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A cross-national comparison of Millennial consumers' initial trust towards an E-travel website

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Purpose - The study examines Millennials' formation of trust towards a travel website and identifies the similarities and differences in trust formation among consumers from two countries – Denmark and Portugal.

Design/methodology/approach - The study is based on online surveys conducted with convenience samples from two culturally distant countries. Independent t-tests, structural equation modelling and multi-group analysis are used to verify the conceptual model and test the hypotheses.

Findings - Results support a strong relationship between initial trust towards a travel website and consumers' behavioural intentions. The results also suggest that cultural differences between countries moderate the formation of initial trust and behavioural reactions hereto.

Originality/value - The study provides new insights into understanding how Millennials from Portugal and Denmark form initial trust towards an e-travel website.

Keywords Millennials, Cross-cultural consumer behaviour, Initial online trust, E-travel website, Portugal, Denmark

Introduction

The Internet has experienced a global expansion and worldwide penetration over the last decade making online activities such as e-commerce common practice for many modern consumers. In 2016, 85% of all households in the 28 European member states had access to the Internet and every second European consumer purchased online within the last 12 months (Eurostat, 2017). Yet, although more and more consumers acknowledge the benefits of online shopping (i.e. shopping convenience,

broader selection of products and lower prices), perceived risk is affecting consumer's willingness to engage. When purchasing online, consumers are faced with an uncertain situation and grow increasingly critical towards sensitive personal information shared in the purchasing process (Grabner-Kräuter and Kaluscha, 2003). In this context, building and maintaining trust becomes of vital importance to online marketers as numerous studies have evidenced the lack of trust among the main reasons for consumers' reluctance to online shopping (Hoffmann *et al.*, 1999; Grabner-Kräuter and Kaluscha, 2003). Trust has evolved as means to reduce the perceived risks and thereby determines success or failure of e-vendors (Beldad *et al.*, 2010; Koufaris and Hampton-Sosa, 2004; McKnight *et al.*, 2002; Urban *et al.*, 2009).

One consumer group, which is incorporating the nature of online activities are the so-called "Millennials". The millennial generation includes individuals born between 1977 and 2000 who nowadays are in their 20s and 30s (Nielsen, 2014). Millennials have been identified as a driving force behind online shopping (Smith, 2012). However, the critical nature of these consumers is also evident in their perception of advertising on the Internet. Online marketing that is viewed in a negative manner can elicit a negative view of the brand being marketed or the website that contains the ads and have a negative influence on Millennials' trust formation (Truong and Simmons, 2010).

Although e-commerce and online trust have received great interest among academics and practitioners within marketing and consumer behaviour, there seems to be a lack of cross-cultural research on young consumer's trust formation (Shankar *et al.*, 2002; Urban *et al.*, 2009). Especially Europe as a focus requires attention since existent research so far centres on the US as a cultural comparison point.

To address this research gap, this study aims at investigating whether national culture makes a difference in Millennials' formation of initial online trust among consumers from Northern and Southern Europe. Content of analysis will be a holiday planning website since travel is an emotional service product requiring high levels of initial trust due to high uncertainty, intangibility as well as personal and financial information exchange (Jensen, 2012). When booking a holiday, consumers are confronted with the intangible nature of the purchase, which relates to a considerable risk since there are no sensual cues to rely on. Trust in an operating system can here be a way to deal with the complicated decision-making process and to reduce uncertainties (Luhmann, 1979).

Thus, the purpose of this study is twofold; a) to propose and test a conceptual model for understanding Millennials' formation of initial trust and its relationship with their behavioural

reactions to a travel website; b) to identify the similarities and the differences in trust formation and behavioural reaction hereto among consumers from two countries – Denmark and Portugal.

With those purposes in mind, our study seeks to advance our current understanding of trust formation in e-commerce in several ways. First, studies conducted on trust formation in tourism and e-commerce are limited (Kim et al, 2011) so our study will help fill this gap. Second, Millennials have been identified as a fast-growing consumer segment and a driving force behind online shopping (Smith, 2012), and our findings will add knowledge to the current understanding of this segment. Third, because most research on Millennials' trust formation has been conducted in the US, there seems to be a need for more cross-cultural research investigating whether national culture makes a difference in the formation process (Shankar *et al.*, 2002; Urban *et al.*, 2009). Our study addresses this gap, by analysing data from Denmark and Portugal.

Conceptual framework and hypotheses

Figure 1 presents our research model. The model includes three sets of variables: consumer characteristics, initial trust as the core construct and the intended behaviour as consequence hereof. More specifically, we intend to investigate the influence of three consumer characteristics on initial trust and behavioural intentions. Indicated in brackets are the proposed positive or negative relations. Each construct and the corresponding hypotheses are discussed in the following section.

