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Differences in horizontally individualist and vertically collectivist consumers' environmental behavior: A regulatory focus perspective

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Abstract

Building on horizontal and vertical individualism and collectivism (HV I-C) typology and regulatory focus theory (RFT), this study aims to examine cross-cultural environmental behaviour differences between HI-Finnish and VC-Pakistani consumers. In regards to consumers' attitude towards environmentally friendly products, the results demonstrated predominantly HI-promotion-focused regulatory fit effect in Finland and VC-prevention-focused regulatory fit effect in Pakistan. Consequently, consumers' environmentally friendly products' attitude positively affect their purchase intentions. This study contributes to the sustainability literature by examining the overlooked appropriateness of RFT and HV I-C in cross-cultural environmental behaviour. Managers can use the insights of this study to market their environmentally friendly products more effectively across different cultures.

Keywords environmentally friendly products, consumers, regulatory focus, cross-cultural, horizontal individualism vs vertical collectivism

Introduction

When a consumer decides to buy a product or service, there is always potential for that decision to be part of a sustainable or unsustainable pattern of consumption. Their purchase decisions may prevent or promote environmental degradation. While consumers may be willing to take responsibility for the environmental impact of their purchases, greening their consumption patterns is not easy (Quazi, Amran and Nejati, 2016; Fowler and Close, 2012). It seems that, regardless of consumers' concerns, they continue to buy hazardous non-green products. Researchers have consistently struggled to accurately predict possible antecedents of consumers' pro-environmental behaviour (Cho, Thyroff, Rapert, Park and Lee, 2013) and the motives behind consumers' environmental or sustainable consumption are still unclear (Zagata, 2014).

Marketing researchers argue that consumer behaviour is goal-orientated and consumers' purchase decisions are the expressions of those goals (Higgins, 1997). For example, eastern and western cultures that are classified as collectivistic and individualistic (Hofstede, 1980) are described as prevention- and promotion-focused, respectively (Higgins, Pierro and Kruglanski, 2008). However, the structures of cultures are changing and as a result, consumer behaviour varies across different cultures. Consequently, individuals regulate their goals in different ways (Higgins, 1997; Ouschan *et al.*, 2007; Lee *et al.*, 2000; Shavitt, Lee and Torelli, 2009; Poels and Dewitte, 2008).

Researchers have mainly relied on using regulatory focus theory (RFT) to examine how consumers' regulate their goal orientations in a given situation. RFT is devoted to the pursuit of pleasure goals, i.e., promotion focused, and the avoidance of pain goals, i.e., prevention focused (Higgins, 2012; Higgins, 1997). The role of RFT is also evident in the research on consumers' environmentally friendly consumption (Onwezen, Bartels and Antonides, 2014; Hsu and Chen, 2014; Miniero *et al.*, 2014; Pula, Parks and Ross, 2014; Kareklas, Carlson and

Muehling, 2012; Bhatnagar and McKay-Nesbitt, 2016; Chen, Lee and Huang, 2015). However, the findings of these studies are limited to basing consumers' sustainable consumption goals as pro-self or pro-others, construing them as independent and interdependent selves (Markus and Kitayama, 1991; Kareklas *et al.*, 2012; Chen *et al.*, 2015) or individualists and collectivists (IND/COL) (Hofstede, 1980; Onwezen *et al.*, 2014). Research reveals that consumers face a trade-off between their individual and collective interests when behaving in environmentally friendly ways (Moisander, 2007; Gupta and Ogden, 2009; Van Lange *et al.*, 2013) and that their promotion- and prevention-focused orientations may transcend each other in the context of environmentally friendly behaviour across different cultures (Bhatangar and McKay-Nesbitt, 2016; Chen, Lee and Huang, 2015).

As no consumers are alike, such as that consumers' goals and cultural characteristics are not homogenous, the purpose of this study is to blend RFT with HV I-C typology (Triandis and Gelfand, 1998), so as to provide important findings in advancing cross-cultural sustainable consumption research that demonstrates whether consumers' prevention and promotion focus orientations have any impact on environmentally friendly behaviour. Here, the authors infer that environmental behaviour is not limited to individualistic or collectivistic interests of consumers, but the interplay of RFT can be useful with horizontal and vertical individualism and collectivism (HV I-C) typology, which is more comprehensive (Triandis and Gelfand, 1998). This study offers several managerial and marketing implications that may be essential for national as well as international producers, marketers and policymakers. In the remainder of the study, the literature review, theoretical framework, research method, findings and results, discussion and conclusions are discussed. Managerial implications, limitations and future research recommendations are also considered at the end.

