



Exploring the acceptance of mobile marketing among Dutch and Portuguese smartphone users: a cross-cultural examination

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ABSTRACT

Dissertation Title: Exploring the acceptance of mobile marketing among Dutch and Portuguese smartphone users: a cross-cultural examination

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The aim of this thesis is to explore smartphone users' dimensions of mobile marketing acceptance and to understand which of these dimensions are relevant in explaining the intention to participate in mobile marketing. A cross-country analysis is performed of The Netherlands and Portugal assessing differences between the two countries while taking into account their cultural values. The cultural values are measured on an individual level with the scales established by Yoo, Donthu, and Lenartowicz (2011). Scales of Persaud and Azhar (2012) are employed to measure mobile marketing acceptance and the intention to participate in mobile marketing. The study is exploratory as well as quantitative, which included data collection through an online survey with 252 respondents. The results show that mobile marketing acceptance dimensions positively influence the intention to participate in mobile marketing. Perceived value is among smartphone users the main determinant of the intention to participate in mobile marketing. This is valid for both countries and the perceived value does not differ, implying no cross-national differences. Still, the Dutch smartphone users are more intent to participate in mobile marketing than the Portuguese smartphone users. The Dutch shopping styles are more consistent with mobile marketing, whereas for Portuguese smartphone users brand trust is essential in order to feel more comfortable with mobile marketing. Cultural values enable to understand these findings, especially for managers in Portugal. A study that further explores the influence of cultural values on mobile acceptance is suggested for future research.

RESUMO

Título da Dissertação: A aceitação do marketing nos telemóveis por parte dos utilizadores holandeses e portugueses de smartphones: uma análise a nível cultural

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O objectivo da presente tese é o de explorar a aceitação de marketing no telemóvel por parte dos utilizadores, bem como aferir quais das dimensões deste construto são mais relevantes para explicar a intenção de participarmos em campanhas de que são alvo. O estudo foi realizado em Portugal e na Holanda, com o objetivo de perceber se existem diferenças tendo em conta os seus valores culturais. Estes valores são medidos a nível individual através das escalas de Yoo, Donthu, and Lenartowicz (2011). As escalas de Persaud and Azhar (2012) são utilizadas para medir a aceitação do marketing nos telemóveis. O estudo é exploratório e quantitativo e a recolha de dados foi feita através de um inquérito online que contou com online 252 respondentes. Os resultados revelam que a aceitação do marketing no telemóvel influencia de forma positiva a intenção de participar por parte dos utilizadores. O valor percebido é o maior determinante na intenção de participar neste tipo de marketing. Esta conclusão é válida para ambos os países. Ainda assim, os utilizadores de telemóvel holandeses revelam uma maior intenção de participar neste tipo de marketing do que os portugueses. O estilo de compra dos holandeses é mais consistente com o marketing móvel, enquanto que para os portugueses a confiança na marca é fundamental para que estes se sintam mais confortáveis e aderirem. Os valores culturais não são expressivos, especialmente em Portugal. Futuramente sugere-se que seja explorado com maior profundidade a influência dos valores culturais na aceitação do marketing através de telemóvel.

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1. INTRODUCTION

1.1 Background

The world is becoming more mobile with currently 3,9 billion smartphone users, which is expected to grow up to 5,7 billion in 2020 (Okeleke, Rogers, & Pedros, 2017). There is also an assumption that there are more people with mobile devices than with toothbrushes in the world (Mobile Marketing Association, 2010). The development in smartphone adoption has not gone unnoticed by marketers (Shankar et al., 2016). It is forecasted that between 2016 and 2019 mobile advertising spending will almost double, which would result in a total global spending of \$195,6 billion accounting for 70,1% of global digital advertising spending (eMarketer, 2015). Mobile ads cannot only be placed on mobile webpages, but also on social media sites, such as Facebook, Twitter, YouTube and Instagram, which are accessed every day by millions of consumers through their smartphones (Grewal, Bart, Spann, & Zubcsek, 2016; We Are Social & Hootsuite, 2017c). In addition, mobile applications enable marketers to promote brands by placing unique content in apps (Berman & Zarb, 2016) or sending push notifications (Selligent, 2017). Text messages can be sent as well with special offers and coupons (Dix, Phau, Jamieson, & Shimul, 2017). Mobile marketers can reach consumers at anytime and anywhere with these mobile marketing messages (Y. J. Kim & Han, 2014), given the fact that mobile phone users on average touch their phones 2617 times per day (Winnick, 2016) and carry their phones around everywhere they go (Sultan & Rohm, 2005). Moreover, the users' behavior can be tracked through smartphones, such as location and browsing behavior, which enables marketers to accurately segment their audiences and deliver customized mobile ads (Y. J. Kim & Han, 2014; Sultan & Rohm, 2005). In order to effectively apply these innovative marketing capabilities, understanding consumer behavior towards mobile marketing is one of the main priorities for marketing managers (Jiménez & San-Martín, 2017).

At the same time, smartphones are for consumers extensions of their personalities and allow them to connect with people whenever they want (Berman & Zarb, 2016; Persaud & Azhar, 2012). Because of this personal nature of smartphones, mobile marketing messages can be perceived as intrusive and an invasion of privacy (Al-alak & Alnawas, 2010; Berman & Zarb, 2016; Spralls, Divine, & Garver, 2016). For example, after online pop-ups, mobile advertisements were found to be the most disliked type of ads (HubSpot Research, 2016). As a result of this annoyance, consumers are less willing to receive mobile advertisements and to respond to the ads (Gao, Rohm, Sultan, & Pagani, 2013; Jayawardhena, Kuckertz, Karjaluoto, & Kautonen, 2009; Muk & Chung, 2015; Persaud & Azhar, 2012; Sultan & Rohm, 2005;

Sultan, Rohm, & Gao, 2009). This is shown by the fact that more than a fifth of the Internet users worldwide use an ad-blocker on their smartphones (Willens, 2016).

It follows that, in order to improve mobile strategies, marketers need to better understand what influences consumers to accept and participate in marketing on their smartphones. The present study explores the dimensions suggested by Persaud and Azhar (2012) regarding mobile acceptance, which concern *perceived value*, *shopping style* and *brand trust*. Research found that among consumers differences exist regarding the value they perceive to receive from mobile marketing, the consistency of mobile marketing with their shopping styles, and their trust in the mobile marketer (Persaud & Azhar, 2012). Due to these differences, mobile marketing acceptance varies across the globe (Gao et al., 2013; Jayawardhena et al., 2009; Muk & Chung, 2015; Persaud & Azhar, 2012; Sultan et al., 2009). Moreover, it is suggested that this difference in mobile marketing acceptance can be explained by dissimilar cultural values among smartphone users (Gao et al., 2013; Jayawardhena et al., 2009; Muk, 2007; Muk & Chung, 2015; Okazaki, 2007; Sinkovics, Pezderka, & Haghirian, 2012). Hence, mobile marketers might also need to comprehend the cultural environment in which they display their mobile advertisements (Jiménez & San-Martín, 2017).

In Europe smartphones are pervasive with a penetration rate of 65%, but this rate differs across the continent implying that countries are not equally mobile-focused (We Are Social & Hootsuite, 2017c). At the same time, the privacy protection laws of the European Union limit the tracking of smartphone users' behavior, which in turn complicates the segmentation of European consumers (European Commission, 2016). On top of that, cultural values strongly vary from nation to nation in Europe (Hofstede, 1991, 2001a). Hence, it seems to be challenging for companies operating across Europe to optimize their mobile marketing strategies (King & Jessen, 2010). Thus, there is a strong need for an understanding of mobile marketing acceptance in Europe and the possible role of cultural values.

In particular, two European countries – The Netherlands and Portugal – are considered as relevant for cross-country research on mobile marketing acceptance given their different mobile (We Are Social & Hootsuite, 2017a, 2017b) as well as cultural landscapes (Hofstede, 2001b, 2001c; Singh, 2006). With regards to smartphone penetration, The Netherlands is among the leading countries (Deloitte, 2016) with a rate of 80%, while in Portugal this is only 59% (Google Inc., 2016a). Yet, there is no research available regarding the smartphone users' acceptance of mobile marketing in these countries. On the other hand, the cultural values of both nations have been measured and all of the values appear as contradictory (Hofstede, 2001b, 2001c). Taking

this into account, a cross-cultural study on mobile marketing acceptance in The Netherlands and Portugal can add new contributions to literature.

To sum up, the present thesis explores dimensions of mobile marketing acceptance – perceived value, shopping style, and brand trust – among Dutch and Portuguese smartphone users and how these dimensions explain the users’ intentions to participate in mobile marketing. It is also examined whether cultural differences are present between these nations, and if so, the influence of cultural values on dimensions of mobile marketing acceptance would be explored.

1.2 Problem statement

Traditional marketing channels are becoming less effective, while digital marketing channels are growing rapidly (Pescher, Reichhart, & Spann, 2014). In particular, the mobile channel is raising given that expenditures on mobile are the largest among digital ad spending (eMarketer, 2015). Therefore, it is essential for companies that their mobile marketing campaigns are successful. Despite the dynamic abilities to target and provide relevant content, marketers are struggling with establishing appropriate mobile marketing strategies (Grewal et al., 2016). This is because not every smartphone user is willing to accept and participate in mobile marketing (Gao et al., 2013; Gao, Sultan, & Rohm, 2010; Grant & O’Donohoe, 2007; H Karjaluo & Alatalo, 2007; Persaud & Azhar, 2012). Therefore, in order to overcome this issue, exploring what are the determinants of consumers’ intentions to participate in mobile marketing is of utmost importance.

To obtain a thorough comprehension, it is necessary for markers to identify which country-specific consumer characteristics influence mobile marketing acceptance (Jiménez & San-Martín, 2017; Rohm, Gao, Sultan, & Pagani, 2012). In pursuance of this, a cross-country analysis provides relevant insights for companies. A comparison of smartphone users in The Netherlands and Portugal is not only novel in the field of mobile marketing, but also highly relevant given the unequal mobile-focus in the countries (We Are Social & Hootsuite, 2017a, 2017b). Further, the cultural values strongly differ between the countries, which helps to explore the suggested influence of cultural values on mobile marketing acceptance (Choi, Hwang, & McMillan, 2008; Muk, 2007; Sinkovics et al., 2012).

The research problem of the present thesis is to explore the dimensions of mobile marketing acceptance. Then, the aim is to understand which dimensions are relevant to explain the intentions of smartphone users to participate in mobile marketing. The cross-national differences between The Netherlands and Portugal are also assessed. Furthermore, cultural

values are taken into account. Academic contributions are provided given the current gap in research on mobile marketing acceptance in both countries. The influence of cultural values has been explored in other fields, but only to a small extent in mobile marketing (Muk & Chung, 2015), and therefore new insights are added to literature. Moreover, the study enables marketers in The Netherlands and Portugal to create suitable mobile marketing strategies for smartphone users, that drive better results in terms of acceptance and participation.

1.3 Aim

The main aim is to understand the acceptance of mobile marketing via smartphones in The Netherlands and Portugal. The relation between dimensions of mobile marketing acceptance and the intention to participate in mobile marketing is explored. The objective is to determine which dimensions of mobile marketing acceptance explain the intention to participate in mobile marketing through smartphones. Then, a cross-country comparison is performed. Finally, the impact of cultural values on mobile marketing acceptance is also explored for both countries. Thus, the following research questions are addressed in the present thesis:

❖ Research question 1

- a) *Does mobile marketing acceptance influence the intention to participate in mobile marketing?*
- b) *Are there significant differences between The Netherlands and Portugal?*

❖ Research question 2

- a) *Which dimensions of mobile marketing acceptance are relevant to explain the intention to participate in mobile marketing?*
- b) *Are there significant differences between The Netherlands and Portugal?*

❖ Research question 3

- a) *Do cultural values influence mobile marketing acceptance?*
- b) *Are there significant differences between The Netherlands and Portugal?*

❖ Research question 4

- a) *Which cultural values are relevant to explain dimensions of mobile marketing acceptance?*
- b) *Are there significant differences between The Netherlands and Portugal?*

1.4 Research method

This thesis is an exploratory and quantitative study focused on the dimensions of mobile marketing acceptance and the intention to participate in mobile marketing applied to the Dutch and Portuguese context. In order to provide answers to the research questions, a self-

administered survey was conducted among Dutch and Portuguese smartphone users, which aimed at measuring the dimensions of mobile marketing acceptance, the intention to participate in mobile marketing, and cultural values.

1.5 Academic and managerial relevance

1.5.1 Academic relevance

The developments in the state-of-the-art mobile channel ask for advanced academic research on mobile marketing (Varnali & Toker, 2010). However, studies on the acceptance of marketing practices through this channel remain limited (Feng, Fu, & Qin, 2016). Several studies examine the acceptance of mobile marketing among classic mobile phone users (Barwise & Strong, 2002; Jayawardhena et al., 2009; Muk, 2007; Zhang & Mao, 2008), whereas literature lacks analyses of the acceptance innovative marketing capabilities among smartphone users (Grewal et al., 2016; Persaud & Azhar, 2012).

In addition, most research on mobile marketing acceptance is based on Ajzen and Fishbein's (1980) Theory of Reasoned Action (TRA), or the derived Davis' (1989) Technology Acceptance Model (TAM), and Ajzen's (1991) Theory of Planned Behavior (TPB). However, these models are rather used to study dated innovations, and therefore the models' findings might not be valid for such a recent innovation as the smartphone (Shankar & Balasubramanian, 2009). Hence, a contemporary model of mobile marketing acceptance is missing in literature.

Several studies examine antecedents of the attitude towards mobile marketing, (Gyaneshwar Singh & Agrawal, 2012; Sinkovics et al., 2012; Tsang, Ho, & Liang, 2004), and how the attitude explains the intention to participate in mobile marketing (Choi et al., 2008; Gao et al., 2013; Izquierdo-Yusta, Olarte-Pascual, & Reinares-Lara, 2015; Muk, 2007; Soroa-Koury & Yang, 2010). Dix, Phau, Jamieson, and Shimul (2017) identified the drivers of consumers' acceptance, and in turn measured the acceptance and its relationship to the behavioral response, but only regarding SMS advertisements. Moreover, only few studies identify the direct determinants of the intention to participate in mobile marketing (Persaud & Azhar, 2012; Zhang & Mao, 2008), and thus there is a lack of literature that studies these direct relationships.

Choi et al. (2008) found that perceived value is a predictor of the intention to purchase from mobile advertisements. Further, several studies identified brand trust as a key characteristic for mobile marketing acceptance (Barnes & Scornavacca, 2004; Zhang & Mao, 2008). Nevertheless, these studies are limited to SMS advertising among classic mobile phone users. Only Persaud and Azhar (2012) have studied the relationship between perceived value and

brand trust, and the intention to participate in mobile marketing among smartphone users. Shopping style was also defined as a predictor of the intention to participate in mobile marketing, which was not addressed before (Persaud & Azhar, 2012). However, the authors only studied Canadian smartphone users, and therefore the examination of these dimensions for other nations is lacking in academic literature. Still, cross-country studies on mobile marketing acceptance exist (Choi et al., 2008; Gao et al., 2013; Jayawardhena et al., 2009; Muk, 2007; Sultan et al., 2009), but they do not consider The Netherlands and Portugal.

In addition, previous cross-country studies on mobile marketing acceptance lack the incorporation of relevant cultural values. Only Muk (2007) examines the influence of cultural values on mobile marketing acceptance, but limited to SMS advertising. Further, the study only considered *collectivism* and did not directly measure this cultural value among respondents, which were limited to students. Hence, a richer and more recent study on the influence of cultural values on the dimensions of mobile marketing acceptance is missing (Choi et al., 2008; Gao et al., 2013; Muk, 2007; Varnali & Toker, 2010).

The present study provides a better and contemporary understanding of mobile marketing acceptance dimensions and participation among smartphone users through exploring the relation with perceived value, shopping style and brand trust, while taking cultural values into account. In addition, the model is applied to an European context, given the analysis of The Netherlands and Portugal, which is until now relatively unexplored.

1.5.2 Managerial relevance

Currently, the mobile channel is the leading digital channel in emerging markets, and it will become leading in 2017 developed markets as well (Criteo, 2017). Studying mobile marketing acceptance helps marketers to develop advertisements that consumers will accept to receive through this highly relevant channel (Feng et al., 2016), which was found to be one of the biggest challenges for advertisers (Billore & Sath, 2015). Hereby, defining dimensions of mobile marketing acceptance among smartphone users is of high importance for managers, since it allows them to adjust the mobile campaigns accordingly and optimize the acceptance (Dix et al., 2017; Sultan et al., 2009). Above all, studying the intention to participate in mobile marketing shows to what extent smartphone users are willing to respond to mobile marketing, and to which types in particular. In this way, mobile marketers could employ methods, such as text messages and web advertisements, that appear as most effective in order to maximize the performance of the ads (Persaud & Azhar, 2012). However, only knowing the intention to

participate in mobile marketing is insufficient for marketers, since they need to know as well what determines these intentions (Persaud & Azhar, 2012).

According to Strong Mail (2013), 43% of business leaders that use mobile marketing state that they have not yet defined the correct mobile strategy. Therefore, it is crucial to study the relation between dimensions of mobile marketing acceptance and the intention to participate in mobile marketing in order to establish insights that help marketers to have ads that generate responses, and consequently to have profitable returns (Sinkovics et al., 2012). In order to have such effective mobile marketing strategies, marketers “should also segment consumers by behavioral variables such as perceived value, shopping style, and brand trust” (Persaud & Azhar, 2012, p. 437). The study of these dimensions in this thesis allows companies to deliver high quality mobile advertisements adapted to smartphone users’ individual characteristics (Y. J. Kim & Han, 2014).