INSERT FIGURE 1

Initial trust

Among others, Rousseau *et al.* (1998), Grabner-Kräuter and Kaluscha (2003) and Beldad *et al.* (2010) provide comprehensive literature reviews of trust research across various disciplines. Although there is a lack of consensus when it comes to a uniform definition, researchers agree on the importance of trust as an influencing factor on the trustor's behavioural intentions to act, i.e. sharing personal information with e-vendors and making purchases over the web (McKnight *et al.*, 2002). Furthermore, researchers agree that the development of trust is a dynamic process and changes over time. Rousseau *et al.* (1998) summarize three main phases of trust: the first phase of trust building, the second phase of trust stability and the third phase of dissolution. Although we acknowledge the dynamic nature of trust and the importance of maintaining trust, our study focuses solely on the first phase – *initial trust*. As Koufaris and Hampton-Sosa (2004) reason in relation to McKnight *et al.*'s

basic trust definition, it is thus the “willingness to rely on a third party after the first interaction” (2004, p.378). This study will therefore follow Koufaris and Hampton-Sosa’s (2004) initial trust factors for new online customers, which include three company and three website aspects. The company perceptions describe customization qualities, perceived reputation of the company acquired by third parties and the factor of size. The website perceptions are the factors security control and two elements of Davis (1979)’s technology acceptance model (TAM), the perceived usefulness and ease of use.

Behavioural intentions

Acknowledging that trust in a travel website should not only enhance consumer’s purchase intentions but also their willingness to follow the vendor’s advice and share sensitive information with the online vendor, we follow McKnight *et al.*’s (2002) suggestion and include three dimensions of intentional outcomes in our model. The first dimension of purchase intention is a frequently used measurement for trust in an online vendor. When an online company is trusted in the first phase of interaction, consumers are more likely to initiate a purchase. The second dimension is the consumer’s readiness to follow advice from the e-vendor, which is especially important for travel websites providing information about locations, hotels, flight tickets etc. It is expected that only a positive perception of initial trust results in the choice to depend on the vendor’s advice (McKnight *et al.*, 2002). The third dimension concerns the consumer’s willingness to share sensitive information with the e-vendor, such as personal or financial information. To have a successful online transaction and booking process, exchange of information is inevitable. The consumer’s willingness to offer and share sensitive information is therefore crucial for the success of an e-service interaction (McKnight *et al.*, 2002). We expect that consumers with a positive perception of initial trust are more likely to share sensitive information with the e-vendor. Our first hypothesis is therefore as follows:

H₁: There is a positive relationship between initial trust and the behavioural intentions

Consumer characteristics

The three consumer characteristics in our model emphasise the notion that the consumer’s personality affects the initial trust building process and are also the point where national culture is hypothesised to have an effect (Schoorman *et al.*, 2007).

Trust propensity

The first consumer characteristic in our model is trust propensity, a general, not situation-specific predisposition to trust others (McKnight *et al.*, 2002). As emphasised by Schoorman *et al.* (2007), this personality trait is expected to moderate the formation of trust by diminishing or increasing the perception of trustworthiness of the other party. Also, as Schoorman *et al.* (2007) propose, trust propensity might be the main influence point of national culture differences on trust and should therefore be investigated further. This study will follow Kim *et al.* (2009) and Chen and Barnes (2007) who suggest a positive relation of trust propensity to initial online trust. The second hypothesis for this study's research model is thus:

H₂: There is a positive relationship between trust propensity and initial trust

Propensity to web risk

The second consumer characteristic in our model is propensity to web risk. Rousseau *et al.* (1998) note that trust only becomes important because some sort of risk is present, which is the consumer's perception of a possible loss or harm. Researchers do not agree on the exact implications of risk on behavioural intentions. While some researchers propose a mediating effect of risk on trust (Jarvenpaa *et al.*, 2000), McKnight *et al.* (2002) hypothesise a direct negative effect of the consumer's perceived web risk on the behavioural outcomes, which this study will also follow. Thus, our third hypothesis is:

H₃: There is a negative relationship between propensity to web risk
and the behavioural intentions

Familiarity with e-commerce and e-travel shopping

The last consumer characteristic included is familiarity and confidence with the online action (Chen and Barnes, 2007). Familiarity and confidence are commonly related to the consumer's overall experience with e-commerce (Yoon, 2009), yet also increasingly specific actions like familiarity with e-travel shopping (Jensen, 2012). The latter is evidenced having a strong positive influence on the purchase intention of online travel products (Jensen, 2012). Our fourth hypothesis for this study is therefore:

H₄: There is a positive relationship between familiarity with e-travel
shopping and the behavioural intentions

National culture and hypotheses related hereto

Hofstede's cultural dimensions

Although culture has been defined in hundreds of ways, it is a general belief that national culture is one of many forces influencing consumer decision-making (Burgmann *et al.*, 2006; Rojas-Méndez *et al.*, 2017). Hofstede (1991) defines national culture as the collective programming of the mind, which distinguishes the members of one society from members of another, and suggests that national culture may be examined by five cultural dimensions: uncertainty avoidance, power distance, masculinity/femininity, individualism/collectivism, and long/short term orientation of life.

