National cultural value models and reputation of MNCs

Bernhard Swoboda and Nadine Batton
Chair for Marketing and Retailing, University of Trier, Trier, Germany

Received 2 May 2018
Revised 19 November 2018
5 March 2019
Accepted 6 March 2019

Abstract

Purpose – The purpose of this paper is to provide a theoretical and empirical comparison of four major national cultural value models for perceived corporate reputation (CR) of multinational corporations (MNCs) across nations: Hofstede, Schwartz, the GLOBE study and Inglehart.

Design/methodology/approach – Two consumer surveys on an MNC and on competitors in 25 countries in the year 2015 ($n = 20{,}288$ and 25,397) were used for the first time to compare the roles of the cultural value models as antecedents of CR, using multilevel structural equation modeling (MSEM), which disentangles the explained variances on the country level and on the individual level.

Findings – National culture is strongly attributed to individual CR perceptions of MNCs across nations. However, the four conceptual cultural value models explain the variance differently (46.2–84.6 percent) as do particular cultural value dimensions within each model. The results are stable for both surveys.

Research limitations/implications – Novel insights into the roles of cultural value models are provided for international business research. For MNCs aiming to use their CR to attract target groups in foreign countries, this study identifies the most influential cultural value model and particular dimensions.

Originality/value – This study contributes to cultural research by deepening the understanding of the various cultural value models and their importance for MNCs. Moreover, the authors add to the CR research by providing new insights into perception differences and using the still novel MSEM.

Keywords National culture, Cultural value models, Hofstede, Schwartz, GLOBE, Inglehart, Corporate reputation, Multilevel structural equation modelling

Paper type Research paper

Introduction

National culture is a common set of shared beliefs, attitudes, norms, roles and values expressed within a society (Triandis, 1995, p. 6) and eventuates in similar perceptions and behaviors (De Mooij, 2017). Culture is one of the most observed context variables in international research. Scholars primarily use either Hofstede's (1980) descriptive conceptual model or one of its six dimensions to explain behavioral differences across nations. Although this model (timely published when scholars began to examine country interactions, Søndergaard, 1994) is the most-criticized one (even seen as invalid, e.g. McSweeney, 2009, 2013; Brewer and Venaik, 2012; Minkov, 2018; Minkov *et al.*, 2017), scholars relatively seldom use alternative models such as those of Schwartz (1994), the GLOBE study (House *et al.*, 2004) or Inglehart (1997) (e.g. Steenkamp and Geyskens, 2006; Chan *et al.*, 2007). These models propose different conceptualizations and measurements of national culture, and it is important to study them to determine which one is the most meaningful for multinational corporations (MNCs).

We aim to advance our knowledge by theoretically and empirically comparing whether and how these four cultural value models explain different customer perceptions of MNCs across nations. Through multilevel structural equation modeling (MSEM), we distinguish explained variance at the individual and country level and show the relative importance of each model as well as of their dimensions.

We analyze the effects in the important context of perceived corporate reputation (CR), i.e. consumers' overall evaluation of a firm's responsibility, strength or offer of quality (Walsh and Beatty, 2007), for both theoretical and practical reasons. Studying differences in perceptions of MNCs across nations is important as they tell what consumers think

Cross Cultural & Strategic Management
Vol. 26 No. 2, 2019
pp. 166-198

2059-5794
DOI 10.1108/CCSM-05-2018-0061

about an MNC in different societies and affect behavioral responses toward an MNC (e.g. perception-trust-links, Swoboda *et al.*, 2017). CR represents easily accessible information and an important signal for MNCs to attract consumers, employees or the public across nations (e.g. Fombrun and Shanley, 1990). Culture is seen as one of the most important antecedents of CR signals across nations. For MNCs, it is consequently paramount to understand cultural differences and the higher explained variances by different cultural value models. MNCs may then adjust corporate communication budgets and maximize the payoffs of CR signals in countries with a strong diminishing or reinforcing role of national culture.

This study contributes to cross-cultural research by providing a systematic comparison of the major models and their importance for consumers' perceptions across nations. Although these models have been widely acknowledged, the theoretical and operational advantages and disadvantages of Hofstede and GLOBE have primarily been discussed (e.g. De Mooij, 2015; Javidan *et al.*, 2006). The four models have not been compared regarding their explained variances in research on customer behavior. Only De Mooij (2017), Minkov (2018) and Minkov *et al.* (2017) empirically compared Hofstede, Schwartz and GLOBE by correlating their dimensions to secondary data (e.g. GNP/capita, internet usage, etc., in 16 and 56 countries). Providing a comprehensive literature review on related empirical studies, rationales and new empirical results for each model's antecedent role for cross-national perception, we aim to advance the extant research. In doing so, we respond to calls for research to increasingly understanding the capacity of the leading models to explain cross-cultural differences (e.g. De Mooij, 2017) and for the use of multilevel modeling in this context (Devinney and Hohberger, 2017).

We also add to the CR research by providing new results on cultural-based CR perception differences of MNCs across nations. Four studies addressed such differences referring to Hofstede: Falkenreck and Wagner (2010) analyze five countries and power distance/masculinity; Ali *et al.* (2015) evaluate 110 studies and indicate the relevance of uncertainty avoidance; Deephouse *et al.* (2016) show significant effects of uncertainty avoidance, power distance and masculinity across 25 countries (analyzing four dimensions), while Swoboda and Hirschmann (2017) show the effects of power distance, individualism and masculinity across 37 countries (analyzing five dimensions)[1]. However, extant research suffers from limitations when focusing on Hofstede or a few dimensions only. National culture is a complex phenomenon with different dimensions (e.g. Morgeson III *et al.*, 2011; Kirkman *et al.*, 2017) and only the explained variance of the cultural value models (tested with all conceptualized facets) makes their importance visible. Finally, analyzing only a few countries is a limitation as well as it remains unclear how strong the explained variance of a model or its dimensions is. MSEM provides appropriate insights for MNCs aiming to use CR across nations.

The remainder of the study proceeds as follows. A literature review clarifies the importance of cultural value models in consumer research and theoretical rationales address their general role for perceived CR. The empirical tests are based on two samples in 25 countries (five MNCs with different origins and a German MNC for stability reasons), which however do not allow testing moderation models in MSEM. Finally implications and further research directions are provided.

Literature review

There is ongoing interest in international business research across cultures and many studies published in leading journals deal with national cultural differences in consumers' behavior. Subsequently a comprehensive review highlights the status of this research stream and the need for a comparison of the role of the major cultural value models for MNCs in this context.

Journal and article identification

To identify relevant journals, we follow Gaur and Kumar (2018) with a focus on those journals which favor research on consumer perceptions or behavior. According to Harzing's (2018) journal quality list (in particular the rankings of the Association of Business Schools Academic Journal Quality Guide (minimum highly regarded journal), and at the same time the Vienna University of Business Administration (minimum A)), we selected the leading 12 international business and marketing journals: *JIBS*, *JIMan*, *JIMark*, *JWB*, *MIR* by adding *IMR*, and *IJRM*, *JAMS*, *JCR*, *JM*, *MS*, *JMR*. The following criteria were used to select relevant empirical studies published between 2005 and 2017 (e.g. Tsui *et al.*, 2007). First, only studies using national culture as an explanatory variable were included. Second, at least two countries had to be analyzed. Third, conceptual studies, meta-analysis, literature reviews and studies that do not apply a distinct cultural value model were excluded. Table I captures 78 empirical studies.

We observe the relevance of the cultural value models and additionally their dimensions for consumer behavior studies across nations. Furthermore, sample and methodological issues are highlighted (e.g. sample size, number of countries and analytical method). Both issues affect the options for the conceptual and empirical modeling of cultural studies. Further contents remain unobserved (e.g. longitudinal design, research theme, type of interpretation, etc.; Gaur and Kumar, 2018) as all studies are cross-sectional and quantitative empirical studies.

Relevance of cultural value models

With respect to the research topics, only the few studies previously mentioned address CR, whereas others address further behavioral issues. In general, 64 studies refer to the main cultural value models of Hofstede (1980), Schwartz (1994), the GLOBE study (House *et al.*, 2004) and Inglehart (1997) (see Table I). Further cultural value models are less important. Hofstede is by far the most often used (52 studies vs 12 studies on the other three cultural value models). A combination of cultural value models is seldom. Only one study uses Hofstede and mentions GLOBE without stringent tests (Chan *et al.*, 2007, Hofstede's individualism and GLOBE's collectivism II). Steenkamp and Geyskens (2006) create a measure of individualism according to Hofstede and Triandis. De Mooij (2017) compares Hofstede, Schwartz and GLOBE for behavior-related secondary data.

National culture is analyzed in different research model types, i.e. as an antecedent of consumer perceptions or of behavioral responses/outcomes (e.g. trust), as well as a moderator of relationships between two or more variables (e.g. the perceptions-responses-link).

In total, 11 studies analyze national culture as an antecedent of consumer perceptions (e.g. service perception, Cunningham *et al.*, 2006; four studies mentioned perceived CR). In total, six studies question how different perceptions are explained by culture and five how perceptions differ depending on culture when comparing countries without empirical testing. Hofstede is most often used. Only one study uses GLOBE (Chan *et al.*, 2007), whereas Schwartz and Inglehart have never been linked to perceptions.

In total, 11 studies analyze the effects of culture on consumer responses (e.g. word-of-mouth, buying behavior; Lam *et al.*, 2009; Zhang *et al.*, 2010). Nine studies analyze the explanatory power of culture on consumer responses and the remaining two solely compare countries to highlight cultural effects. Hofstede is predominantly used (nine studies). As initially mentioned, De Mooij (2017) compares Hofstede, Schwartz and GLOBE. Schwartz is used in one further study (Lemmens *et al.*, 2007; customer confidence) and one study uses Inglehart (Morgeson III *et al.*, 2011; customer satisfaction).

In total, 44 studies address national culture as a moderator of the relationship between independent and outcome variables (e.g. brand globalness on purchasing likelihood; Özsomer, 2012). The dominance of Hofstede is visible again (34 studies, including the few

Table I.
Literature review on conceptual national cultural value models

Research model type	Hofstede	Schwartz	GLOBE	Inglehart	Further
Consumer perceptions	Agarwal *et al.* (2010, *JIMark*) Ahmed and d'Astous (2008, *IMR*)[a] *Chan et al. (2007, IMR)*[a] Cunningham *et al.* (2006, *IMR*) **Deephouse *et al.* (2016, *JWB*)** El-Manstrly (2014, *IMR*) Lieven and Hildebrand (2016, *JMR*) Pauwels *et al.* (2013, *IJRM*) Petrovici *et al.* (2007, *IMR*) Reardon *et al.* (2006, *JIMark*) **Swoboda and Hirschmann (2017, *IMR*)**		*Chan et al. (2007, IMR)*[a]		Choi *et al.* (2016, *JIMark*)[d] Keh and Sun (2008, *JIMark*)[b] *Singh et al. (2011, JIBS)*[d] Thomas *et al.* (2016, MIR)
Relationships between two or more variables	Ashraf *et al.* (2014, *JIMark*) Becker-Olsen *et al.* (2011, *JIMark*) Bolton *et al.* (2010, *JMR*) Chan *et al.* (2010, *JM*) Duque and Lado (2010, *IMR*) Eisingerich and Rubera (2010, *JIMark*) *Erdem et al. (2006, JM)*[c] Evanschitzky *et al.* (2014, *IJRM*) Hudson *et al.* (2016, *IJRM*) Hui *et al.* (2011, *JIMark*) ***Jin et al. (2008, IMR)***[a,d] Jung *et al.* (2009, *IMR*) Krautz and Hoffmann (2017, *JIMark*) Kumar and Pansari (2016, *JIMark*) Kwak *et al.* (2006, *JAMS*) Lee *et al.* (2007, *IMR*) Lee *et al.* (2013, *JWB*) Möller and Eisend (2010, *JIMark*) Moon *et al.* (2015, *IMR*)	Camacho *et al.* (2014, *IJRM*) Marquina and Morales (2012, *IMR*) **Swoboda *et al.* (2016, *JAMS*)**	Chan *et al.* (2016, *IMR*) Okazaki *et al.* (2010, *JIMark*) Soyez (2012, *IMR*)	Steenkamp and de Jong (2010, *JM*) Van der Lans *et al.* (2016, IJRM) Yeung *et al.* (2013, *IJRM*) Zarantonello *et al.* (2013, *IJRM*)	*Erdem et al. (2006, JM)*[c] ***Jin et al.* (2008, *IMR*)**[a,d] Keh *et al.* (2015, *IMR*)[b] Laforet and Chen (2012, *JWB*)[d] *Park et al.* (2015, *IMR*)[c] Rubera *et al.* (2011, *JIBS*)[b] Sharma *et al.* (2017, *JIMark*)[c] *Steenkamp and Geyskens (2006, JM)*[c] Torelli *et al.* (2012, *JM*)[c] Zakaria (2017, *JIMan*)[a]

(*continued*)

Table I.

