This is the final draft of a manuscript accepted for publication in the Journal of Business Research:

Žabkar, V., Arslanagic-Kalajdzic, M., Diamantopoulos, A., & Florack, A. (2017). Brothers in blood, yet strangers to global brands purchase: A four-country study of the role of consumer personality. *Journal of Business Research*, *80*, 228-235.

This paper is not the copy of record and may not exactly replicate the final, authoritative version of the article. The final article is available via its DOI: https://doi.org/10.1016/j.jbusres.2017.06.006

This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.

To view a copy of this license, visit http://creativecommons.org/licenses/by-nc-nd/4.0/ or send a letter to Creative Commons, PO Box 1866, Mountain View, CA 94042, USA

BROTHERS IN BLOOD, YET STRANGERS TO GLOBAL BRAND PURCHASE: A FOUR-COUNTRY STUDY OF THE ROLE OF CONSUMER PERSONALITY

Vesna Žabkar^a

University of Ljubljana

Maja Arslanagic-Kalajdzic^b, Adamantios Diamantopoulos^b, and Arnd Florack^c

University of Vienna

^aMarketing Department, University of Ljubljana, Kardeljeva ploščad 17, 1000 Ljubljana, Slovenia

^bDepartment of International Marketing, University of Vienna, Oskar-Morgenstern-Platz 1, 1090 Vienna, Austria

^cDepartment of Applied Psychology: Work, Education, Economy, University of Vienna, Universitätsstraße 7 (NIG), 1010 Vienna, Austria

Correspondence concerning this article should be addressed to Adamantios

Diamantopoulos, Department of International Marketing, University of Vienna, Oskar
Morgenstern-Platz 1, 1090 Vienna, Austria, adamantios.diamantopoulos@univie.ac.at

Abstract

Although personality traits have repeatedly been shown to influence consumer behavior, their impact on willingness to buy global brands has yet to be empirically investigated. Based on a four-country sample (N = 4,539) of South East European consumers, we test alternative pathways linking consumer personality traits to global brand purchase intentions. Our findings show that extraversion, neuroticism, conscientiousness and openness to experience impact purchase intentions mediated through consumers' global brand associations, domestic country bias and price sensitivity. Implications of the findings for theory and practice are considered and future research directions identified.

Keywords: global brand associations, domestic country bias, price sensitivity, consumer personality traits

1. Introduction

The globalization of the marketplace plays a viable role in softening national borders with its encouragement of economic, political, and personal interaction (McDonald, Spears, & Parker, 2004). Through the process of globalization, once fragmented country markets have been significantly changed in (a) economic (enormous growth in investments), (b) technological (rise of Internet and modern communications technology), and (c) social terms (world travel) (Steenkamp & de Jong, 2010). A key marketing implication has been the rise of global brands, that is, brands that enjoy "global awareness, availability, acceptance and desirability" (Özsomer & Altaras, 2008, p.1) and are associated with consumer perceptions of high quality, enhanced prestige and various functional, symbolic, and identity-strengthening benefits (Dimofte et al., 2008; Özsomer, 2012; Xie, Batra, & Peng, 2015). Consequently, internationally-active companies have shown great interest in understanding and fostering consumer motivations regarding responsiveness to global brands. In this context, personality traits may play an important role in understanding how people adopt global and national identities not least because such traits are in charge of shaping people's worldviews and ideological attitudes (Sibley & Duckitt, 2009). As Westjohn, Singh and Magnusson (2012, p. 71, original emphasis) observe, "a better understanding of global and national identity and consumer personality traits can help marketers be proactive and anticipate aspirations and self-construal of the target market".

While the adoption of global and national (local) identities has attracted considerable research attention (for a recent review, see Bartsch, Riefler, & Diamantopoulos, 2015), there is scant research of the role of personality traits in shaping consumer responses to global brands. To the best of our knowledge, other than the study by Westjohn, Singh, and Magnusson (2012) on the link between agreeableness and openness to experience and global

and national identity (as a mediator of responsiveness to global and local consumer culture positioning strategies), no other investigation of consumer personality traits has been conducted in a global branding context. This is surprising, not least because personality traits are an important construct in marketing (Bosnjak et al., 2007; Gountas & Gountas, 2007) and frequently part of segmentation strategies (Barry & Weinstein, 2009). Furthermore, prior research – albeit not specifically in a global branding context – has demonstrated links between personality traits and behavior (Back, Schmukle, & Egloff, 2009; Lastovicka & Joachimsthaler, 1988).

The focus of the present study is on advancing our understanding of the role and relevance of personality traits in influencing global brand purchase. Specifically, we propose a mediational model involving different pathways through which personality traits may drive consumers' willingness to buy global brands while controlling for consumer demographics. We subsequently test our model on a four-country sample (total N=4,539) drawn from Serbia, Croatia, Slovenia and Bosnia and Herzegovina (B&H hereafter).

We contribute to global branding literature by offering the first study assessing the extent to which innate and inherent characteristics of human nature – the development of which is autonomous and not tied to environmental conditions (McCrae et al., 2000) – impact key drivers of global brand purchase. Furthermore, we identify the routes through which different personality dimensions influence the likelihood of buying global brands as well as the relative importance of such routes. Finally, we investigate the potential existence of cross-country differences in the impact of personality traits and their implications for international market segmentation.

2. Background and conceptual framework

Several studies have shown that personality traits can explain an important part of perceptions, judgments, and behavior of consumers (Gountas & Gountas, 2007; Kassarjan, 1971; Thompson & Prendergast, 2015). Personality traits are defined as "endogenous dispositions that follow intrinsic paths of development essentially independent of environmental influences" (McCrae et al., 2000, p. 173) and can be assessed, for example, by asking individuals to assess the degree to which short descriptive sentences describe them (Benet-Martinez & John, 1998) or by rating themselves on trait adjectives (Goldberg, 1990). In the prominent Big Five/FFM model of personality, such ratings are assigned to five key factors, namely extraversion, neuroticism, agreeableness, conscientiousness and either openness to experience (McCrae & Costa, 1987) or intellect (Goldberg 1990). However, different number of factors have been used in previous studies to describe the personality structure of individuals; for example Eysenck (1991) refers to three factors, namely psychoticism, extraversion and neuroticism (for an overview of different personality models, see Saucier & Srivastava, 2015).