Regarding this study, we suggest that especially the two dimensions of individualism/collectivism and uncertainty avoidance are relevant. Prior studies (e.g. Lim *et al.*, 2004) suggest that those two dimensions affect people's trust formation and resistance to change. Members of individualistic cultures have a high propensity to trust in general and are more willing to trust people without knowing them (Jarvenpaa *et al.*, 1999). They also score low in risk aversion. In contrast, those high on collectivism are more likely to base their trust on relationships with first-hand knowledge and are more risk averse. Thus, people from collectivistic cultures may see purchase from new travel websites as riskier than people from individualist cultures (Jarvenpaa *et al.*, 1999).

Cultures with high uncertainty avoidance are less open towards change. Uncertainty avoidance does not equal risk avoidance, but it refers to how comfortable people feel towards uncertain or unknown situations. Purchasing travel products from an unknown website may constitute a matter of anxiety for people in countries with high uncertainty avoidance. In addition, Nath and Murphy (2004) evidenced that people who are high on uncertainty avoidance are risk averse and less likely to use the Internet.

Denmark and Portugal as research objects

Being in the northern and southern parts of Europe, respectively, Denmark and Portugal seem ideal countries for cross-national comparisons in a European context. The Hofstede Centre's (2017), ratings of the two countries confirm our expectation of interesting country differences on uncertainty avoidance and individualism/collectivism. Portugal is rated very high on uncertainty avoidance when compared to Denmark, 99 and 23 respectively. In contrast, for individualism, Denmark is rated on 74 and Portugal only 27. Thus, based on the discussion above, we expect Danes to be less resistant

to changes (i.e. Internet usage and online shopping) and to have a higher propensity to trust, when compared to Portuguese. A review of statistics from Eurostat also reflects this. In 2016, the proportion of Danish households with access to the Internet was 97 percent compared to 71 percent of the Portuguese households (Eurostat, 2017). 82 percent of the Danes had made an online purchase within the last twelve months compared to only 31 percent of the Portuguese (Eurostat, 2017).

The global survey of consumer confidence and spending intentions compares more than 30,000 Internet users in 60 countries (Nielsen, 2017). In relation to the global average of 104, great distinction is observable between Denmark and Portugal. The Danish confidence index of 115 indicates optimism and a very confident consumer culture. Portugal, in contrary, is far below average with only 82 points, which indicates pessimism and a more negative consumer culture (Nielsen, 2017).

To conclude from this, we suggest the following four hypotheses.

H₅: Propensity to trust is higher among Danish millennials when compared to their Portuguese counterpart.

H₆: Propensity to web risk is lower among Danish millennials when compared to their Portuguese counterpart.

H₇: Initial trust is higher among Danish millennials when compared to their Portuguese counterpart.

H₈: Behavioural intentions are higher among Danish millennials when compared to their Portuguese counterpart.

Research methodology

Survey instrument

To test our model and hypotheses, we used data from an online survey. The questionnaire was distributed in English to both country-groups. Due to our target audience of students at internationally-oriented universities in both countries, this procedure was deemed appropriate for minimising problems with translation invariance. The development of the questionnaire was based on our literature review. The questionnaire was composed of a short introduction part followed by 11 questions capturing basic information about the respondents such as gender, age, native language, nationality, Internet usage as well as familiarity with online shopping and credit card usage, followed

by six batteries with multi-item scales assessing each of the constructs included in the suggested model as well as our hypothesized website scenario.

The next three questions were multi-item scales with Likert-type statements intended to measure the respondent's propensity to trust, familiarity with e-travel shopping, and web risk attitudes. Some of the statements were phrased positively, some negatively to minimise response bias (Sanders *et al.*, 2009). Each statement was assessed on a 5-point Likert scale anchored on strongly disagree (=1) and strongly agree (=5).

The construct of propensity to trust was measured by four statements adopted from Koufaris and Hampton-Sosa (2004) and Gefen and Straub (2004). Familiarity with e-travel shopping was measured by two items adopted from Chen and Barnes (2007) and Jensen (2012). Web risk attitude was captured by four statements related to both financial and personal information, and adopted from McKnight *et al.* (2002) and Bellman *et al.* (2004).

The next part of the questionnaire concerned the website scenario. The hypothetical scenario was chosen to ensure that none of the participants had encountered the brand or company before. For the hypothetical homepage, the name DreamVacations.com was invented since it had positive connotations and could be perceived straightforwardly as a holiday website. Research made sure that the chosen domain did not exist on the web. In addition, it was important that the website description followed specific guidelines to be valid for the empirical analysis and possessing situational normality for the consumers (Gefen and Straub, 2004).