Research model type	Hofstede	Schwartz	GLOBE	Inglehart	Further
	Özsomer (2012, *JIMark*) *Park et al.* (2015, *IMR*)[c] Patterson *et al.* (2006, *IJRM*) Petersen *et al.* (2015, *JM*) Petrovici *et al.* (2007, *IMR*) Schumann *et al.* (2010, *JIMark*) *Steenkamp and Geyskens* (2006, *JM*)[c] **Swoboda and Hirschmann (2017, *IMR*)** **Swoboda *et al.* (2017, *MIR*)** Tang (2017, *JIMark*) Usunier and Cestre (2007, *JIMark*) Van Ittersum and Wong (2010, *IJRM*) Walsh *et al.* (2014, *JIMark*) Wang and Sun (2010, *IMR*) Yang *et al.* (2015, *JCR*)				
Consumer responses/ outcomes	*De Mooij* (2017, *IMR*) Lam *et al.* (2009, *JIMark*) Paul *et al.* (2006, *JIMark*) Schlager and Maas (2013, *JIMark*) Segalla *et al.* (2006, *IJRM*) Singh (2006, *IMR*) Thompson and Chmura (2015, *JIMark*) Winterich and Zhang (2014, *JCR*) Zhang *et al.* (2010, *JMR*)	Lemmens *et al.* (2007, *IJRM*) *De Mooij* (2017, *IMR*)	*De Mooij* (2017, *IMR*)	Morgeson III *et al.* (2011, *JAMS*)	Chelminski and Coulter (2007, *JIMark*)[c] Ma *et al.* (2014, *JM*)[c] Rippé *et al.* (2015, *IMR*)[d] Yim *et al.* (2014, *IMR*)[c]

Notes: Studies in bold analyze CR; in italics uses more than one cultural value model; underlined question respondents on national culture. Further cultural value models: [a]high vs low context cultures (Hall, 1983); [b]self-transcendence vs -enhancement cultures, conservation vs openness to change (Schwartz, 1992); [c]horizontal vs vertical collectivism cultures (Triandis, 1995); [d]further cultural value models

ones on CR mentioned before). However, Inglehart is still relatively seldom used but more often than within the other research model types (four studies), followed by Schwartz and GLOBE (three studies each).

Analyzed dimensions

In total, 32.8 percent of all studies use one dimension, 48.4 percent a higher number of selected dimensions and only 18.8 percent use all dimensions of one cultural value model (see Table II). Only three studies use all six dimensions of Hofstede (Krautz and Hoffmann, 2017; De Mooij, 2017; Swoboda *et al.*, 2017). Most studies select one dimension (21 studies). A similar observation occurs for GLOBE (80.0 percent selected dimensions). Notably, all five studies on Schwartz use all its dimensions. In sum, 12 studies use all dimensions of Hofstede, Schwartz, GLOBE or Inglehart understanding culture as a complex phenomenon and having the option to explain variances by one cultural value model. Within the cultural value models, some dimensions are most often used (e.g. 70.3 percent Hofstede's individualism vs 1.6 percent GLOBE's power distance, for example).

Referring to the antecedents of consumer perceptions, one can see in total that almost all studies use up to three dimensions (81.8 percent). Within Hofstede's cultural value model there are 88.9 percent using up to three dimensions. Two studies use five Hofstede dimensions (Cunningham *et al.*, 2006; Swoboda and Hirschmann, 2017), while none all six dimensions. Notably, there is only one observation for GLOBE, while Schwartz and Inglehart have, as mentioned before, never been used in antecedent research models yet. The dominant dimension is once more individualism (90.9 percent), followed by uncertainty avoidance (45.5 percent).

Among the studies analyzing cultural effects on behavioral outcomes, most studies use up to three cultural dimensions (36.6 percent). Within Hofstede's cultural value model there are 44.4 percent using up to three dimensions and 33.3 percent using the initial four dimensions. One study refers to Hofstede's five dimensions (Paul *et al.*, 2006), and one to all six dimensions (De Mooij, 2017). There are two studies on Schwartz, one on GLOBE and one on Inglehart which refer to all dimensions, respectively.

Among the 44 studies on culture as a moderator of the relationship between independent and outcome variables, in total 79.5 percent of studies address selected dimensions and 20.5 percent all dimensions of one cultural value model. Within Hofstede, 67.6 percent analyze up to three dimensions, 17.6 percent analyze the initial four dimensions. In contrast, all dimensions are used in nine studies: Hofstede (Krautz and Hoffmann, 2017; Swoboda *et al.*, 2017), Schwartz (Camacho *et al.*, 2014; Marquina and Morales, 2012; Swoboda *et al.*, 2016) or Inglehart (Steenkamp and de Jong, 2010; Zarantonello *et al.*, 2013; van der Lans *et al.*, 2016; Yeung *et al.*, 2013). The most often used dimension is still Hofstede's individualism (68.2 percent) followed by power distance and uncertainty avoidance (43.2 percent each).

In summary, for Schwartz and Inglehart, always all dimensions are used which build up a broad network of culture, especially for the conceptual model of Schwartz. For Hofstede, primarily, up to three dimensions are used. It is arbitrary that the theoretically based choice of one, two or three dimensions of the Hofstede's model may show cultural effects but interdependencies within the complex network of national culture are theoretically and empirically neglected.

Further content

The sampling, in particular the available data, strongly affects the options for the conceptual and empirical modeling of cultural studies. Multilevel modeling requires a considerable number of countries and individuals observed in each country, for example. Table III shows that most studies cover two counties in total (37.5 percent). More than 20 countries are covered by 23.4 percent of the studies. For Hofstede, 21.5 percent of the studies use more than 20 countries; for Schwartz, 20.0 percent; for GLOBE, none; and for

Table II.
Numbers of analyzed dimensions

	Hofstede (52 studies)										Schwartz (5 studies)									
	Single dimensions							No. in total			Single dimensions							No. in total		
Research model type	HPD	HUA	IDV	MAS	LTO	IND	1	2–3	Initial 4	all	EMB	IAU	AAU	HIE	EGA	MAT	HAR	1	2–3	all
Consumer perceptions	4	5	10	3	2	0	7	1	1	0	0	0	0	0	0	0	0	0	0	0
Relationships between two or more variables	19	19	30	13	8	3	12	11	6	2	3	3	3	3	3	3	3	0	0	3
Consumer responses/ outcomes	7	7	7	5	2	1	2	2	3	1	2	2	2	2	2	2	2	0	0	2
In total	28[b,c]	29[b,c]	45[b,c]	20[b]	11[b]	4	21	13[c]	10	3	5	5	5	5	5	5	5	0	0	5

	GLOBE (5 studies)												Inglehart (5 studies)				In total[a] (64 studies)		
	Single dimensions									No. in total			Single d.		No. in total		No. in total		
Research model type	GPD	COI	COII	GUA	GEG	ASS	FOR	POR	HOR	1	2–3	all	TRA	SUR	1	all	1	more	all
Consumer perceptions	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	7[d]	4	0
Relationships between two or more variables	0	0	1	0	0	3	0	2	0	0	3	0	4	4	0	4	12	23	9
Consumer responses/ outcomes	1	1	1	1	1	1	1	1	1	0	0	1	1	1	0	1	2	6	3[e]
In total	1	1	3	1	1	4	1	3	1	1	3	1	5	5	0	5	21[d]	31[b,c]	12[e]

Notes: Hofstede: HPD, Hofstede's power distance; HUA, Hofstede's uncertainty avoidance; IDV, individualism; MAS, masculinity; LTO, long-term orientation; IND, indulgence. Schwartz: EMB, embeddedness; IAU, intellectual autonomy; AAU, affective autonomy; HIE, hierarchy; EGA, egalitarianism; MAT, mastery; HAR, harmony. GLOBE: GPD, GLOBE's power distance; COI/COII, collectivism I/II; GUA, GLOBE's uncertainty avoidance; GEG, gender egalitarianism; ASS, assertiveness; FOR, future orientation; POR, performance orientation; HOR, human orientation. Inglehart: TRA, traditional values; SUR, survival values. [a]De Mooij (2017) uses three cultural value models and Chan *et al.* (2007) two value model; [b]Swoboda and Hirschmann (2017) analyze perception as well as relationship models, so that accumulation varies in sum as the study is not listed twice in total; [c]Petrovici *et al.* (2007) analyze perception as well as relationship models, so that accumulation varies in sum as the study is not listed twice in total; [d]Chan *et al.* (2007) use Hofstede and GLOBE with one dimension respectively and is not listed twice in total; [d]De Mooij (2017) uses Hofstede, Schwartz and GLOBE with all dimensions respectively and is not listed triple in total

	Hofstede (52 studies)	Schwartz (5 studies)	GLOBE (5 studies)	Inglehart (5 studies)	In total[a] (64 studies)
Sample size					
0–500	20	3	2	0	23
501–1,000	15	0	2	0	16
1,001–10,000	8	0	1	0	9
> 10,001	8	2	0	5	15
n/a	1	0	0	0	1
No. of countries					
2	21	1	3	0	24
3–5	11	0	1	0	12
6–10	7	1	1	1	8
11–20	2	2	0	1	5
> 20	11	1	0	3	15
n/a	0	0	0	0	0
Host countries (geog. focus)[b]					
Only developed	34	4	5	4	44
Only emerging	0	0	0	0	0
Comparing developed vs emerging	6	0	0	0	6
Further, multiple countries	12	1	0	1	14
n/a	0	0	0	0	0
Data source/type					
Culture					
Secondary (e.g. Hofstede)	44	5	4	5	55
Primary (e.g. questions customers)	8	0	1	0	9
Further	0	0	0	0	0
n/a	0	0	0	0	0
Further variables					
Secondary	6	1	1	3	9
Primary[c]	46	3	4	2	54
Further	0	1	0	0	1
n/a	0	0	0	0	0
Industries					
No.					
1	24	2	1	3	30
2	1	0	0	0	1
> 2	1[d]	0	0	0	1[d]
n/a	26	3	4	2	32[a]
Type					
Industrial products/services	0	0	0	0	0
Consumer products	13	1	1	3	18
Consumer services	9	0	0	0	9
Retailing (offline/online)	4	0	0	0	4
Information technology/communication	3	0	0	0	3
Tourism	0	0	0	0	0
Further	0	1	0	0	1
n/a	0	0	0	0	0
Analytical method					
ANOVA, etc.	8	0	1	0	9
Correlations	1	1	1	0	1[a]
Regression (e.g. multiple)	14	2	2	3	20
SEM	13	0	1	1	15

(*continued*)

Table III.
Further contents

	Hofstede (52 studies)	Schwartz (5 studies)	GLOBE (5 studies)	Inglehart (5 studies)	In total[a] (64 studies)
Multilevel regression	11	0	0	1	12
Multilevel SEM	2	1	0	0	3
Further	3	1	0	0	4
n/a	0	0	0	0	0

Notes: ANOVA, analysis of variance; SEM, structural equation modeling. [a]De Mooij (2017) uses three cultural value models and Chan *et al.* (2007) two value model; [b]We rely on one of the most frequently employed indicators, the Human Development Index (e.g. Zarantonello *et al.*, 2013); [c]in total 22.2 percent experimental and 77.8 percent non-experimental data collection (within Hofstede: 19.6 vs 80.4 percent, Schwartz: 33.3 vs 66.7 percent, GLOBE: 50.0 vs 50.0 percent, and Inglehart: 0 vs 100.0 percent); [d]four types of industries were analyzed: consumer products, consumer services, retailing (offline/online) and information technology/communication

Table III.