Moreover, companies must know that mobile marketing acceptance can differ across countries (Muk & Chung, 2015; Rohm et al., 2012; Sinkovics et al., 2012). Especially, firms implementing mobile advertisements in Europe should be aware of this, since mobile-orientation varies across the continent (We Are Social & Hootsuite, 2017a, 2017b). This cross-country analysis of The Netherlands and Portugal provides insights for marketers how they can optimally target these nations, so that responses to the ads are maximized (Muk & Chung, 2015). In addition, examining the influence of Dutch and Portuguese cultural values on dimensions of mobile marketing acceptance allows marketers to develop strategies that make the advertisements more relevant to the smartphone users’ needs (Muk & Chung, 2015; Rohm et al., 2012).

1.6 Dissertation outline

In the first chapter an introduction to the thesis’ topic is provided by outlining the topic’s background, introducing the research problem and questions, and defining its academic and managerial relevance. The second chapter consists of an extensive literature review on dimensions of mobile marketing acceptance and the intention to participate in mobile marketing, especially focused on two European countries: The Netherlands and Portugal. After that, cultural values are discussed with regards to mobile marketing acceptance dimensions in these countries. The chapter ends with a conceptual framework that provides an overview of the main variables studied in this thesis. This is followed by the third chapter consisting of a description of the methodology and data collection method. In the fourth chapter primary and secondary data are analyzed. Based on these results answers to the research questions are

provided. Finally, academic and managerial contributions are defined, and limitations of the study and recommendations for future research are established.

2. LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 Mobile marketing via smartphones

This thesis adopts the definition of mobile marketing by Shankar and Balasubramanian (2009, p.118), which is the following: “mobile marketing is the two-way or multi-way communication and promotion of an offer between a firm and its customers using a mobile medium, device or technology”. Since smartphones are found to be highly relevant for mobile marketing nowadays (Watson, McCarthy, & Rowley, 2013), the smartphone is the “mobile medium” considered in this study. The rapid growth of smartphone adoption means for marketers a large opportunity “to reach and serve consumers anytime, anywhere” (Persaud & Azhar, 2012, p. 148). At the same time, for consumers the smartphone is not just a device; it is also an expression of their personality (Persaud & Azhar, 2012; Sultan & Rohm, 2005).

2.2 Mobile marketing acceptance

There seems to be a conflict of interest when it comes to mobile marketing through smartphones. “While consumers adopt mobile phones to enhance their private and social lives, marketers see mobile phones as a marketing channel” (Persaud & Azhar, 2012, p. 419). As a result, consumers can perceive mobile marketing as intrusive and annoying, and therefore they are not willing to receive and respond to marketing activities on their smartphones (Berman & Zarb, 2016). This implies different levels of mobile marketing acceptance among smartphone users (Dix et al., 2017; Muk & Chung, 2015; Persaud & Azhar, 2012; Watson et al., 2013).

Past studies have focused their analysis of mobile marketing acceptance on various consumer characteristics, such as demographics (Muk & Chung, 2015; Ünal, Erciş, & Keser, 2011), innovativeness (Feng et al., 2016), and risk avoidance (Sultan et al., 2009). Nevertheless, according to Persaud and Azhar (2012) only studying the influence of these characteristics is insufficient, because behavioral variables also need to be examined. The authors identified three distinct dimensions of mobile marketing acceptance, which are perceived value, shopping style, and brand trust. However, only Canadian consumers were studied, and therefore the question is raised whether these dimensions of mobile marketing acceptance are also relevant for other nations, and whether differences exist between nations. This is explored in the next paragraphs for The Netherlands and Portugal.

2.2.1 Perceived value

Perceived value is defined as the final result of a consumer’s assessment of a product based on the perceptions of what is gained and what is given up (Zeithaml, 1988). In the case of mobile

marketing consumers can receive discounts and special offers, which enables them to save money. Mobile marketing messages may also provide useful information regarding products and services, which might increase consumers' shopping efficiency. As a result, consumers perceive that they obtain value from the mobile ads, which makes them more inclined to accept the ads (Billore & Sath, 2015; Persaud & Azhar, 2012; Ström, Vendel, & Bredican, 2014). At the same time, research suggests that country characteristics influence perceived value, and result in differences between nations (Choi et al., 2008; Sinkovics et al., 2012; Steenkamp & Geyskens, 2006). This implies that differences between The Netherlands and Portugal in perceived value of mobile marketing might be observable. Nevertheless, until now no research exist on perceived value and mobile marketing in these countries.

2.2.2 Shopping style

The overall behavior during a purchase process shapes the consumer's shopping style (Tai, 2005). Nowadays parts of the purchase process are online, offline or both, depending on the consumer (Andrews, Drennan, & Bennett, 2005; Papatla & Bhatnagar, 2002). Consumers can shop online through smartphones when an Internet connection is available. However, as mentioned before, consumers across the world are not equally mobile-oriented, and consequently not every consumer is experienced with mobile shopping (We Are Social & Hootsuite, 2017c). For example, when looking at shopping styles in The Netherlands and Portugal, 24% of Dutch internet users made an online purchase via a mobile device, while in Portugal this is only 15% (We Are Social & Hootsuite, 2017a, 2017b). Thus, Dutch consumers are more inclined to conduct parts of their purchase process via a smartphone than Portuguese consumers. This implies that Dutch smartphone users will perceive more of a fit between their shopping styles and mobile marketing.

Additionally, Persaud and Azhar (2012) found that the extent to which smartphone users find mobile marketing annoying is also related to the shopping style dimension. Annoyance can result from unwanted, incomprehensible or intrusive mobile ads (Y. J. Kim & Han, 2014; Sinkovics et al., 2012; Watson et al., 2013). Irritation from mobile marketing differs between nations (Sinkovics et al., 2012). Since Portuguese smartphone users are less intent to shop through their mobile phones than the Dutch, mobile advertisements might be less relevant for Portuguese smartphone users. Because of this irrelevance, it is likely that Portuguese smartphone users perceive mobile advertisements more as annoying than Dutch smartphone users.

2.2.3 Brand trust

With regards to brand trust, the trustor is vulnerable to actions of the trustee, since it is expected that the trustee will perform actions important to the trustee (Mayer, Davis, & Schoorman, 1995). In the case of mobile marketing, consumers are vulnerable to the actions of the mobile marketer (Persaud & Azhar, 2012). For example, consumers are uncertain about the quality of the mobile marketers' offers, since they are not able to physically observe the quality offers in the online environment (Gana & Koce, 2016). Smartphone users also worry about the misuse of their personal data by mobile marketers (Watson et al., 2013). In such a cases of uncertainty, trust becomes crucial in order to make decisions (Okazaki, Katsukura, & Nishiyama, 2007). Indeed, brand trust is considered as a prerequisite for mobile marketing acceptance (Bauer, Reichardt, Barnes, & Neumann, 2005; Gana & Koce, 2016; Grant & O'Donohoe, 2007; Muk & Chung, 2015).

For consumers to have trust in a brand, they need to know the marketer. Also, feelings of comfort and trust in mobile marketing can be facilitated by asking for permission to send mobile marketing messages (Persaud & Azhar, 2012; Watson et al., 2013). This involves 'opt-in' schemes, which enable users to agree or disagree with receiving marketing efforts "before anything is sent, with the opportunity to change preferences or stop messages at any time" (Barnes & Scornavacca, 2004, p. 136). In Europe obtaining permission is especially of high importance for mobile marketers given the established privacy laws that protect personal data, and require marketers to ask consumers for the permission to track online behavior (European Commission, 2016; Gao et al., 2013). The presence of these laws suggest a strong concern for data protection in Europe, and thus a high importance of brand trust. For example, in the Netherlands 89% indicates that data protection and data privacy are very important to them personally, while this is 93% in Portugal (Google Inc., 2016b). This suggests that brand trust might be slightly more necessary for Portuguese smartphone users than for the Dutch in order to feel comfortable with mobile marketing. In addition, in less technologically developed markets users are less experienced with mobile marketing, which implies a higher importance of knowing and trusting the marketer (Zhang & Mao, 2008). Given the lower development in Portugal compared to The Netherlands (Cornell University, INSEAD, & WIPO, 2016), again brand trust might be very relevant for Portuguese smartphone users.

2.3 The intention to participate in mobile marketing

Persaud and Azhar (2012) determined Canadian smartphone users' intentions to participate in mobile marketing through measuring to what extent they like to receive ads via text messages,

to what extent they would participate in surveys sent to their phones, and to what extent they would respond to mobile ads, mobile coupons or mobile web offers. According to Dix et al. (2017) consumers with a high acceptance of SMS advertising are more inclined to respond. This suggests a relationship between mobile marketing acceptance and the intention to participate, which was also found by Persaud and Azhar (2012). Nevertheless, these two studies only address Australian and Canadian consumers respectively, and therefore this relationship needs to be explored in other countries, such as The Netherlands and Portugal. Based on this, the following research question is proposed:

❖ **Research question 1**

- a) *Does mobile marketing acceptance influence the intention to participate in mobile marketing?*
- b) *Are there significant differences between The Netherlands and Portugal?*

Moreover, consumers' dimensions of mobile marketing acceptance – perceived value, shopping styles and brand trust – explain their intentions to participate in mobile marketing (Persaud & Azhar, 2012). Perceived value was found by the authors to be the most influential predictor of the intention to engage in mobile marketing. Furthermore, a positive relationship appears to be present, which implies that the more value smartphone users perceive to receive from mobile marketing, the more willing they are to participate in mobile marketing (Choi et al., 2008; Persaud & Azhar, 2012; Ström et al., 2014). As mentioned before, Dutch and Portuguese consumers might differently perceive value from mobile marketing, and therefore the dimension might differently explain the intention to respond to mobile marketing in these countries.

According to Persaud and Azhar (2012), shopping style is positively related to the intention to participate in mobile marketing, meaning when smartphone users consider mobile marketing as consistent with their shopping styles, they are more prone to respond to mobile marketing efforts. Conversely, consumers that “see mobile marketing as inconsistent with their idea of shopping will find it difficult to participate in mobile marketing” (Persaud & Azhar, 2012, p. 436). As suggested before, the shopping styles of Dutch smartphone users might be more compatible with mobile marketing than the shopping styles of the Portuguese users (We Are Social & Hootsuite, 2017a, 2017b). This suggest that Dutch consumers might be more intent to respond to mobile marketing offers than Portuguese smartphone users. In addition, it was suggested before that Portuguese consumers might be more annoyed by mobile marketing than

the Dutch, and consequently, they will be less willing to engage in mobile marketing (Chen & Hsieh, 2012; Tsang et al., 2004).

Further, studies show that consumers are more willing to receive and respond to mobile marketing messages from brands that they trust (Gana & Koce, 2016; Persaud & Azhar, 2012; Watson et al., 2013; Zhang & Mao, 2008). Knowing the marketer and the obtaining of permission makes smartphone users feel more comfortable with mobile marketing, and in turn more intent to engage in it (Persaud & Azhar, 2012). Correspondingly, if permission is obtained mobile marketing is more likely to be effective (Standing, Benson, & Karjaluoto, 2005). The higher concern for privacy in Portugal than in The Netherlands might imply a stronger effect of brand trust on the intention to participate in mobile marketing. Nevertheless, so far the influence of brand trust in these countries is unknown. This is also valid for the relevance of the perceived value and shopping styles of these nations, and therefore the following research question is established:

❖ **Research question 2**

- a) *Which dimensions of mobile marketing acceptance – perceived value, shopping style, and brand trust – are relevant to explain the intention to participate in mobile marketing?*
- b) *Are there significant differences between The Netherlands and Portugal?*

2.4 A cultural perspective on Mobile marketing acceptance

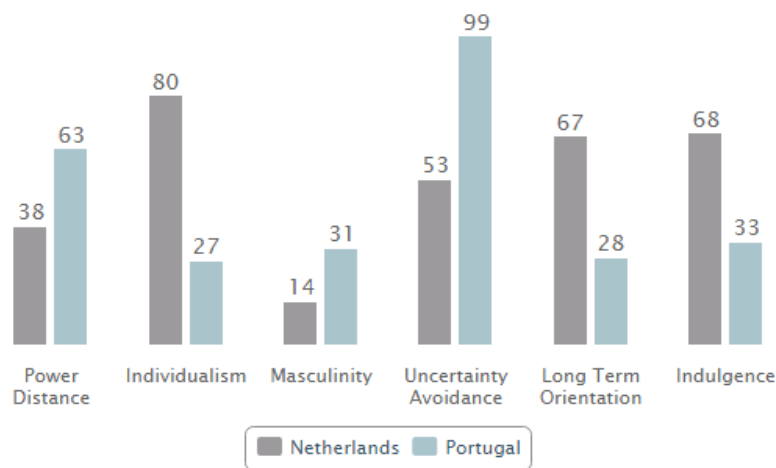
According to Hofstede (1980) culture consists of collectively held values, which influence the behavior of the individuals belonging to a culture. To measure cultural values across the world Hofstede established five cultural dimensions: power distance, uncertainty avoidance, masculinity, collectivism and long-term orientation. Since culture is found to be the most important factor influencing consumer behavior and international online marketing, it can be considered as relevant for explaining mobile marketing acceptance (Choi et al., 2008; Gao et al., 2013; Sinkovics et al., 2012; Wang & Sun, 2010). Moreover, cultural values are found to influence the acceptance of SMS advertising by two-country studies of the U.S. and Taiwan and Korea (Muk, 2007; Muk & Chung, 2015). This also suggest the influence of cultural values on mobile marketing acceptance. In order to study if this is valid for The Netherlands and Portugal, the research question below is addressed:

❖ Research question 3

- a) *Do cultural values influence mobile marketing acceptance?*
- b) *Are there significant differences between The Netherlands and Portugal?*

From Figure 1 it can be concluded that the largest differences are present between the scores on *individualism/collectivism* and *uncertainty avoidance* of The Netherlands and Portugal (Hofstede, 2001c). Furthermore, current research refers to collectivism and uncertainty avoidance as possible factors that can influence mobile marketing acceptance across cultures (Gao et al., 2010; Muk, 2007; Muk & Chung, 2015). Therefore, these two dimensions are considered as the most relevant to study, and are addressed in the next paragraphs.

Figure 1 – The cultural values of The Netherlands and Portugal (Hofstede, 2001b, 2001c)



2.4.1 Cultural values: Collectivism

Individualism versus collectivism explains how important the individual is compared to the welfare of the group (La Ferle, Edwards, & Mizuno, 2002). In collectivistic countries, social pressure forces consumers to conform to group behavior, which implies that mobile marketing acceptance can be stimulated by focusing on spreading the acceptance among groups (Jiménez & San-Martín, 2017; La Ferle et al., 2002; Muk & Chung, 2015). However, it needs to be pointed out that individualistic countries are found to be more innovative than collectivistic (de Mooij, 1998; Steenkamp, ter Hofstede, & Wedel, 1999; Yaveroglu & Donthu, 2002; Yenyurt & Townsend, 2003). This suggests that individualistic countries, such as The Netherlands might be more acceptant of such innovative marketing messages via smartphones. In the same way, the higher rate of mobile purchases in The Netherlands (We Are Social & Hootsuite, 2017b), and in turn the suggested consistency of mobile marketing with Dutch shopping styles, could also be explained by the low score on collectivism. Nevertheless, Singh (2006) did not find a

significant relationship between collectivism and the likelihood to participate in innovative behavior. This might imply that there is also no significant influence of collectivism on mobile marketing acceptance. Given these contradicting results, the relationship needs to be further explored.

2.4.2 Cultural values: Uncertainty avoidance

Uncertainty avoidance means “the extent to which the members of a culture feel threatened by uncertain or unknown situations” (Hofstede, 1991, p. 113). This suggests that cultures with high levels of uncertainty avoidance might be more reluctant towards mobile marketing, since they might be more skeptical towards such a new method of advertising. In addition, it is less likely that parts of their shopping processes will be conducted through such an innovative device as a smartphone (Gao et al., 2013; Ng, 2014; Rohm et al., 2012). This suggests inconsistency of shopping styles and mobile marketing in high uncertainty avoidance countries, such as Portugal. Further, given the high uncertainty avoidance, it can be suggested that for Portuguese smartphone users it is necessary to know the marketer in order to feel comfortable with mobile marketing, which implies a high importance of brand trust (Persaud & Azhar, 2012).

Across cultures differences exist in perceived value (Choi et al., 2008; Sinkovics et al., 2012). Also, Sinkovics et al. (2012) stated that differences in the perceived value of mobile advertising between Japan and Austria can be explained by different levels of collectivism and uncertainty avoidance in these countries. Based on this, it can be suggested that these cultural values might also influence the perceived value of mobile marketing in The Netherlands and Portugal.