Personality traits are particularly relevant for the study of the effects of global brands on consumer behavior since research in psychology shows that the personality of individuals affects their behavior through cognitions, affect and motivations that are linked to personality (Elliot & Thrash, 2002; Mischel & Shoda, 1995). In particular, the cognitive-affective personality system theory of Mischel and Shoda (1995) argues that the same situation might be differently encoded, be differently related to beliefs and values, and might evoke different emotional responses for individuals with different personality traits. For example, for individuals scoring high in neuroticism, winning a trip to a distant foreign country in a lottery might not evoke great pleasure or the belief that this will be an exciting trip. Such highly

neurotic individuals might instead think about the possible risks involved, such as the need for vaccinations, visas etc.

Highly relevant for the present research is the reasoning that personality traits direct the cognitive and affective system of individuals according to two basic motives from which one was already alluded to in the lottery trip example above (Carver et al., 2000; Gray, 1987; Gray, Hanna, Gillen, & Rushe, 2016): (a) the experience of safety and the reduction of uncertainty and ambiguity, and (b) the experience of advancement, sensations, and novelty. More specifically, individuals high in neuroticism are motivated to reduce uncertainty and individuals high in openness to new experience are motivated to seek advancement and sensations (Elliot & Thrash, 2002). Such differences in motivational orientations between individuals with different personality traits explain why individuals differ in how much they prefer what is already established and why they oppose changes (Higgins, 2000; Jost et al., 2003).

Individuals who attempt to keep a pleasant state and reduce uncertainty prefer choice options that are less risky and uncertain (Florack & Hartmann, 2007; Herzenstein et al., 2007; Yeo & Park, 2006) are more persuaded by concrete information than by abstract arguments (Semin, Higgins, Gil de Montes, & Estourget, 2005) and are less likely to apply simple heuristics (Florack, Friese, & Scarabis, 2010; Pham & Avnet, 2004). In contrast, individuals who focus on advancement often display stronger purchase intentions towards novel high-tech goods as well as ownership of newly launched high-tech products (Herzenstein et al., 2007).

With specific reference to branding, it has been shown that motivational orientations can affect consumers' brand perceptions (Florack & Palcu, 2016). For example, Yeo and Park (2006) found that consumers who focus on positive consequences of decisions are more open to brand extensions very dissimilar from the parent brand than those who are very sensitive

about potential negative consequences. Global brands are, by definition, more "distant" from the consumer than local brands, and global brands are more abstract and less concrete in their meaning (Dimofte, Johansson, & Ronkainen, 2008). Hence, global brands bear more uncertainty than local brands. Furthermore, global brands often explicitly promise extraordinary experiences most relevant for individuals who seek such sensations, and they address the simple heuristic that global brand positioning means success (Alden et al., 1999). Therefore, consumers scoring high on extraversion and openness to experience are likely to associate global brands with positive attributes and consequently report stronger intentions to purchase global brands than consumers with personality traits that are linked to reducing uncertainty. Thus a first expected pathway linking personality traits to purchase intentions is through (positive) global brand associations (GBA); the latter refer to associations of quality, prestige, value-for-money, etc. that consumers make when confronted with global brands (Steenkamp, Batra, & Alden, 2003; Özsomer & Altaras, 2008; Swoboda, Pennemann, & Taube, 2012). Consistent with prior literature (e.g. Dimofte et al., 2008; Riefler, 2012), we expect GBA to result in positive responses towards global brands thus enhancing willingness to purchase the latter.

Furthermore, research indicates that the motivation to reduce uncertainty increases the identification with the in-group (Grieve & Hogg, 1999) and that unambiguous and clearly structured high entitativity groups are better suited for reducing uncertainty (Hogg, Adelman, & Blagg, 2009). Hence, personality traits motivating uncertainty reduction (e.g. neuroticism) are likely to lead to more favorable attitudes towards the own (home) country and its products and adversely affect purchase intentions for global brands. On the other hand, personality traits that reflect receptiveness (e.g. openness to experience) are likely to be negatively related to a preference of brands from the home country at the expense of global brands. In line with this reasoning, previous research revealed that in-group favoritism tends to be related

positively to neuroticism but negatively to openness to experience (Lewis & Bates, 2014). Thus, a second expected pathway linking personality traits to purchase intentions for global brands is through *domestic country bias* (DCB); that is a "bias against foreign products and in favor of domestic ones" (Balabanis & Diamantopoulos, 2004, p. 80). Country-of-origin literature has repeatedly shown that DCB positively impacts the purchase likelihood of domestic brands at the expense of foreign brands (e.g. see Pharr, 2000; Verlegh & Steenkamp, 1999; Wilcox, 2015). Foreign brands, in turn, are often associated with globalness (e.g. Batra et al. 2000; Winit, Gregory, Cleveland, & Verlegh, 2014) and, therefore, the negative impact of DCB is expected to apply also to purchase intentions for global brands.

Finally, while GBA represent consumers' expectations of brand benefits, such benefits can only be enjoyed by consumers at a cost, that is, consumers must be willing and able to pay for them (Davvetas, Sichtmann, & Diamantopoulos, 2015; Winit et al., 2014). In this context, price is a very concrete and clear attribute of a product offer that can be used as an argument for purchasing. For example, neuroticism which is a personality trait related to uncertainty reduction is likely to lead to increased price sensitivity which may subsequently hinder global brand purchase. Price sensitivity might be also high amongst consumers who make careful decisions because of their high conscientiousness, as well as those who strive for reward (i.e. consumers high in extraversion). Thus, a third expected pathway linking personality traits to purchase intentions of global brands is *price sensitivity* (PS); namely "the extent to which consumers vary their purchases of a product as its price changes" (Tellis, 1988, p. 331). Prior research indicates that global brands are often perceived as being more expensive (e.g. Winit et al., 2014) and that consumers' willingness to pay is positively linked to a brand's perceived globalness (Davvetas et al., 2015).

In light of the above, we offer the following mediating hypotheses regarding the relationship between consumer personality traits and intentions to purchase global brands:

H1: Consumer personality traits impact purchase intentions of global brands through the influence of (a) global brand associations (GBA), (b) domestic country bias (DCB), and (c) price sensitivity (PS).

For purposes of testing H1a-H1c, demographic characteristics (notably age, income and education) are used as control variables in the analysis. Figure 1 summarizes the conceptual framework of our study.