Inglehart, 60.0 percent. Similar observations occur for the three research model types (antecedence of perceptions and responses 13.3 percent each and moderation models 80.0 percent). Additionally, the analyzed host countries are shown. In total, 68.8 percent of the studies analyze only developed countries (referring to the Human Development Index, 2018), no study analyzes only emerging countries, and 9.4 percent compare developed vs emerging countries (21.9 percent studies across nations have a multiple country contexts).

Culture is still mostly measured using the cultural value models (85.9 percent), while primary data (i.e. questioning respondents) is used as well (14.1 percent), which we address in the limitations and further research section. Not surprisingly, behavioral studies mostly use primary data for the perception or outcome variables (84.4 percent; mostly in a non-experimental setting).

Regarding the applied analytical method, quantitative empirical studies mostly use regressions (31.3 percent; 23.4 percent use SEM, 14.1 percent use ANOVA, etc., and only 1.6 percent use correlations). Only 18.8 percent use multilevel regressions (Deephouse *et al.*, 2016; Krautz and Hoffmann, 2017; Lee *et al.*, 2007; Möller and Eisend, 2010; Petersen *et al.*, 2015; Pauwels *et al.*, 2013; Schlager and Maas, 2013; Schumann *et al.*, 2010; Steenkamp and Geyskens, 2006; van der Lans *et al.*, 2016; van Ittersum and Wong, 2010; Walsh *et al.*, 2014) and 4.7 percent MSEM (Swoboda and Hirschmann, 2017; Swoboda *et al.*, 2016; Swoboda *et al.*, 2017). Multilevel regressions handle manifest variables while MSEM allows for the observation of latent constructs, like our perception variables. Both types of multilevel modeling predominantly refer to Hofstede and only Swoboda and Hirschmann (2017) combine perception and moderation models for five Hofstede dimensions.

Finally, mostly single industries are addressed (46.9 percent in total), and consumer products dominate (28.1 percent). Also this observation will be addressed in the limitation and further research section.

Conclusions

The literature review indicates the predominance of Hofstede in total and in the relatively few studies on national culture as an antecedent of consumer perceptions across nations. Although scholars discuss the cultural value models' theoretical roots as well as advantages and disadvantages, to the best of our knowledge, no study empirically compares these cultural value models in a customer context. De Mooij (2017) tests three models by using secondary data and correlations only.

In summary, the literature review supports the need for and our aim to advance extant research by theoretically and empirically comparing whether and how these four cultural value models explain important customer perceptions of MNCs across nations.

Moreover, the sampling and methodological issues indicate the limitations of extant research to cover the relevance of the four cultural value models. Analyzing few countries allows only rough assumptions about culture-based differences between countries (which may differ in various institutions, e.g. Swoboda *et al.*, 2016), and do not allow for a comparison of the models. We apply the novel MSEM to distinguish the explained variances at the individual level (latent constructs) and country levels, and to indicate the capacity of the cultural value models for customer perceptions of MNCs.

Conceptual framework and effects of cultural value models

To address our research aims, we conceptualize the four cultural value models in Figure 1 (on a country level) as antecedents of CR perceptions across nations (on an individual level). Theoretically, we build on the considerations of two research streams: studies on cultural differences between nations and studies on CR perceptions, referring to signaling theory according to which most studies understand reputation as a valuable signal for MNCs across nations (e.g. Swoboda and Hirschmann, 2017; Bartikowski *et al.*, 2011).

Theoretical basis

Signaling theory provides a stringent rationale. According to Spence (1973), signaling theory assumes either an imperfect or an unequal availability of information to all transaction parties. In order to reduce those information asymmetries, signals are sent out to transfer credible information. We argue that CR can be seen as an essential signal of MNCs to deliver credible information such as quality and reliability. Furthermore, we suggest, that information cues affect consumers' formation of attitude, i.e. CR of an MNC (e.g. Bartikowski *et al.*, 2011; Swoboda and Hirschmann, 2017). Consumers rely on signals to facilitate their decision making (Erdem *et al.*, 2006).

Consumers' perceptions of signals are affected by the country-specific environment, including national culture (Erdem *et al.*, 2006). These effects may be explained in detail using institutional or consumer culture theory, for example (Swoboda *et al.*, 2016; Özsomer, 2012). However, we assume that individuals in a society share a culture-specific system and deeply rooted cognitive processes that vary across societies. Elements of this culture-specific belief system affect consumers' (CR) perceptions. Because signals are likely to be differently perceived across nations, we assume that the extent to which they conform to a society's beliefs may result in consumers' approval or disapproval of an MNC's CR.

This rationale outlines a theoretical mechanism for the antecedent role of culture on CR across nations. However, the four models theoretically and empirically conceptualize national culture differently (see Table IV). Scholars use single vs all dimensions of one model. The former assumes no (theoretical) relationships between additional cultural dimensions and the analyzed links, whereas the latter assumes – as we do – that consumers' responses cannot be separated from a "complex network of cultural relationships"

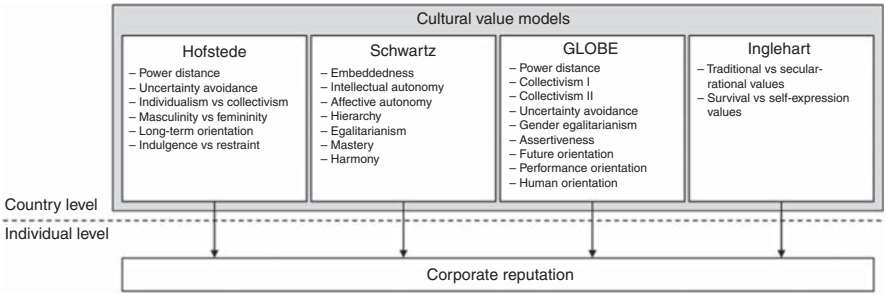

Figure 1.
Conceptual framework

Table IV.
Cultural value models

	Hofstede *et al.* (1980, 2010)	Schwartz (1992, 2014)	GLOBE (House *et al.*, 2002, 2004)	Inglehart (1997)
Definition	Collective programming of the mind which distinguishes the members of one human group from another	Implicitly or explicitly shared abstract ideas about what is good, right and desirable in a society	Shared motives, values, beliefs, identities, and interpretations or meanings of significant events that result from common experiences of members of the collectives and are transmitted across age generations	A system of attitudes, values, and knowledge that is widely shared within a society and is transmitted from generation to generation
Theoretical/ empirical basis	Descriptive; one of the first addressing national culture multi-dimensionally Survey of > 117,000 IBM employees in 40 countries (1967–1973) and factor analysis (four dimensions) applied to means of national aggregated individual responses (national/ecological level; today 76 countries) Replication of initial dimensions and development of two further ones in independent studies (1988 and 2010) by factor analysis In 2010 rescaling of all six dimensions	Theory of universals in the content and structure of values (Schwartz, 1992) based on anthropological theory of values (Kluckhohn, 1951), personality and psychological theory of values (Rokeach, 1973) Survey of college student and teachers in 38 (1988–1992, today > 90) countries; ten individual- and seven country-level value factors	Based on Hofstede (2001), implicit leadership theory (Lord and Maher, 1991) and (human) motivation theory (McClelland, 1961) Survey of 17,000 managers (951 organizations, 62 societies), multi-phase and multi-method survey (150 scholars) and factor analysis on national level	Dominant sociological model; (post) modernization theory (e.g. Inglehart, 1997) Survey of > 330,000 respondents in the WVS with 360 questions (on economy, family, politics, and gender in > 80 countries) and factor analysis on national and then individual level (initially 22 items, later ten items; Inglehart and Baker, 2000)
Dimensions	Six Power distance Uncertainty avoidance Individualism vs collectivism Masculinity vs femininity Long-term orientation (Bond's Chinese Value Survey, Hofstede and Bond, 1988) Indulgence vs restraint (Minkov's	Seven (associated to three bipolar values) 1. Relationship individual and group Embeddedness Intellectual autonomy Affective autonomy 2. Ensuring responsible social behavior Hierarchy	Nine (for two cultural manifestations) 1. Collective agreement of psychological attributes (as should be) 2. Modal reported/observed practices (as is) Power distance Collectivism I Collectivism II	Two Traditional vs secular-rational values Survival vs self-expression values

(*continued*)

Table IV.

	Hofstede *et al.* (1980, 2010)	Schwartz (1992, 2014)	GLOBE (House *et al.*, 2002, 2004)	Inglehart (1997)
	analysis of data from the WVS, Hofstede *et al.*, 2010)	Egalitarianism 3. Individuals social/natural environmental relations Mastery Harmony	Uncertainty avoidance Gender egalitarianism Assertiveness Future orientation Performance orientation Human orientation	
Advantages	Timely publication (start of scholars to view country interactions; Søndergaard, 1994) Rigorous design and systematic data collection (at least at time of publication) Studies confirm validity (e.g. De Mooij, 2011, p. 50; Søndergaard, 1994)	Theoretically stringently deduced Sample procedure reflects broader range of cultural variations for the whole society Rigorous individual- and country-level conceptualization/calculation Replicated (e.g. Schwartz and Boehnke, 2004)	Theoretical basis and expansive classification (compared to Hofstede) Strong empirical design (e.g. separation of cultural practices; Taras *et al.*, 2010) Replicated (e.g. Javidan *et al.*, 2006)	Sampling reduces common source bias Regularly updated, count of cultural dynamics (first: 1981–1984; sixth: 2010–2014) Replicated (high correlations between time points and levels, e.g., Inglehart and Baker, 2000)
Disadvantages	No theoretical foundation Old data and sampling may cause common method bias (Brewer and Venaik, 2012) Questionable measurement/method: invalid to infer individual value, low correlations of national vs individual values (McSweeney, 2009, 2013), and irreliability (Minkov, 2018; Minkov *et al.*, 2017)	Sampling may cause common source bias External validity (McSweeney, 2013) Complex questions complicate answering; result-interpretation complicated by unipolar dimensions (De Mooij, 2011, p. 54)	Sampling causes common source bias; representativeness of society High abstraction level of questions Unexpected negative correlations of cultural values and practices (Taras *et al.*, 2010)	Explorative (less normative; item selection and reduction questionable) National culture reflected by two dimensions (i.e. no covering entire national cultural sounding) Sociological roots compound hypothesizing direct effects of national culture

(e.g. Morgeson III *et al.*, 2011, p. 200; Kirkman *et al.*, 2017). Therefore, next we provide general rationales for the role of culture as antecedent of CR perceptions by addressing differences among the four models and additionally the assumed effects of single dimensions of each respective model.