However, until now the direct relationships between both collectivism and uncertainty avoidance and dimensions of mobile marketing acceptance have not been studied. Hence, these relationships are explored through the following research question:

❖ Research question 4

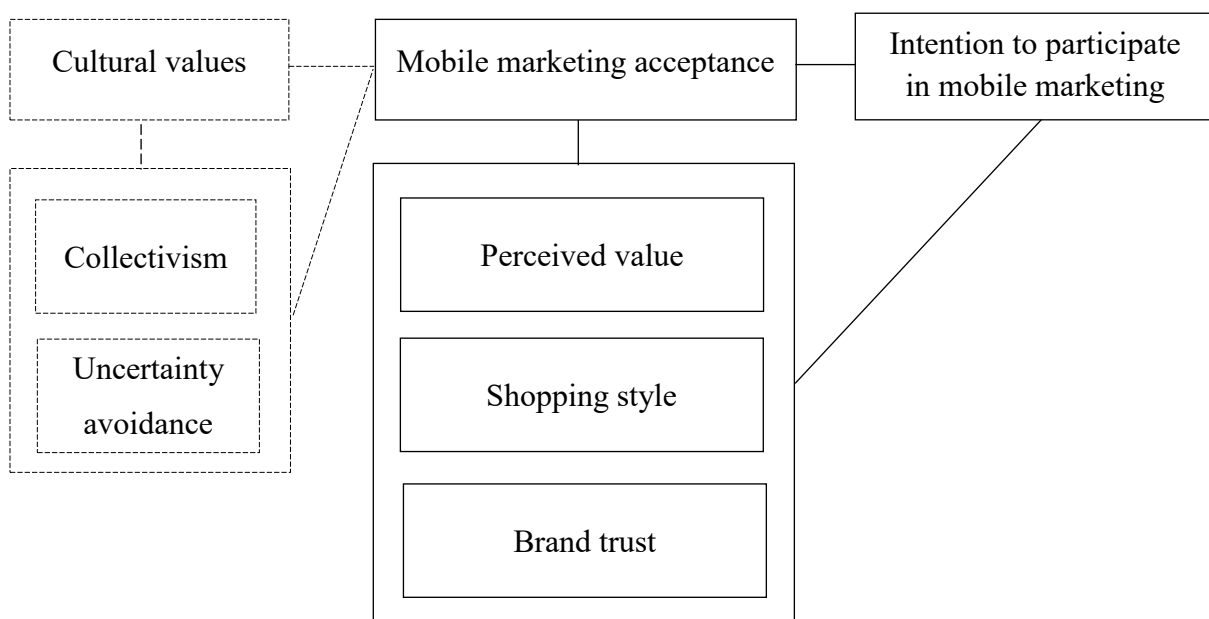
- a) *Which cultural values – collectivism and uncertainty avoidance – are relevant to explain dimensions of mobile marketing acceptance – perceived value, shopping style and brand trust?*
- b) *Are there significant differences between The Netherlands and Portugal?*

2.5 Conclusions and the conceptual framework

The existing literature lacks research on dimensions of mobile marketing acceptance. This implies that more research is needed in order to obtain a more extensive understanding of mobile marketing acceptance among smartphone users. In particular, differences among

countries exists regarding the acceptance (Choi et al., 2008; Jayawardhena et al., 2009; Muk, 2007; Sinkovics et al., 2012; Sultan et al., 2009). In order to explore whether this is valid, different dimensions of mobile marketing acceptance need to be studied. Moreover, these dimensions might also differently explain the intention to participate in mobile marketing. However, there is still a gap in cross-market literature, especially within Europe, and therefore The Netherlands and Portugal are relevant to compare. Cultural values might influence and result in differences in mobile marketing acceptance among Dutch and Portuguese smartphone users. The following conceptual framework provides an overview of these relationships between variables that are explored in this thesis:

Figure 2 – Conceptual framework



In accordance with the conceptual model established through the literature review, the following research questions are defined:

❖ **Research question 1**

- a) *Does Mobile marketing acceptance influence the Intention to participate in mobile marketing?*
- b) *Are there significant differences between The Netherlands and Portugal?*

❖ **Research question 2**

- a) *Which dimensions of Mobile marketing acceptance – Perceived value, Shopping style, and Brand trust – are relevant to explain the intention to participate in mobile marketing?*
- b) *Are there significant differences between The Netherlands and Portugal?*

❖ **Research question 3**

- a) *Do Cultural values influence Mobile marketing acceptance?*
- b) *Are there significant differences between The Netherlands and Portugal?*

❖ **Research question 4**

- a) *Which Cultural values – Collectivism and Uncertainty avoidance – are relevant to explain dimensions of mobile marketing acceptance – Perceived value, Shopping style and Brand trust?*
- b) *Are there significant differences between The Netherlands and Portugal?*

3. METHODOLOGY

3.1 Research approach

According to Saunders, Lewis, and Thornhill (2009) in literature three research approaches exist, namely exploratory, descriptive and explanatory research. Exploratory research is used when insufficient research has been performed on a topic and clarification is needed. This can be done through qualitative research, such as by reviewing existing literature, conducting focus groups or interviewing experts of the related field. The aim is to obtain new insights regarding the topic. In the case of descriptive research, quantitative data is collected in order to establish a more detailed characterization of a phenomena. Surveys are often conducted to collect primary data. An explanatory approach is adopted when a topic is already studied thoroughly, but causal relationships between the variables still need to be established. The relationships that resulted from the descriptive research might be further examined through semi-structured or structured interviews. Experiments and simulations can also be employed in order to study cause-and-effect relationships. Hypotheses can be formulated and tested through data collection (Saunders et al., 2007).

As mentioned before, research on mobile marketing is still in an early stage (Shankar & Balasubramanian, 2009; Ström et al., 2014). Mobile marketing acceptance dimensions and the influence of cultural values on these dimensions in particular are uncovered topics in literature. Therefore, for this study an exploratory approach is applicable. Secondary data is examined in the literature review and based on that, research questions are defined. Additionally, in order to provide answer to the research questions, primary data is collected by means of an online survey (Appendix 1). Thus, this thesis consists of exploratory research combined with descriptive research.

3.2 Research instruments

3.2.1 Population and sample

A population is the set of all elements that have various elements in common, and that share the information needed by a researcher in order to solve a research problem (Malhotra, 2010). The population of this study consists of Dutch and Portuguese smartphone users of both genders, and from 18 years old onwards.

In The Netherlands and Portugal there are 13,6 million and 6,1 million smartphone users respectively (Google Inc., 2016c). Due to time and financial constraints a representative sample cannot be taken for the present study. Therefore, the chosen sampling method is a non-

probabilistic convenience sample, which allows for easy, quick and inexpensive sampling. Respondents are selected by virtue of their accessibility and close proximity to the researcher (Malhotra, 2010).

3.2.2 The survey

To collect the required data an online and self-administered survey was developed (Appendix 1). The survey started with an introduction mentioning the appreciation for the respondent's participation, the confidentiality of the responses, the general aim of the study and the estimated duration of completion. Firstly, it was assured that respondents are smartphone users and that they are either Dutch or Portuguese. In case they did not meet these requirements, they were directed to the end of the survey. After passing through the two filter questions, statements to measure collectivism and uncertainty avoidance were provided. Then, three sections followed, which were related to perceived value, shopping style and brand trust. Next, the intention to participate in mobile marketing was measured. Subsequently, general questions regarding smartphone and social media usage were asked. In the end demographic questions were included, and a thank you note was displayed.

As recommended by Malhotra (1999) to establish an accurate measurement of the data it was assured that the questions were clear and correctly understood by respondents. This was done through a pre-test of the survey. A draft version of the survey was answered by 12 Dutch smartphone users and 12 Portuguese smartphone users. The results showed that the scales had very good reliability, and therefore they are suitable to be used. The provided feedback was also taken into account by adjusting the survey accordingly.

3.2.3 The measures

This thesis uses the scales developed by Persaud and Azhar (2012) in order to explore how Perceived value, Shopping style and Brand trust explain the Intention to participate in mobile marketing in The Netherlands and Portugal. To measure these dimensions and intentions, a 7 point Likert scale is used ranging from 1 representing "Strongly disagree" to 7 representing "Strongly agree". Additionally, to measure the frequency of certain mobile activities a 7 point Likert scale was used for which 1 indicated "Never" and 7 indicated "Always".

In order to measure the cultural values – collectivism and uncertainty avoidance – among individuals, the CVSCALE (Individual Cultural Values Scale) developed by Yoo, Donthu, and Lenartowicz (2011) is used. This is "a 26-item five-dimensional scale of individual cultural values that assesses Hofstede's cultural dimensions at the individual level" (Yoo et al., 2011,

p. 193). Furthermore, it is proven that the scale can be used across countries and different samples, and has adequate reliability and validity (Yoo et al., 2011). The scale was adapted by using a 7 point Likert scale that ranges from 1 meaning “Strongly disagree” to 7 meaning “Strongly agree”.

First the survey was designed in English, and afterwards it was translated into Dutch and Portuguese (Appendix 1). Considerable effort was taken in order to ensure that the translations capture the same meaning across the languages. To illustrate, in Appendix 2 the measurements of the cultural values, the mobile marketing acceptance dimensions and the intention to participate in mobile marketing are outlined, and the Dutch and Portuguese translations are provided.

The measurements were conducted through an online survey designed with Qualtrics (www.qualtrics.com).

4. RESULTS ANALYSIS

4.1 Preliminary analysis

4.1.1 Data collection and analysis

The data was collected through an online survey from the 14th of March 2017 until the 3rd of April 2017. The survey was promoted via social media and e-mail. In total, 312 people started the survey, and in the end 252 people completed the survey.

In order to provide insights from the collected data the statistical program IBM SPSS Statistics 23 was used.

4.1.2 Sample characterization

The overall sample consists for 53,0% of females and for 47,0% of males, as shown in Figure 3. When comparing the two nationalities, 137 respondents are Dutch and 115 are Portuguese. Among the Dutch respondents 56,2% are females and 43,8% are males (Figure 4), while 48,7% of the Portuguese respondents are females and 51,3% are males (Figure 5).

Figure 3 – Gender (Total sample)

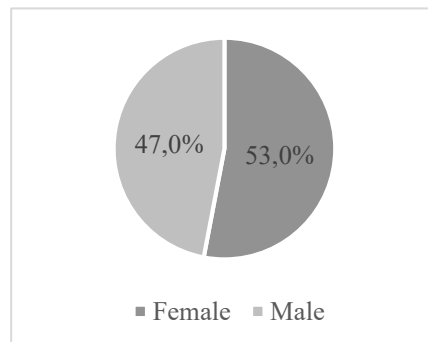


Figure 4 – Gender (The Netherlands)

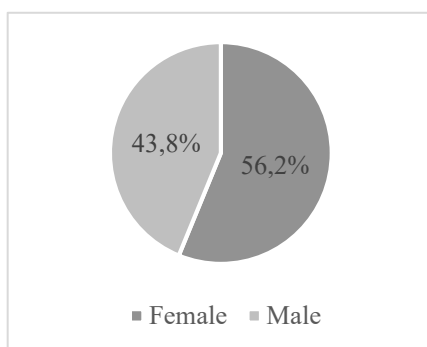
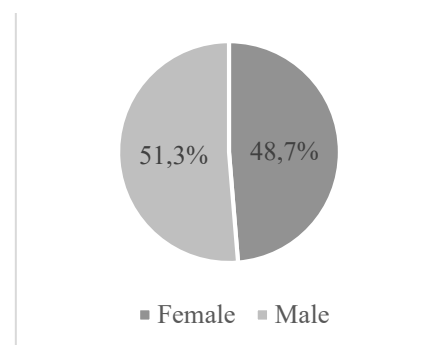
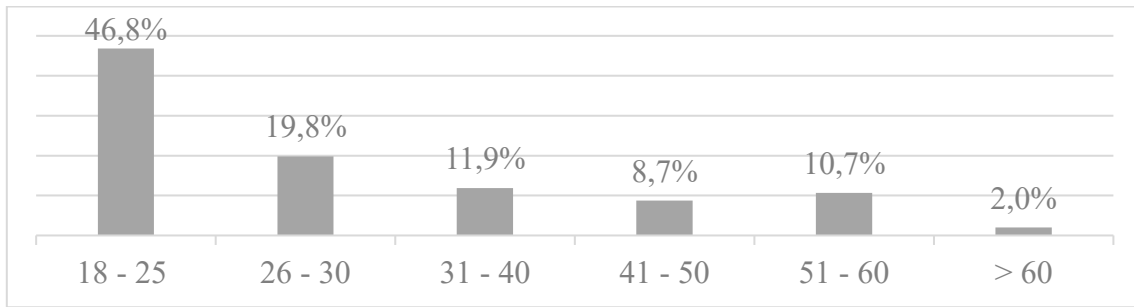


Figure 5 – Gender (Portugal)



Regarding the age of the total sample, as illustrated in Figure 6, most of the respondents (46,8%) belong to the age group from 18 to 25 years old. After that, 26 to 30 years old (19,8%) is the largest group, followed by 31 to 40 years old (11,9%), 51 to 60 years old (10,7%), and 41 to 50 years old (8,7%). Only 2,0% is older than 60.

Figure 6 – Age distribution (Total sample)



Among Dutch respondents a similar age distribution is present, which can be found in Figure 7. Among Portuguese respondents (Figure 8) a higher percentage of 12,2% indicate to be between 41 and 50 years old. Also, more respondents belong to the age group between 31 and 40 years old (16,5%). Further, the largest group (43,5%) is between 18 and 25 years old, followed by 19,1% between 26 and 30 years old. The age group 51 to 60 years old accounts for 7%, and 1,7% indicates to be above 60 years old.

Figure 7 – Age distribution (The Netherlands)

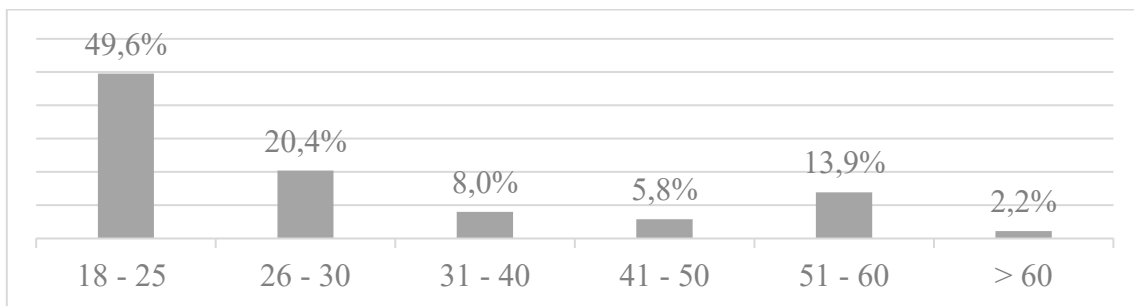
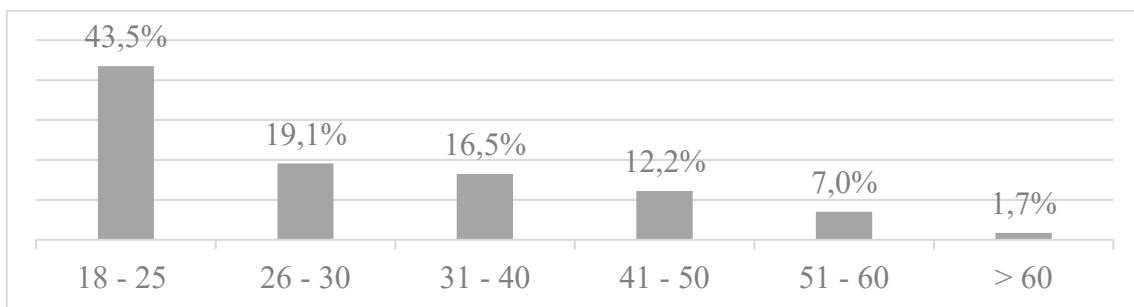


Figure 8 – Age distribution (Portugal)



In The Netherlands and Portugal different educational systems exist, and therefore the education distributions are illustrated per nationality. According to Figure 9, most of the Dutch respondents (32,8%) indicate that their highest obtained diploma is one of an University of Applied Sciences. After that, 21,2% has a bachelor's degree as the highest level of education, followed by 18,2% with a high school diploma. People with a college diploma and with a

master's degree are equally represented with 13,1%. Only one person has a doctor's degree. Concerning the Portuguese sample (Figure 10), most respondents indicate to have a bachelor's degree (37,4%), and after that a master's degree (26,1%). For 20,9% a high school diploma is the highest diploma obtained. Respondents for which secondary school or elementary school is their highest level of education account both for 7,8%.