- Insert Figure 1 about here -

3. Method

We tested the framework in Figure 1 using a unique dataset of consumer survey data, collected by a syndicated field survey in four South East European countries. The samples in each country were drawn by a professional research agency so as to be representative of the respective national populations in terms of age, gender, education, and region (Nslovenia = 1,068, Ncroatia = 1,069, Nserbia = 1,265, Nsosnia&Herzegovina = 1,137, Ntotal = 4,539). The four countries represented by these samples differ in political and economic conditions, infrastructure and other internationalization factors, as well as in the degree of the conflict between local traditions and forces of globalization (Shultz et al., 2015), which makes them particularly attractive for studying consumer response to global brands. Until 1991, the four countries were part of former Yugoslavia that came into existence after World War I from territories of the former Austro-Hungarian Empire and the formerly independent Kingdom of Serbia. Slovenes, Croats, Bosnians and Serbians belong to South Slavic nations, yet are considerably diverse culturally and in ethno-linguistic terms (e.g. they speak four related, yet

significantly different languages). Importantly, the four countries regard themselves as ethnically and culturally distinct (Sevic, 2003; Dmitrovic, Vida & Reardon, 2009).

Respondents in the survey were persons primarily responsible for grocery purchases in their household. The questionnaire was developed by the market research agency in English and translated and then back translated into Slovenian, Croatian, Bosnian and Serbian, maintaining consistency across all countries.

The items comprising the consumer personality measures were drawn from the Big Five Inventory (BFI; John & Srivastava, 1999), the International Personality Item Pool – Five Factor Model (IPIP-FFM; Goldberg, 1999, see also Donnellan et al., 2006) and the NEO Five-Factor Inventory (NEO-FFI; Costa & McCrae, 1992). However, since the original inventories were very long, a total of 35 items (captured on 5-point Likert format) drawn from them was included in the research questionnaire. These 35 items were pre-tested in each of the four countries prior to being included in the main study. Subsequently, the pool of items was reduced to four key personality dimensions (see Results section).

Regarding the mediators, DCB (three items, Cronbach's alpha = 0.84)¹ and PS (three items, Cronbach's alpha = 0.72)² were measured on 5-point Likert scales, while GBA was computed by summing six (yes or no) items capturing the extent to which the respondent associated global brands with (a) quality, (b) prestige, (c) value for money, (d) attractiveness, (e) availability, and (f) workmanship. Finally, purchase intention was measured with a binary (yes or no) variable indicating willingness to buy global brands.

-

¹ DCB was measured with the following three items: (1) I would rather by products from [country], even if it is more expensive for me in the long run, (2) People from [country] should buy products/services coming from [country], and (3) I always give priority to products produced by the producers from [country].

² PS was measured with the following three items: (1) While purchasing, I always look at what I get for my money, (2) I always check prices before I buy the product, and (3) When shopping, I almost always only look at the price.

4. Results

4.1. Measure evaluation

Principal component analysis (PCA) with Varimax rotation was used to analyze the 35 items capturing consumers' personality traits and align them with the Big Five personality dimensions. Items with cross-loadings and loadings below 0.5 were removed one at a time, until a satisfactory solution was reached with 18 items. We extracted four distinct factors (explaining 50% of variance) that reflect different facets of South East European consumer personality (Table 1): extraversion (6 items), neuroticism (4 items), conscientiousness (4 items), and openness to experience (4 items). Although the Big Five dimensions of personality have been shown to be very robust for different samples, instruments and cultures (Barrick & Mount, 1991), agreeableness did not emerge as a distinct dimension from the items in our survey. We subsequently replicated this factor structure in each country subsample and the results were stable across countries³.

- Insert Table 1 about here -

We next conducted confirmatory factor analysis (CFA) and established good measurement model fit (χ^2 = 2,043.28, df = 129; RMSEA = 0.05; NNFI = 0.94; CFI = 0.95; SRMR = 0.04; GFI = 0.95). Composite reliability values exceeded recommended thresholds (Bagozzi & Yi, 1988; CR_{extraversion} = 0.76, CR_{neuroticism} = 0.68, CR_{conscientiousness} = 0.74 and CR_{openness to experience} = 0.63). Correlations between extraversion, conscientiousness and

³ Note that "introverted" and "reserved" items are often associated with the negative pole of the extraversion factor (e.g. see Goldberg, 1990), however, according to our factor structure the two items consistently load on the neuroticism factor. In this context, prior research shows that neuroticism and introversion descriptors are often empirically confounded (e.g. see Briggs 1998; Ferguson, 2001).

openness to experience were all positive, while neuroticism was negatively correlated with all other dimensions. The maximum correlation was observed between extraversion and conscientiousness ($\rho = 0.70$) and the lowest between neuroticism and openness to experience ($\rho = -0.21$).

To further investigate the stability of the factor solution across the four countries, we performed a multi-group CFA which yielded good global goodness of fit ($\chi^2 = 2,834.09$, df = 516; RMSEA = 0.06; NNFI = 0.93; CFI = 0.94) as well as balanced contribution to χ^2 (B&H = 26.40%; Serbia = 24.31%; Slovenia = 27.01%; Croatia = 22.27%). Subsequently, we created composite variables (i.e. average scale scores for each personality dimension) for use in further analysis.

4.2. Hypothesis testing

We first applied structural equations modeling (SEM) to test for the overall mediational impact of the three mediators (GBA, DCB, and PS) on purchase intention for each personality trait. The results reveal a significant positive total indirect effect of extraversion (β = 0.02, p<0.001; model fit: χ^2 = 179.14, df = 12; RMSEA = 0.05; NNFI = 0.80; CFI = 0.92; SRMR = 0.03; GFI = 0.99), conscientiousness (β = 0.02, p<0.001; model fit: χ^2 = 209.03, df = 12; RMSEA = 0.06; NNFI = 0.73; CFI = 0.88; SRMR = 0.04; GFI = 0.99) and openness to experience (β = 0.02, p<0.001; model fit: χ^2 = 194.24, df = 12; RMSEA = 0.06; NNFI = 0.75; CFI = 0.89; SRMR = 0.04; GFI = 0.99), as well as a significant negative indirect effect of neuroticism (β = -0.01, p<0.01; model fit: χ^2 = 171.64, df = 12; RMSEA = 0.05; NNFI = 0.75; CFI = 0.89; SRMR = 0.03; GFI = 0.99).

In order to decompose the identified indirect effects according to specific mediators and formally test H1a-H1c, we have used Preacher and Hayes' (2004) PROCESS procedure

(Model 4) which allows the assessment of indirect effects using a bootstrapping method with bias-corrected confidence intervals (Hayes, 2013). Results of the PROCESS analysis are presented in Table 2.

- Insert Table 2 about here -

From Table 2, it can be seen that GBA has a positive and a strong effect on global brand purchase intention. PS also positively impacts purchase intention, while DCB has an expected negative impact; about 12% of the variance in purchase intention is explained by the analysis.