Background and general effects of the cultural models

Hofstede. Hofstede (1980) is the first to empirically describe a multi-dimensional national cultural value model. He defines culture as the collective programming of the mind that distinguishes the members of one category of people from another. Central are cultural values, seen as "a broad tendency to prefer certain states of affairs over others," for example, "evil vs good" (Hofstede *et al.*, 2010, p. 9). With respect to these values, Hofstede assesses what individuals of a certain culture desired, i.e. what they want for themselves. In our context, individuals in each society perceive MNCs' CR based on the extent to which CR signals correspond to their value orientations, i.e. to what a society desires.

As initially mentioned, the model was theoretically linked to perceived CR, with different results. We however assume that all six dimensions could be theoretically linked to CR. For example, MNCs' signals are likely to be rated positively in societies with high (vs low) power distance, high (vs low) uncertainty avoidance (Deephouse *et al.*, 2016), masculinity (vs femininity) (Falkenreck and Wagner, 2010), long- (vs short-)term orientation and probably indulgence (vs restraint). In contrast, the CR signals are likely to be rated negatively in individualistic (vs collectivistic) societies (Swoboda and Hirschmann, 2017).

Schwartz. Schwartz (1992) is the first to propose a multi-dimensional, theory-based model. He refers to the roots of psychological cultural research, which did not evolve until Rokeach (1973) differentiated values, attitudes and other elements of individuals' belief system in a value theory. Schwartz's theory of universals in the content and structure of values assumes that societies are confronted with similar basic problems in regulating their human activities: the relationships between the individual and the group, responsible social behavior and humankind and its social/natural environment. Evolution forces societies to develop problem-solving strategies (Schwartz, 2014). Accordingly, cultural values reflect societal responses to problems. In our context, CR signals are perceived according to each society's manifestation of these cultural orientations, i.e. the extent to which the perceived signal matches the society's values, and differs across nations. This normative model adds both theoretically and methodologically to Hofstede, for example by conceptualizing cultural value first on an individual and then on a country level (the models/dimensions are conceptually inequivalent, De Mooij, 2011, p. 54).

Theoretically this model was not linked to CR perceptions. However, based on moderation studies (e.g. Swoboda *et al.*, 2016, on the CR-customer loyalty-link; Camacho *et al.*, 2014, on the consumer empowerment-adherence to expert advice-link), we may assume that CR perceptions are strongly affected by the society's cultural model and its dimensions according to Schwartz, for example positively by high (vs low) embeddedness and negatively by high (vs low) intellectual/affective autonomy, positively by high (vs low) hierarchy and negatively by high (vs low) egalitarianism, and finally positively by high (vs low) mastery and negatively by high (vs low) harmony.

GLOBE. The GLOBE study aims to improve Hofstede's model theoretically and methodologically and extend the definition of culture to shared motives, values, beliefs, identities and interpretations of significant events based on the experiences of a collective (House *et al.*, 2002, p. 5). GLOBE's dimensions relate to two types of cultural manifestations: collective agreement concerning psychological attributes (as they should be) and observed practices (which we focus on because they reflect a society's actual practices, House *et al.*, 2004, p. 21). GLOBE also asks for the desirable, based on the blue-belief theory of culture

(however, the dimensions are similarly conceptualized on the ecological level only; Triandis, 1995). The theory posits that predictions about a culture's behavior can be made based on its values. For us, CR signals are perceived based on the extent to which they match an individual's cultural thinking about how "the world is." Thus, individuals in different societies, according to GLOBE, are likely to rate an MNC's CR differently.

This model was only once linked to perceived CR (Bartikowski *et al.*, 2011, with future orientation). However, one can conceptually follow De Mooij (2017) and assume effects of those dimensions that are similar to other models. Referring to Hofstede, we may assume positive effects for high (vs low) power distance, collectivism I/II (reversely similar to individualism), uncertainty avoidance and future orientation (similar to long-term orientation). Referring to Schwartz we may assume a positive effect for high (vs low) assertiveness (similar to mastery) and a negative one for gender egalitarianism (similar to harmony). Finally, for high (vs low) performance orientation and human orientation we may assume positive effects (e.g. leaning on Okazaki *et al.*, 2010).

Inglehart. Inglehart (1997, p. 15) uses the (post)modernization theory and defines culture as a society's system of shared attitudes, values and knowledge. Society's primary goal is to maximize individual well-being. In this sociological view (values are almost everything of importance), cultural values are a basis for rejecting or accepting norms, which affect individuals' behavior (Rezsohazy, 2001). The model is mostly explorative (using the World Value Survey, WVS), executes data at a country level (for tests on an individual level, see Inglehart and Baker, 2000) and differs from psychological models by assuming that individuals are indirectly shaped by culture: values as guidelines to form norms that affect behaviors. However, this mediation is not validated, and a direct effect of culture, according to Inglehart is likely. We assume that CR signals in different societies are perceived based on the extent to which an MNC helps to achieve a high quality of life.

Also, since this model was not linked to perceived CR, we assume a negative link of both traditional (vs secular-rational) values and survival (vs self-expression) values to the perceptions of MNCs' CR. This assumption is based on moderation studies (e.g. van der Lans *et al.*, 2016, on brand beliefs-purchase intention-links) or the reasoning by Steenkamp and de Jong (2010).

Empirical study

Sample design

We have developed a panel in cooperation with a German MNC offering prescription and non-prescription drugs and chemical consumer products in the pharmaceutical and chemical industry which is sensitive to CR (e.g. Leisinger, 2005). Annually, 1,000 consumers in up to 40 countries (chosen based on the MNC's importance) are surveyed. For this study, we use two unique samples from the year 2015 for the first time. First, consumers' CR perceptions of the strongest five country-specific competitors of the MNC within 25 countries are used. The competitors are market leaders in their industry, are chosen based on their sales volumes due to the importance for the MNC, offer chemical and further consumer products as well as drugs and are predominantly from five western countries. Second, we additionally analyze the data for the MNC for stability reasons (see the web appendix, which is available on the journal's homepage). We primarily use the sample of the competitors because their CR perceptions – compared to one MNC – are likely to provide a broader variance or allow to randomly mix industries or countries of origin (e.g. Strizhakova *et al.*, 2011; Berens *et al.*, 2005). However, we need to test for possible intra-class correlations, for example.

A marketing research agency is responsible for the data collection using a panel approach (average participation rate: 61 percent in the year 2015). The data and panel

quality were controlled (e.g. Kaminska *et al.*, 2010). To select the respondents in each country, screening criteria were used. A quota sampling relating to the age and gender distribution was applied based on the information provided by the national registration offices in each country. For various reasons (e.g. familiarity with MNCs; Strizhakova *et al.*, 2011) the sample was restricted to the urban population aged between 18 and 65 (55) years in developed (emerging) countries and only respondents with higher levels of education/profession and above-average incomes were included in the sample to ensure sample comparability across nations (e.g. Özsomer, 2012). An essential precondition for survey participation was each respondent's knowledge of the evaluated MNCs. Only respondents with at least general prompted awareness of the analyzed MNCs were evaluated.

The sample consists of 27,201 consumer evaluations (for the MNC: 21,548). After conducting a Mahalanobis distance-based outlier analysis, 25,397 (20,288) respondents remained. The sample is not representative, as shown by ex post comparisons with official numbers (see Table V). Tests for univariate/multivariate normality indicate normally distributed data (Vlachopoulos, 2008).

Measurements

According to the conceptualization, we measured CR as a second-order construct at the individual level (Walsh and Beatty, 2007; Walsh *et al.*, 2009) using five-point Likert-type scales (1 = strongly disagree to 5 = strongly agree) with 15 items reflecting five first-order CR dimensions: customer orientation, product range quality, social/environmental responsibility, good employer and reliability/financial strength (see Table VI). We chose a valid measure which emphasizes the affective (vs cognitive) components of CR compared to

		Gender (%)		Age groups (years, %)				
	n	Male	Female	18–25	26–35	36–45	46–55	56–65
Australia	1,031	49.6	50.4	17.6	23.3	21.6	17.9	19.6
Austria	910	48.8	51.2	11.9	18.6	22.5	25.6	21.4
Belgium	960	50.1	49.9	14.6	19.2	23.1	23.3	19.8
Brazil	946	49.9	50.1	38.9	27.7	20.4	13.0	0
Canada	1,030	48.2	51.8	26.0	23.6	19.4	14.2	16.8
China	990	52.7	47.3	29.9	31.9	23.1	15.1	0
The Czech Republic	1,164	49.2	50.8	11.5	21.0	24.0	19.4	24.1
Finland	1,011	48.6	51.4	17.0	19.6	22.1	18.6	22.7
France	1,009	47.7	52.3	20.3	22.9	20.4	12.1	24.3
Germany	955	50.5	49.5	16.3	18.1	24.4	23.8	17.4
India	1,040	50.9	49.1	30.5	24.5	21.0	24.0	0
Italy	944	50.3	49.7	20.2	19.1	22.8	22.9	15.0
Japan	1,394	46.3	53.7	17.3	21.4	21.5	19.2	20.7
Mexico	935	47.9	52.1	32.7	28.4	22.9	15.9	0
The Netherlands	966	50.0	50.0	15.5	20.3	24.9	21.2	18.0
New Zealand	1,142	48.6	51.4	19.5	22.4	22.2	21.5	14.4
Poland	929	50.3	49.7	20.2	22.6	18.6	21.6	16.9
Portugal	911	49.4	50.6	11.4	21.2	24.8	21.0	21.6
Russia	953	53.6	46.4	24.9	23.2	24.1	27.8	0
Slovakia	1,103	49.1	50.9	11.9	23.3	23.5	20.3	21.0
South Africa	1,091	49.4	50.6	37.2	25.8	15.9	21.0	0
Spain	874	49.0	51.0	13.3	22.3	25.2	21.5	17.7
Turkey	946	49.6	50.4	15.9	33.2	28.6	22.3	0
UK	1,206	50.3	49.7	18.2	21.5	24.4	20.0	16.0
USA	957	49.4	50.6	20.3	20.2	22.4	22.4	14.8
Total	25,397	49.5	50.5	20.5	23.0	22.5	20.2	13.9