Figure 9 – Education distribution (The Netherlands)

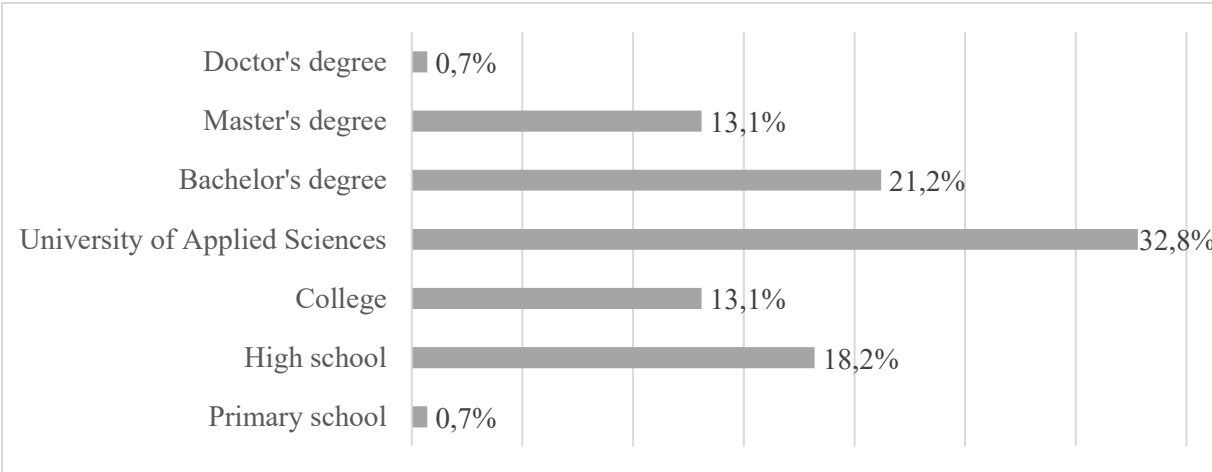
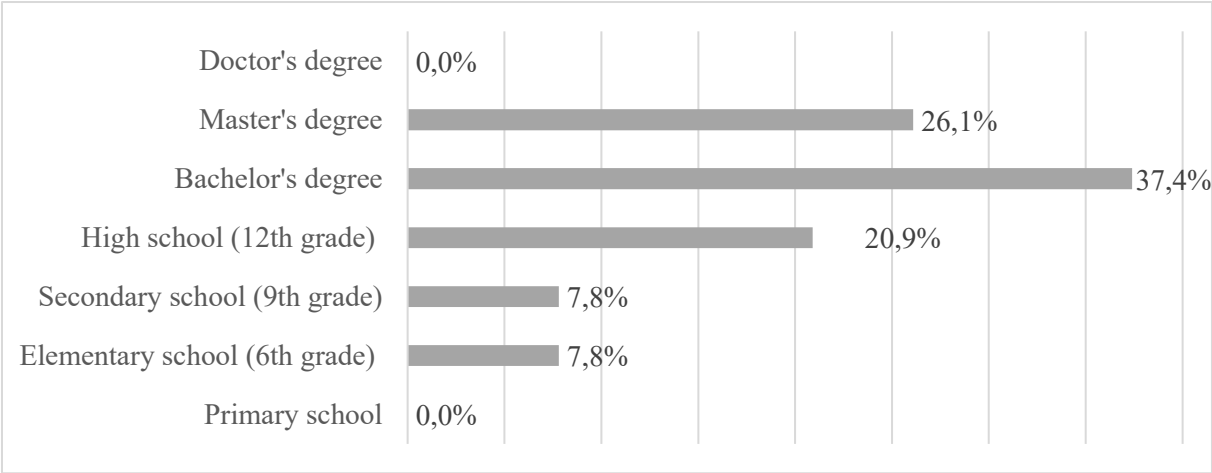
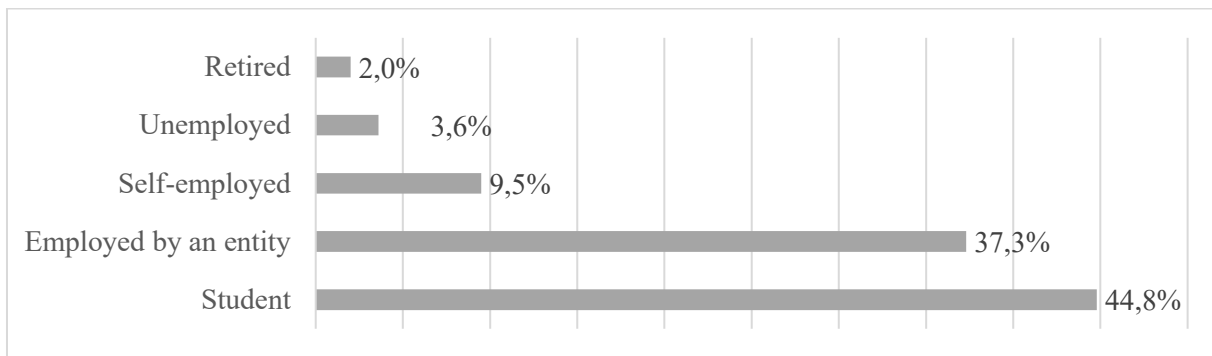


Figure 10 – Education distribution (Portugal)



Regarding the occupation of the total sample (Figure 11) most of the respondents are students, which corresponds to 44,8%. Besides that, 37,3% is employed by an entity, 9,5% is self-employed, whereas 3,6% is unemployed. Only 2,0% is retired.

Figure 11 – Occupation distribution (Total sample)



When taking a look at the Dutch sample in Figure 12, a percentage of 45,3% is employed by an entity, which was closely followed by 44,5% of students. Both the unemployed and retired account for 2,2% of the Dutch respondents. Only 0,7% is self-employed. The occupation of the Portuguese respondents (Figure 13) is different, since 45,2% are students, 27,8% are employed by an entity, and 20% is self-employed. More people are unemployed amounting to 5,2%, whereas 1,7% is retired.

Figure 12 – Occupation distribution (The Netherlands)

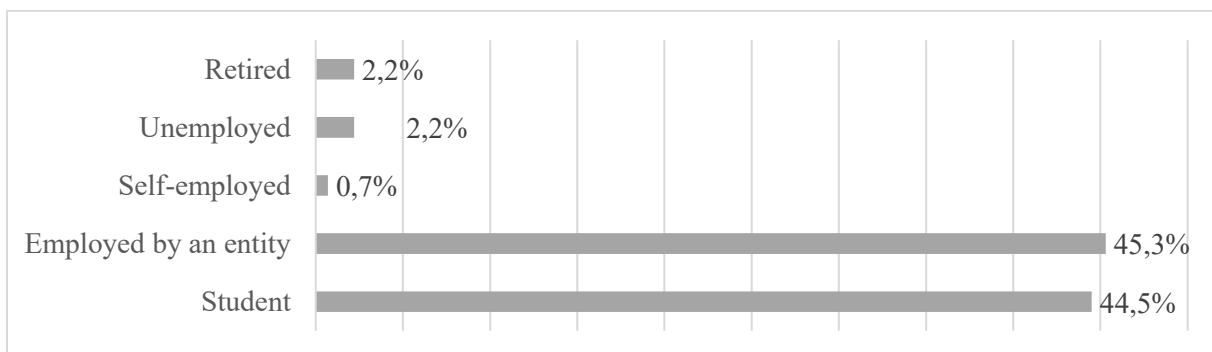
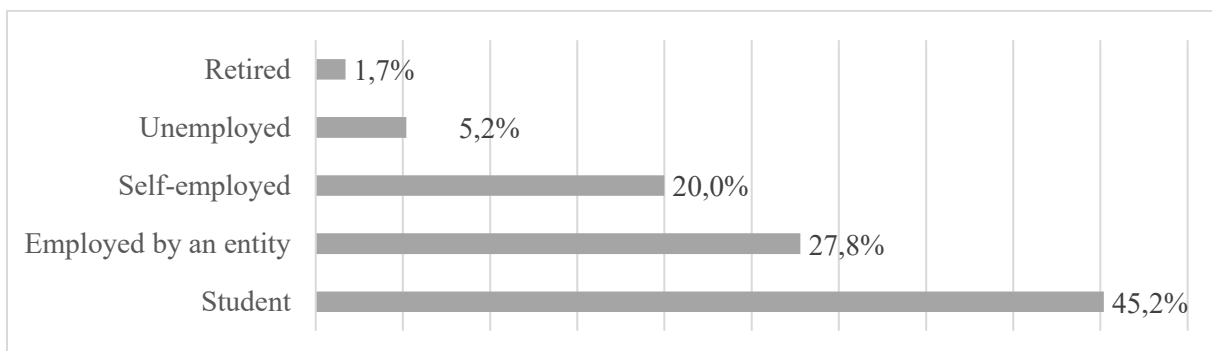


Figure 13 – Occupation distribution (Portugal)



Additionally, Appendix 3 contains the mean values from questions regarding the frequencies of performed activities on a smartphone and visiting social media pages on a smartphone. The results are compared for the Dutch and Portuguese samples in order to provide additional insights regarding smartphone usage behavior of both nationalities.

4.1.3 Data screening: univariate outliers and multivariate outliers

Before conducting any further analysis, the quality of the data needs to be improved through data screening. This process involves identifying univariate and multivariate outliers.

The analysis of univariate outliers shows if any extreme values are present in the single variables that resulted from the adopted scales in this research. This involves the conversion of the scores of all variables into standardized Z-scores. Taking a significance level of 0,1%, all Z-scores smaller than -3,29 and larger than 3,29 are considered as outliers (Tabachnick & Fidell, 2013). Based on this, the results in Appendix 4 demonstrate that 10 outliers exist among one of the variables, which is Uncertainty avoidance.

Through a multivariate analysis respondents are identified that answered unusual combinations of scores on at least two variables. For this identification of outliers the Mahalanobis distance was calculated for all responses, and a Chi-square distribution was performed. When the *p*-value was below 0,001, the response was considered as an outlier. For this research it was concluded that only 2 outliers were present.

Thus, both univariate and multivariate analysis show that outliers exist among the collected data. However, the responses containing outliers were not deleted from the data set, since existing literature does not provide absolute conclusions regarding this topic.

4.1.4 Data reliability

The Cronbach's alphas are presented in Table 1 to examine the internal consistency of the measurement model.

Table 1 – Scales' reliability

Scales	Dimensions	Initial number of items	Cronbach's alpha	Cronbach's alpha if item deleted	Items deleted	Final number of items
Cultural values	Uncertainty avoidance	5	0,896	-	-	5
	Collectivism	6	0,890	-	-	6
Cultural values as a construct		11	0,901	-	-	11
Mobile marketing acceptance	Perceived value	4	0,897	-	-	4
	Shopping style	3	0,883	-	-	3
	Brand trust	2	0,649	-	-	2
Mobile marketing acceptance as a construct		9	0,783	-	-	9
Intention to participate in mobile marketing		5	0,791	-	-	5

Based on DeVellis (1991), Cronbach's alpha values below 0,60 are considered as *unacceptable*. However, values between 0,65 and 0,70 are *minimally accepted*. In order for the Cronbach's alpha to be defined as *good* its value should be between 0,75 and 0,80. Furthermore, Cronbach's alphas between 0,80 and 0,90 are considered as *very good*. In the case of this research, all of the Cronbach's alphas are accepted and most of them are considered as very good. The values of the constructs Mobile marketing acceptance and Intention to participate in mobile marketing are defined as good. The Cronbach's alpha of Brand trust is found to be minimally accepted. Thus, since all values are acceptable, no items were removed. It can be concluded that the scales are internally consistent, and therefore the measurement scales are proven to be reliable. Additionally, in Appendix 5 the means, standard deviations and Cronbach's alphas of all variables are shown.

4.1.5 Principal component analysis (PCA)

A Principal component analysis was performed to assess the dimensionality of the scales used in this thesis. Further, the analysis demonstrates whether the factors are aggregated around the components as expected.

The evaluation of the sample size needs to be prioritized before performing the PCA. Comrey and Lee (1992) consider a sample of 100 respondents as *poor*, a sample of 200 respondents as *fair*, a sample of 500 respondents as *very good*, and a sample of 1000 is considered as *excellent*. The sample size of this study can be defined as fair, since this sample consists of 252

respondents that completed the survey. In this case, it is suitable to run a factor analysis on the collected data.

A PCA with varimax rotation was conducted and factors were fixed to an amount of 6, corresponding with the number of the previously defined variables. The results in show that 70,8% of the variance is explained by the model. When looking at the items belonging to each factor, it becomes clear that only one item does not fit to its component. This is the case for the item “I would participate in surveys sent to my mobile phone”, and therefore it was removed from the analysis.

The Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) value ranges from 0 to 1 and is 0,85 in this case. According Hutcheson and Sofroniou (1999) to this value is *great*, since it falls in the range between 0,80 and 0,90. At the same time, KMO values between 0,50 and 0,70 are considered as *normal*, between 0,70 and 0,80 as *good*, and above 0,90 as *superb*.

In addition, the Barlett’s test of sphericity is desired to be significant. For this research the value is significant at a *p*-value below 0,001, which supports the factorability of the correlation matrix. Besides that, the Chi-square value is 3821,328. All of the previously discussed results are shown in Appendix 6.

4.1.6 Measurement model

Due to the elimination of one item in the analysis – “I would participate in surveys sent to my mobile phone” – different values resulted for the reliability analysis as well as the factor analysis, which is discussed below.

Only the alpha of the construct “Intention to participate in mobile marketing” was affected by the removal of the item. In fact, the Cronbach’s alpha increased from 0,791 to 0,818 implying a better internal consistency.

Moreover, the item was taken out of the PCA with varimax rotation and 6 fixed factors. As a result, the total variance explained increased to 72,4%. Also, a higher KMO value of 0,856 appeared. The Barlett’s test of sphericity continued to be significant and the Chi-square value decreased to 3732,220. These results are all visible in Appendix 7.

4.1.7 Correlation analysis

The Pearson correlation coefficients were calculated to measure the strength of the associations between all variables, and to find out whether they are positive or negative. The analysis in Appendix 8 shows that the majority of the correlations is significant at a 0,01 significance level.

Significant negative associations exist between Shopping style and Collectivism and Shopping style and Brand trust. All of the other significant associations are positive.

4.2 In-depth analysis

To provide answers to the proposed research questions, an in-depth analysis is conducted in this paragraph. Insights are provided that are based on the results of various statistical tests.

4.2.1 Mobile marketing acceptance dimensions and the Intention to participate in mobile marketing

❖ Research question 1

- a) *Does Mobile marketing acceptance influence the Intention to participate in mobile marketing?*
- b) *Are there significant differences between The Netherlands and Portugal?*

The variable Mobile marketing acceptance was established through the average of all responses of the items measuring Perceived value, Shopping style and Brand trust. From Table 2 it becomes clear that the Mobile marketing acceptance significantly influences the Intention to participate in mobile marketing with a standardized coefficient of 0,577 ($F(1, 250) = 124,692$; $p = 0,000$). In this analysis 33,0% of the variance in the dependent variable is explained by the independent variable. Hence, Mobile marketing acceptance does influence the Intention to participate in mobile marketing.

Table 2 – Linear regression of Mobile marketing acceptance on Intention to participate in mobile marketing (Total sample)

Dependent variable: Intention to participate in mobile marketing				
Independent variables	Standardized β	T	Sig.	VIF
Mobile marketing acceptance	0,577	11,167	0,000*	1,000
Adjusted R²	0,330			
F(1, 250)	124,692 ($p = 0,000^*$)			

*Note: * Sig. at $p < 0,05$*

First, to analyze cross-country differences, it is analyzed whether there is a difference between Dutch and Portuguese respondents in their dimensions of mobile marketing acceptance and their intention to participate in mobile marketing. This is performed through two Independent samples t -tests at a 95% confidence level. The Levene's test for equality of variances showed that the variances were not significantly different, since the p -values were higher than 0,05.

Therefore, the p -value of ‘Equal variances assumed’ apply for both tests. Hence, when taking a 0,05 significance level, the results in Table 3 show that Mobile marketing acceptance is not significantly different in The Netherlands ($\bar{x} = 3,649$) and Portugal ($\bar{x} = 3,752$). On the other hand, the Intention to participate in mobile marketing does significantly differ across the countries. The Dutch respondents ($\bar{x} = 3,721$) were more intent to participate in mobile marketing than the Portuguese respondents ($\bar{x} = 3,365$).

Table 3 – Independent samples t-test for Intention to participate in mobile marketing comparing the nationalities

Variable	Nationality	Mean	Std. Deviation	Sig. (2-tailed)
Mobile marketing acceptance	Dutch	3,649	0,998	0,379
	Portuguese	3,752	0,822	
Intention to participate in mobile marketing	Dutch	3,721	1,283	0,026*
	Portuguese	3,365	1,218	

*Note: * Sig. at $p < 0,05$*

In Appendix 9 it is visible that all scores of the items belonging to the variable Intention to participate in mobile marketing are significantly different between the two nations, except for “I would like to receive ads via text messages on my mobile phone”. Dutch respondents indicate to a larger extent that they would respond to coupons, ads and web offers on their mobile phones.

Then, it is analyzed whether Mobile marketing acceptance influences differently the Intention to participate in The Netherlands and Portugal. A Linear regression was performed of which the results for each nationality are shown in Table 4. Based on these results, there is almost no difference between the countries regarding the influence of Mobile marketing acceptance on the Intention to participate in mobile marketing. For both nations the relationship is significant with a Standardized β around 0,6. The model of The Netherlands explains 35,9% of the variable variance, and for Portugal this is 32,8%.

Table 4 – Linear regression of Mobile marketing acceptance on Intention to participate in mobile marketing (per country)

Dependent variable: Intention to participate in mobile marketing								
Country	The Netherlands				Portugal			
Independent variable	Standardized β	T	Sig.	VIF	Standardized β	T	Sig.	VIF
Mobile marketing acceptance	0,603	8,782	0,000*	1,000	0,578	7,520	0,000*	1,000
Adjusted R ²	0,359				0,328			
	$F(1, 135) = 77,118 (p = 0,000^*)$				$F(1, 113) = 56,553 (p = 0,000^*)$			

Note: * Sig. at $p < 0,05$

❖ Research question 2

- Which dimensions of Mobile marketing acceptance– Perceived value, Shopping style, and Brand trust – are relevant to explain the Intention to participate in mobile marketing?
- Are there significant differences between The Netherlands and Portugal?

In order to provide a deeper analysis of what influences the Intention to participate in mobile marketing, the variables Perceived value, Shopping style and Brand trust were considered as independent variables and Intention to participate in mobile marketing as a dependent variable. A Multiple linear regression was run and as shown in Table 5, the model explains 39,3% of the variable variance and it is significant ($F(3, 248) = 55,144; p = 0,000$). However, from the independent variables only Perceived value is significant, which has a standardized coefficient of 0,570. The results show that only Perceived value is relevant to explain the Intention to participate in mobile marketing, which is the answer to the second research question.