When it comes to consumer personality traits, neuroticism has a negative direct effect on purchase intentions of global brands (β =-0.10, p<0.05), while extraversion, conscientiousness and openness to experience do not impact purchase intention directly.

When analyzing indirect effects (which are the focus of H1a-H1c), we observe 8 out of possible 12 significant effects. GBA is positively mediating the effect of extraversion (β =0.04, p<0.05), conscientiousness (β =0.04, p<0.05) and openness to experience (β =0.05, p<0.05) on global brand purchase intentions, while it does not mediate the effect of neuroticism. DCB is not a significant mediator for extraversion and conscientiousness, but is mediating negatively the effects of neuroticism (β =-0.01, p<0.05) and openness to experience (β =-0.01, p<0.05). Finally, PS positively mediates the effects of extraversion (β =0.01, p<0.05), conscientiousness (β =0.02, p<0.05) and openness to experience (β =0.01, p<0.05). These results provide overall support for H1a-H1c. Since we are particularly interested in the mechanism of how the effect of personality traits is transferred through the three selected mediators, we conducted a comparison of the indirect effects for the significant mediations. This involves testing whether the magnitudes of the indirect effects are equal in size and strength (Preacher & Hayes, 2008). For conscientiousness and extraversion, as noted above, GBA and PS are significant mediators in driving the effect on global brand purchase intentions, however, there is no

significant difference between the strength of the indirect effects. Finally, for openness to experience, where all three indirect effects are significant, GBA has stronger effect than DCB (β =0.05, CI = (0.0096, 0.0827)), while DCB has a weaker indirect effect than PS (β =-0.03, CI = (-0.0494, 0.0085)).

4.3. Cross-country comparison

Having established that each of the four personality dimensions individually impact consumers' purchase intentions of global brands through their influence on GBA, DCB and PS, we next examined their simultaneous influence. In doing so, we also sought to identify differences across four different countries comprising our sample through multi-group SEM analysis. Specifically, we estimated two models with different restrictions in the model parameters across countries.⁴

Model 1 assumes that the personality traits as well as the mediating variables (i.e. GBA, DCB and PS), have *an identical* influence on purchase intentions (PI). Thus, all structural coefficients as well as disturbance terms are estimated to be the same across countries. Model 2 allows for the estimation of both country-specific structural paths and country-specific error terms. This model thus fully accounts for potential country-specific differences and imposes no cross-country constraints.

The two models are nested within each other as one can be derived from the other by adding or removing parameter constraints (Long, 1983). Thus their fit can be directly compared by means of chi-square difference (D²) tests. Table 3 summarizes the relevant results.

⁴ Initially, we assessed three models, including a model that assumes equality in structural paths but allows disturbance terms to vary across countries. However, this model failed to converge and hence we did not include it in the analysis shown in Table 3.

- Insert Table 3 about here -

While the global fit indices for both models indicate good fit, Model 2 fits significantly better than Model 1 (D² = 393.21, df = 93, p<0.001). This suggests that there are significant differences across the four country samples in terms of the impact of direct (GBA, DCB and PS) and indirect influences (personality characteristics) on purchase intentions. Specifically, only GBA (positively) impacts purchase intentions in all four countries. DCB shows the expected negative effect in B&H and Serbia but has no influence in Slovenia or Croatia. Finally, PS influences purchase intentions only in Croatia.

A picture of even greater diversity is painted by the results on the impact of consumer personality dimensions on GBA, DCB and PS (and through them on purchase intentions). For example, extraversion positively impacts GBA in B&H and Serbia, negatively impacts GBA in Slovenia and has no effect in Croatia. Even more inconsistent is the effect of conscientiousness on GBA which is negative in Serbia but positive in Croatia. Neuroticism positively impacts DCB in B&H and Serbia but not in Slovenia and Croatia. Conscientiousness consistently and positively influences PS in all four countries but its impact is much stronger in Croatia. In contrast, openness to experience only positively impacts PS in Slovenia and has no significant influence in any of the other countries. Overall, it seems that the personality dimensions have different influences on different mediating variables in different countries. Given that, as noted above, the mediating variables (i.e. GBA, DCB and PS) themselves also do not display cross-country consistency in terms of their impact on purchase intentions, using a common model of the determinants of willingness to buy global brands in the countries studied is neither justified nor advisable

5. Discussion and conclusions

Being the first study to link consumer personality traits to willingness to buy global brands, our results should be viewed as suggestive rather than conclusive and subjected to further scrutiny in future studies (particularly in non-South East European countries). Having said that, in light of the size and representativeness of our multi-country sample, it can be concluded that the studied personality dimensions – notably extraversion, neuroticism, conscientiousness and openness to experience -do indeed impact global brand purchase intentions. This impact is largely indirect and channeled through consumers' global brand associations, domestic country bias and price sensitivity. Importantly, the precise way in which personality dimensions impact these mediating variables varies considerably across countries. The same applies to the direct effects of global brand associations, domestic country bias and price sensitivity on purchase intentions. These results clearly suggest that neither geographical proximity nor a common history is a sufficient condition for ensuring homogeneity in consumer responses to global brands. It seems that willingness to buy global brands is subject to different influences – both in terms of nature and in terms of magnitude – in the countries concerned. Our findings thus complement previous research (Dmitrovic et al. 2009) that points to differences in consumer ethnocentrism and domestic product appraisal among South East European countries as well as their impact on purchase behavior.

Across all countries and personality dimensions, global brand associations have the greatest overall mediating influence; thus building and maintaining positive associations in terms of quality, prestige, design, etc. is a worthwhile investment for global brands. However, particularly in B&H and Serbia, the positive impact of global brand associations on purchase intentions is counteracted by the negative impact of domestic country bias. As far as the impact of price sensitivity is concerned, this is only significant in Croatia and it positively

influences purchase intentions of global brands. While this runs against prior evidence indicating that consumers perceive global brands to be more expensive (Winit et al., 2014), it could well be a sample-dependent finding since the point of reference for Croatian consumers may have been ordinary (day-to-day) global brands rather than luxury brands. For example, in a study of Croatian consumers' attitudes towards foreign and domestic products, domestic origin was a predominant factor influencing willingness to buy even for young Croatian consumers in the category of fast moving consumer goods (FMCG; Ozretic-Dosen, Skare, & Krupka, 2007). Further research is needed to throw light on the role of price as a driver of global brand purchase in the South East Europe region (ideally distinguishing between different product categories).