In the description/setup of our hypothesised travel website, we followed Koufaris and Hampton-Sosa's (2004) initial trust factors. Since vendor size had a questionable effect on initial trust it was decided to refrain from including big size in the description. The choice was made based on two main reasons. First, the market of holiday planning sites has Tripadvisor and booking.com as worldwide famous sources. Creating a new website with equal size would not follow the situational normality and likely be detected as abnormal. Second, the nature of Millennials supposes that small companies are seen as trustful as long as they have a good reputation. It was therefore chosen to focus on reputation rather than size. Figure 2 displays the image of the website description as used in the questionnaire, including the logo which was prepared for the study's website scenario by a graphic designer.

INSERT FIGURE 2

An overall short and positive description was created in the style of other holiday websites with emotional language emphasising advantages and positive connoted adjectives such as “relaxing”, “new” or “convenient”. The slogan “THE holiday of your dreams” was created in line with the logo. Moreover, the direct communication approach should highlight uniqueness of the service. For the font of the description, Georgia was chosen as a sportive and modern typeface. The DreamVacations logo includes a palm tree surrounded by a green frame as a neutral image relatable for the young consumers. The font and layout, like the overall questionnaire, were chosen to be clean and simple and therefore appealing to Millennials.

The arrows in the image above indicate the five initial trust factors. The factor customisation is mentioned right after the slogan by introducing the available holiday variations. As Koufaris and Hampton-Sosa (2004) note, customisation is common for tourism products and therefore expected by consumers. To respond to the key interests of Millennials, romance, fun as well as family trips were highlighted. Usefulness of information was mentioned by local tips, offers and the overall framing of “DreamVacations”. The respondents should feel that this holiday website offers exactly what they prefer and need. Further, basic security features are nowadays a necessity rather than specialty and security seals from trusted third parties can be an important factor of online trust formation and structural assurance, especially for new products and companies (Hu *et al.*, 2010). Hence, Trust Guard was chosen as a global customisable security seal and website verification (Trust-Guard, 2017).

As outlined before, reputation is one of the most important trust factors of a new website. Thus, reputation was included by a customer feedback ranking common for holiday websites. The ranking 4.5 out of 5, thus not the full points, was intentionally chosen since this could be analysed as the most positive ranking outcome. Precisely, a study by Lead Digital investigated that if an e-commerce website has an outstanding ranking of 5 stars, which implies no negative feedback at all, customers expect fraud and manipulated evaluations (Mattgey, 2014). Lastly, ease of use was indicated by highlighting the four easy steps of the booking process.

After the website description, the respondents were asked questions investigating trust perceptions and behavioural intentions. First, the main research variable initial trust was explored by Likert scale agreement to four statements. First and third statement were adapted from Ou and Sia’s (2010) trust measures based on website design, the second sentence from Jarvenpaa, *et al.*’s (2000) item of trustworthiness of an Internet store and the last as evaluating trusting intention from McKnight’s (2002) trust building model. Where necessary, the type of website was changed to “holiday” and “website” instead of “store”. The last questions asked about behavioural intentions via

Likert scale agreements, at first the likelihood of purchasing travel products or services from this new website and lastly the other two behavioural intentions thus the willingness to follow the e-vendor's advice and the willingness to share sensitive information (McKnight *et al.*, 2002).

Data collection and sample

Data for this study was collected through convenience sampling. Links to the online survey were distributed using the social network Facebook, as data collection in online settings is naturally more suitable for an e-commerce study (Chen, 2006; Malhotra and Peterson, 2001). During April 2014, a link to the questionnaire was posted in groups of the second (younger) author's Danish and Portuguese fellow students. To reach individuals outside the author's own circle, all contacts were asked to forward invitations to other acquaintances.

A total of 247 questionnaires were completed. To insure an adequate match to our target population (Millennials from Denmark and Portugal), the sample had to be checked for age and nationality. Using the boundaries set by (Nielsen, 2014) the accepted age range was 18-37. Six respondents, three Danish and three Portuguese, were older than this and therefore excluded from the analysis. 22 respondents had other nationalities than Denmark and Portugal and therefore also excluded from our sample. Finally, the total number of the usable sample for our cross-national analysis was 214, with 110 Danish respondents and 104 Portuguese.

The pooled sample consists of 33 percent men and 67 percent women. Most respondents (82 percent) are aged between 21 and 30 years. Supporting our understanding of Millennials as an Internet savvy generation, 99 percent of the total sample reported using the Internet daily. 93 percent have done online shopping and 70 percent of those have used a credit card for e-commerce.

As in any other study that deals with cross-national consumer behaviour, it is important that the characteristics of the comparison samples are as equivalent as possible on variables that are not expected to vary by national culture, i.e. gender and age. The two samples show a very similar and comparable gender distribution. Concerning age, the Portuguese sample is skewed towards the younger age groups when compared to the Danish sample being more represented in the upper age groups.