Table 5 – Multiple linear regression of Perceived value, Shopping style and Brand trust on Intention to participate in mobile marketing (Total sample)

Dependent variable: Intention to participate in mobile marketing				
Independent variables	Standardized β	T	Sig.	VIF
Perceived value	0,570	10,020	0,000*	1,340
Shopping style	0,113	1,904	0,058	1,455
Brand trust	-0,075	-1,405	0,161	1,165
Adjusted R ²	0,393			
$F(3, 248)$	55,144 ($p = 0,000^*$)			

Note: * Sig. at $p < 0,05$

To examine whether there are differences between The Netherlands and Portugal, firstly, Independent samples *t*-tests were conducted for the variables Perceived value, Shopping style and Brand trust. The Levene's test for equality of variances showed that for Shopping style and Brand trust the variances are not significantly different, since the *p*-values are higher than 0,05. In this case, the measured data for 'Equal variances assumed' is referred to. Accordingly, the results are provided in Table 6, which reveal that Perceived value is not significantly different (*p* = 0,680) for the two countries. Nevertheless, differences in Shopping style and Brand trust appear to be present, since the *p*-values are significant at the 0,05 level. The mean of Shopping style is the highest for Dutch respondents (\bar{x} = 3,285), whereas the mean of Brand trust is higher for Portuguese respondents (\bar{x} = 6,152).

Table 6 – Independent samples t-tests for Cultural values and dimensions of Mobile marketing acceptance comparing the nationalities

Variables	Nationality	Mean	Std. Deviation	Sig. (2-tailed)
Perceived value	Dutch	3,292	1,416	0,680
	Portuguese	3,363	1,291	
Shopping style	Dutch	3,285	1,374	0,000*
	Portuguese	2,670	1,262	
Brand trust	Dutch	4,909	1,259	0,000*
	Portuguese	6,152	0,935	

Note: * Sig. at *p* < 0,05

To see where these differences in Shopping style and Brand trust come from, another Independent samples *t*-test is performed, which tests the differences between the items of these variables. The results are displayed in Appendix 9 and demonstrate that the scores of all items are significantly different.

Given the differences between the nations' scores on the dimensions of Mobile marketing acceptance and on the Intention to participate in mobile marketing, the relationships between these variables might also differ. Multiple linear regressions were conducted of which the results are summarized in Table 7. The results of the *F*-tests for The Netherlands ($F(3, 133) = 29,691$; *p* = 0,000) and for Portugal ($F(3, 111) = 24,987$; *p* = 0,000) show that the model is significant for both countries, implying a linear relationship between the variables. Also, the Adjusted *R*² values are very similar, given the value of 0,388 for The Netherlands and 0,387 for Portugal. Furthermore, for both Dutch and Portuguese respondents, only Perceived value is relevant to explain the Intention to participate in mobile marketing, since it is the only significant variable in both cases (*p* = 0,000). Thus, dimensions of Mobile marketing acceptance

do not differently explain the Intention to participate in mobile marketing in The Netherlands and Portugal.

Table 7 – Multiple linear regression of Perceived value, Shopping style and Brand trust on Intention to participate in mobile marketing (per country)

Dependent variable: Intention to participate in mobile marketing								
Country:	The Netherlands				Portugal			
Independent variables	β^{**}	T	Sig.	VIF	β^{**}	T	Sig.	VIF
Perceived value	0,549	6,774	0,000*	1,460	0,613	7,563	0,000*	1,220
Shopping style	0,143	1,769	0,079	1,453	0,043	0,505	0,615	1,362
Brand trust	-0,006	-0,086	0,931	1,110	-0,027	-,342	0,733	1,129
Adjusted R ²	0,388				0,387			
	$F(3, 133) = 29,691 (p = 0,000^*)$				$F(3, 111) = 24,987 (p = 0,000^*)$			

Note: * Sig. at $p < 0,05$, ** Standardized

4.2.2 Cultural values and Mobile marketing acceptance dimensions

❖ Research question 3

- Do Cultural values influence Mobile marketing acceptance?
- Are there significant differences between The Netherlands and Portugal?

The variable Cultural values was created by taking the average of all scores of the items related to Collectivism and Uncertainty avoidance. A Linear regression was performed, analyzing the influence of Cultural values on Mobile marketing acceptance (Table 8). The results ($F(1, 250) = 1,177; p = 0,279$) demonstrate that, in general, Cultural values do not have a significant influence on Mobile marketing acceptance.

Table 8 – Linear regression of Cultural values on Mobile marketing acceptance (Total sample)

Dependent variable: Mobile marketing acceptance				
Independent variable	Standardized β	T	Sig.	VIF
Cultural values	0,068	1,085	0,279	1,000
Adjusted R ²	0,001			
$F(1, 250)$	1,177 ($p = 0,279$)			

An Independent samples *t*-test with a 95% confidence level was conducted to determine whether Cultural values differ between The Netherlands and Portugal. For the test equal variances were not assumed, resulting in a *p*-value of 0,026, which implies that the Cultural values in The Netherlands and Portugal are significantly different (Table 9).

Table 9 – Independent samples *t*-tests for Cultural values comparing the nationalities

Variable	Nationality	Mean	Std. Deviation	Sig. (2-tailed)
Cultural values	Dutch	3,721	1,283	0,026*
	Portuguese	3,365	1,218	

Note: * Sig. at $p < 0,05$

In the interest of exploring whether these varying Cultural values also differently explain Mobile marketing acceptance, a Linear regression of Cultural values on Mobile marketing acceptance was performed for The Netherlands and Portugal. According to the results in Table 10, it is the case for both countries that Cultural values do not significantly influence Mobile marketing acceptance. Additionally, the R^2 values are very low.

Table 10 – Linear regression of Cultural values on Mobile marketing acceptance (per country)

Dependent variable: Mobile marketing acceptance								
Country	The Netherlands				Portugal			
Independent variable	Standardized β	T	Sig.	VIF	Standardized β	T	Sig.	VIF
Cultural values	-0,022	-0,253	0,801	1,000	0,158	1,704	0,091	1,000
Adjusted R^2	-0,007				0,016			
	$F(1, 135) = 0,064 (p = 0,801)$				$F(1, 113) = 2,905 (p = 0,091)$			

❖ Research question 4

- a) Which Cultural values – Collectivism and Uncertainty avoidance – are relevant to explain dimensions of Mobile marketing acceptance – Perceived value, Shopping style and Brand trust?
- b) Are there significant differences between The Netherlands and Portugal?

As discussed in Chapter 2, it is suggested that Collectivism and Uncertainty avoidance might individually explain dimensions of Mobile marketing acceptance. Therefore, a Multiple linear regression is performed examining the relationship between Collectivism and Mobile marketing acceptance, and Uncertainty avoidance and Mobile marketing acceptance (Table 11). Again, it appears that both dimensions are not significantly related to overall Mobile marketing

acceptance ($p = 0,796$; $p = 0,395$). Thus, none of them is considered to be relevant in explaining Mobile marketing acceptance in general.

Table 11 – Multiple linear regression of Collectivism and Uncertainty avoidance on Mobile marketing acceptance (Total sample)

Dependent variable: Mobile marketing acceptance				
Independent variables	Standardized β	T	Sig.	VIF
Collectivism	0,019	0,258	0,796	1,325
Uncertainty avoidance	0,062	0,853	0,395	1,325
Adjusted R ²	-0,003			
F(2, 249)	0,671 ($p = 0,512$)			

Still, as suggested in the literature review, Collectivism and Uncertainty avoidance might explain dimensions of mobile marketing acceptance - Perceived value, Shopping style and Brand trust. Hence, as in presented in Table 12, various Multiple linear regressions are conducted studying which cultural values explain these dimensions. Regarding Perceived value, none of the cultural values are significant for a 5% confidence level. For the regression with Shopping style as a dependent variable, Collectivism is shown as significantly related to Shopping style ($p = 0,000$) with a standardized coefficient of -0,260. However, only 5,9% of the variable variance is explained by the model. At the same time, both Collectivism ($p = 0,000$) and Uncertainty avoidance ($p = 0,031$) are significant ($p < 0,05$) in relation to Brand trust. The Adjusted R² is explains 18,8% of the model's variable variation.

Table 12 – Multiple linear regressions of Collectivism and Uncertainty avoidance on Perceived value, Shopping style, and Brand trust (Total sample)

Dependent variables:	Perceived value				Shopping style				Brand trust			
	β^{**}	T	Sig.	VIF	β^{**}	T	Sig.	VIF	β^{**}	T	Sig.	VIF
Collectivism	0,057	0,786	0,433	1,325	-0,260	-3,687	0,000*	1,325	0,353	5,383	0,000*	1,325
Uncertainty avoidance	0,024	0,329	0,742	1,325	0,005	0,070	0,944	1,325	0,142	2,172	0,031*	1,325
Adjusted R ²	-0,003				0,059				0,188			
F(2, 249)	0,651 ($p = 0,522$)				8,843 ($p = 0,000^*$)				30,001 ($p = 0,000^*$)			

Note: * Sig. at $p < 0,05$; ** Standardized

To further compare The Netherlands and Portugal, first, it is relevant to see whether the individual scores on Collectivism and Uncertainty avoidance are significantly different. Therefore, an Independent samples *t*-tests at a 95% confidence level was conducted. The results are presented in Table 13 and show that significant differences exist between the two nations regarding their scores on Collectivism and Uncertainty avoidance ($p = 0,000$). The Dutch respondents ($\bar{x} = 4,179$) indicated a lower level of Collectivism than the Portuguese respondents ($\bar{x} = 5,410$). Concerning Uncertainty avoidance the Dutch respondents ($\bar{x} = 4,742$) also have a lower score than the Portuguese ($\bar{x} = 5,649$).

Table 13 – Independent samples *t*-tests for Collectivism and Uncertainty avoidance comparing the nationalities

Variables	Nationality	Mean	Std. Deviation	Sig. (2-tailed)
Collectivism	Dutch	4,179	0,992	0,000*
	Portuguese	5,410	0,951	
Uncertainty avoidance	Dutch	4,742	1,131	0,000*
	Portuguese	5,649	0,872	

Note: * Sig. at $p < 0,05$

Since differences exist between the two nationalities regarding Cultural values and certain dimensions of Mobile marketing acceptance, an in-depth analysis is performed on the relationships between these variables for each nationality. From Table 14 it can be observed that for Portuguese respondents Uncertainty avoidance does significantly explain Mobile marketing acceptance with a p -value of 0,007 at a 0,05 significance level. Yet, the model is significant ($p = 0,023$), but only explains 4,8% of the variable variance. Among Dutch respondents Collectivism and Uncertainty avoidance do not significantly explain the variable Mobile marketing acceptance.

Table 14 – Multiple linear regression of Collectivism and Uncertainty avoidance on Mobile marketing acceptance (per country)

Dependent variable: Mobile marketing acceptance								
Country	The Netherlands				Portugal			
Independent variable	Standardized β	T	Sig.	VIF	Standardized β	T	Sig.	VIF
Collectivism	0,038	0,411	0,682	1,165	-0,053	-0,544	0,588	1,131
Uncertainty avoidance	-0,058	-0,706	0,481	1,165	0,268	2,759	0,007*	1,131
Adjusted R ²	-0,011				0,048			
F(2, 134)	0,262 ($p = 0,770$)				F(2, 112) = 3,895 ($p = 0,023^*$)			

Note: * Sig. at $p < 0,05$

Moreover, Table 15 shows that Collectivism and Uncertainty avoidance do not significantly explain Perceived value, Shopping style, and Brand trust in The Netherlands, since all p -values are more than 0,05.

Table 15 – Multiple linear regressions of Collectivism and Uncertainty avoidance on Perceived value, Shopping style, and Brand trust (The Netherlands)

Dependent variables:	Perceived value				Shopping style				Brand trust			
Independent variables	β^*	T	Sig.	VIF	β^*	T	Sig.	VIF	β^*	T	Sig.	VIF
Collectivism	0,080	0,861	0,391	1,165	-0,102	-1,112	0,268	1,165	0,124	1,349	0,180	1,165
Uncertainty avoidance	-0,066	-0,707	0,481	1,165	-0,104	-1,133	0,259	1,165	0,084	0,914	0,363	1,165
Adjusted R ²	-0,008				0,015				0,016			
F(2, 134)	0,456 ($p = 0,635$)				2,020 ($p = 0,137$)				2,086 ($p = 0,128$)			

Note: * Standardized

However, as depicted in Table 16, regarding Portugal significant relationships exist between the variables. It is shown that both Collectivism and Uncertainty avoidance significantly explain Shopping style for Portuguese respondents ($F(2, 112) = 5,549$; $p = 0,005$). The standardized coefficients of Collectivism and Uncertainty avoidance are -0,281 and 0,239 respectively. For this regression the model only explains 7,4% of the variable variance. Concerning Brand trust, only Collectivism is significant ($p = 0,001$), and thus relevant in explaining Brand trust. Nevertheless, the Adjusted R-squared is very low for all of the models, and therefore the models do not much explain the variables' variances.

Table 16 – Multiple linear regressions of Collectivism and Uncertainty avoidance on Perceived value, Shopping style, and Brand trust (Portugal)

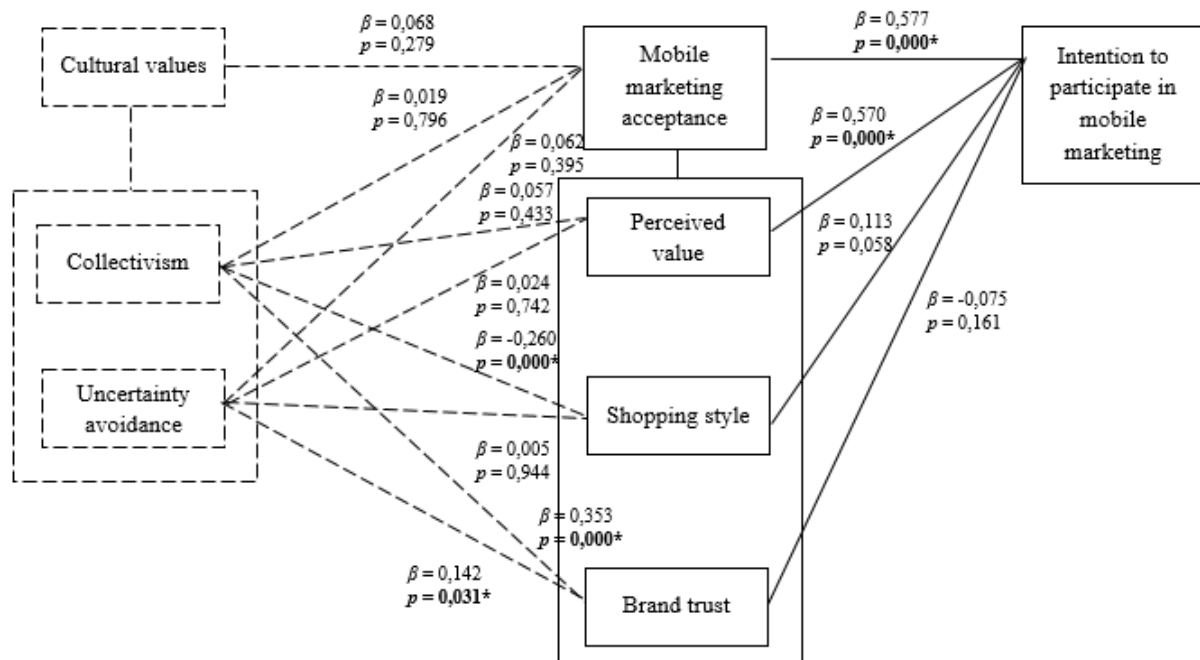
Dependent variables:	Perceived value				Shopping style				Brand trust			
Independent variables	β^{**}	T	Sig.	VIF	β^{**}	T	Sig.	VIF	β^{**}	T	Sig.	VIF
Collectivism	0,018	0,186	0,853	1,131	-0,281	-2,297	0,004*	1,131	0,308	3,271	0,001*	1,131
Uncertainty avoidance	0,178	1,799	0,075	1,131	0,239	2,493	0,014*	1,131	0,087	0,923	0,358	1,131
Adjusted R ²	0,017				0,074				0,105			
F(2, 112)	1,978 ($p = 0,143$)				5,549 ($p = 0,005^*$)				7,697 ($p = 0,001^*$)			

Note: * Sig. at $p < 0,05$, ** Standardized

Finally, answering Research questions 3 and 4, the analysis demonstrates that Collectivism is relevant to a small extent in explaining Shopping style as well as Brand trust. Moreover, differences between The Netherlands and Portugal exist, since it appeared that only in Portugal Collectivism and Uncertainty avoidance are slightly relevant in explaining dimensions of mobile marketing – Shopping style and Brand trust.

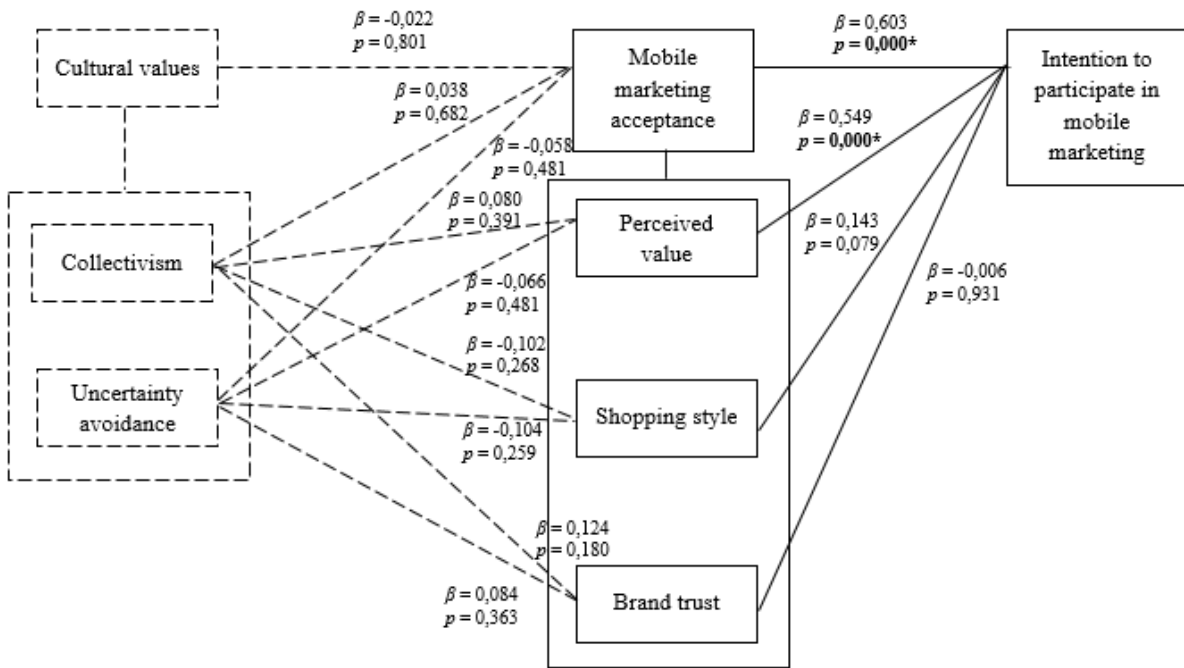
In summary, all relations of the model regarding the total sample are shown in Figure 14. With regards to the Dutch sample the p -values and standardized coefficients are presented in Figure 15. An overview of the p -values and standardized coefficients of the Portuguese sample is given in Figure 16.