Table V.
Sample distribution

Table VI. Reliability and validity

Item	MV/Std	FL	KMO	ItTC	α	CR	AVE	λ_1	λ_2
CR (*first order*)									
CO									
(MNC) has employees who are concerned about customer needs	3.37/0.810	0.922	0.763	0.867	0.927	0.928	0.887	0.912	0.910
(MNC) has employees who are polite to their customers	3.39/0.796	0.901		0.852				0.898	0.893
(MNC) is concerned about its customers	3.42/0.853	0.878		0.836				0.892	0.886
PRQ									
(MNC) is a strong, reliable company.	3.57/0.859	0.900	0.763	0.849	0.924	0.925	0.873	0.899	0.887
(MNC) offers high-quality products.	3.57/0.854	0.911		0.857				0.903	0.901
(MNC) develops innovative products.	3.53/0.842	0.877		0.832				0.888	0.882
SER									
(MNC) would reduce its profits to ensure a clean environment.	3.08/0.930	0.840	0.745	0.780	0.893	0.891	0.829	0.807	0.813
(MNC) seems to make an effort to create new jobs.	3.28/0.822	0.839		0.778				0.870	0.866
(MNC) seems to be environmentally responsible	3.28/0.871	0.902		0.820				0.896	0.894
GE									
(MNC) appears to be a good employer	3.44/0.816	0.918	0.767	0.870	0.933	0.934	0.895	0.913	0.907
(MNC) seems to have an excellent leadership style	3.42/0.816	0.888		0.849				0.899	0.889
(MNC) seems to treat its employees well	3.40/0.799	0.917		0.869				0.912	0.906
RFS									
(MNC) appears to have strong prospects for future growth	3.54/0.845	0.903	0.759	0.845	0.918	0.919	0.865	0.906	0.898
(MNC) seems to recognize and take advantage of market opportunities	3.52/0.836	0.902		0.844				0.897	0.889
(MNC) tends to outperform competitors	3.44/0.838	0.860		0.815				0.862	0.867
CR (*second order*)									
CO									0.923
PRQ									0.930
SER									0.850
GE									0.952
RFS									0.914

Notes: Confirmatory model fit of first order model: CFI = 0.988; TLI = 0.984; RMSEA = 0.038; SRMR = 0.021; $\chi^2(80) = 3{,}008.140$; scaling correction factor mean-adjusted maximum likelihood = 1.6019. Confirmatory model fit of second order model: CFI = 0.977; TLI = 0.972; RMSEA = 0.052; SRMR = 0.031; $\chi^2(85) = 4{,}698.314$; scaling correction factor mean-adjusted maximum likelihood = 1.4914. CO, customer orientation; CR, corporate reputation; GE, good employer; MNC, multinational corporation; PRQ, product range quality; SER, social and environmental responsibility; RFS, reliability and financial strength; FL, factor loadings (exploratory analysis); KMO, Kaiser–Meyer–Olkin criterion (≥0.5); ItTC, item-to-total correlation (≥0.5); α, Cronbach's alpha (≥0.7); CR, composite reliability (≥0.6); AVE, average variance extracted (≥0.5); λ_1/λ_2, standardized factor loadings of the first-order and second-order confirmatory factor analysis (≥0.5)

alternative scales (Sarstedt *et al.*, 2013). Pre-tests by two consumer focus groups in the MNC's home country ($n = 288$) and eight foreign countries (average $n = 213$ per country) yielded satisfactory values for reliability and validity. To ensure semantic equivalence of the measures in each national language, the translation/back-translation method was applied by commercial agencies (e.g. Hult *et al.*, 2008).

The measurements of each national cultural value model were based on the most recent available data (Hofstede *et al.*, 2010; WVS, 1981–2014). With respect to the GLOBE study, we relied on the "as is" data (House *et al.*, 2004, p. 21). We obtained the most recent data from Shalom H. Schwartz (partly used by Swoboda *et al.*, 2016)[2].

We included covariates on both the individual and country levels. Age and gender (0 = male, 1 = female) were controlled for because both may affect CR perceptions. We controlled for brand familiarity, which was measured with one item ((MNC) is very familiar to me). On the country level, we controlled for the number of respondents per country to ensure that the results were not affected by unequal numbers of respondents across nations (Snijders and Bosker, 2012, p. 56).

We assure the reliability and validity of CR as a second-order construct (Tables VI–VII; for the MNC see web appendix B.2.-3.). We satisfactorily tested the factor loadings and goodness-of-fit criteria of the first-order confirmatory model and the second-order factor solution. The overall measurement model was tested for multilevel reliability (Geldhof *et al.*, 2014) with satisfactory values (> 0.8; multilevel alpha (α), multilevel composite reliability (ω) and multilevel maximal reliability (H; see Table VIII). Correlations on individual- and country-levels are shown in Table IX (correlations < 0.8 are acceptable; Zhou *et al.*, 2010; for the MNC see web appendix B.4.-5.). Because two correlations are higher, we estimated variance inflation factors which mostly reach the critical threshold of ten

	CO	PRQ	SER	GE	RFS
CO	*0.887*	0.241	0.213	0.242	0.219
PRQ	0.491***	*0.873*	0.212	0.258	0.287
SER	0.461***	0.460***	*0.829*	0.218	0.208
GE	0.492***	0.508***	0.467***	*0.895*	0.245
RFS	0.468***	0.536***	0.456***	0.495***	*0.865*

Notes: Confirmatory model fit of first order model: CFI = 0.988; TLI = 0.984; RMSEA = 0.038; SRMR = 0.021; $\chi^2(80) = 3{,}008.140$; scaling correction factor mean-adjusted maximum likelihood = 1.6019. CO, customer orientation; GE, good employer; PRQ, product range quality; SER, social and environmental responsibility; RFS, reliability and financial strength; AVE, average variance extracted (≥0.5); ns, not significant. AVEs are on the diagonal; squared correlations are above the diagonal; correlations are below the diagonal. ***$p < 0.001$

Table VII.
Discriminant validity

	α		Composite reliability		Maximal reliability	
	α_w	α_b	ω_w	ω_b	H_w	H_b
CO	0.922	0.995	0.923	0.997	0.924	0.998
PRQ	0.919	0.998	0.920	0.998	0.920	0.998
SER	0.885	0.990	0.883	0.988	0.892	0.998
GE	0.928	0.996	0.929	0.997	0.929	0.999
RFS	0.912	0.988	0.913	0.989	0.915	0.998

Notes: CO, customer orientation; GE, good employer; PRQ, product range quality; SER, social and environmental responsibility; RFS, reliability and financial strength; $\alpha = \geqslant 0.8$; ω, composite reliability (≥0.8); H, maximal reliability (≥0.8); w, within (individual) level; b, between (country) level

Table VIII.
Multilevel reliability

	(1)	(2)	(3)	(4)						
(1) CR	1									
(2) Gender	0.021**	1								
(3) Age	−0.070***	−0.006ns	1							
(4) BF	0.542***	−0.018**	−0.112***	1						
	(5)	(6)	(7)	(8)	(9)	(10)	(11)			
VIF	1.511	1.917	1.232	1.794	1.161	1.642	1.972			
(5) CS	1				1					
(6) HPD	−0.105***	1								
(7) HUA	−0.180***	0.270***	1							
(8) IDV	0.145***	−0.618***	−0.384***	1						
(9) MAS	0.492***	0.166***	−0.133***	−0.055***	1					
(10) LTO	0.285***	0.304***	0.156***	−0.240***	0.284***	1				
(11) IND	−0.003ns	−0.529***	−0.245***	0.434***	−0.114***	−0.582***	1			
	(5)	(12)	(13)	(14)	(15)	(16)	(17)	(18)		
VIF	1.845	21.132	9.303	8.810	5.130	3.190	3.340	4.899		
(5) CS	1				1					
(12) EMB	0.031***	1								
(13) IAU	0.008ns	−0.870***	1							
(14) AAU	0.135***	−0.797***	0.560***	1						
(15) HIE	0.256***	0.617***	−0.613***	−0.298***	1					
(16) EGA	−0.439***	−0.692***	0.609***	0.434***	−0.773***	1				
(17) MAT	0.137***	0.247***	−0.476***	−0.046***	0.651***	−0.384***	1			
(18) HAR	−0.105***	−0.363***	0.597***	−0.154***	−0.595***	0.471***	−0.573***	1		
	(5)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)
VIF	2.558	6.396	2.425	4.191	2.871	2.565	1.425	6.229	6.652	5.982
(5) CS	1				1					
(19) GPD	0.436***	1								
(20) COI	−0.587***	−0.543***	1							
(21) COII	−0.281***	−0.474***	0.196***	1						
(22) GUA	−0.141***	−0.057***	0.290***	0.221***	1					
(23) GEN	−0.282***	−0.576***	0.402***	0.466***	−0.268***	1				
(24) ASS	0.534***	0.310***	−0.377***	−0.179***	0.187***	−0.328***	1			
(25) FOR	−0.273***	−0.668***	0.461***	0.782***	0.455***	0.467***	−0.183***	1		
(26) POR	−0.413***	−0.753***	0.411***	0.771***	0.190***	0.589***	−0.170***	0.809***	1	
(27) HOR	−0.355***	−0.865***	0.384***	0.496***	0.170***	0.491***	−0.172***	0.667***	0.794***	1
	(5)	(28)	(29)							
VIF	1.247	1.287	1.065							
(5) CS	1				1					
(28) TRA	0.441***	1								
(29) SUR	0.162***	0.238***	1							

Notes: AAU, affective autonomy; ASS, assertiveness; BF, brand familiarity; COI/COII, collectivism I/II; CR, corporate reputation; CS, cluster size; EGA, egalitarianism; EMB, embeddedness; FOR, future orientation; G, gender; GEG, gender egalitarianism; GPD, GLOBE's power distance; GUA, GLOBE's uncertainty avoidance; HAR, harmony; HIE, hierarchy; HOR, human orientation; HPD, Hofstede's power distance; HUA, Hofstede's uncertainty avoidance; IAU, intellectual autonomy; IDV, individualism; IND, indulgence; LTO, long-term orientation; MAS, masculinity; MAT, mastery; POR, performance orientation; SUR, survival values; TRA, traditional values; VIF, variance inflation factor; ns, not significant. Results on dimensions within each cultural value model are shown (across cultural value models irrelevant for hypotheses tests). $^{**}p < 0.01$; $^{***}p < 0.001$

Table IX.
Correlations and VIF

(e.g. Diamantopoulos and Winklhofer, 2001). For embeddedness we tested an alternative model excluding this dimension. No significant change occurs. The explained variance of the alternative model supports our results (see web appendix A.1.; for the MNC B.6.). Finally, grand-mean centering was used for hypotheses testing, to avoid possible multicollinearity on country level (e.g. Cohen *et al.*, 2003).

To ensure measurement equivalence (MI) across nations we followed Jak *et al.* (2013), who warrants that the constructs equally measure the included parameters across nations. All factor loadings were considered equal across levels (see web appendix A.2.; for the MNC B.7.). We conclude that MI is not a problem in this study.