1.0 Literature review

1.1 Regulatory focus theory

The primary basis for this research is Regulatory focus theory (RFT). RFT suggests that individuals have two different motivational preferences for the means to achieve goals: promotion-focused and prevention-focused (Higgins, 1997). Promotion orientated individuals focus on achieving an ideal state, are sensitive to gains and strive eagerly to reach goals. Individuals with a prevention orientation focus on pursuing goals cautiously, preventing problems and are sensitive to losses (Shah, Higgins and Friedman, 1998). Individuals feel more satisfied when regulatory fit occurs and matches with their goals (Kruglanski, 2006). Lee and Aaker (2004) found that regulatory fit leads to positive attitudes, which improve individuals' behaviour. Consumers evaluate the purchases they make based on these orientations and consider whether the result will maximize their benefits or minimize negative outcomes (Aaker and Lee, 2006). Consequently, they pay more for a product if it matches their promotion- or prevention-focused orientation (Avent and Higgins, 2006). Due to its importance in people's decision-making, RFT has been widely used in the majority of studies, including those on consumers' responses to advertising (Aaker and Lee, 2001; Chowdhury, Micu, Ratneswar and Kim, 2015), health-relevant behaviours (Haught, Rose and Brown, 2015), safety behaviour (Aryee and Hsiung, 2016), restaurant choice (Pham and Chang, 2010) word of mouth communications (Pentina, Bailey and Zhang, 2015) and food consumption (Pula, Parks and Ross, 2014). RFT is appropriate for many consumers' decisions and remains one of the stable individual difference variables in consumer behaviour (Higgins, 2012).

1.2 Horizontal vs Vertical individualism and collectivism (HV I-C)

HV I-C addresses the equality/inequality belief among members of a cultural group (Singelis *et al.*, 1995; Triandis and Gelfand, 1998; Shavitt *et al.*, 2006; Shavitt and Cho, 2016). For instance, vertical individualistic (VI) individuals are from France, Great Britain and the United

States, with characteristics focused on hierarchy, power, individual competition and the value of being different and important. Individuals from India, Japan and Korea are vertical collectivistic (VC) in nature, emphasizing submission and compliance with authority, prioritizing group benefits, goals and interests and preserving unity. Citizens of Denmark, Norway, Sweden and Australia are horizontal individualistic (HI) and bear the characteristics of equality, independence, self-reliance and uniqueness. Horizontal collectivistic (HC) people are from Israeli kibbutzim, emphasizing equity, sociability, interdependence and group commonality. These characteristics bring out different themes and each of them can be displayed by individuals within any culture (Komarraju and Cokley, 2008). The role of HV I-C dimensions has been widely examined in different research contexts; among these, its role in consumer psychology is most prominent. For example, consumers with VI (high on competitiveness) orientations are brand conscious and status orientated and do not tolerate lying (Lu et al., 2011; Zhang and Nelson, 2016). VC (high on group dependence) orientated consumers are normative, pro-environmental and prone to other directed symbolism and nomophobia (Yi-Cheon Yim et al., 2014; Shukla, Singh and Banerjee, 2015; Arpaci, 2017; Waylen et al., 2012). Individuals rated high on HI (high on uniqueness) achieve outcomes with competence, display impersonal interests in nutritional practices for society, show proenvironmental attitudes and are satisfied with their lives (Sandhu and Ching, 2014; Torres and Perez-Nebra, 2007; Cho et al., 2013; Parker and Grinter, 2014). HC individuals (high on interdependence) show positive environmental attitudes, are interested in cause-related marketing, give preference to products for religious reasons and show leisure attitudes (Cho et al., 2013; Wang, 2014; Jamal and Sharifuddin, 2015; Wong, Newton and Newton, 2014).