Figure 14 – Standardized coefficients and p -values (Total sample)



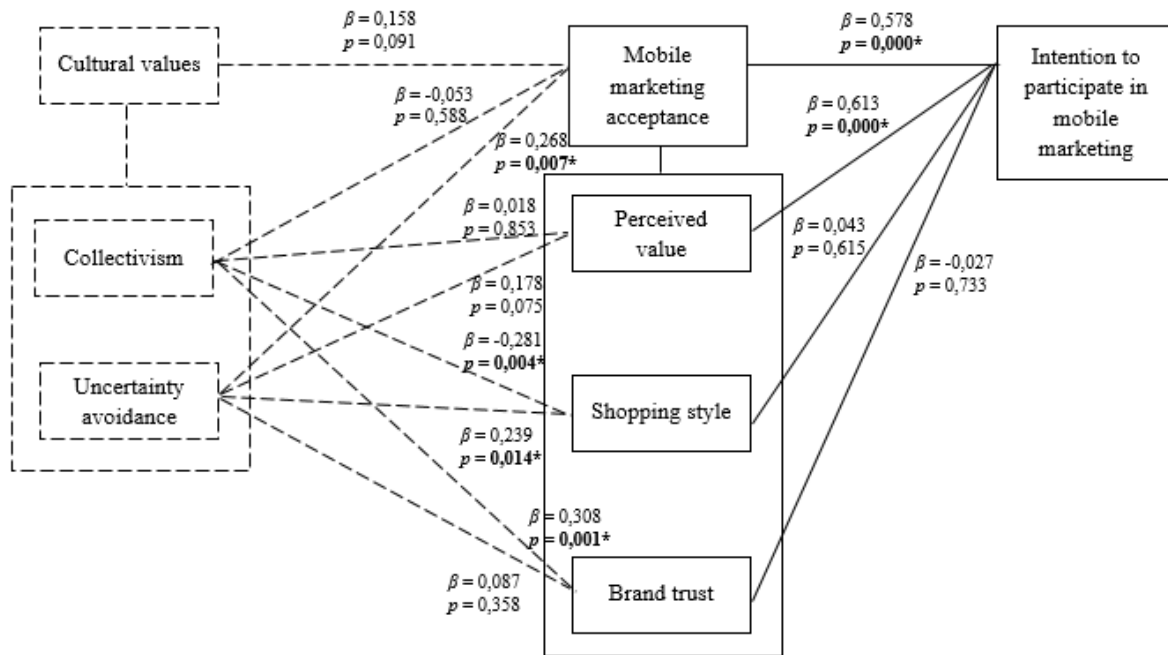
Note: * Sig. at $p < 0,05$

Figure 15 – Standardized coefficients and p-values (The Netherlands)



Note: * Sig. at $p < 0,05$

Figure 16 – Standardized coefficients and p-values (Portugal)



Note: * Sig. at $p < 0,05$

5. CONCLUSIONS

5.1 Academic contributions

Novel insights are added to academic research by exploring the relation between mobile marketing acceptance dimensions and the intention to participate in mobile marketing while performing a cross-country comparison and taking cultural values into account. Therefore, the originality of the present study is confirmed.

Moreover, the applied scales to measure dimensions of mobile marketing acceptance, the intention to participate in mobile marketing, and cultural values among Dutch and Portuguese smartphone users showed acceptable as well as very good internal consistency. This verifies that the proposed framework is adequate to explore the relationships which are addressed by the research questions. The reliability analysis results were especially very good for the scales of collectivism, uncertainty avoidance, perceived value and shopping style, which implies that this study established a substantial measurement model for these dimensions.

In compliance with literature, mobile marketing acceptance positively influences the intention to participate in mobile marketing (Dix et al., 2017; Persaud & Azhar, 2012). In this study, among the dimensions of mobile marketing acceptance only perceived value explained smartphone users' intentions to participate in mobile marketing. Therefore, perceived value can be considered as a determinant of smartphone users' intentions to participate in mobile marketing. In accordance with literature, the influence was found to be positive (Billore & Sath, 2015; Persaud & Azhar, 2012; Ström et al., 2014). On the other hand, the absence of a relationship with shopping styles is in conflict with previous research (Persaud & Azhar, 2012). Furthermore, the irrelevance of brand trust in explaining intentions to participate in mobile marketing is unaligned with past studies claiming that brand trust is a prerequisite for mobile marketing acceptance (Barnes & Scornavacca, 2004; Bauer et al., 2005; Grant & O'Donohoe, 2007; Persaud & Azhar, 2012). Nevertheless, the study of Dix et al. (2017) also suggested that brand trust does not influence the intention to receive mobile marketing messages.

Regarding the question whether significant differences exist between The Netherlands and Portugal, this study revealed that, as expected, Dutch respondents indicated a better fit between mobile marketing and their idea of shopping than Portuguese respondents. It was also confirmed that compared to Dutch smartphone users, Portuguese smartphone users would rather feel more comfortable with mobile marketing when they know the marketer and when permission is obtained, implying a higher need for brand trust. Both differences can be explained by the fact

that The Netherlands is more technologically developed than Portugal. Because of this, Dutch consumers are more tech-savvy, and therefore their shopping styles are more compatible with e-commerce channels, such as the smartphone. The lower technologic development in Portugal also implicates fewer experience with mobile marketing, and therefore a higher need for trust in the marketer (Zhang & Mao, 2008). In addition, perceived value was expected to be significantly different for the nations (Choi et al., 2008; Sinkovics et al., 2012; Steenkamp & Geyskens, 2006). However, this was not the case, implying that Dutch and Portuguese smartphone users perceive equally the value they receive from mobile marketing.

With regards to the intention to participate in mobile marketing, Dutch smartphone users are more intent to participate than Portuguese smartphone users. Despite this difference, for both users the intention to participate in mobile marketing can only be explained by perceived value. Thus, in The Netherlands as well as in Portugal, perceived value is a determinant of consumers' intentions to participate in mobile marketing. This supports findings of previous studies stating that determinants of mobile marketing participation do not differ across countries (Choi et al., 2008; Sultan et al., 2009).

Additionally, past research suggested that cultural values influence mobile marketing acceptance (Choi et al., 2008; M. J. Kim & Jun, 2008; Muk, 2007). In contrast, this assumption is proven to be invalid by this study, given the insignificant relationship between cultural values and mobile marketing acceptance. Still, a deeper analysis revealed significant individual relationships between the cultural values and mobile marketing acceptance dimensions. Although the models had a weak predictive ability, and therefore the results may be disputed. As expected, collectivistic smartphone users indicated a lower fit between mobile marketing and their idea of shopping. These users are less intent to shop through such innovative devices as smartphones due to the lower innovativeness of collectivistic cultures (de Mooij, 1998; Steenkamp et al., 1999; Yaveroglu & Donthu, 2002; Yenyurt & Townsend, 2003). Because of this lower innovativeness and in turn experience with mobile marketing, brand trust is of higher importance for collectivistic smartphone users (Zhang & Mao, 2008). Brand trust was also more relevant for uncertainty avoidant respondents, which can be explained by their aversiveness towards the unknown, and therefore higher need to know and trust the marketer (Hofstede, 1991, 2001a).

In accordance with (Hofstede, 2001b) The Netherlands and Portugal are proven to be culturally different. The results showed that Portuguese consumers are more collectivistic and uncertainty avoidant ($\bar{x} = 5,410$ and $\bar{x} = 5,649$ respectively) than the Dutch ($\bar{x} = 4,179$ and $\bar{x} = 4,742$

respectively). Differences were also found in the role of culture in explaining mobile marketing acceptance. For Portugal, uncertainty avoidance appeared to have a positive effect on overall mobile marketing acceptance. This unexpected insight comes from the contradicting result (Gao et al., 2013; Ng, 2014; Rohm et al., 2012) that smartphone users with higher scores on uncertainty avoidance saw mobile marketing more consistent with their idea of shopping. At the same time, higher collectivism among Portuguese smartphone users, implied a lower fit between shopping styles and mobile marketing, but a higher relevance of brand trust. Both relationships might be explained by, as mentioned before, the lower innovativeness of collectivistic cultures (de Mooij, 1998; Steenkamp et al., 1999; Yaveroglu & Donthu, 2002; Yenyurt & Townsend, 2003). However, all of the models have a low predictive ability, and therefore cultural values only explain mobile marketing acceptance to a small extent in Portugal. Moreover, in The Netherlands cultural values do not explain mobile marketing acceptance at all. This might result from globalization, which makes cultural values less salient, and consequently consumers attach less importance to cultural values (Craig & Douglas, 2006; Hornikx, de Groot, Timmermans, Mariëns, & Verckens, 2010).

5.2 Managerial contributions

The cross-cultural analysis of mobile marketing acceptance dimensions and which ones explain the intention to participate in mobile marketing performed by this study is highly relevant for managers in The Netherlands and Portugal. The fact is that, for companies targeting consumers from countries dissimilar technological development and cultural values, it is of high importance to understand differences in mobile marketing acceptance (Jiménez & San-Martín, 2017). They need to assure a fit between the advertisements and smartphone users' behavior. Otherwise, click-through rates might strongly decrease over time, resulting in a waste of the mobile marketing expenditures (Sinkovics et al., 2012).

It is crucial for managers in The Netherlands and Portugal that smartphone users perceive value from their mobile marketing practices. Firms should not just display mobile ads to follow the latest technologic development, but they should do it with the purpose of delivering value to consumers, since only in this way smartphone users will be intent to participate in mobile marketing (Heikki Karjaluoto, Lehto, Leppäniemi, & Jayawardhena, 2008). Marketers should aim to develop mobile marketing messages that increase shopping efficiency, improve shopping decisions and that save money for smartphone users. For example, sending an in-store mobile coupon can improve the consumer's shopping efficiency and at the same time it can save the consumer money (Ström et al., 2014), which results in a greater perceived value. The

importance of accurate personalization is emphasized, since ads are more valuable when they fit the consumers' needs, instead of displaying irrelevant messages that can result in annoyance (Y. J. Kim & Han, 2014). At the same time this raises a conflict, since personalization is limited due to the European privacy laws regarding the tracking of consumers' mobile behavior (European Commission, 2016; King & Jessen, 2010). In addition, Dutch and Portuguese smartphone users will feel more comfortable with mobile marketing if their permission is obtained before mobile marketing messages are shown. Hence, mobile marketers in The Netherlands and Portugal should deliver value through adapting the messages to the smartphone users, but simultaneously they should be cautious of not being too intrusive, such as by enabling smartphone users to opt-in. Generally it is not recommended to send mobile marketing messages through text messages, since Dutch and Portuguese smartphone users are not willing to receive them. Instead, marketers should offer coupons, web offers, and ads that are appropriate to smartphone users' needs.

In the case of mobile marketing in Portugal, marketers should focus on building brand trust, since this makes Portuguese smartphone users strongly feel more comfortable with mobile marketing. Besides asking for permission, it is highly essential that the smartphone users know the marketer. Therefore, Portuguese marketers should aim to raise awareness of their brands among smartphone users. They should also target the users that have already visited the company's page, in other words perform retargeting (Criteo, 2016), since these users already know the brand. Further, they could take into account the collectivistic nature of the smartphone users, which implies that consumers are strongly influenced by their peers (Jiménez & San-Martín, 2017; Muk & Chung, 2015). For example, it could be effective to create a mobile marketing campaigns that rely on peer-to-peer communications by smartphone users, such as a viral marketing campaign, which is aimed to be shared among consumers and create a buzz (Sultan et al., 2009; van der Lans, van Bruggen, Eliashberg, & Wierenga, 2010). Moreover, collectivism and uncertainty avoidance should be considered when adapting mobile marketing to Portuguese shopping styles. Marketers should aim for this adaptation, since the current fit between mobile marketing and Portuguese shopping styles is relatively low. On the contrary, marketers in The Netherlands should not consider cultural values while creating mobile marketing campaigns. As indicated before, they should develop their mobile marketing strategies in a way that Dutch smartphone users perceive to receive value from the mobile marketing. Despite the fact that the intention to participate in mobile marketing is already higher in The Netherlands, marketers can still boost this intention through increasing the perceived

value, and in this way mobile marketing will be effective. In addition, the Dutch smartphone users' permission should be obtained, since this will make them feel more comfortable with mobile marketing.

Given these insights, mobile marketers in The Netherlands and Portugal could apply a similar approach. Nevertheless, for The Netherlands the main focus should be on delivering value, and permission should be obtained, whereas for Portuguese smartphone users the fit with shopping styles and developing brand trust should be rather considered as well. In addition, marketers in Portugal could adopt the preliminary insights from this research to adjust their mobile marketing to different cultural values of smartphone users.

5.3 Limitations and future research

This thesis provided significant insights for both academic researchers and marketers in the field of mobile marketing. Still, certain limitations are attributed to this study.

The main limitation of this research is the adopted non-probabilistic convenience sampling method, since this sampling method is not representative for the population. Due to this and the relatively small sample size the results are not allowed to be generalized.

Another limitation is that only The Netherlands and Portugal were studied. In order to have a fair cross-cultural analysis, at least five countries must be compared (de Mooij & Hofstede, 2010). For mobile marketers it can also be insightful if more countries were included so that they have insights for the segmentation of different markets. In addition, this study was limited to examining the influence of two of Hofstede's cultural values. The model would be more complete when more or all of the cultural values were included.

As mentioned before, perceived value was the only dimension explaining the intention to participate in mobile marketing of both Dutch and Portuguese smartphone users. Despite the fact that the perceived value did not differ between the nations, there was still a difference between The Netherlands and Portugal in the intention to participate in mobile marketing. Hence, it seems that this difference in the intention might be explained by other factors than perceived value, shopping style and brand trust, and that could be clarified by future research.

Further, adding a qualitative part through for example, interviews with managers and marketers from The Netherlands and Portugal as well as focus groups with smartphone users from both nations, would provide a deeper understanding of the topic. Moreover, instead of measuring intentions, smartphone user's actual behavior towards mobile marketing could be studied, such

as by measuring click and conversion rates of the different types of mobile marketing activities. In this way, more reliable results can be established, since the measurement of intentions might have been less accurate due to social desirability bias. Despite the fact that survey responses were assured to be strictly anonymous and confidential, it is still possible that respondents answer in a way that they perceive as accepted by others.

APPENDICES

Appendix 1

Survey in Dutch

Beste deelnemer,

Allereerst wil ik u hartelijk danken voor uw deelname aan dit onderzoek. Ik ben een eindejaarsstudent van de master in International Management op Universidade Católica Portuguesa in Lissabon. Voor mijn afstuderen doe ik onderzoek naar advertenties op mobiele telefoons.

Het invullen van de enquête zal slechts 10 minuten duren en uw antwoorden zijn volledig anoniem.

Mocht u nog vragen of opmerkingen hebben over het onderzoek, neem dan contact met mij op via kimvandeplasse@gmail.com.

Nogmaals hartelijk dank voor uw deelname!

Met vriendelijke groet,

Kim van de Plasse

Q1 Gebruikt u een smartphone? (onder een smartphone wordt verstaan een mobiele telefoon die wordt bediend via een touchscreen of toetsenbordje en die veel capaciteiten van een computer heeft, zoals een agenda, een camera, internet en e-mail)

- Ja (1)
- Nee (2)

Q2 Wat is uw nationaliteit? (geef de nationaliteit aan van het land waar u 10 jaar of langer onafgebroken heeft gewoond)

- Nederlands (1)
- Portugees (2)
- Anders, namelijk: (3) _____

Q3 Eerst worden er algemene vragen gesteld. Daarna volgen er vragen over mobiele advertenties.

Geef hieronder aan in hoeverre u het eens bent met de volgende stellingen over regels en voorschriften in een werksituatie, op een schaal van 1 - Helemaal mee oneens tot 7 - Helemaal mee eens.

	Zeer mee oneens (1)	Mee oneens (2)	Een beetje mee oneens (3)	Neutraal (4)	Een beetje mee eens (5)	Mee eens (6)	Zeer mee eens (7)
Het is belangrijk dat instructies tot in detail zijn omschreven, zodat ik altijd weet wat er van mij verwacht wordt. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Het is belangrijk om instructies en procedures strikt op te volgen. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regels en voorschriften zijn belangrijk, omdat ze aangeven wat er van mij verwacht wordt. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gestandaardiseerde werkprocessen zijn nuttig. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instructies voor het verrichten van handelingen zijn belangrijk. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q4 Geef hieronder aan in hoeverre u het eens bent met de volgende stellingen over uw relatie als een individu met een groep, op een schaal van 1 - Helemaal mee oneens tot 7 - Helemaal mee eens.