Method

To test the effects of the cultural value models on CR, MSEM was applied (using Mplus 8). MSEM (vs HLM) allows the modeling of latent constructs, accounts for the nested data structure by considering cross-level effects between variables at the individual and country levels (following the stepwise procedure of Raudenbush and Bryk, 2002, p. 159) and by disentangling the information contained in the data about the observed variance between and within countries (Luke, 2004, pp. 6–7). Testing for the breakdown of variance shows reasonability of multilevel modeling, as 18.1 percent of the differences in CR could be attributed to country differences. We further test for the appropriateness of considering the underlying cross-classified structure by testing the intra-class correlation. A marginal 1.8 percent of the CR differences are attributed to differences in the MNCs wherefore we tested the hypotheses based on two-levels. We estimated so-called Mean as Outcomes Models because these models explain mean value differences in CR on the individual level through country-level variables (Luke, 2004, p. 13). The level-one equation for CR is as follows:

$$\mathrm{CR}_{ij} = \beta_{0j} + \beta_{\mathrm{controls}}\mathrm{Controls}_{ij} + r_{ij}. \quad (1)$$

On the consumer level, a decomposition of CR in the country average (β_{0j}) plus individual deviation from this average (r_{ij}) was made, where i denotes consumers, j indicates countries, CR_{ij} denotes consumer i's CR and $\mathrm{Controls}_{ij}$ includes individual-level control variables. On the country level, differences in the countries' CR means are explained by national culture. The level-two equation is as follows:

$$\beta_{0j} = \gamma_{00} + \gamma_{01}\left(\mathrm{Culture}_j\right) + u_{0j}. \quad (2)$$

$\mathrm{Culture}_j$ represents the different dimensions of the cultural value models on the country-level, and u_{0j} are errors, i.e. parts of the countries' CR mean β_{0j} that cannot be explained through each national cultural dimension. Separate multilevel models were computed for each cultural dimension and for all cultural dimensions of the respective model.

Results

The results are presented in Table X. Unstandardized coefficients are shown, as is common in MSEM (e.g. Swoboda *et al.*, 2016).

Hofstede

Hofstede's cultural value model explains 69.2 percent of the country-level variance in CR. The results indicate the significance of two cultural dimensions: power distance ($b = 0.003$; $p < 0.01$) and individualism ($b = -0.003$; $p < 0.05$). Both explain most of the country differences in CR (each 23.1 percent). Uncertainty avoidance ($b = -0.002$; $p > 0.05$), masculinity ($b = 0.001$; $p > 0.05$), long-term orientation ($b = 0.000$; $p > 0.05$) and indulgence ($b = 0.000$; $p > 0.05$) are insignificant. This result was not expected. We may argue for uncertainty avoidance that CR signals might not structure high uncertainty-avoiding societies' interactions with MNCs or might not increase familiarity with them (Swoboda and Hirschmann, 2017). Our integrated view of CR may neutralize reinforcing or diminishing effects of single CR dimensions (e.g. reliability/financial strength is valuable in masculine societies and social/environmental responsibility in feminine societies). Also long-term orientation is likely to be linked to perceptions of social/environmental responsibility but not to the entire perceived CR. For indulgence, we may argue equal emotional perceptions of MNCs' CR of individuals in indulgent and restrained societies.

		Null model	Baseline model	Means as outcomes models							
Hofstede		b*p*	b*p*	b*p*	b*p*	b*p*	b*p*	b*p*	b*p*	b*p*	
Cross-level effects	HPD → CR			0.003** (0.480)						0.003** (0.483)	
	HUA → CR				–0.002ns(****) (–0.323)					–0.003*** (–0.550)	
	IDV→ CR					–0.003* (–0.475)				–0.003*** (–0.494)	
	MAS→ CR						0.001ns (0.197)			0.000ns (0.003)	
	LTO → CR							0.000ns (0.052)		0.000ns (0.085)	
	IND → CR								0.000ns (–0.002)	0.002* (0.365)	
Controls Individual level	G → CR		0.046***	0.046***	0.046***	0.046***	0.046***	0.046***	0.046***	0.046***	
	Age → CR		0.013**	0.013**	0.013**	0.013**	0.013**	0.013**	0.013**	0.013**	
	BF → CR		0.301***	0.301***	0.301***	0.301***	0.301***	0.301***	0.301***	0.301***	
Control country level	CS → CR		0.000ns	0.000ns	0.000ns	0.000ns	0.000ns	0.000ns	0.000ns	0.000ns	
Residual variance	Individual level	0.431	0.319	0.319	0.319	0.319	0.319	0.319	0.319	0.319	
	Country level	0.038	0.013	0.010	0.012	0.010	0.013	0.013	0.013	0.004	
Explained variance (%)	Individual level		26.0	0	0	0	0	0	0	0	
	Country level		65.8	23.1	7.7	23.1	0	0	0	69.2	
AIC		537,930	530,758	530,754	503,758	530,754	530,760	530,760	530,760	530,745	
BIC (adj.)		538,282	531,131	531,131	531,135	531,131	531,137	531,138	531,138	531,147	

Schwartz		b*p*	b*p*	b*p*	b*p*	b*p*	b*p*	b*p*	b*p*	b*p*	b*p*
Cross-level effects	EMB → CR			0.294*** (0.692)							–0.370** (–0.879)
	IAU → CR				–0.271*** (–0.756)						–0.390*** (–1.098)
	AAU → CR					–0.144** (–0.496)					–0.030ns (–0.104)
	HIE → CR						0.196*** (0.758)				0.150** (0.584)
	EGA → CR							–0.341*** (–0.863)			–0.199** (–0.504)
	MAT → CR								0.285* (0.408)		–0.193ns(****) (–0.279)
	HAR → CR									–0.174* (–0.423)	0.128ns(****) (0.314)
Controls Individual level	G → CR		0.046***	0.046***	0.046***	0.046***	0.046***	0.046***	0.046***	0.046***	0.046***
	Age → CR		0.013**	0.013**	0.013**	0.013**	0.013**	0.012**	0.013**	0.013**	0.013**
	BF → CR		0.301***	0.301***	0.301***	0.301***	0.301***	0.301***	0.301***	0.301***	0.301***
Control country level	CS → CR		0.000ns	0.000ns	0.000ns	0.000ns	0.000ns	0.000ns	0.000ns	0.000ns	0.000ns
Residual variance	Individual level	0.431	0.319	0.319	0.319	0.319	0.319	0.319	0.319	0.319	0.319
	Country level	0.038	0.013	0.006	0.005	0.010	0.006	0.004	0.011	0.011	0.002
Explained variance (%)	Individual level		26.0	0	0	0	0	0	0	0	0
	Country level		65.8	53.8	61.5	23.1	53.8	69.2	15.4	15.4	84.6
AIC		537,930	530,758	530,744	530,73 9	530,753	530,741	530,73 7	530,756	530,755	530,73 1
BIC (adj.)		538,282	531,131	531,12 1	531,116	531,131	531,11 8	531,11 4	531,133	531,13 3	531,138

GLOBE		b*p*	b*p*	b*p*	b*p*	b*p*	b*p*	b*p*	b*p*	b*p*	b*p*	b*p*	b*p*
Cross-level effects	GPD → CR			0.090* (0.364)									0.045ns (0.182)
	COI → CR				–0.034ns (–0.137)								–0.116* (–0.463)
	COII → CR					–0.077ns(****) (–0.282)							–0.191** (–0.697)
	GUA → CR						0.115*** (0.544)						0.172*** (0.819)
	GEG → CR							–0.118ns (–0.407)					0.049ns (0.171)
	ASS → CR								0.021ns (0.129)				–0.037ns (–0.226)
	FOR → CR									–0.014ns (–0.067)			0.019ns (0.090)
	POR → CR										–0.036* (–0.236)		0.052ns (0.343)
	HOR → CR											–0.048ns (–0.199)	–0.033ns (–0.139)

(*continued*)

Table X. Results

Controls	G → CR		0.046***	0.046***	0.046***	0.046***	0.046***	0.046***	0.046***	0.046***	0.046***	0.046***	0.046***
Individual level	Age → CR		0.013**	0.013**	0.013**	0.013**	0.013**	0.013**	0.013**	0.013**	0.013**	0.013**	0.013**
	BF → CR		0.301***	0.301***	0.301***	0.301***	0.301***	0.301***	0.301***	0.301***	0.301***	0.301***	0.301***
Control country level	CS → CR		0.000ns	0.000ns	0.000ns	0.000ns	0.000ns	0.000ns	0.000ns	0.000ns	0.000ns	0.000ns	0.000ns
Residual variance	Individual level	0.431	0.319	0.319	0.319	0.319	0.319	0.319	0.319	0.319	0.319	0.319	0.319
	Country level	0.038	0.013	0.012	0.013	0.012	0.009	0.011	0.013	0.013	0.012	0.013	0.005
Explained variance (%)	Individual level		26.0	0	0	0	0	0	0	0	0	0	0
	Country level		65.8	7.7	0	7.7	30.8	15.4	0	0	7.7	0	61.5
AIC		537,930	530,758	530,758	530,760	530,758	530,752	530,756	530,760	530,760	530,759	530,759	530,754
BIC (adj.)		538,282	531,13 1	531,13 5	531,137	531,13 6	531,12 9	531,133	531,137	531,13 8	531,136	531,137	531,171

Inglehart			b*p*	b*p*	b*p*	b*p*	b*p*
Cross-level effects	TRA → CR				−0.165*** (−0.520)		−0.131* (−0.414)
	SUR → CR					−0.156*** (−0.535)	−0.131** (−0.447)
Controls	G → CR			0.046***	0.046***	0.046***	0.046***
Individual level	Age → CR			0.013**	0.013**	0.013**	0.013**
	BF → CR			0.301***	0.301***	0.301***	0.301***
Control country level	CS → CR			0.000ns	0.000ns	0.000ns	0.000ns
Residual variance	Individual level	0.431		0.319	0.319	0.319	0.319
	Country level	0.038		0.013	0.010	.009	0.007
Explained variance (%)	Individual level			26.0	0	0	0
	Country level			65.8	23.1	30.8	46.2
AIC			537,930	530,758	530,754	530,752	530,74 9
BIC (adj.)			538,282	531,13 1	531,131	531,129	531,131

Notes: ns, not significant; AAU, affective autonomy; ASS, assertiveness; BF, brand familiarity; COI/COII, collectivism I/II; CR, corporate reputation; CS, cluster size; EGA, egalitarianism; EMB, embeddedness; FOR, future orientation; G, gender; GEG, gender egalitarianism; GPD, GLOBE's power distance; GUA, GLOBE's uncertainty avoidance; HAR, harmony; HIE, hierarchy; HOR, human orientation; HPD, Hofstede's power distance; HUA, Hofstede's uncertainty avoidance; IAU, intellectual autonomy; IDV, individualism; IND, indulgence; LTO, long-term orientation; MAS, masculinity; MAT, mastery; POR, performance orientation; SUR, survival values; TRA, traditional values. Unstandardized coefficients are common in MSEM (standardized additionally in parentheses). *$p<0.05$; **$p<0.01$; ***$p<0.001$; ****$p<0.10$

Table X.

Schwartz

Schwartz's cultural value model explains 84.6 percent of country-level variance in CR perceptions. All dimensions are significant: embeddedness ($b = 0.294$; $p < 0.001$), intellectual and affective autonomy ($b = -0.271$; $p < 0.001$; $b = -0.144$; $p < 0.01$), hierarchy ($b = 0.196$; $p < 0.001$), egalitarianism ($b = -0.341$; $p < 0.001$), mastery ($b = 0.285$; $p < 0.05$) and harmony ($b = -0.174$; $p < 0.05$). We conclude that a good covering of the complex network of culture with disjunctive dimensions occurs. Egalitarianism explains most of the variance (69.2 percent), followed by intellectual autonomy (61.5 percent), embeddedness and hierarchy (53.8 percent each) and affective autonomy (23.1 percent).