Regarding the role of consumer personality dimensions, it was somewhat surprising that the Big Five structure was not fully replicated in the current sample (since agreeableness did not emerge as a distinct dimension). Equally surprising was the fact that the item capturing "perfectionism" loaded on the openness to experience dimension rather than the conscientiousness dimension and that "introverted" loaded on neuroticism rather than (negatively) on extraversion. Although the Big Five structure has been previously observed for some of the countries under study (e.g. Croatia – see Mlačić & Ostendorf, 2005; Slovenia – see Zabkar & Kolar, 2010), several studies have reported personality factor structures varying from one to six factors (for an overview, see Saucier & Srivastava, 2015). While, in light of the size and representativeness of the current sample, it is difficult to attribute the observed departures from the Big Five dimensions to methodological artifacts, further research is required to confirm the personality structure of South East European consumers identified in the current study.

Even more surprising from a theoretical perspective is the lack of consistency in terms of how the identified personality dimensions influence the willingness to buy global brands through their impact on global brand associations, domestic country bias and price sensitivity. Personality traits are essentially developed independently of environmental influences (McCrae et al., 2000) and are descriptors of *intrinsic* and *fundamental* characteristics of human nature. While different personality dimensions may be valued differently in terms of desirability or importance in different cultures and societies (e.g. see Diener, Oishi, & Lucas, 2003), their effects on consumer outcomes would be expected to be fairly consistent. However, the only consistent finding across all four countries is the positive impact of conscientiousness on price sensitivity. For all other personality dimensions, significant influences are observed for a maximum of two countries depending upon the mediator involved. Moreover, there is no clear pattern as to which countries are similarly affected by a particular personality dimension. Thus, according to our results, identifying relevant intercountry segments using personality dimensions as segmentation variables does not appear to be a promising pursuit.

Overall, it seems that any segmentation efforts based on personality dimensions only make sense on a *within*-country basis rather than a *between*-country basis. Put differently, companies promoting global brands in the countries examined are advised to first approach these countries as distinct markets and then examine whether and, if so, in which *specific* country market(s) different consumer personality variables do have an influence. For example, extraversion and openness to experience play no role whatsoever in Croatia as neither of them impacts global brand associations, domestic country bias or price sensitivity. In contrast, both these personality dimensions positively impact global brand associations in Serbia with extraversion also having a negative impact on domestic country bias. It is therefore not clearly advisable to ignore differences at the country level and instead assume a homogeneous South East European region; a particular personality dimension may be of relevance in one country but not in another. Thus, a general prescription that personality

dimensions operate similarly *across* countries when it comes to influencing the drivers of global brand purchase is *not* supported by our study's findings.

We based our hypotheses on the reasoning that some personality traits (like extraversion) are positively related to the motive to seek advancement, sensations, and novelty, whereas other personality traits (like neuroticism) are positively related to the motive to reduce uncertainty and ambiguity (Elliot & Thrash, 2002). Moreover, we argued that because of a greater distance to the consumer and a higher level of abstractness, global brands bear the potential to provide advancement, sensations, and novelty but are incongruous to a motive of uncertainty reduction. In this context, extraversion indeed had a positive effect on purchase intentions of global brands mediated by global brand associations in the full sample, while neuroticism had a negative effect mediated by domestic country bias. However, in light of the inconsistent results across the four countries, the question arises whether an undifferentiated approach is adequate for describing the relationship between personality traits and attitudes toward global brands. Specifically, the meaning of global brands might differ across countries (e.g. in some countries, the perception of global brands may be more concrete in some countries than others) because of different legacies of purchasing global brands as well as differences in brand prominence and dominance. For example, Slovenians and Croatians consider global brands as attractive, of prestige and high quality, while for Serbians they are too expensive to encourage purchase. Similarly, regarding domestic brands, the majority of Slovenians and Croatians consider them to also be of high quality and prestige; however, for Serbians and Bosnians domestic brands are "cheaply made" and not attractive buying targets (Kolar & Zabkar, 2014).

Bearing the above in mind, it is likely that individuals who perceive concrete gains from globalization perceive global brands as more concrete and less ambiguous, and the proportion of such consumers might well differ across countries. Future studies should take into account

the degree of perceived abstractness or concreteness as it might well moderate the relationship between personality traits and global brand associations. The default perception might be that global brands are more abstract than local brands but with an increase in experience with global brands, the relevant perceptions are likely to become more concrete.

Several limitations of the present study are worth noting. First, and most obvious, the present findings are based on a set of countries with specific geographical and historical connections and it remains to be seen whether similar results would be obtained with a different set of countries. Second, given that the data used in our analyses came from a syndicated field survey run by a commercial research agency, there were constraints both with regards to the number of variables that could be accommodated in the research questionnaire and the measurement of these variables (e.g. it would have been desirable to have a greater number of items to capture consumer personality dimensions but this was not feasible due to space constraints). Third, our ultimate dependent variable was willingness to buy global brands in general, making no distinction between different kinds of product categories (e.g. utilitarian vs. hedonic) or different brand origins (e.g. Japanese- vs. US-based brands). Fourth, the impact of potentially moderating variables representing brand characteristics (e.g. local vs. global identity) on the relationships of interest was also not investigated.

Overcoming the above limitations in future studies would help paint a more comprehensive and refined picture of whether, when, and how personality characteristics influence consumer behavior towards global brands. Similarly, further research is necessary to provide insights on the impact of consumer personality traits on other outcome variables of managerial importance such as consumer-brand identification, actual global brand ownership and willingness-to-pay for global brands.

References

- Alden, D. L., Steenkamp, J. E. B. M., & Batra, R. (1999). Brand Positioning Through

 Advertising in Asia, North America, and Europe: The Role of Global Consumer Culture. *Journal of Marketing*, 63(1), 75-87.
- Back, M. D., Schmukle, S. C., & Egloff, B. (2009). Predicting actual behavior from the explicit and implicit self-concept of personality. *Journal of Personality and Social Psychology*, 97(3), 533
- Balabanis, G., & Diamantopoulos, A. (2004). Domestic country bias, country-of-origin effects, and consumer ethnocentrism: a multidimensional unfolding approach. *Journal of the Academy of Marketing Science*, *32*(1), 80-95.
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74-94.
- Barrick, M. R., & Mount, M. K. (1991). The big five personality dimensions and job performance: a meta-analysis. *Personnel Psychology*, 44(1), 1-26.
- Barry, J., & Weinstein, A. (2009). Business psychographics revisited: from segmentation theory to successful marketing practice. *Journal of Marketing Management*, 25(3–4), 315–340.
- Bartsch, F., Riefler, P., & Diamantopoulos, A. (2015). A taxonomy and review of positive consumer dispositions toward foreign countries and globalization. *Journal of International Marketing*, 24(1), 82-110.
- Batra, R., Ramaswamy, V., Alden, D. L., Steenkamp, J. B. E., & Ramachander, S. (2000). Effects of brand local and nonlocal origin on consumer attitudes in developing countries. *Journal of Consumer Psychology*, 9(2), 83-95.