Turning to factors expected to vary across our two samples, 100 percent of the Danes and 98 percent of the Portuguese stated to use the Internet daily. Without doubt, the high level of Internet usage in both countries may to some extent be explained by our sampling method, using Facebook to distribute links to the questionnaire. 100 percent of the Danish respondents and 88 percent of the

Portuguese had done online shopping. Concerning credit card usage, 99 percent of the Danes who have done online purchases have paid with a credit card while only 37 percent of the Portuguese online shoppers have. Except for Internet usage, the figures confirm that Portuguese millennials are less innovative and more risk averse, when compared to their Danish counterparts.

Results

The analysis was done in four steps. First, the conceptual model in Figure 1 was translated into an SEM model with two parts: The measurement model and the structural equation model. Confirmatory factor analysis was conducted to test our measurement model and to test for measurement invariance across the two countries. Second, 1-sided t-tests were used to test our hypothesised nationality-related differences (H₅-H₈) with respect to the constructs included in our model. Third, the structural model and corresponding hypotheses (H₁-H₄) were tested on the pooled sample. Finally, a multi-group analysis was applied to test for country-related differences in the model's hypothesised relationships.

Measurement model analysis and test for cross-national invariance.

The results of the confirmatory factor analysis of our measurement model are displayed in Table 1. First observation is that χ^2 (df.=125) = 254.52 is highly significant (p<0.001) indicating that the model fails to fit in an absolute sense. However, the chi-square test is very powerful for big sample sizes and thus even good measurement models could be rejected. Therefore, many researchers agree that for sample sizes of more than 200, other goodness-of-fit indices besides the χ^2 -value should be considered, such as the χ^2/df ratio, comparative fit index (CFI) and the root mean square error of approximation (RMSEA) which are less affected by sample size (Hair *et al.* 2010; Byrne 2010; Gaskin 2013). The χ^2/df ratio of 2.04 indicates that the measurement model fits the data, since it is below the 3 thresholds for acceptable fit (Byrne, 2010). Also, the CFI value of 0.938 shows a good fit in comparison to the traditional minimum standard of 0.90 (Gaskin, 2013). Hair *et al.* (2010) suggest that RMSEA below or equal to 0.05 indicates a good model fit, between 0.05 and 0.08 a fair fit and up to 0.10 a moderate fit. The RMSEA of this measurement model is 0.070 and thus represents an acceptable fit.

The convergent validity of the latent variables is also supported. All factor loadings were highly significant (t-value > 2.64; p < 0.01), showing that the chosen generic questions for each latent

variable reflect a single underlying construct (Byrne, 2010). The reliabilities and estimates of extracted variance were computed by using the indicator's standardised loadings and measurement errors. As seen in the parentheses beside the respective constructs, all reliabilities are above the recommended 0.70 level and all but one with extracted variances above the 0.50 threshold (Hair *et al.*, 2010). Only the construct of propensity to web risk is slightly below the recommended level, however since the 0.50 level is increasingly questioned by researchers, this extracted variance can also be accepted (Cortina, 1998; Jensen, 2012). Overall, these results indicate that the model is reliable and valid.

INSERT TABLE 1

Discriminant validity was tested following Fornell and Larcker's (1981) approach. Table 4 displays the extracted variance for each construct in the diagonals and the shared variance among constructs (squared correlations) in the non-diagonals. The matrix shows a very good level of discriminant validity of all constructs, except for initial trust which has a very high correlation with behaviour (estimate 0.898), thus sharing high amount of variance. However, considering the hypothesised relation between the two constructs outlined above, the result is not surprising. For all remaining constructs, the extracted variance shown in the diagonals is well above the shared variance with other constructs shown in the non-diagonals.

INSERT TABLE 2

With the validation of our measurement model's applicability, a multi-group analysis was employed to examine the cross-national invariance of the measurement model. First, configural invariance was assessed by estimating our measurement model simultaneously on the two groups without any constraints on parameters. The model fit indices ($\chi^2/DF = 1.71$, RMSEA = .06, CFI = .91) fall within recommended ranges, indicating that the measurement model is appropriate for both countries. Next, metric invariance was tested by comparing the unconstrained model to a constrained one, in which factor loadings were constrained to be invariant across countries. The differences in χ^2 between the two models were not significant ($\Delta\chi^2 = 1.71$, $\Delta DF = 13$, $p < .01$) indicating that the factor loadings were the same for the two samples. Having met the conditions for metric invariance we can

assume the unit of measurement to be the same across countries (Byrne, 2010; Steenkamp and Baumgartner, 1989).