2.0 Hypotheses development

2.1 Horizontal individualism vs vertical collectivism differences in regulatory focus

Earlier research has argued that consumers' regulatory goals, attitudes and behaviour can be distinctively different in different cultures (Higgins, 1997). Researchers assumed that consumers in individualistic cultures would be promotion-orientated and consumers from collectivistic cultures would be prevention-orientated (Chen, Ng and Rao, 2005; Lee *et al.*, 2000). However, it is not true. From the review of literature, it seems that earlier research was unable to produce credible evidence on how and why regulatory fit effect occurs in different contexts, thus compelling the authors to understand regulatory fit occurrence in cross-cultural contexts. One possible explanation is that regulatory focus orientations are not fixed (Miniero *et al.*, 2014) and different across different cultural contexts (Bu, Kim and Son, 2013).

Since the countries of investigation in this study are Finland and Pakistan, the authors argue that the goals of consumers in Finland are promotion-focused to achieve gains and will be compatible with their horizontal individualist characteristics. On the contrary, Pakistani consumers are prevention-focused to avoid losses and will be compatible with their vertical collectivistic characteristics. For instance, earlier research supports our selection of these countries. Finns represents HI specific cultural characteristics such as uniqueness, independence, self-reliance and equality (Khatri, Tsang, and Begley, 2005). Finns show positive attitude to products with promoting health claims and experience emotions having positive outcomes (Grunert *et al*, 2009; Loumala, Kumar, Singh, and Jaakkola, 2015), whereas the characteristics of Pakistanis are relatively obligatory, show status or power distance, group orientation, and hierarchy (Sivadas, Bruvold, and Nelson, 2008), which shows their VC cultural orientations (Imam, 2013). Moreover, Pakistanis have also been characterized as prevention

focused consumers (Ashraf, Razzaque, and Thongpapani, 2016). Therefore, it is hypothesized that,

H1a. There is a positive influence of HI on consumers' promotion-focused orientations but (H1b) a negative influence, or no influence, on their prevention focus in Finland;
H2a. There is a positive influence of VC on consumers' prevention-focused orientations but (H2b) a negative effect, or no effect, on their promotion-focused orientations in Pakistan;

2.2 Regulatory focus difference in environmental attitude and purchase

intentions

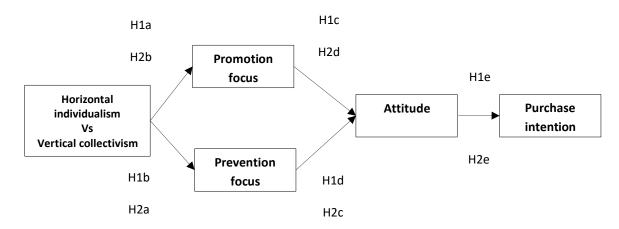
RFT also appears in research on predicting consumers' pro-environmental behaviours, but with mixed results. For instance, prevention-orientated consumers feel a moral duty to adopt green lifestyles and prefer natural contents in food (Miniero *et al.*, 2014; Pula, Parks and Ross, 2014). Conversely, promotion goals were found to be more dominant than prevention goals in environmentally responsible behaviour and the purchase of organic food (Chen, Lee, Huang, 2015). Bhatnagar and McKay-Nesbitt (2016) found that promotion- and prevention-focused individuals respond similarly to recycling. In their study, Onwezen *et al.* (2014) found no difference regarding self-regulated anticipated pride and guilt in the purchase intentions of consumers from individualistic and collectivistic countries. According to Kareklas *et al.* (2012), promotion-orientated environmental appeals for consumers with interdependent self-views. On the contrary, it has been suggested that consumers perceive prevention-focused appeals better than promotion-focused appeals when marketers position sustainable products (Bullard and Manchanda, 2013).