- Benet-Martinez, V., & John, O. P. (1998). *Los Cinco Grandes* across cultures and ethnic groups: Multitrait multimethod analyses of the Big Five in Spanish and English. *Journal of Personality and Social Psychology*, 75, 729-750.
- Bosnjak, M., Bratko, D., Galesic, M., & Tuten, T. (2007). Consumer personality and individual differences: Revitalizing a temporarily abandoned field. *Journal of Business Research*, 60(6), 587–589.
- Briggs, S. R. (1988). Shyness: Introversion or neuroticism?. *Journal of Research in Personality*, 22(3), 290-307.
- Carver, C. S., Sutton, S. K., & Scheier, M. F. (2000). Action, emotion, and personality:

 Emerging conceptual integration. *Personality and Social Psychology Bulletin*, 26(6), 741-751.
- Costa, P. T. & R. R. McCrae (1992). Normal personality assessment in clinical practice: The NEO Personality Inventory. *Psychological Assessment*, 4(1): 5-13.
- Davvetas, V., Sichtmann, C., & Diamantopoulos, A. (2015). The impact of perceived brand globalness on consumers' willingness to pay. *International Journal of Research in Marketing*, 32(4), 431-434.
- Diener, E., Oishi, S., & Lucas, R. E. (2003). Personality, culture, and subjective well-being: Emotional and cognitive evaluations of life. *Annual Review of Psychology*, *54*(1), 403-425.
- Dimofte, C. V., Johansson, J. K., & Ronkainen, I. A. (2008). Cognitive and affective reactions of US consumers to global brands. *Journal of International Marketing*, *16*(4), 113-135.
- Dmitrovic, T., I. Vida, & J. Reardon (2009). Purchase behavior in favor of domestic products in the West Balkans. *International Business Review 18*(5): 523-535.
- Donnellan, M. B., F. L. Oswald, et al. (2006). The mini-IPIP scales: tiny-yet-effective measures of the Big Five factors of personality. *Psychological Assessment* 18(2): 192.

- Elliot, A. J., & Thrash, T. M. (2002). Approach-avoidance motivation in personality: approach and avoidance temperaments and goals. *Journal of Personality and Social Psychology*, 82(5), 804-818.
- Eysenck, H. J. (1991). Dimensions of personality: 16, 5 or 3?—Criteria for a taxonomic paradigm. *Personality and Individual Differences*, 12(8), 773–790.
- Ferguson, E. (2001). Personality and coping traits: A joint factor analysis. *British Journal of Health Psychology*, *6*(4), 311-325.
- Florack, A., & Palcu, J. (2016). The psychology of branding. In C. Jansson-Boyd, & M. Zawisza (Eds.), *International Handbook of Consumer Psychology*. New York: Routledge.
- Florack, A., Friese, M., & Scarabis, M. (2010). Regulatory focus and reliance on implicit preferences in consumption contexts. *Journal of Consumer Psychology*, 20(2), 193–204.
- Florack, A., & Hartmann, J. (2007). Regulatory focus and investment decisions in small groups. *Journal of Experimental Social Psychology*, 43(4), 626–632.
- Goldberg, L. R. (1999). A broad-bandwidth, public domain, personality inventory measuring the lower-level facets of several five-factor models. *Personality Psychology in Europe* 7(1): 7-28.
- Goldberg, L. R. (1990). An alternative "description of personality": the big-five factor structure. *Journal of Personality and Social Psychology*, 59(6), 1216.
- Gountas, J., & Gountas, S. (2007). Personality orientations, emotional states, customer satisfaction, and intention to repurchase. *Journal of Business Research*, 60(1), 72–75.
- Gray, J. A. (1987). The psychology of fear and stress. Vol. 5. CUP Archive.
- Gray, J. D., Hanna, D., Gillen, A., & Rushe, T. (2016). A closer look at Carver and White's BIS/BAS scales: Factor analysis and age group differences. *Personality and Individual Differences*, 95, 20–24.

- Grieve, P. G., & Hogg, M. A. (1999). Subjective Uncertainty and Intergroup Discrimination in the Minimal Group Situation. *Personality and Social Psychology Bulletin*, *25*(8), 926–940.
- Hayes, A. F. (2013). *Introduction to Mediation, Moderation, and Conditional Process*Analysis: A Regression-based Approach. New York: Guilford Press.
- Herzenstein, M., Posavac, S. S., & Brakus, J. J. (2007). Adoption of new and really new products: The effects of self-regulation systems and risk salience. *Journal of Marketing Research*, 44(2), 251–260.
- Higgins, E. T. (2000). Does personality provide unique explanations for behaviour?

 Personality as cross-person variability in general principles. *European Journal of Personality*, 14(5), 391–406.
- Hogg, M. A., Adelman, J. R., & Blagg, R. D. (2009). Religion in the Face of Uncertainty: An Uncertainty-Identity Theory Account of Religiousness. *Personality and Social Psychology Review*, 14(1), 72–83.
- John, O. P. and S. Srivastava (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. *Handbook of Personality: Theory and Research*, 2(1999), 102-138.
- Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin*, *129*(3), 339–375.
- Kassarjian, H. H. (1971). Personality and Consumer Behavior: A Review. *Journal of Marketing Research*, 8(4), 409–418.
- Kolar, T. & V. Zabkar (2014). The effect of general consumer attitudes and personality traits on attitudes towards domestic and multinational products in the Balkan region. *Journal of East European Management Studies*, 19(1), 58-80.