Nationality-related differences

Summated scales were used to test our hypothesised nationality-related differences (H₅-H₈) with respect to the constructs included in our model. Summated scales were calculated by averaging the responses to individual items belonging to each of the construct. Means and standard deviations for Danes and Portuguese are displayed along with corresponding t-tests for differences in the last three columns of Table 1. As expected, and paralleling results from Eurostat (2017) showing Danes as more familiar with e-commerce compared to Portuguese, Danes are significantly more familiar with e-travel commerce than Portuguese are. Regarding trust-propensity (H₅), Danes are significantly more trusting than the Portuguese ($M_{\text{Danes}} = 3.62$, $M_{\text{Portuguese}} = 3.15$, $t = 4.73$). Perceived web risk (H₆) is lower in the Danish group than in the Portuguese group ($M_{\text{Danes}} = 3.03$, $M_{\text{Portuguese}} = 3.14$, $t = -1.87$). Our hypotheses about Danes showing a higher level of initial trust (H₇) and behavioural intentions (H₈) could not be supported. Surprisingly, Portuguese scored significantly higher than Danes on the initial trust scale ($M_{\text{Danes}} = 2.82$, $M_{\text{Portuguese}} = 3.04$, $t = -3.06$) and the behavioural intentions scale ($M_{\text{Danes}} = 2.58$, $M_{\text{Portuguese}} = 2.79$, $t = -2.00$).

Structural Model and Hypothesis Testing

The initial test of the conceptual model suggested in Figure 1 revealed that the model did not fit well to the data as desired by model fit criteria. Modification indices suggested to include three correlations paths between the three consumer constructs of familiarity, trust propensity and web risk. These paths are theoretical plausible. For instance, consumers with a higher level of propensity to trust are expected to perceive less web risk and being more familiar with online shopping. Also, a lower level of perceived web risk is expected to produce more familiarity with online shopping. Thus, correlations were included between the three consumer characteristics indicating a positive correlation between familiarity and trust propensity ($r = .23$) and a negative correlation both between trust propensity and web risk ($r = -.41$) as well as familiarity and web risk ($r = -.41$).

INSERT TABLE 3

Table 3 shows the overall results of testing the proposed structural model and its hypotheses. The model fit indices for the structural model suggest an adequate fit ($\chi^2/df = 2.034$; CFI = 0.937; RMSEA = 0.070).

The path from trust propensity to initial trust is significant and positive ($\beta = 0.24$; $t = 3.05$), supporting H₁. Surprisingly, the path from familiarity to behavioural intentions is not significant ($\beta = 0.01$; $t = 0.12$), thus H₂ is not supported. The same applies for H₃, which concerned the relationship between the propensity to web risk and behavioural intentions. Even though as expected negative, also this path is insignificant and the hypothesis rejected ($\beta = -0.05$; $t = -0.82$). Lastly, H₄ concerned the relationship between initial trust and the behavioural intentions. The highly significant and strong positive relationship support this expectation ($\beta = 0.89$; $t = 12.62$).

The structural equation results further show that 81 percent of the variance for behavioural intentions can be explained by initial trust, which supports the great importance of initial trust in online travel consumer behaviour. On the contrary, only 6 percent of the variance for initial trust is explained by trust propensity. This is not surprising considering that initial trust is a situation-specific construct depending on a variety of other variables.

Summarising, the results of the structural equation modelling support a significant relationship between initial trust and consumer's behavioural intentions when assessing a new e-travel website. Further, the significant relationship between trust propensity and initial trust supports the importance of cultural consumer characteristic in the formation of initial trust.

Multi-group Analysis

Multi-group analysis in AMOS compared the structural relationships from the model across the two nationality groups using Gaskin's (2013) statstool computations with regression weights and pairwise parameter comparisons. The results of the multi-group analysis are displayed in the last two columns of Table 5. The model is not different across the two nationalities at the p 0.05 or 0.01 level. However, two paths are significantly different at the 0.10 level, which can be accepted because of the relatively small sample size (Gaskin, 2013). As seen in the second row, there is weak significant difference of the path familiarity → behaviour relationship between the two nationalities. Although not significant, for the Portuguese this path would be negative whereas zero or positive for the Danes. Most surprising is the third row, which shows different path relations of web risk → behaviour across the two groups. The significant negative path relationship for the Portuguese group in web risk to behaviour at the

0.05 level supports the expected negative effect of perceived web risk on behaviour from the initial measurement model but only for the young Portuguese consumers.

Conclusion

The results of this study support the effect of initial online trust on behavioural intentions and the importance of cultural related consumer characteristics like trust propensity, familiarity with e-commerce and web risk in the trust building process. Our results showed neither a significant effect of perceived web risk on behavioural intentions as proposed by McKnight *et al.* (2002) nor of familiarity with e-commerce on the behavioural intentions as proposed by Chen and Barnes (2007). However, the consumer characteristics themselves were shown to be interrelated and thus indirectly moderating factors in the overall initial trust process. Moreover, when evaluated across the two nationality groups, web risk had indeed a weak but significant negative effect on behavioural intentions for the Portuguese. We can follow from this that for consumers who concern about web risk on a higher level, this factor has effect on the behavioural intention in comparison to consumers who are less concerned.