	Zeer mee oneens (1)	Mee oneens (2)	Een beetje mee oneens (3)	Neutraal (4)	Een beetje mee eens (5)	Mee eens (6)	Zeer mee eens (7)
Individen moeten hun eigen interesses opofferen voor het belang van de groep. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Men moet bij de groep blijven, zelfs in het geval van moeilijkheden. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Het welzijn van de groep is belangrijker dan een individuele beloning. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Het succes van de groep is belangrijker dan individueel succes. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Men moet pas eigen doelen nastreven na rekening gehouden te hebben met het welzijn van de groep. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Loyaliteit aan de groep moet worden aangemoedigd, ook al gaat het ten koste van eigen doelen. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q5 Geef hieronder aan in hoeverre u het eens bent met de volgende stellingen over advertenties die u ontvangt op uw mobiele telefoon, op een schaal van 1 - Helemaal mee oneens tot 7 - Helemaal mee eens.

	Zeer mee oneens (1)	Mee oneens (2)	Een beetje mee oneens (3)	Neutraal (4)	Een beetje mee eens (5)	Mee eens (6)	Zeer mee eens (7)
Mobiele advertenties helpen mij betere beslissingen te nemen tijdens het aankopen doen. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mobiele advertenties helpen mij tijd te besparen bij het zoeken naar producten en diensten. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mobiele advertenties helpen mij efficiënter aankopen te doen, met name wanneer ik haast heb of wanneer ik in een nieuwe stad ben. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mobiele advertenties helpen mij geld te besparen. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q6 Geef hieronder aan in hoeverre u het eens bent met de volgende stellingen over advertenties die u ontvangt op uw mobiele telefoon, op een schaal van 1 - Helemaal mee oneens tot 7 - Helemaal mee eens.

	Zeer mee oneens (1)	Mee oneens (2)	Een beetje mee oneens (3)	Neutraal (4)	Een beetje mee eens (5)	Mee eens (6)	Zeer mee eens (7)
Mobiele advertenties irriteren mij. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mobiele advertenties passen niet bij mijn manier van aankopen doen. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mobiele advertenties passen niet bij mijn voorstelling van aankopen doen. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q7 Geef hieronder aan in hoeverre u het eens bent met de volgende stellingen over advertenties die u ontvangt op uw mobiele telefoon, op een schaal van 1 - Helemaal mee oneens tot 7 - Helemaal mee eens.

	Zeer mee oneens (1)	Mee oneens (2)	Een beetje mee oneens (3)	Neutraal (4)	Een beetje mee eens (5)	Mee eens (6)	Zeer mee eens (7)
Ik zou me prettiger voelen bij mobiele advertenties wanneer er toestemming wordt gevraagd voordat ik de advertenties ontvang. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik zou me prettiger voelen bij mobiele advertenties als ik de adverteerder ken. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q8 Geef hieronder aan in hoeverre u het eens bent met de volgende stellingen over advertenties die u ontvangt op uw mobiele telefoon, op een schaal van 1 - Helemaal mee oneens tot 7 - Helemaal mee eens.

	Zeer mee oneens (1)	Mee oneens (2)	Een beetje mee oneens (3)	Neutraal (4)	Een beetje mee eens (5)	Mee eens (6)	Zeer mee eens (7)
Ik zou graag advertenties als berichten ontvangen op mijn mobiele telefoon (bijvoorbeeld via SMS, WhatsApp of Facebook Messenger). (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik zou reageren op mobiele advertenties als ze te maken hebben met iets waar ik naar op zoek ben. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik ben bereid deel te nemen aan enquêtes die ik ontvang op mijn mobiele telefoon. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik zou reageren op een kortingsbon voor een product of dienst die ik ontvang op mijn mobiele telefoon. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik zou reageren op aanbiedingen die ik ontvang tijdens het surfen op het internet via mijn mobiele telefoon. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q9 Geef hieronder aan hoe vaak u de volgende activiteiten uitvoert op uw mobiele telefoon, op een schaal van 1 - Nooit tot 7 - Altijd.

	Nooit (1)	Ze zelden (2)	Zelden (3)	Soms (4)	Vaak (5)	Ze er vaak (6)	Altijd (7)
Sociale media pagina's (Facebook, Instagram, LinkedIn enz.) bezoeken (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Op het internet surfen (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Berichten versturen (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Navigatie applicaties raadplegen (e.g. Google Maps, Maps) (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inbox bekijken (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Iemand bellen (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Foto's/video's maken (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Producten en diensten kopen (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Muziek luisteren (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spelletjes spelen (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q10 Geef hieronder aan hoe vaak u de volgende sociale media pagina's bezoekt op uw mobiele telefoon.

	Nooit (1)	1 - 3 keer per week (2)	4 - 7 keer per week (3)	8 keer per week of meer (4)
Facebook (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instagram (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Twitter (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Snapchat (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
YouTube (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Google+ (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LinkedIn (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pinterest (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tumblr (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q11 Wat is uw geslacht?

- Man (1)
- Vrouw (2)

Q12 Tot welke categorie behoort uw leeftijd?

- 18 - 25 jaar (2)
- 26 - 30 jaar (3)
- 31 - 40 jaar (4)
- 41 - 50 jaar (5)

- 51 - 60 jaar (6)
- Boven de 60 jaar (7)

Q13 Welke van de volgende opties beschrijft uw huidige situatie het beste?

- Student (1)
- Werkloos (2)
- Werkzaam in loondienst (3)
- Werkzaam als zelfstandig ondernemer (6)
- Gepensioneerd (4)
- Anders, namelijk: (5) _____

Q14 Wat is uw hoogst behaalde opleidingsniveau?

- Geen (1)
- Basisschool (2)
- Middelbare school (3)
- Middelbaar beroepsonderwijs (MBO) (4)
- Hoger beroepsonderwijs (HBO) (5)
- Universiteit bachelor (6)
- Universiteit master (7)
- Universiteit doctor (8)

Survey in Portuguese

Caro participante,

Muito obrigada por dispensar o seu tempo para responder a estas questões. Este questionário é realizado no âmbito da tese para conclusão do mestrado Internacional em Gestão na Universidade Católica Portuguesa, tendo como objetivo estudar marketing (publicidade) em dispositivos móveis.

O questionário não demorará mais do que 10 minutos. Declaro que toda a informação prestada será confidencial.

Caso tenha alguma observação quanto a este estudo pode contatar-me através do e-mail kimvandeplasse@gmail.com.

Muito obrigada pela sua participação!

Melhores Cumprimentos,

Kim van de Plasse

Q1 Usa um smartphone? (ou seja, um telefone móvel que é navegado com um ecrã tátil ou teclado e que tem muitas capacidades semelhantes a um computador pessoal, como uma agenda, uma câmara, internet e e-mail)

- Sim (1)
- Não (2)

Q2 Por favor indique a sua nacionalidade: (indique o país em que viveu pelo menos 10 anos)

- Holandesa (1)
- Portuguesa (2)
- Outro, por favor especifique: (3) _____

Q3 Primeiro, irão ser feitas perguntas gerais, seguidas de questões sobre publicidade no telemóvel.

Indique em que medida cada uma das seguintes frases melhor traduz a sua opinião em relação às regras e normas no trabalho, numa escala compreendida entre 1 – Discordo totalmente e 7 – Concordo totalmente.

	Discordo totalmente (1)	Discordo em grande parte (2)	Discordo em parte (3)	Não concordo nem discordo (4)	Concordo em parte (5)	Concordo em grande parte (6)	Concordo totalmente (7)
É importante ter instruções detalhadas de forma a saber o que é esperado da minha parte. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
É muito importante seguir as instruções e procedimentos com rigor. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regras e regulamentos são importantes para mim pois informam-me do que é esperado da minha parte. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Procedimentos de trabalho padronizados são úteis. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
As instruções são importantes para as operações. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q4 Indique em que medida cada uma das seguintes frases melhor traduz a sua opinião em relação à relação enquanto um indivíduo com um grupo, numa escala compreendida entre 1 – Discordo totalmente e 7 – Concordo totalmente.

	Discordo totalmente (1)	Discordo em grande parte (2)	Discordo em parte (3)	Não concordo nem discordo (4)	Concordo em parte (5)	Concordo em grande parte (6)	Concordo totalmente (7)
Os indivíduos devem sacrificar-se pelo grupo. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Os indivíduos devem permanecer com o grupo, mesmo em situações de dificuldade. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
O bem-estar de grupo é mais importante do que as recompensas individuais. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
O sucesso do grupo é mais importante do que o sucesso individual. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Os indivíduos só devem seguir os seus objetivos depois de considerar o bem-estar do grupo. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A lealdade de grupo deve ser incentivada mesmo que os objetivos individuais sofram. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q5 Indique em que medida cada uma das seguintes frases melhor traduz a sua opinião em relação à publicidade que recebe no seu telemóvel, numa escala compreendida entre 1 – Discordo totalmente e 7 – Concordo totalmente.

	Discordo totalmente (1)	Discordo em grande parte (2)	Discordo em parte (3)	Não concordo nem discordo (4)	Concordo em parte (5)	Concordo em grande parte (6)	Concordo totalmente (7)
As mensagens de marketing que recebo no meu telemóvel ajudam-me a tomar melhores decisões de compra. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
As mensagens de marketing que recebo no meu telemóvel ajudam a reduzir o tempo que demoro a procurar produtos e serviços. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
As mensagens de marketing que recebo no meu telemóvel ajudam a melhorar a minha eficiência de compras, especialmente quando estou com pressa ou numa cidade nova. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
As mensagens de marketing que recebo no meu telemóvel ajudam-me a poupar dinheiro. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q6 Indique em que medida cada uma das seguintes frases melhor traduz a sua opinião em relação à publicidade que recebe no seu telemóvel, numa escala compreendida entre 1 – Discordo totalmente e 7 – Concordo totalmente.

	Discordo totalmente (1)	Discordo em grande parte (2)	Discordo em parte (3)	Não concordo nem discordo (4)	Concordo em parte (5)	Concordo em grande parte (6)	Concordo totalmente (7)
As mensagens de marketing que recebo no meu telemóvel incomodam-me. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
O marketing em telemóveis não vai ao encontro do meu estilo de compras. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
O marketing através do telemóvel não vai ao encontro do meu conceito de fazer compras. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q7 Indique em que medida cada uma das seguintes frases melhor traduz a sua opinião em relação à publicidade que recebe no seu telemóvel, numa escala compreendida entre 1 – Discordo totalmente e 7 – Concordo totalmente.

	Discordo totalmente (1)	Discordo em grande parte (2)	Discordo em parte (3)	Não concordo nem discordo (4)	Concordo em parte (5)	Concordo em grande parte (6)	Concordo totalmente (7)
Antes de receber ofertas de marketing móvel, prefiro que me seja pedida permissão. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sinto-me mais confortável com ofertas de marketing através do telemóvel se conhecer a empresa/marca que as promove. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q8 Indique em que medida cada uma das seguintes frases melhor traduz a sua opinião em relação à publicidade que recebe no seu telemóvel, numa escala compreendida entre 1 – Discordo totalmente e 7 – Concordo totalmente.

	Discordo totalmente (1)	Discordo em parte (2)	Discordo em grande parte (3)	Não concordo nem discordo (4)	Concordo em parte (5)	Concordo em grande parte (6)	Concordo totalmente (7)
Gostaria de receber anúncios através de mensagens de texto no meu telemóvel. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Responderia a anúncios recebidos no meu telemóvel se forem adequados às minhas necessidades. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participaria em estudos enviados para o meu telemóvel. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Responderia a uma oferta especial para um produto ou serviço no meu telemóvel. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Responderia a ofertas online recebidas no meu telemóvel enquanto navegava na internet. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q9 Com que frequência executa as seguintes atividades no seu telemóvel? Numa escala compreendida entre 1 - Nunca e 7 - Sempre.

	Nunca (1)	Muito raramente (2)	Raramente (3)	Algumas vezes (4)	Frequentemente (5)	Muito frequentemente (6)	Sempre (7)
Visitar redes sociais (Facebook, Instagram, LinkedIn etc.) (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Navegar na Internet (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enviar mensagens (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Utilizar o GPS (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Verificar o e-mail (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fazer telefonemas (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tirar fotografias/fazer videos (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comprar produtos e serviços (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ouvir música (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jogar (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q10 Indique com que frequência visita as seguintes redes sociais no seu telemóvel.

	Nunca (1)	1 - 3 vezes por semana (2)	4 - 7 vezes por semana (3)	8 vezes por semana ou mais (4)
Facebook (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instagram (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Twitter (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Snapchat (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
YouTube (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Google+ (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LinkedIn (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pinterest (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tumblr (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q11 Por favor indique o seu sexo:

- Masculino (1)
- Feminino (2)

Q12 Que categoria inclui a sua idade?

- 18 - 25 anos (2)
- 26 - 30 anos (3)
- 31 - 40 anos (4)
- 41 - 50 anos (5)
- 51 - 60 anos (6)
- Mais de 60 anos (7)

Q13 Por favor indique a sua ocupação:

- Estudante (1)
- Desempregado (2)
- Empregado por conta própria (3)
- Empregado por conta de outrem (6)
- Reformado (4)
- Outro, por favor especifique: (5) _____

Q14 Por favor indique o seu nível de escolaridade:

- Nenhum (1)
- 1º ciclo (primária) (2)
- 2º ciclo (equivalente ao 6º ano) (3)
- 3º ciclo (equivalente ao 9º ano) (4)
- Secundário (equivalente ao 12º ano) (5)
- Licenciatura (6)
- Mestrado (7)
- Doutoramento (8)

Appendix 2

Table 17 – Cultural values' scale

Cultural values' scale (Yoo et al., 2011)			
Items			
Variable	Original Statement	Translation into Dutch	Translation into Portuguese
Uncertainty avoidance	It is important to have instructions spelled out in detail so that I always know what I'm expected to do.	Het is belangrijk dat instructies tot in detail zijn omschreven, zodat ik altijd weet wat er van mij verwacht wordt.	É importante ter instruções detalhadas de forma a saber o que é esperado da minha parte.
	It is important to closely follow instructions and procedures.	Het is belangrijk om instructies en procedures strikt op te volgen.	É muito importante seguir as instruções e procedimentos com rigor.
	Rules and regulations are important because they inform me of what is expected of me.	Regels en voorschriften zijn belangrijk, omdat ze aangeven wat er van mij verwacht wordt.	Regras e regulamentos são importantes para mim pois informam-me do que é esperado da minha parte.
	Standardized work procedures are helpful.	Gestandardiseerde werkprocessen zijn nuttig.	Procedimentos de trabalho padronizados são úteis.
	Instructions for operations are important.	Instructies voor het verrichten van handelingen zijn belangrijk.	As instruções são importantes para as operações.
Collectivism	Individuals should sacrifice self-interest for the group.	Individuen moeten hun eigen interesses opofferen voor het belang van de groep.	Os indivíduos devem sacrificar-se pelo grupo.
	Individuals should stick with the group even through difficulties.	Men moet bij de groep blijven, zelfs in het geval van moeilijkheden.	Os indivíduos devem permanecer com o grupo, mesmo em situações de dificuldade.
	Group welfare is more important than individual rewards.	Het welzijn van de groep is belangrijker dan een individuele beloning.	O bem-estar de grupo é mais importante do que as recompensas individuais.
	Group success is more important than individual success.	Het succes van de groep is belangrijker dan individueel succes.	O sucesso do grupo é mais importante do que o sucesso individual.
	Individuals should only pursue their goals after	Men moet pas eigen doelen nastreven na rekening	Os indivíduos só devem seguir os seus objetivos

	considering the welfare of the group.	gehouden te hebben met het welzijn van de groep.	depois de considerar o bem-estar do grupo.
	Group loyalty should be encouraged even if individual goals suffer.	Loyaliteit aan de groep moet worden aangemoedigd, ook al gaat het ten koste van eigen doelen.	A lealdade de grupo deve ser incentivada mesmo que os objetivos individuais sofram.

Table 18 – Mobile marketing acceptance dimensions’ scale

Mobile marketing acceptance dimensions’ scale (Persaud & Azhar, 2012)			
Items			
Variable	Original Statement	Translation into Dutch	Translation into Portuguese
Perceived value	Marketing messages received on my mobile phone help me make better shopping decisions.	Mobiele advertenties helpen mij betere beslissingen te nemen tijdens het aankopen doen.	As mensagens de marketing que recebo no meu telemóvel ajudam-me a tomar melhores decisões de compra.
	Marketing messages received on my mobile phone help to reduce the time it takes me to search for products and services.	Mobiele advertenties helpen mij tijd te besparen bij het zoeken naar producten en diensten.	As mensagens de marketing que recebo no meu telemóvel ajudam a reduzir o tempo que demoro a procurar produtos e serviços.
	Marketing messages received on my mobile phone help to improve my shopping efficiency, especially when I am in a hurry or in a new city.	Mobiele advertenties helpen mij efficiënter aankopen te doen, met name wanneer ik haast heb of wanneer ik in een nieuwe stad ben.	As mensagens de marketing que recebo no meu telemóvel ajudam a melhorar a minha eficiência de compras, especialmente quando estou com pressa ou numa cidade nova.
	Marketing messages received on my mobile phone save me money.	Mobiele advertenties helpen mij geld te besparen.	As mensagens de marketing que recebo no meu telemóvel ajudam-me a poupar dinheiro.
Shopping style	Marketing messages received on my mobile phone annoy me.	Mobiele advertenties irriteren mij.	As mensagens de marketing que recebo no meu telemóvel incomodam-me.