Since, pro-environmental behaviour is described as "behaviour that consciously seeks to minimize the negative impact of one's actions on the natural and built world" (Kollmuss and Agyeman, 2002). Therefore, instead of assuming consumers' environmental goals are

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independent or interdependent and/or individualistic or collectivistic (McCarty and Shrum, 2001; Soyez, 2012; Park *et al*, 2007), it is possible that there may be a difference in consumers' regulatory focus and environmental behaviour in countries structured as horizontal and vertical or collectivist and individualist (Cho *et al.*, 2013; Waylen *et al.*, 2012). For example, in their green purchasing behaviour, there is a difference in consumers' underlying emotional mechanisms between attitude-intention associations in individualistic versus collectivistic cultures (Onwezen *et al.*, 2014). Therefore, it can be possible that a pro-environmental consumer may activate his or her prevention- or promotion-focused orientation despite his or her chronic regulatory focus orientation as an individualist or a collectivist (Higgins, 2002). Consequently, we argue that, instead of assuming congruency between IND/COL and regulatory focus emotions, it is possible that the formation of regulatory fit effect will prevail in HI and VC cultures and produce cultural indigenous consumers' environmentally friendly attitude and purchase intentions. Therefore, it is hypothesized that,

H1c. Promotion-focused orientations positively influence but (H1d) prevention-focused orientations have a negative influence, or no influence, on consumers' attitude in Finland;
H1e. Consumers' attitude positively influence consumers' purchase intentions in Finland;
H2c. Prevention-focused orientations positively influence but (H2d) promotion-focused orientations have a negative influence, or no influence, on consumers' attitude in Pakistan; and



H2e. Consumers' attitude positively influence consumers' purchase intentions in Pakistan.

Fig 1.0Conceptual framework

3.0 Methodology

3.1 Data collection and sample

The study sample includes people belonging to two countries: Finland and Pakistan. The authors adopted non-probability convenient sampling techniques for data collection. The respondents were contacted in malls, parks, city centres, universities and public places. Data were received from 179 Pakistani respondents residing in Rawalpindi and Islamabad during the months of August to October 2017 and from 207 Finnish respondents residing in Vaasa and Helsinki from May to July 2017.

3.2 Measures

The study questionnaire consisted of two parts. To avoid the confusion of respondents in understanding the questions, the questionnaire was translated into the native languages of Pakistan-Urdu and Finland-Finnish. The first part included scale items of independent and dependent variables and the second part included questions about demographic characteristics, such as age, gender, marital status, education and income level of the respondents. Scale items of horizontal individualism (HI) and four items of vertical collectivism (VC) value orientations were adopted from the study of Triandis and Gelfand (1998) and were measured using a Likert scale of "Strongly disagree" (1) to "Strongly agree" (5). Statements on regulatory focus orientations were adopted from the study of Higgins *et al.* (2001) and measured as advised by that author. Scale items on consumers' environmental attitude variable were adopted from the study of Mostafa (2007) and were measured using a 1-5 Likert scale. Questionnaire items on purchase intention variables were taken from the study of Paul, Modi and Patel (2016) and were measured using a Likert scale of "Strongly disagree" (5).

3.3 Data analysis tests

The collected data were analysed using the statistical application software Statistical Program for Social Scientists (SPSS 20.0). Moreover, to test the fitness of the model, the authors applied a structural equation modelling (SEM) technique using SmartPLS (v. 3.2.6) application software.

4.0 **Results and findings**

4.1 Sample characteristics

The demographic information shows that the majority of the respondents were aged 21-25 in both samples (Pakistan, 35, 19.5%; Finland, 51, 24.6%). However, there were more females in the Finnish sample (154, 74.4%) than in the Pakistani sample (80, 44.7%). There were six (3.4%) respondents with doctorate degrees in the Pakistani sample but only one (0.6%) in the Finnish sample. The majority (39, 21.8%) of the respondents in the Pakistani sample had income levels Pakistani rupees (PKR) between 30,001 to 35,000, while in the Finnish sample 52 (25.1%) and 37 (17.9%) respondents had income levels of 501-999 and 2,000-2,499, respectively.

4.2 Discriminant validity

The Pearson correlation test of statistics was used to view the interrelationship between the variables. For evaluating the reliability and convergent validity, the authors computed composite reliability (CR) and average variance extracted (AVE). In addition, the square root of AVEs was computed to check the adequate discriminant validity that exceeds correlation coefficients between the pair of corresponding constructs (See Table 1.0 and 2.0).