- Lastovicka, J. L., & Joachimsthaler, E. A. (1988). Improving the Detection of Personality-Behavior Relationships in Consumer Research. *Journal of Consumer Research*, 14(4), 583–587.
- Lewis, G. J., & Bates, T. C. (2014). Common heritable effects underpin concerns over norm maintenance and in-group favoritism: evidence from genetic analyses of right-wing authoritarianism and traditionalism. *Journal of Personality*, 82(4), 297–309.
- Long, J. J. S. (1983). *Confirmatory factor analysis: A preface to LISREL*. Vol. 33. Sage Publications.
- McCrae, R. R., Costa Jr, P. T., Ostendorf, F., Angleitner, A., Hřebíčková, M., Avia, M. D., & Saunders, P. R. (2000). Nature over nurture: temperament, personality, and life span development. *Journal of Personality and Social Psychology*, 78(1), 173-186.
- McCrae, R. R., & Costa, P. T. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, *52*(1), 81-90.
- McDonald, M., Spears, M. C., & Parker, D. F. (2004). Strategic management: does personality make a difference? *Academy of Strategic Management Journal*, *3*, 37.
- Mischel, W., & Shoda, Y. (1995). A cognitive-affective system theory of personality: reconceptualizing situations, dispositions, dynamics, and invariance in personality structure. *Psychological Review*, 102(2), 246-268.
- Mlačić, B., & Ostendorf, F. (2005). Taxonomy and structure of Croatian personality-descriptive adjectives. *European Journal of Personality*, 19, 117–152.
- Ozretic-Dosen, D., V. Skare, & Z. Krupka (2007). Assessments of country of origin and brand cues in evaluating a Croatian, western and eastern European food product. *Journal of Business Research*, 60(2), 130-136.

- Özsomer, A. (2012). The interplay between global and local brands: a closer look at perceived brand globalness and local iconness. *Journal of International Marketing*, 20(2), 72-95.
- Özsomer, A., & Altaras, S. (2008). Global brand purchase likelihood: A critical synthesis and an integrated conceptual framework. *Journal of International Marketing*, *16*(4), 1-28.
- Pham, M. T., & Avnet, T. (2004). Ideals and Oughts and the Reliance on Affect versus Substance in Persuasion. *Journal of Consumer Research*, 30(4), 503–518.
- Pharr, J. M. (2005). Synthesizing country-of-origin research from the last decade: is the concept still salient in an era of global brands?. *Journal of Marketing Theory and Practice*, 13(4), 34-45.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, *36*(4), 717–731.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879–891.
- Riefler, P. (2012). Why consumers do (not) like global brands: The role of globalization attitude, GCO and global brand origin. *International Journal of Research in Marketing*, 29(1), 25-34.
- Saucier, G., & Srivastava, S. (2015). What makes a good structural model of personality?

 Evaluating the Big Five and alternatives. In M. L. Cooper & R. Larsen (Eds.), *Handbook of Personality and Social Psychology* p. 283–305. Washington, DC: American Psychological Association.
- Semin, G. R., Higgins, T., de Montes, L. G., Estourget, Y., & Valencia, J. F. (2005).

 Linguistic signatures of regulatory focus: How abstraction fits promotion more than prevention. *Journal of Personality and Social Psychology*, 89, 36–45.

- Sevic, Z. (2003). Ethos, culture and reform patterns: some British-Yugoslav comparison.

 Cross Cultural Management: An International Journal, 10(2): 53-74.
- Shultz, C., II, F. Jallat, et al. (2015). Traumatized Economies and Marketing Paths to Recovery. *Proceedings of the 2010 Academy of Marketing Science (AMS) Annual Conference*. D. R. Deeter-Schmelz, Springer International Publishing: 161-163.
- Sibley, C. G., & Duckitt, J. (2009). Big-five personality, social worldviews, and ideological attitudes: Further tests of a dual process cognitive-motivational model. *The Journal of Social Psychology*, *149*(5), 545-561.
- Steenkamp, J. B. E., & de Jong, M. G. (2010). A global investigation into the constellation of consumer attitudes toward global and local products. *Journal of Marketing*, 74(6), 18-40.
- Steenkamp, J.-B. E. M., Batra, R., & Alden, D. L. (2003). How perceived brand globalness creates brand value. *Journal of International Business Studies*, *34*(1), 53–65.
- Swoboda, B., Pennemann, K., & Taube, M. (2012). The Effects of Perceived Brand
 Globalness and Perceived Brand Localness in China: Empirical Evidence Regarding
 Western, Asian, and Domestic Retailers. *Journal of International Marketing*, 20(4), 1–54.
- Tellis, G. J. (1988). The Price Elasticity of Selective Demand: A Meta-Analysis of Econometric Models of Sales. *Journal of Marketing Research*, 25(4), 331–341.
- Thompson, E. R., & Prendergast, G. P. (2015). The influence of trait affect and the five-factor personality model on impulse buying. *Personality and Individual Differences*, 76, 216–221.
- Verlegh, P. W., & Steenkamp, J. B. E. (1999). A review and meta-analysis of country-of-origin research. *Journal of Economic Psychology*, 20(5), 521-546.
- Westjohn, S. A., Singh, N., & Magnusson, P. (2012). Responsiveness to global and local consumer culture positioning: A personality and collective identity perspective. *Journal of International Marketing*, 20(1), 58-73.

- Wilcox, D. (2015). Country-of-origin bias: A literature review and prescription for the global world, in Spotts, H.E. (Ed), *Marketing, Technology and Customer Commitment in the New Economy* (pp. 86-96). Springer International Publishing.
- Winit, W., Gregory, G., Cleveland, M., & Verlegh, P. (2014). Global vs local brands: how home country bias and price differences impact brand evaluations. *International Marketing Review*, 31(2), 102-128.
- Xie, Y., Batra, R., & Peng, S. (2015). An extended model of preference formation between global and local brands: The roles of identity expressiveness, trust, and affect. *Journal of International Marketing*, 23(1), 50-71.
- Yeo, J., & Park, J. (2006). Effects of Parent-Extension Similarity and Self Regulatory Focus on Evaluations of Brand Extensions. *Journal of Consumer Psychology*, 16(3), 272–282.
- Zabkar, V. and T. Kolar (2010). Consumers in Slovenia: values, personality types and consumerist attitudes. *Tržište/Market*, (2), 205-222.