The results also show that familiarity with e-commerce has different effects on behaviour across nationalities, which however needs further research. For the observed millennial segment, usage and knowledge of online activities is extraordinarily high. Lastly, the positive influence of initial trust on behavioural intentions was supported in the model as well as consumer's trust propensity as a significant antecedent of initial trust. The positive effect of trust propensity on initial trust supports the research by Chen and Barnes (2005) and Kim *et al.* (2009).

The study's results also emphasise the importance of taking national culture into account when investigating consumer's initial trust in an e-service vendor. The Danish Millennials showed higher general trust as well as higher familiarity with e-commerce and e-travel planning than the Portuguese. As was seen, the different levels of consumer confidence can be related hereto, with Denmark standing out as an optimistic and very confident consumer culture whereas Portugal is depicted as a pessimistic and more negative consumer culture. Lastly, our results showed less web risk and higher familiarity with e-commerce among Danes when compared to Portuguese, thereby coinciding our expectations drawn from the two countries ratings on Hofstede's dimensions of individualism/collectivism and uncertainty avoidance. Though surprisingly, the Portuguese students had higher initial trust towards the new holiday planning website and consequently also higher behavioural intentions than their Danish counterparts. One possibility to explain this somewhat

contradicting behaviour is the fact that trust propensity is only one of the many antecedents included in the trust formation process. As mentioned, initial trust is a situation-specific construct depending on a variety of other aspects of the company, website or consumer. Overall, the Danes being more familiar with e-commerce may also lead to being more sceptical towards new and unknown websites, i.e. the one used in the website scenario.

Limitations and Further Research

As with other studies, the present work has several limitations, which also calls for future research efforts. As already mentioned above, initial trust is a situation-specific construct depending on a variety of aspects of the company, website or consumer. Future research may examine the influence of other aspects on the trust formation process. Moreover, language can be a factor influencing trust. This study used a questionnaire in English for all respondents. Additional research could use questionnaires in the local language indicating a non-foreign online service.

Using the pool of students in Portugal and Denmark as respondents may question generalisability of the results to Millennials in general. However, for cross-national studies, it is better to use more homogenous samples (Koufaris and Hampton-Sosa, 2004). Future research may examine our model on larger and more representative samples of Millennials from the two countries. Future research may also target other segments, i.e. Millennials from other countries or other segments from other age groups.

This study focused on a travel website. Future research could examine website trust for other products, i.e. varying in complexity and price.

Another main limitation of this study connected to above is the focus on the initial trust phase for analysis, where factors such as brand knowledge and previous experiences are not taken into consideration. This was intentionally chosen for the sake of the study but further research could examine other stages of trust, for example in the maintaining and declining stages. How might post-purchase behaviour like delivery and after-sales support affect consumer's online trust? Further, since trust is an active concept in steady change, a long-term study could investigate the process of different trust phases from initial to dissolution of trust. It could be very revealing how trust perceptions change over the course of a, in this case, online business relationship.

Managerial and Theoretical Implications

As Gefen and Straub (2004) mention, it is the interpretation of motives behind the observed trust behaviour which leads to cues and reasoning of consumer behaviour. This analysis is therefore truly subjective and includes the personal interpretation of the observed Portuguese and Danish behaviour. To follow with practical advice for e-travel website hosts how to address and engage the culturally different segments requires more and adapted research. Yet, this theoretical research explored some influencing factors and can propose guidelines for which variables are of importance when promoting trustful relationships in the online environment.

Most importantly, this study supports that national culture significantly affects the trust formation process in online purchasing situations. Overall, the effect of trust propensity on consumer's initial trust emphasises the need for nationality-related considerations for websites to account for differences in trust levels and required factors. Further, even though familiarity and web risk did not have an observed direct effect on behavioural intentions, they are involved in trust formation and another point where consumers from different countries might vary. Notably, security of personal information is a concern throughout cultures and an important aspect to provide as an e-travel vendor. Overall, it became obvious that the millennial segment has advanced knowledge but also advanced expectations towards the "situational normality" of an e-service situation, which e-vendors need to address for successful engagement.

Theoretically, this study showed the need for more adapted research methods in online trust and cross-cultural research emphasising consumer variables as important influences. Koufaris and Hampton-Sosa's initial trust factors (2004) were adapted to the e-travel environment and investigated in two countries, Denmark and Portugal. Since no other study investigated initial trust formation of young consumers in those two countries before, this research gives new insights and findings of factors involved in the trust formation process.