Table 1.0	Discriminant	validity	(Finland)

Variables	HI	Pro	Pre	EA	PI	CR	AVE
HI	(0.79)					0.757	0.626
Pro	.387**	(0.78)				0.819	0.601

Pre	036	.012	(0.83)			0.871	0.692
EA	.260**	.228**	137*	(0.78)		0.887	0.612
PI	.160*	.147*	078	.727**	(0.88)	0.930	0.770

Table 2.0 Discriminant validity (Pakistan)

Variables	VC	Pro	Pre	EA	PI	CR	AVE
VC	(0.86)					0.852	0.743
Pro	.085	(0.79)				0.776	0.636
Pre	.360**	.100	(0.79)			0.839	0.636
EA	.444**	.137	.577**	(0.75)		0.796	0.567
PI	.273**	.194**	.499**	.443**	(0.80)	0.842	0.640

Notes: Values of square root of AVEs are shown diagonally in parentheses.

**. Correlation is significant at the 0.01 level (2-tailed)

*. Correlation is significant at the 0.05 level (2-tailed)

4.3 Structural Equation Modelling (SEM) Analysis

To test the relationship in the research model as specified during the conceptualization stage, the authors used a SEM approach (Diamantopoulos *et al.*, 2000). Hair *et al.* (2006) argue that SEM is a collection of statistical models that helps researchers simultaneously examine the interrelationship between different variables. Therefore, to analyse the data and check the hypothesized relationship of the model, the authors employed partial least squares (PLS) SmartPLS software. PLS is prediction-orientated SEM-based software that is convenient and works well with smaller data sets (Henseler, Ringle and Sinkovics, 2009). A two-step SEM analysis approach was performed on the data (Anderson and Gerbing, 1999).

4.4 Measurement model

There are five latent variables in each model of the two samples that employ the reflective measurement model on each of the different items of the scale. Loadings of all the factors

showed adequate convergent validity, which indicates acceptable internal consistency above the recommended value of 0.50 (Fornell and Larcker, 1981) (see Figures 1 and 2).

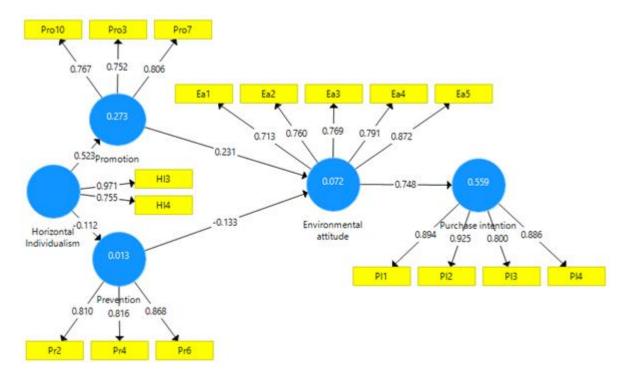


Fig 2.0 Measurement model (Finland)

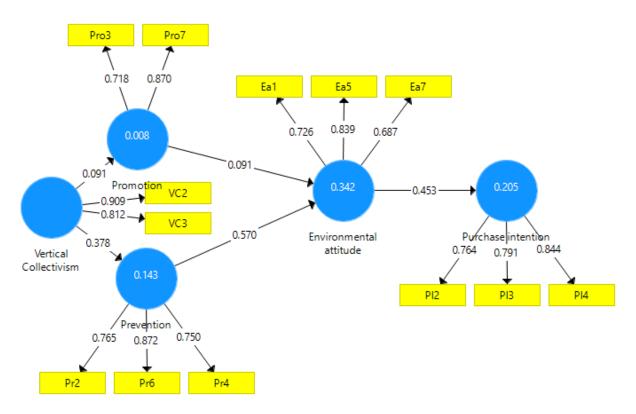


Fig 3.0Measurement model (Pakistan)

