural world: the interplay of marketing, ethnicity and consumption. *European Journal of Marketing*, 37: 1599-1620.

Iacobucci, D., 2010. Structural equations modelling: Fit Indices, sample size, and advanced topics. *Journal of Consumer Psychology*, 20: 90–98,

Jamal, A., and S., Shukor, 2014. Antecedents and outcomes of interpersonal influences and the role of acculturation: The case of young British-Muslim. *Journal of Business Research* 67: 237-245

Jarvenpaa, S. Tractinsky, N., Saarinen, L., and M., Vitale, 1999. Consumer Trust in an Internet Store: A Cross-Cultural Validation. *Journal of Computer Mediated Communications*, 5(2)

Kurnia, S., Choudrie, J., Mahbubur, R., and B., Alzougool, 2015. E-commerce technology adoption: a Malaysian grocery SME retail sector study. *Journal of Business Research*, 68:1906- 1918

Lee, I., Choi, B., Kim, J., and S., Hong, 2007. Culture-Technology Fit: Effects of Cultural Characteristics on the Post-Adoption Beliefs of Mobile Internet Users. *International Journal of Electronic Commerce*, 11(4):11-51,

Leidner, D., and T., Kayworth, 2006. A review of culture in information systems research: toward a theory of information technology culture conflict' *MIS Quarterly*, 30(2):357- 399,

Lerman, D., Maldonado, R., and D., Luna, 2009. A theory-based measure of acculturation: The shortened cultural life style inventory. *Journal of Business Research*, 62(4): 399-406

Li, C., and W., Tsai, 2015. Social media usage and acculturation: a test with Hispanics in the U.S. *Computers in Human Behavior*. 45: 204-212

Lu, J., Yi, C., Liu, C., and J., Wei, 2017. Comparison of mobile shopping continuance intention between China and USA from an espoused cultural perspective. *Computers in Human Behavior*, 75:130-146

Marczak, Joanna (2011) Socioeconomic characteristics of Polish migrants in the UK by parity and gender. In: *Mobility and Migrations at the Time Transformation - Methodological Challenges*, 25 March 2011, Warsaw, Poland

Mazaheri, E., Richard, M., Laroche, M., and L., Ueltschy, 2014. The influence of culture, emotions, intangibility, and atmospheric cues on online behavior. *Journal of Business Research* 67: 253-259

Miyazaki, A., Lassar, W., and K., Taylor, 2007. Hispanic vs. non-Hispanic response to online self-service tasks: implications for perceived quality and patronage intentions. *Journal of Service Marketing*, 21(7): 520–529,

Office for National Statistics, 2016.
<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/internationalmigration/bulletins/migrationstatisticsquarterlyreport/dec2016> accessed on 29th March 2017

Oliveira T., and Martins M., (2010) Understanding e-business adoption across industries in European countries. *Industrial Management and Data Systems*, 110(9), 1337-1354

Oswald, L., 1999. Culture Swapping: Consumption and Ethnogenesis of Middle- Class Haitian Immigrants. *Journal of Consumer Research*, 25: 303-317,

Pavlou, P., and L., Chai, 2002. What drives electronic commerce across cultures? A cross- cultural empirical investigation of the theory of planned behaviour. *Journal of Electronic Commerce*, 3(4): 240- 253,

Penaloza, L., 1994. Atravesando Fronteras/ Border Crossing: A Critical Ethnographic Exploration of the Consumer Acculturation of Mexican Immigrants. *Journal of Consumer Research*, 21:32-54,

Penaloza, L., and Gilly, C., 1999. Marketer Acculturation; the changer and the changed. *Journal of Marketing*, 63(3): 84- 104,

Podsakoff, F., MacKenzie, S., and N., Podsakoff, 2003. Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology*. 88(5):879–903

Schau, H., Dang, Y., and Y., Zhang, 2017. Learning to navigate the American retail servicescape: Online forums as consumer acculturation platforms and consumer gift systems. *Journal of Business Research*, 72:178-188

Shiu, E., Walsh, G., Hassan, L., and S., Parry, 2015. The direct and moderating influences of individual-level cultural values within web-engagement: a multi-country analysis of public information website. *Journal of Business Research*, 68:534-541

Singh, N., Kumar, V., and D., Baack, 2005. Adoption of cultural environment: evidence from B2C e-commerce firms. *European Journal of Marketing*, 39(1):71- 86,

Stafford, T., Turan, A., and M., Raisinghani, 2004. International and Cross-Cultural Influences on Online Shopping Behaviour. *Journal of Global Information Management*, 7(2):70-87,

Statista. (2017a. <https://www.statista.com/statistics/251666/number-of-digital-buyers-worldwide/> accessed on 1st February 2017

Statista. 2017b. <https://www.statista.com/statistics/379046/worldwide-retail-e-commerce-sales/> accessed on 1st February 2017

Statista. 2017.c <https://www.statista.com/topics/871/online-shopping/> accessed on 1st February 2017

Srite, M., and E., Karahanna, 2006 .The role of espoused national cultural values in technology acceptance. *MIS Quarterly*, 30(3):679- 704

Taylor, S., and P., Todd, 1995. Assessing IT usage: The role of prior experience. *MIS Quarterly*, 19(2):561- 570,

Tsatsou, P., 2012. The role of social culture in internet adoption in Greece: Unpacking “I don’t want to use Internet” and frequency of use. *Information Society*, 28: 174-188

Yoon, C. 2009. The effects of national culture values on consumers acceptance of e-commerce; online shopping in China. *Information and Management*, 46:294- 301

Venkatesh, V., 2000. Determinants of Perceived Ease of Use: Integrating Control, Intrinsic Motivation and Emotion into the Technology Acceptance Model. *Information Systems Research*,.11(4): 342- 365

Venkatesh, V., Morris, M., Davis, G., and F., Davis, 2003. User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, 27(3):425 -478,

Venkatesh, V., Thong, J., and X., Xu, 2012. Consumer Acceptance and Usage of Information Technology; Extending the Unified Theory of Acceptance and Use of Technology. *MIS Quarterly*, 36 (1):157- 178,

Vallendorf, M., and M., Reilly, 1983. Ethnic Migration, Assimilation, and Consumption. *Journal of Consumer Research*, 10(3): 292- 302,

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