	Mobile marketing does not fit with my shopping style.	Mobiele advertenties passen niet bij mijn manier van aankopen doen.	O marketing em telemóveis não vai ao encontro do meu estilo de compras.
	Mobile marketing does not fit with my idea of shopping.	Mobiele advertenties passen niet bij mijn voorstelling van aankopen doen.	O marketing através do telemóvel não vai ao encontro do meu conceito de fazer compras.
Brand trust	I would feel more comfortable with mobile marketing if my permission were obtained before receiving marketing offers.	Ik zou me prettiger voelen bij mobiele advertenties wanneer er toestemming wordt gevraagd voordat ik de advertenties ontvang.	Antes de receber ofertas de marketing móvel, prefiro que me seja pedida permissão.
	I would feel more comfortable with mobile marketing if I knew the marketer.	Ik zou me prettiger voelen bij mobiele advertenties als ik de adverteerder ken.	Sinto-me mais confortável com ofertas de marketing através do telemóvel se conhecer a empresa/marca que as promove.

Table 19 – Intention to participate in mobile marketing's scale

Intention to participate in mobile marketing's Scale (Persaud & Azhar, 2012)			
Items			
Variable	Original Statement	Translation into Dutch	Translation into Portuguese
Intention to participate in mobile marketing	I would like to receive ads via text messages on my mobile phone.	Ik zou graag advertenties als berichten ontvangen op mijn mobiele telefoon (bijvoorbeeld via SMS, WhatsApp of Facebook Messenger).	Gostaria de receber anúncios através de mensagens de texto no meu telemóvel.
	I would respond to ads received on my mobile phone if they were appropriate to my needs.	Ik zou reageren op mobiele advertenties als ze te maken hebben met iets waar ik naar op zoek ben.	Responderia a anúncios recebidos no meu telemóvel se forem adequados às minhas necessidades.
	I would participate in surveys sent to my mobile phone.	Ik ben bereid deel te nemen aan enquêtes die ik ontvang op mijn mobiele telefoon.	Participaria em estudos enviados para o meu telemóvel.
	I would respond to a coupon offer for a product or service on my mobile phone.	Ik zou reageren op een kortingsbon voor een product of dienst die ik	Responderia a uma oferta especial para um produto ou serviço no meu telemóvel.

		ontvang op mijn mobiele telefoon.	
	I will respond to web offers received on my mobile phone while browsing the internet.	Ik zou reageren op aanbiedingen die ik ontvang tijdens het surfen op het internet via mijn mobiele telefoon.	Responderia a ofertas online recebidas no meu telemóvel enquanto navegava na internet.

Appendix 3

Table 20 – Mean values of frequencies of performing activities on smartphone

Phone activities (1 = never, 2 = very rarely, 3 = rarely, 4 = sometimes, 5 = often, 6 = very often, 7 = always)	Mean Total sample	Mean The Netherlands	Mean Portugal
Visit social media pages	5,59	5,45	5,76
Browse the Internet	5,41	5,36	5,47
Send messages	5,79	5,79	5,80
Use navigation applications	4,40	4,60	4,16
Check inbox	5,26	5,25	5,27
Call someone	5,12	4,74	5,57
Take pictures/videos	4,98	5,03	4,93
Buy products/services	3,04	3,54	2,44
Listen to music	4,52	4,70	4,31
Play games	3,21	3,39	2,99

Table 21 – Mean values of frequencies of visiting social media pages on smartphone

Social media pages 1 = never, 2 = 1 – 3 times per week, 3 = 4 – 7 times per week, 4 = 8 times per week or more	Mean Total sample	Mean The Netherlands	Mean Portugal
Facebook	3,510	3,471	3,557
Instagram	2,968	2,890	3,061

Twitter	1,799	1,859	1,728
Snapchat	2,250	2,515	1,939
YouTube	2,510	2,541	2,474
Google+	1,619	1,659	1,570
LinkedIn	1,976	2,022	1,921
Pinterest	1,297	1,252	1,351
Tumblr	1,117	1,111	1,123

Appendix 4

Table 22 – Univariate outliers

Dimension	Item	Number of univariate outliers
Uncertainty avoidance	It is important to have instructions spelled out in detail so that I always know what I'm expected to do.	3
	It is important to closely follow instructions and procedures.	2
	Rules and regulations are important because they inform me of what is expected of me.	2
	Standardized work procedures are helpful.	2
	Instructions for operations are important.	1

Appendix 5

Table 23 – Cultural values (Descriptives and reliability)

CULTURAL VALUES (Yoo et al., 2011)						
	Mean	Std. Deviation	Cronbach's alpha	Overall Mean	Cronbach's alpha	Overall Mean
UA - It is important to have instructions spelled out in detail so that I always know what I'm expected to do.	5,11	1,446	0,896	5,156	0,901	4,929

UA - It is important to closely follow instructions and procedures.	5,09	1,383				
UA - Rules and regulations are important because they inform me of what is expected of me.	5,20	1,300				
UA - Standardized work procedures are helpful.	5,01	1,250				
UA - Instructions for operations are important.	5,37	1,242				
COL - Individuals should sacrifice self-interest for the group.	4,38	1,517	0,89	4,741		
COL - Individuals should stick with the group even through difficulties.	4,87	1,411				
COL - Group welfare is more important than individual rewards.	4,88	1,365				
COL - Group success is more important than individual success.	4,94	1,407				
COL - Individuals should only pursue their goals after considering the welfare of the group.	4,57	1,458				
COL - Group loyalty should be encouraged even if individual goals suffer.	4,81	1,427				

Table 24 – Mobile marketing acceptance (Descriptives and reliability)

MOBILE MARKETING ACCEPTANCE (Persaud & Azhar, 2012)						
	Mea n	Std. Deviation	Cronbac h's Alpha	Overall Mean	Cronbach's Alpha	Overall Mean
PV - Marketing messages received on my mobile phone help me make better shopping decisions.	3,30	1,555	0,897	3,324	0,783	4,360
PV - Marketing messages received on my mobile phone help to reduce the time it takes	3,42	1,548				

me to search for products and services.						
PV - Marketing messages received on my mobile phone help to improve my shopping efficiency, especially when I am in a hurry or in a new city.	3,31	1,569				
PV - Marketing messages received on my mobile phone save me money.	3,27	1,542				
SS - Marketing messages received on my mobile phone do not annoy me. (R)	2,60	1,372	0,883	4,996		
SS - Mobile marketing does not fit with my shopping style. (R)	3,15	1,552				
SS - Mobile marketing does fit with my idea of shopping. (R)	3,25	1,586				
BT - I would feel more comfortable with mobile marketing if my permission were obtained before receiving marketing offers.	5,63	1,448	0,649	5,476		
BT - I would feel more comfortable with mobile marketing if I knew the marketer.	5,32	1,529				

Table 25 – Intention to participate in mobile marketing (Descriptives and reliability)

INTENTION TO PARTICIPATE IN MOBILE MARKETING (Persaud & Azhar, 2012)				
Item	Mean	Std. Deviation	Cronbach's Alpha	Overall Mean
IP - I would like to receive ads via text messages on my mobile phone.	2,28	1,432	0,791	3,419
IP - I would respond to ads received on my mobile phone if they were appropriate to my needs.	4,10	1,686		
IP - I would participate in surveys sent to my mobile phone.	2,86	1,589		
IP - I would respond to a coupon offer for a product or service on my mobile phone.	4,12	1,586		
IP - I will respond to web offers received on my mobile phone while browsing the internet.	3,75	1,569		

Appendix 6

Table 26 – KMO and Bartlett's Test

Kaiser-Meyer-Olkin measure of sampling adequacy.		0,850
Bartlett's Test of Sphericity	Approx. Chi-Square	3821,328
	df	300
	Sig.	0,000

Table 27 – Total variance explained

Component	Initial eigenvalues			Extraction sums of squared loadings			Rotation sums of squared loadings		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1	6,407	25,627	25,627	6,407	25,627	25,627	4,008	16,032	16,032
2	5,310	21,240	46,867	5,310	21,240	46,867	3,693	14,771	30,803
3	2,150	8,602	55,468	2,150	8,602	55,468	3,394	13,575	44,378
4	1,544	6,176	61,644	1,544	6,176	61,644	2,564	10,257	54,634
5	1,363	5,453	67,097	1,363	5,453	67,097	2,421	9,683	64,318
6	,931	3,722	70,819	,931	3,722	70,819	1,625	6,502	70,819

Table 28 – Rotated component matrix

	Component					
	1	2	3	4	5	6
UN - It is important to have instructions spelled out in detail so that I always know what I'm expected to do.	0,256	0,769	0,167	-0,080	-0,084	0,049
UN - It is important to closely follow instructions and procedures.	0,248	0,803	0,047	-0,035	0,019	0,033
UN - Rules and regulations are important because they inform me of what is expected of me.	0,190	0,890	-0,017	-0,035	-0,010	0,042
UN - Standardized work procedures are helpful.	0,238	0,718	-0,073	-0,078	0,012	0,052
UN - Instructions for operations are important.	0,145	0,859	-0,014	0,032	-0,071	0,052
COL - Individuals should sacrifice self-interest for the group.	0,737	0,189	0,104	0,045	-0,052	0,252
COL - Individuals should stick with the group even through difficulties.	0,687	0,310	0,136	-0,045	-0,054	0,203
COL - Group welfare is more important than individual rewards.	0,810	0,168	-0,002	-0,081	-0,068	0,025
COL - Group success is more important than individual success.	0,825	0,136	-0,063	-0,022	-0,136	-0,076

COL - Individuals should only pursue their goals after considering the welfare of the group.	0,770	0,198	0,024	-0,062	-0,049	0,043
COL - Group loyalty should be encouraged even if individual goals suffer.	0,764	0,204	0,018	0,010	-0,107	0,117
PV - Marketing messages received on my mobile phone help me make better shopping decisions.	0,071	0,006	0,840	0,185	0,154	0,030
PV - Marketing messages received on my mobile phone help to reduce the time it takes me to search for products and services.	0,031	0,027	0,804	0,242	0,221	-0,088
PV - Marketing messages received on my mobile phone help to improve my shopping efficiency, especially when I am in a hurry or in a new city.	0,005	0,053	0,846	0,230	0,165	-0,035
PV - Marketing messages received on my mobile phone save me money.	0,052	0,005	0,783	0,260	0,143	0,134
SS - Marketing messages received on my mobile phone annoy me. (R)	-0,090	-0,025	0,283	0,032	0,732	-0,242
SS - Mobile marketing does not fit with my shopping style. (R)	-0,176	-0,021	0,219	0,185	0,870	0,008
SS - Mobile marketing does not fit with my idea of shopping. (R)	-0,162	-0,061	0,221	0,193	0,877	-0,099
BT - I would feel more comfortable with mobile marketing if my permission were obtained before receiving marketing offers.	0,119	0,261	0,043	-0,030	-0,282	0,688
BT - I would feel more comfortable with mobile marketing if I knew the marketer.	0,334	0,146	0,160	0,149	-0,167	0,647
IP - I would like to receive ads via text messages on my mobile phone.	0,130	0,093	0,372	0,428	0,145	-0,302
IP - I would respond to ads received on my mobile phone if they were appropriate to my needs.	-0,073	-0,107	0,242	0,798	0,146	-0,049
IP - I would participate in surveys sent to my mobile phone.	-0,084	0,136	0,171	0,354	-0,097	-0,636
IP - I would respond to a coupon offer for a product or service on my mobile phone.	-0,103	-0,035	0,253	0,856	0,119	-0,039
IP - I will respond to web offers received on my mobile phone while browsing the internet.	-0,003	-0,123	0,384	0,739	0,099	0,010

Appendix 7

Table 29 – KMO and Bartlett's Test

Kaiser-Meyer-Olkin measure of sampling adequacy.		0,856
Bartlett's test of sphericity	Approx. Chi-Square	3732,220
	df	276
	Sig.	0,000

Table 30 – Total variance explained

Component	Initial eigenvalues			Extraction sums of squared loadings			Rotation sums of squared loadings		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1	6,362	26,509	26,509	6,362	26,509	26,509	3,968	16,535	16,535
2	5,249	21,869	48,379	5,249	21,869	48,379	3,635	15,145	31,680
3	2,132	8,881	57,260	2,132	8,881	57,260	3,273	13,636	45,316
4	1,538	6,408	63,668	1,538	6,408	63,668	2,548	10,615	55,931
5	1,186	4,943	68,611	1,186	4,943	68,611	2,408	10,035	65,966
6	0,915	3,812	72,423	0,915	3,812	72,423	1,550	6,457	72,423

Table 31 – Rotated component matrix

	Component					
	1	2	3	4	5	6
UN - It is important to have instructions spelled out in detail so that I always know what I'm expected to do.	0,253	0,773	0,172	-0,073	-0,091	0,066
UN - It is important to closely follow instructions and procedures.	0,246	0,808	0,049	-0,026	0,010	0,047
UN - Rules and regulations are important because they inform me of what is expected of me.	0,187	0,893	-0,017	-0,030	-0,013	0,066
UN - Standardized work procedures are helpful.	0,235	0,706	-0,086	-0,092	0,045	0,129
UN - Instructions for operations are important.	0,141	0,864	-0,006	0,033	-0,087	0,064
COL - Individuals should sacrifice self-interest for the group.	0,732	0,177	0,091	0,031	-0,035	0,288
COL - Individuals should stick with the group even through difficulties.	0,683	0,293	0,126	-0,065	-0,027	0,261
COL - Group welfare is more important than individual rewards.	0,810	0,174	0,010	-0,073	-0,086	0,011
COL - Group success is more important than individual success.	0,825	0,143	-0,057	-0,008	-0,144	-0,059
COL - Individuals should only pursue their goals after considering the welfare of the group.	0,770	0,209	0,033	-0,044	0-,074	0,013
COL - Group loyalty should be encouraged even if individual goals suffer.	0,761	0,195	0,006	0,005	-0,087	0,168
PV - Marketing messages received on my mobile phone help me make better shopping decisions.	0,068	-0,001	0,827	0,191	0,181	0,096
PV - Marketing messages received on my mobile phone help to reduce the time it takes me to search for products and services.	0,029	0,031	0,804	0,262	0,222	-0,053
PV - Marketing messages received on my mobile phone help to improve my shopping efficiency, especially when I am in a hurry or in a new city.	0,002	0,051	0,841	0,239	0,179	0,022

PV - Marketing messages received on my mobile phone save me money.	0,048	0,015	0,785	0,285	0,116	0,099
SS - Marketing messages received on my mobile phone annoy me. (R)	-0,086	-0,031	0,269	0,041	0,761	-0,197
SS - Mobile marketing does not fit with my shopping style. (R)	-0,175	-0,030	,205	0,182	0,875	-0,004
SS - Mobile marketing does not fit with my idea of shopping. (R)	-0,160	-0,061	0,215	0,204	0,869	-0,128
BT - I would feel more comfortable with mobile marketing if my permission were obtained before receiving marketing offers.	0,108	0,206	0,005	-0,115	-0,202	0,796
BT - I would feel more comfortable with mobile marketing if I knew the marketer.	0,323	0,092	0,115	0,074	-0,085	0,771
IP - I would like to receive ads via text messages on my mobile phone.	0,128	0,096	0,339	0,464	0,189	-0,169
IP - I would respond to ads received on my mobile phone if they were appropriate to my needs.	-0,082	-0,105	0,228	0,805	0,145	0,011
IP - I would respond to a coupon offer for a product or service on my mobile phone.	-0,113	-0,031	0,245	0,863	0,105	0,009
IP - I will respond to web offers received on my mobile phone while browsing the internet.	-0,012	-0,110	0,386	0,757	0,064	0,006

Appendix 8

Table 32 – Pearson correlation's analysis

Items	Uncertainty avoidance	Collectivism	Perceived value	Shopping style	Brand trust	Intention to participate in mobile marketing
Uncertainty avoidance	1	0,495*	0,052	-0,124	0,317*	-0,098
Collectivism	0,495*	1	0,069	-0,257*	0,423*	-0,077
Perceived value	0,052	0,069	1	0,452*	0,081	0,616*
Shopping style	-0,124*	-0,257*	0,452*	1	-0,292*	0,393*
Brand trust	0,317*	0,423*	0,081	-0,292*	1	-0,062
Intention to participate in mobile marketing	-0,098	-0,077	0,616*	0,393*	-0,062	1

Note: * Sig. at $p < 0,01$

Appendix 9

Table 33 – Independent samples t-tests for all items comparing the nationalities

Items	Nationality	Mean	Sig.
SS - Marketing messages received on my mobile phone annoy me. (R)	Dutch	2,81	0,009*
	Portuguese	2,36	
SS - Mobile marketing does not fit with my shopping style (R)	Dutch	3,39	0,009*
	Portuguese	2,88	
SS - Mobile marketing does not fit with my idea of shopping. (R)	Dutch	3,66	0,000*
	Portuguese	2,77	
BT - I would feel more comfortable with mobile marketing if my permission were obtained before receiving marketing offers.	Dutch	5,16	0,000*
	Portuguese	6,20	
BT - I would feel more comfortable with mobile marketing if I knew the marketer.	Dutch	4,66	0,000*
	Portuguese	6,10	
IP - I would like to receive ads via text messages on my mobile phone.	Dutch	2,15	0,138
	Portuguese	2,43	
IP - I would respond to ads received on my mobile phone if they were appropriate to my needs.	Dutch	4,34	0,011*
	Portuguese	3,80	
IP - I would respond to a coupon offer for a product or service on my mobile phone.	Dutch	4,41	0,001*
	Portuguese	3,77	
IP - I will respond to web offers received on my mobile phone while browsing the internet.	Dutch	3,98	0,010*
	Portuguese	3,47	

Note: * Sig. at $p < 0,05$

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