GLOBE

GLOBE's cultural value model explains 61.5 percent of the country variance in CR. The dimensions power distance ($b = 0.090$; $p < 0.05$), uncertainty avoidance ($b = 0.115$; $p < 0.001$) and performance orientation ($b = -0.036$; $p < 0.05$) are significant (for the latter, see Diehl *et al.*, 2008). Insignificant are collectivism I/II ($b = -0.034$; $p > 0.05$; $b = -0.077$; $p > 0.05$), gender egalitarianism ($b = -0.118$; $p > 0.05$), assertiveness ($b = 0.021$; $p > 0.05$), future orientation ($b = -0.014$; $p > 0.05$) and human orientation ($b = -0.048$; $p > 0.05$). For example, we may argue that for high (vs low) collectivism I, MNCs' CR is not seen as a benefit for the entire society and MNCs might not be seen as in-group members (high collectivism II). The CR conceptualization does not include aspects of gender egalitarianism and MNCs' CR may not affect social relationships (likely in high assertive societies).

Reasoning for future orientation may be linked to those of Hofstede's long-term orientation while human orientation reflects society's encouragement of individuals, which seems to be less important for MNCs. However, uncertainty avoidance explains most of the variance (30.8 percent), followed by gender egalitarianism (15.4 percent).

Inglehart

Inglehart's cultural value model explains 46.2 percent of the country variance in CR perceptions. Both dimensions are significant: traditional values ($b = -0.165$; $p < 0.001$) and survival values ($b = -0.156$; $p < 0.001$). They explain 23.1 and 30.8 percent country variance in CR perceptions, respectively.

Stability test

The results of the tests with the data for one German MNC are almost identical (see web appendix B.8.). The models explain similarly different levels of variance in CR perceptions across nations: Schwartz (78.9 percent), Hofstede (57.9 percent), GLOBE (52.6 percent) and Inglehart (47.4 percent). Thus, we believe that our observations are stable for the countries analyzed. Additionally, similar results remain for the dimensions: Hofstede's power distance ($b = 0.003$; $p < 0.001$), uncertainty avoidance ($b = -0.001$; $p > 0.05$), individualism ($b = -0.003$; $p < .05$), masculinity ($b = 0.000$; $p > 0.05$), long-term orientation ($b = 0.001$; $p > 0.05$), indulgence ($b = -0.001$; $p > 0.05$); Schwartz's embeddedness ($b = 0.316$; $p < 0.001$), intellectual/affective autonomy ($b = -0.271$; $p < 0.001$; $b = -0.165$; $p < 0.001$), hierarchy ($b = 0.246$; $p < 0.001$) and egalitarianism ($b = -0.421$; $p < 0.001$); GLOBE's collectivism I/II ($b = 0.023$; $p > 0.05$; $b = -0.077$; $p > 0.05$), uncertainty avoidance ($b = 0.121$; $p < 0.01$), gender egalitarianism ($b = -0.134$; $p > 0.05$), assertiveness ($b = -0.034$; $p > .05$), future orientation ($b = 0.001$; $p > 0.05$) and human orientation ($b = -0.013$; $p > 0.05$); Inglehart's traditional values ($b = -0.216$; $p < 0.001$) and survival values ($b = -0.198$; $p < 0.001$). The effects change to minor significance for Schwartz's mastery ($b = 0.285$; $p < 0.10$), harmony ($b = -0.164$; $p < 0.10$) and to insignificance for GLOBE's power distance ($b = 0.039$; $p > 0.10$) and performance orientation ($b = -0.018$; $p > 0.10$).

Discussion and implications

This study contributes to the literature by deepening our understanding of the role of different national cultural value models for consumer behavior. However, only CR perceptions were analyzed and we therefore cautiously provide major implications for research and managers.

Research implications

This study compares the four major conceptualizations of national culture as antecedents of CR perceptions. We study conceptualizations of culture in their totality (even if we are also struggling with theoretical and conceptual challenges) as consumers' responses can hardly be separated from this complex network of culture (Kirkman *et al.*, 2017; Morgeson III *et al.*, 2011). In doing so, we respond to calls for research to increasingly understand the capacity of the leading models by explaining cross-cultural differences (De Mooij, 2017) and by using the appropriate multilevel modeling (Devinney and Hohberger, 2017). The models explain different levels of variance in CR perceptions across nations: Hofstede (69.2 percent), Schwartz (84.6 percent), GLOBE (61.5 percent) and Inglehart (46.2 percent) (see Table XI; web appendix B.9.).

For the research on national culture, the results support the dominant role of psychological (vs sociological) cultural value models. The psychological models of Hofstede, Schwartz and GLOBE explain more variance than the sociological one of Inglehart, although one might conclude that this model, with both significant dimensions, gives a good overall picture of

Table XI.
Summary (percent of explained country-level variances)

Hofstede		Schwartz		GLOBE		Inglehart	
Power distance +	23.1	Embeddedness +	53.8	Power distance +	7.7	Traditional values –	23.1
Uncertainty avoidance	*7.7*	Intellectual autonomy –	61.5	*Collectivism I*	*0*	Survival values –	30.8
Individualism –	23.1	Affective autonomy –	23.1	*Collectivism II*	*7.7*		
Masculinity	*0*	Hierarchy +	53.8	Uncertainty avoidance +	30.8		
Long-term orientation	*0*	Egalitarianism –	69.2	*Gender egalitarianism*	*15.4*		
Indulgence	*0*	Mastery +	15.4	*Assertiveness*	*0*		
		Harmony –	15.4	*Future orientation*	*0*		
				Performance orientation –	7.7		
				Human orientation	*0*		
Total	69.2	Total	84.6	Total	61.5	Total	46.2

Note: Cultural dimensions in italics show insignificant effects on CR

cultural values. The relatively low level of explained variance seems reasonable because sociological viewpoints do not always distinguish values from other elements of the belief system; thus, values do not always directly guide individual behavior (Rezsohazy, 2001). Inglehart mixes attitudes, beliefs and behavior to measure national culture (chooses items out of the WVS) and negates the network of further distinct cultural facets (Morgeson III *et al.*, 2011). However, such procedures are increasingly applied, particularly in management research. Scholars might be unaware of the challenges (e.g. Berry *et al.*, 2010, propose measures for Hofstede using WVS). We therefore recommend caution when using sociological cultural value models in context of individual perception studies.

Among the psychological models, Schwartz's theoretically profound cultural value model explains most of country variation in CR perceptions (84.6 percent) and thus is the recommended model of our comparison. However, international business scholars comparatively use this cultural value model rather seldomly. The descriptive model of Hofstede follows with 69.2 percent explained variance (and the complex GLOBE study with only 61.5 percent). In light of the results, we do not follow the conclusion to leave aside the theoretical critics of Hofstede's model and we consequently do not recommend to using Hofstede or selected dimensions, which often occur. Only two of the six Hofstede dimensions are significant in our study, whereas all of Schwartz's seven dimensions are significant. It may be arbitrary that a (theoretically) chosen dimension of Hofstede's supports cultural effects but then interdependencies within the complex network of national culture will be neglected. Scholars who want to study national cultural values and their broad network of relationships might use Schwartz, who provides both rigorous theoretical rationales and emphasizes the normative aspect of national culture more than the other models. We contradict opinions that question the additional value of Schwartz's theory (e.g. House *et al.*, 2002), but may agree to scholars who propose using Hofstede and Schwartz because the former is better explained by macro-economic variables and the latter by macro-social variables (Gouveia and Ros, 2000; De Mooij, 2017 suggests the use of different models in different contexts based on correlations on a macro level). However, our study shows the superiority of Schwartz for a micro-psychologic perception variable even if only CR was analyzed. We therefore call for further research.

Finally, our study for the first time indicates different explained variances for equivalently viewed dimensions (e.g. Steenkamp *et al.*, 1999; De Mooij, 2017; Minkov, 2018; see Table XI), e.g. first power distance 23.1 percent Hofstede, 7.7 percent GLOBE and 53.8 percent (hierarchy) Schwartz; second uncertainty avoidance 7.7 percent Hofstede, 30.8 percent GLOBE; or third individualism: 23.1 percent Hofstede, 0/7.7 percent (reversely collectivism I/II) GLOBE and 61.5/23.1 percent (intellectual/affective autonomy) as well as 53.8 percent

(reversely embeddedness) Schwartz. Equivalently viewed dimensions do not seem to conceptualize and measure the same value across nations (see also De Mooij, 2017; Minkov, 2018). Choices of conceptually similar dimensions need tests with different measures/models.

For the research on CR, we conclude that the differences in CR perceptions across nations are substantially explained by national culture and that each model (including all dimensions) explains more variance than each respective dimension. However, a few dimensions explain more than 20 percent of variance and are therefore of particular interest for scholars and managers: Hofstede's power distance and individualism (23.1 percent each); Schwartz's egalitarianism (69.2 percent), intellectual autonomy (61.5 percent), embeddedness and hierarchy (53.8 percent each) and affective autonomy (23.1 percent); GLOBE's uncertainty avoidance (30.8 percent); and Inglehart's survival values (30.8 percent) and traditional values (23.1 percent). Notably, three dimensions of Schwartz explain the most variance in CR perceptions across nations and seem to be superior to the dimensions of Hofstede, for example. As mentioned before, comparable dimensions explain different variances in CR, which is crucial, particularly for studies analyzing few countries because the assumed attribution of country differences to one cultural dimension of one model might be hindered. Although scholars may restrict their analysis to single national value dimensions, they should state that only one facet of national culture is analyzed, which further might be important only because of the chosen model.

Further conclusions arise when comparing our results with previous ones. Our study supports the findings of Falkenreck and Wagner (2010), Deephouse *et al.* (2016) and Swoboda and Hirschmann (2017) by providing evidence for an antecedent role of Hofstede's power distance, but not for masculinity. Contrarily to the first two formerly mentioned studies, we found a significant effect of Hofstede's individualism on CR, which might be due to sampling or method. The insignificant role of Hofstede's uncertainty avoidance supports Falkenreck and Wagner (2010) and Swoboda and Hirschmann (2017) but contradicts Deephouse *et al.* (2016), who underline the relevance of CR signals for consumer responses in uncertain societies (see also e.g. Bartikowski *et al.*, 2011). Consequently, using one, two, three or four dimensions of Hofstede shows different results in the same context. This is again different for Schwartz. Finally, Swoboda *et al.* (2016) demonstrate the importance of Schwartz's cultural value model and the particular role of embeddedness, intellectual autonomy, hierarchy, mastery and harmony as moderators of the CR-loyalty-link. Our results additionally show significant effects for all of Schwartz's dimensions on CR perceptions but also slight differences (concerning affective autonomy and egalitarianism, for example).

Managerial implications

Managers are highly aware of the importance of cultural country differences, and our results support their assumptions about CR perceptions. CEOs and other responsible managers at headquarters know their reputation strength and may acknowledge that national culture strongly affects CR perceptions across nations.

The analyzed MNCs can learn how their CR is (differently) perceived across nations and identify starting points for their reputation management. Either the determination of higher CR budgets and the definition of related targets for subsidiaries in countries with major diminishing cultural dimensions (including Hofstede's individualism, Schwartz's individual/affective autonomy, egalitarianism and harmony) or the adjustment of CR budgets and the maximization of the payoffs of CR in countries with opposite, reinforcing role of national culture (including Hofstede's power distance, and Schwartz's embeddedness and hierarchy), are examples of conclusions that managers could draw from this study. Most importantly, the managers see the predominant role of the less common and in practice less known model of Schwartz (vs Hofstede or GLOBE).

We additionally identify major dimensions (> 50 percent explained variance within the Schwartz model) because managers are often interested in the most important levers and are less interested in the gradual antecedents or particular national cultural value models (including their theoretical roots). Annually, the analyzed focal MNC surveys the perceived CR toward themselves in up to 40 countries and toward their strongest country-specific competitors, respectively, at certain time points. These MNCs may use our results to estimate possible CR perceptions in additional countries (i.e. viewing the most important cultural levers of a further country).