Figures and Tables

Consumer Personality
Traits

Domestic Country Bias

Purchase Intention

Controls
Age
Education
Income

Figure 1: Conceptual framework

Table 1: PCA of South East European consumer personality traits

Items	Factor loading	α	Items	Factor loading	α
Extraversion		0.75	Conscientiousness		0.68
Passionate	0.718		Capable	0.735	
Lively	0.685		Well organized	0.716	
Bold	0.606		Intelligent	0.610	
Fun-loving	0.597		Practical	0.579	
Competitive	0.589				
Active	0.542				
Neuroticism		0.67	Openness to Experience		0.61
Introverted	0.752		Perfectionist	0.672	
Reserved	0.698		Creative	0.668	
High Strung	0.674		Imaginative	0.651	
Worrying	0.624		Observant	0.563	

Notes: α – Cronbach's alpha

Table 2: Hypothesis tests

	β (S.E.)	β (S.E.)	β (S.E.)	β (S.E.)			
	ρ (S.E.) (1)	ρ (S.E.) (2)	ρ (S.E.) (3)	ρ (S.E.) (4)			
Covariates	(1)	(2)	(3)	(4)			
Age	-0.01**(0.00)	-0.01**(0.00)	-0.01**(0.00)	-0.01**(0.00)			
Education	0.09**(0.02)	0.09**(0.02)	0.09**(0.02)	0.10**(0.02)			
Income	0.09 (0.02)	0.09 (0.02)	0.07**(0.02)	0.10 (0.02)			
		0.07**(0.02)	0.07**(0.02)	0.07**(0.02)			
Direct effects (on Purchase Intention)							
(1) Extraversion	0.05(0.06)	0.4011(0.05)					
(2) Neuroticism		- 0.10**(0.05)					
(3) Conscientiousness			0.08(0.06)				
(4) Openness to Experience				0.01(0.06)			
Global Brand Associations (GBA)	0.66**(0.04)	0.66**(0.04)	0.66**(0.04)	0.66**(0.04)			
Domestic Country Bias (DCB)	-0.04**(0.01)	-0.04**(0.01)	-0.04**(0.01)	-0.04**(0.01)			
Price Sensitivity (PS)	0.04**(0.02)	0.04**(0.02)	0.04**(0.02)	0.04**(0.02)			
Indirect effects (on Purchase Intention)							
(1/2/3/4) through GBA (H1a)	0.04**(0.02)	-0.02(0.01)	0.04**(0.02)	0.05**(0.02)			
Lower CI	0.0058	-0.0492	0.0031	0.0166			
Upper CI	0.0726	0.0060	0.0750	0.0871			
(1/2/3/4) through DCB (H1b)	-0.00(0.00)	-0.01**(0.00)	-0.01(0.01)	-0.01**(0.01)			
Lower CI	-0.0017	-0.0169	-0.0170	-0.0216			
Upper CI	0.0178	-0.0022	0.0005	-0.0032			
(1/2/3/4) through PS (H1c)	0.01**(0.00)	-0.00(0.01)	0.02**(0.01)	0.01**(0.01)			
Lower CI	0.0017	-0.0062	0.0042	0.0019			
Upper CI	0.0178	0.0029	0.0394	0.0195			
Model information							
-2LL	4,981.80	4,978.17	4,981.40	4,982.73			
\mathbb{R}^2	0.12	0.12	0.12	0.12			

Notes: N = 4,539; ** - p < 0.05; CI = 95% confidence interval; 5,000 bootstrapped samples

Table 3: Multi-group analysis Model 1 (All fixed) Model 2 (Error variances and paths free) В&Н CRO CRO **Paths** SER SLO B&H **SER** SLO 0.028 0.150*** 0.128*** -0.016*** -0.049 Extraversion \rightarrow GBA Neuroticism → GBA -0.022 0.019 -0.0560.032 -0.046-0.019 -0.072-0.139*** 0.125** Conscientiousness → GBA 0.061 Openness to Experience → GBA 0.055** -0.022 0.174*** 0.033 -0.009-0.003*** $Age \rightarrow GBA$ 0.001 -0.010*** -0.0040.001 -0.136*** -0.014 0.004 Education \rightarrow GBA -0.007-0.0440.002 0.082*** 0.002 -0.001 Income \rightarrow GBA 0.002 0.0040.004 0.003 0.018 R^2_{GBA} 0.003 0.010 0.023 0.014 -0.351*** 0.134 Extraversion \rightarrow DCB 0.087 -0.111 -0.2060.218*** 0.400*** 0.245*** Neuroticism \rightarrow DCB 0.097 0.107 0.306 *** 0.769*** 0.219 Conscientiousness → DCB 0.076 -0.0340.563*** Openness to Experience \rightarrow DCB 0.246*** 0.317*** 0.006 0.149 0.017*** 0.021*** $Age \rightarrow DCB$ 0.017*** 0.010 0.016*** Education \rightarrow DCB -0.018 -0.217*** -0.0030.153 -0.117Income \rightarrow DCB -0.011** -0.008 -0.023** 0.064 0.027 0.013 0.021 R^2_{DCB} 0.0150.0150.0140.0430.0140.027Extraversion \rightarrow PS -0.079 -0.199 -0.082 -0.191 0.215 0.289*** Neuroticism \rightarrow PS 0.129*** -0.1550.334*** 0.055 0.636*** 0.956*** 0.525*** 0.571*** 0.492*** Conscientiousness \rightarrow PS 0.336** Openness to Experience \rightarrow PS 0.070 0.054 0.095 -0.1260.008*** 0.012*** 0.014*** $Age \rightarrow PS$ 0.004 0.005 Education \rightarrow PS -0.131*** -0.273*** -0.157*** -0.0170.003 -0.0317*** Income \rightarrow PS -0.023*** -0.053*** -0.193*** -0.049*** 0.049 0.032 R^2_{PS} 0.023 0.025 0.032 0.041 0.052 0.066 0.348*** 0.434*** 0.286*** 0.328*** 0.359*** $GBA \rightarrow PI$ $DCB \rightarrow PI$ -0.023*** -0.028*** -0.047*** -0.0130.001 0.020*** 0.018 0.052*** $PS \rightarrow PI$ 0.018 0.008 $Age \rightarrow PI$ -0.004*** -0.001-0.010*** -0.003-0.005*** 0.099*** 0.125*** 0.139*** -0.131*** Education \rightarrow PI 0.050 0.003 0.016** 0.019 0.023*** Income \rightarrow PI -0.002 R^2_{PI} 0.146 0.147 0.140 0.148 0.162 0.1440.168 0.170 Group fit indices 186.915 Contribution to χ^2 141.257 113.939 128.371 61.685 35.766 66.207 12.030 Percentage Contribution 32.764 24.761 19.972 22.502 37.684 35.111 6.847 20.357 **SRMR** 0.054 0.047 0.049 0.044 0.028 0.027 0.014 0.020 0.979 **GFI** 0.973 0.980 0.980 0.990 0.991 0.998 0.994 Global fit indices

Notes: $N_{B\&H} = 1,137$; $N_{SER} = 1,265$; $N_{SLO} = 1,068$; $N_{CRO} = 1,069$; Merged sample = 4,539; unstandardized coefficients shown; *** - p < 0.01, ** - p < 0.05

564.799; 121; 0.056; 0.885; 0.937

 γ^2 ; df; RMSEA; NNFI; CFI

171.591; 28; 0.067; 0.837; 0.979