4.5 Structural model estimation hypotheses result

The first step in structural model estimation processes is to calculate the value of R^2 , which shows the amount of variance in a dependent variable by independent variables. In the current model, the value of R² for Finland was 0.55 and for Pakistan was 0.20, which demonstrates considerable significance for the interpretation of the variance. After this step, the crossvalidated redundancy measures, called Q², were calculated using blindfolding command in PLS and resulted in values of 0.39 for Finland and 0.23 for Pakistan. In the next step, to estimate the accuracy of the measurement model, calculate the path coefficients and generate t-values, the authors ran a bootstrapping method for sampling test (Roldan and Sanchez-Franco, 2012). The path coefficients showed the strength of the relationship between the independent and dependent variables of the model. The hypotheses of this study were examined using the path coefficients. The data in the first model of Finland accounted for 55% of the variance in the dependent variable. Regarding the first hypothesis result, the data demonstrate that horizontal individualism positively influences consumers' promotion-focused orientations ($\beta = 0.523$, p < 0.05). Therefore, H1a is accepted. Regarding the influence of HI on prevention focus ($\beta =$ 1.112, p > 0.05) H1b is also accepted because the effect was insignificant. The influence of promotion focus on environmental attitudes was found positive ($\beta = 0.231$, p < 0.05) so H1c is accepted. The influence of prevention focus on consumers' environmental attitudes was negative ($\beta = -0.133$, p > 0.05). Therefore, H1d is also accepted. Last, the influence of environmental attitudes on purchase intentions was found positive ($\beta = 0.748$, p < 0.05), so H1e is accepted.

The data in the second model of Pakistan accounted for 20% of variance in the dependent variable. The results demonstrate that vertical collectivism has insignificant influence on consumers' promotion-focused orientations ($\beta = 0.091$, p > 0.05), resulting in an acceptance of H2a, but positively influences prevention-focus orientations ($\beta = 0.378$, p < 0.05), so H2b cannot be accepted. The authors accept H2c because the influence of prevention-focused

orientations on environmental attitudes was positive ($\beta = 0.570$, p < 0.05). The influence of promotion-focused orientation on environmental attitudes was found to be insignificant ($\beta = 0.091$, p > 0.05), so H2d is also accepted. Last, the authors found that there was a positive influence of environmental attitudes on purchase intentions, thus leading to an acceptance of H2e ($\beta = 0.453$, p < 0.05) (see Tables 3 and 4).

Hypotheses	Hypothesized path	В	t-value	P-value	Label		
	Finland						
H1a	HI → Pro	0.523	8.689	0.000	Accept		
H1b	HI→Pre	- 0.112	1.246	0.215	Accept		
H1c	$Pro \rightarrow EAt$	0.231	3.179	0.001	Accept		
H1d	$Pre \rightarrow EAt$	-0.133	1.646	0.100	Accept		
Hle	EAt \rightarrow PI	0.748	23.132	0.000	Accept		
		Pakist	an				
H2a	VC→Pre	0.378	5.257	0.000	Accept		
H2b	$VC \rightarrow Pro$	0.091	1.078	0.281	Accept		
H2c	$\operatorname{Pre} \operatorname{EAt}$	0.570	8.946	0.000	Accept		
H2d	$Pro \rightarrow EAt$	0.091	1.240	0.251	Accept		
H2e	EAt \rightarrow PI	0.453	6.672	0.000	Accept		
Model fit:							
Finland (R ² =	$= 0.55, \mathbf{Q}^2 = 0.39)$						
Pakistan (R ²	$= 0.20, \mathbf{Q}^2 = 0.23)$						

1 able 5.0 Hypotheses 1	Table 3.0	Hypotheses	result
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p < 0.05

5.0 Discussion

This study examines the regulatory focus perspectives of consumers on their environmental products' attitude and purchase intentions, comparing two countries based on horizontal and vertical IND/COL cultural differences. It was conceptualized that consumers from a horizontal individualistic culture country (Finland) would be promotion-focused, while consumers from a vertical collectivistic culture country (Pakistan) would be prevention-focused; consequently, the regulatory focus orientations of consumers in the selected countries would affect their environmental products' attitude. The authors were able to find significant research evidence relating RFT to attitudes and purchase intentions in cross-cultural contexts, which is uniquely different from related research on the topic (Kareklas et al., 2012; Chen et al., 2015; Onwezen et al., 2014). In the context of environmental choices, previous research has divided consumers into pro-self and pro-others (interdependent versus dependent selves) or into individualists and collectivists, thus assuming their environmentally friendly choices are different. In general, the present analysis contributes to earlier research about how RFT can be different across cultures (Higgins, 1997; Shavitt, et al., 2006; Poels and Dewitte, 2008), specifically in horizontal individualistic and vertical collectivistic countries (Cho et al., 2013; Waylen et al., 2012). This research improves existing research on the compatibility of RFT in such cultures in terms of environmental behaviour. To date, no research has been conducted on examining the influence of HI vs VC on RFT and consequently on environmental behaviour in cross-cultural context, therefore; our study is the first to examine this relationship. The authors were able to reveal interesting findings. For instance, since consumers in HI cultures are low power distance societies and categorized by characteristics such as equality, uniqueness and self-reliance, the results of this study clearly show that they are promotion focused. It means that HI or Finnish consumers are promotion-focused and their characteristics align when consumers choose environmentally friendly products. On the other hand, when buying environmentally friendly