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Table 1 Confirmatory factor analyses and t-test for national differences in scale means

Construct/indicator	Standardized factor loading ^b	t-value	Danes M(SD) n=110	Portuguese M(SD) n=104	t-value
η1 Familiarity (alpha = .88, AVE = .79)			4.29(.95)	3.82(1.00)	3.57**
I am familiar with travel planning on the Internet	.87				
I am familiar with buying airplane tickets/hotel reservations on the Internet	.91	8.17**			
η2 Trust Propensity (alpha = .89, AVE = .68)			3.62(.75)	3.15(.72)	4.73**
It is easy for me to trust a person/thing	.54				
I feel that people are generally well meaning	.85	8.32**			
I feel that people are generally trustworthy	.95	8.70**			
I feel that people are generally reliable	.91	8.60**			
η3 Web Risk (alpha = .78, AVE = .48)			3.03(.41)	3.14(.38)	-1.87*
Entering credit card information on the web is safe ^a	.75				
I hesitate to enter my credit card information on the web	.70	8.76**			
Entering personal information on the web is safe ^a	.70	8.79**			
I hesitate to enter personal information like my name, address and phone number on the web	.61	7.77**			
η4 Initial Trust (alpha = .85, AVE = .59)			2.84(.46)	3.04(.49)	-3.06**
I feel this website is trustworthy	.88				
I feel it is necessary to be cautious with this website	.62	10.03**			
I would feel confident dealing with this website	.88	16.80**			
I feel that I could count on this website to help with planning the best holiday	.67	10.98**			
η5 Behaviour (alpha = .83, AVE = .55)			2.58(.75)	2.79(.75)	-2.00*
Given the opportunity, I would purchase from this holiday website	.81				
I would feel comfortable acting upon the advice given to me by this website	.73	11.23**			
I would not hesitate to use the information provided by this website	.73	11.16**			
I would be willing to provide information like my name, address and phone number to this website	.68	10.30**			
$\chi^2 (125) = 254.53; p < .001 \quad \chi^2/DF = 2.04; RMSEA = .07; CFI = .94$					

^a Reversed scale

^b The first item for each construct was set to 1.

Note: 1-sided t-test, * p < .05 ** p < .01

Table 2: Discriminant validity of constructs

	$\eta 1$	$\eta 2$	$\eta 3$	$\eta 4$	$\eta 5$
$\eta 1$ Familiarity	.78				
$\eta 2$ Trust Propensity	.06	.68			
$\eta 3$ Web Risk	.17	.17	.48		
$\eta 4$ Initial Trust	.01	.06	.02	.59	
$\eta 5$ Behaviour	.00	.05	.03	.80	.55

Note: Diagonals represent average amount of extracted variance for each construct; non-diagonals represent the shared variance between constructs (calculated as the squares of correlations between constructs).

Table 3: Results of the structural equation model and multi-group analyses

H_x	Construct Relationships	Pooled sample (n=214)	Danes (n=110)	Portuguese (n=104)
H_1	Trust Propensity \rightarrow Initial Trust	.24**	.30**	.34*
H_2	Familiarity \rightarrow Behaviour	.01	.07	-.10
H_3	Web Risk \rightarrow Behaviour	-.05	-.01	-.24*
H_4	Initial Trust \rightarrow Behaviour	.89**	.95**	.74**
	Construct	R^2	R^2	R^2
	Initial Trust	.06	.09	.11
	Behaviour	.81	.96	.67
$\chi^2 (128) = 260,38, P = .00; \chi^2/DF = 2.03; CFI = .94; RMSEA = .07$				

Note: 1-sided t-test, * $p < .05$ ** $p < .01$

Standardized coefficients, which are unequal across the two groups at the .10 level, are shown in bold.

Figure 1: Conceptual Model of Initial Consumer Trust in an E-travel Website

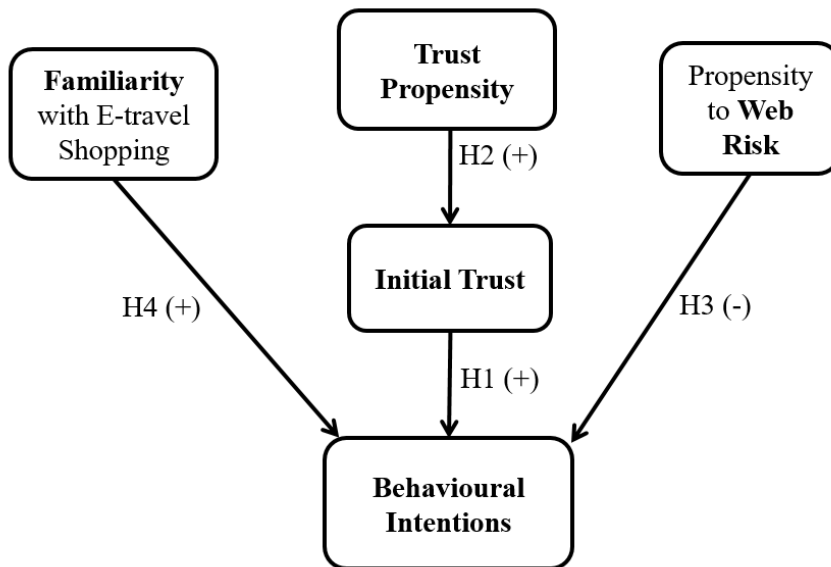


Figure 2: Website Description and Explanation of Included Trust Factors

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- ← Security
- ← Reputation
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