products, the main goals of VC or Pakistani consumers are prevention-focused, which are compatible with VC cultural values. In other words, HI consumers may buy environmentally friendly products to achieve gains including health and an ideal state of mind, satisfaction and hedonism, therefore; hoping that their purchases for such gains will make a difference in achieving environmental protection. Consequently, the features of environmentally friendly products match their promotion-focused orientations and HI cultural values. On the contrary, VC orientated consumers are sensitive to losses, so they may buy environmentally friendly products to stop further losses to the environment, prevent pollution and save themselves and their families from the problems created by environmental degradation. This study has helped in identifying the most important elements of environmental behaivor in cross-cultural context. For instance, HI vs VC and RFT interplay will not only change the way we see green buying behaviour of consumers in the two countries, but also motivate companies to produce environmental friendly products to improve their brand image, competitive advantage, and increase overall business performance.

6.0 Managerial implications

Several managerial implications and insights can emerge from the findings of the present study, which demonstrates that the success of marketers in cross-cultural contexts depends on their ability to satisfy the value-based needs and motives of consumers who experience regulatory fit in Finland and Pakistan. For instance, a consumer in an HI culture may buy a green product for health, social and ethical reasons, while a consumer in a VC culture may buy the same product for group benefits, such as regulating their health and that of their family, or for the purpose of being respected by others. In this regard, in HI markets such as Finland, there may be high demand for products that are low in calories, of good quality and nutritious, such as food and beverages, organic clothes and organic reusable apparel, toxic and chemical free products such as utensils, colour and paints, and the products that gives benefits when buying

to farmers, agriculture, humans and animals. In VC cultures such as the Pakistani market, products such as organic beauty and fashion products, eco-friendly transport and cars, organic dishwashing liquid and green white goods can be marketed well. Regulatory focus plays an important role in consumers' environmentally friendly choices in the selected countries. Therefore, companies should pay attention to create products and services identical to their culture-goal fit. Brands carry different meanings and companies can identify the most viable consumer base for their products and services. For example, a positive consumer response will be generated in HI cultures when consumers are exposed to advertisements such as promotions to gain healthy bodies and lifestyles, discourage unhealthy habits and communicate the positive impact of environmentally friendly products on the earth, people, the environment and animals. On the contrary, the following advertisements may be effective in VC culture countries: those that portray environmentally friendly messages such as benefits to families and groups, those displaying the advantages of environmentally friendly products, e.g., how they prevent environmental degradation and atmospheric pollution and are less damaging than conventional products, and those that enhance consumers' social image in society or in groups. We conclude that, the findings of this study are novel and unique for marketers of environmentally friendly products to capitalize their marketing and advertising strategies in HI and VC cultures.

7.0 Limitations and future research

Like other research studies, the current study is not immune from some limitations. First, this study was conducted in only one HI and one VC cultural country context. Therefore, it would be valuable to examine whether the findings are generalizable in other countries and across different cultural contexts. Second, in the context of environmentally friendly choices, the RFT scores clearly indicated the regulatory focus characteristics of the selected HI versus VC cultures. The results may vary and indicate different findings if and when regulatory focus conditions are manipulated and construed for other products and behavioural intentions, so

future studies should examine this. Third, there can be moderating effects of some factors such as consumers' demographics or other external factors on the relationship between culture, regulatory focus and environmental attitudes. Thus, future studies might examine the role of such factors. Fourth, the sample size in both countries was small and may prevent researchers from generalizing the findings on an overall population. Last, the interplay of RFT can be examined in horizontal collectivistic and vertical individualistic cultures when predicting environmental behaviour of consumers to see if it is suitable.

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