Consequently, managers have to broaden their understanding of national cultural value models as well as MSEM (i.e. regressions and multi-group comparison of only a few countries are insufficient, Swoboda *et al.*, 2016).

Limitations and further research

Further research is needed to improve our understanding of cultural value models across nations as this study is not without limitations. We highlight three issues.

Although we devoted special attention to data collection, broadening the database would mitigate some of the limitations and enables further conclusions. Additional countries and even a broader set of industries could be analyzed, as already mentioned in the literature review. We studied major countries but cannot exclude changes in the results if other countries are observed (e.g. emerging countries). Analyzing several MNCs within 25 countries allows a certain control (e.g. for origin issues or industry factors which may occur changing results; Strizhakova *et al.*, 2011). Methodologically appropriate is the development of a cross-classified model or the analysis of a third level additionally to the country level as consumers are moreover nested in industries or MNCs. The results are almost stable compared to the analysis of our single MNC, but a few differences occur. We therefore call for further studies because the results may change when additional MNCs, industries, or countries are analyzed. We also focused on a consciously selected consumer sample (i.e. an urban population with high professional/educational levels) that is not representative, particularly in emerging countries. Analyzing representative and comparable samples across emerging countries only (vs industrialized ones) will provide further insight.

Our measurements are restricted to the recent cultural value data and consumer perceptions at a single time point. The use of alternative CR measures (Sarstedt *et al.*, 2013) or national cultural value models will extend the conclusions that can be drawn from such a study. National cultural measures are subject to general criticisms. Specifically, the assumption of homogeneity in the use of the cultural dimensions assumes both uniformity within a nation and that the average of a country is an appropriate measure for individuals within that country. However, intra-cultural variation explains more than inter-cultural variation (e.g. Taras *et al.*, 2016), which particularly limits dominant ecological models (i.e. Hofstede, GLOBE; Kirkman *et al.*, 2017).

Further extensions of our study would be promising. Analyzing the effects of the models for further perceptions (e.g. perceived service quality; Agarwal *et al.*, 2010) would broaden the results, as would analyzing behavioral outcomes across nations (e.g. consumers' brand choices; Erdem *et al.*, 2006). As initially noted, future research may address the moderating role of culture for CR effects on consumer responses (e.g. Swoboda *et al.*, 2016).

Notes

1. Five studies address culture as moderator of CR effects (e.g. Bartikowski *et al.*, 2011, Hofstede's uncertainty avoidance and Falkenreck and Wagner, 2010, Hofstede's individualism, masculinity, power distance (both for five nations); Swoboda *et al.*, 2016, the Schwartz-model and Swoboda and Hirschmann, 2017, five Hofstede dimensions (across 40 or 37 countries in the years 2011–2013); Swoboda *et al.*, 2017, all six Hofstede dimensions across 43 countries).

2. Because GLOBE and Inglehart do not offer values for all countries in our data set, we replaced few ones with data from the nearest neighboring country and provided respective robustness tests (similar e.g. Steenkamp and Geyskens, 2006; Swoboda *et al.*, 2016). The following countries were replaced: GLOBE: Belgium and Slovakia; Inglehart: Austria, Belgium and Portugal. To provide evidence for the results' stability, we conducted robustness tests and estimated all models without the replaced countries. All results remained the same in significance and direction of the effects: GLOBE: $b_{\text{Power distance}} = 0.099$, $p < 0.05$; $b_{\text{CollectivismI}} = -0.030$, $p > 0.05$; $b_{\text{CollectivismII}} = -0.080$, $p > 0.05$; $b_{\text{Uncertainty avoidance}} = 0.115$, $p < 0.001$; $b_{\text{Gender egalitarianism}} = -0.122$, $p > 0.05$; $b_{\text{Assertiveness}} = 0.025$, $p > 0.05$; $b_{\text{Future orientation}} = -0.018$, $p > 0.05$; $b_{\text{Performance orientation}} = -0.039$, $p < 0.01$; $b_{\text{Human orientation}} = 0.049$, $p > 0.05$; Inglehart: $b_{\text{Traditional values}} = -0.147$, $p < 0.001$; $b_{\text{Survival values}} = -0.335$, $p < 0.05$. We therefore included the countries with missing data in the survey.

References

Agarwal, J., Malhotra, N.K. and Bolton, R.N. (2010), "A cross-national and cross-cultural approach to global market segmentation: an application using consumers' perceived service quality", *Journal of International Marketing*, Vol. 18 No. 3, pp. 18-40.

Ahmed, S.A. and d'Astous, A. (2008), "Antecedents, moderators and dimensions of country-of-origin evaluations", *International Marketing Review*, Vol. 25 No. 1, pp. 75-106.

Ali, R., Lynch, R., Melewar, T. and Jin, Z. (2015), "The moderating influences on the relationship of corporate reputation with its antecedents and consequences: a meta-analytic review", *Journal of Business Research*, Vol. 68 No. 5, pp. 1105-1117.

Ashraf, A.R., Thongpapanl, N. and Auh, S. (2014), "The application of the technology acceptance model under different cultural contexts: the case of online shopping adoption", *Journal of International Marketing*, Vol. 22 No. 3, pp. 68-93.

Bartikowski, B., Walsh, G. and Beatty, S.E. (2011), "Culture and age as moderators in the corporate reputation and loyalty relationship", *Journal of Business Research*, Vol. 64 No. 9, pp. 966-972.

Becker-Olsen, K.L., Taylor, C.R., Hill, R.P. and Yalcinkaya, G. (2011), "A cross-cultural examination of corporate social responsibility marketing communications in Mexico and the United States: strategies for global brands", *Journal of International Marketing*, Vol. 19 No. 2, pp. 30-44.

Berens, G., Riel, C.B.V. and Bruggen, G.H.V. (2005), "Corporate associations and consumer product responses: the moderating role of corporate brand dominance", *Journal of Marketing*, Vol. 69 No. 3, pp. 35-48.

Berry, H., Guillén, M.F. and Zhou, N. (2010), "An institutional approach to cross-national distance", *Journal of International Business Studies*, Vol. 41 No. 9, pp. 1460-1480.

Bolton, L.E., Keh, H.T. and Alba, J.W. (2010), "How do price fairness perceptions differ across culture?", *Journal of Marketing Research*, Vol. 47 No. 3, pp. 564-576.

Brewer, P. and Venaik, S. (2012), "On the misuse of national culture dimensions", *International Marketing Review*, Vol. 29 No. 6, pp. 673-683.

Camacho, N., De Jong, M. and Stremersch, S. (2014), "The effect of customer empowerment on adherence to expert advice", *International Journal of Research in Marketing*, Vol. 31 No. 3, pp. 293-308.

Chan, F.F.Y., Petrovici, D. and Lowe, B. (2016), "Antecedents of product placement effectiveness across cultures", *International Marketing Review*, Vol. 33 No. 1, pp. 5-24.

Chan, K., Li, L., Diehl, S. and Terlutter, R. (2007), "Consumers' response to offensive advertising: a cross cultural study", *International Marketing Review*, Vol. 24 No. 5, pp. 606-628.

Chan, K.W., Yim, C.K. and Lam, S.S. (2010), "Is customer participation in value creation a double-edged sword? Evidence from professional financial services across cultures", *Journal of Marketing*, Vol. 74 No. 3, pp. 48-64.

Chelminski, P. and Coulter, R.A. (2007), "The effects of cultural individualism and self-confidence on propensity to voice: from theory to measurement to practice", *Journal of International Marketing*, Vol. 15 No. 4, pp. 94-118.

Choi, J., Chang, Y.K., Li, Y.J. and Jang, M.G. (2016), "Doing good in another neighborhood: attributions of CSR motives depend on corporate nationality and cultural orientation", *Journal of International Marketing*, Vol. 24 No. 4, pp. 82-102.

Cohen, J., Cohen, P., West, S. and Aiken, L. (2003), *Applied Multiple Correlation/Regression Analysis for the Behavioral Sciences*, Taylor & Francis, Mahwah, NJ.

Cunningham, L.F., Young, C.E., Lee, M. and Ulaga, W. (2006), "Customer perceptions of service dimensions: cross-cultural analysis and perspective", *International Marketing Review*, Vol. 23 No. 2, pp. 192-210.

Deephouse, D.L., Newburry, W. and Soleimani, A. (2016), "The effects of institutional development and national culture on cross-national differences in corporate reputation", *Journal of World Business*, Vol. 51 No. 3, pp. 463-473.

De Mooij, M. (2011), *Consumer Behavior and Culture: Consequences for Global Marketing and Advertising: Consequences for Global Marketing and Advertising*, Sage, Los Angeles, CA.

De Mooij, M. (2015), "Cross-cultural research in international marketing: clearing up some of the confusion", *International Marketing Review*, Vol. 32 No. 6, pp. 646-662.

De Mooij, M. (2017), "Comparing dimensions of national culture for secondary analysis of consumer behavior data of different countries", *International Marketing Review*, Vol. 34 No. 3, pp. 444-456.

Devinney, T.M. and Hohberger, J. (2017), "The past is prologue: moving on from culture's consequences", *Journal of International Business Studies*, Vol. 48 No. 1, pp. 48-62.

Diamantopoulos, A. and Winklhofer, H.M. (2001), "Index construction with formative indicators: an alternative to scale development", *Journal of Marketing Research*, Vol. 38 No. 2, pp. 269-277.

Diehl, S., Terlutter, R. and Mueller, B. (2008), "The influence of culture on responses to the GLOBE dimension of performance orientation in advertising messages – results from the US, Germany, France, Spain, and Thailand", in Lee, A.Y. and Soman, D. (Eds), *Advances in Consumer Research*, Vol. 35, Association of Consumer Research, Provo, UT, pp. 267-275.

Duque, L.C. and Lado, N. (2010), "Cross-cultural comparisons of consumer satisfaction ratings: a perspective from Albert Hirschman's theory", *International Marketing Review*, Vol. 27 No. 6, pp. 676-693.

Eisingerich, A.B. and Rubera, G. (2010), "Drivers of brand commitment: a cross-national investigation", *Journal of International Marketing*, Vol. 18 No. 2, pp. 64-79.

El-Manstrly, D. (2014), "Cross-cultural validation of switching costs: a four-country assessment", *International Marketing Review*, Vol. 31 No. 4, pp. 413-437.

Erdem, T., Swait, J. and Valenzuela, A. (2006), "Brands as signals: a cross-country validation study", *Journal of Marketing*, Vol. 70 No. 1, pp. 34-49.

Evanschitzky, H., Emrich, O., Sangtani, V., Ackfeldt, A.-L., Reynolds, K.E. and Arnold, M.J. (2014), "Hedonic shopping motivations in collectivistic and individualistic consumer cultures", *International Journal of Research in Marketing*, Vol. 31 No. 3, pp. 335-338.

Falkenreck, C. and Wagner, R. (2010), "Impact of direct marketing activities on company reputation transfer success: empirical evidence from five different cultures", *Corporate Reputation Review*, Vol. 13 No. 1, pp. 20-37.

Fombrun, C. and Shanley, M. (1990), "What's in a name? Reputation building and corporate strategy", *Academy of Management Journal*, Vol. 33 No. 2, pp. 233-258.

Gaur, A. and Kumar, M. (2018), "A systematic approach to conducting review studies: an assessment of content analysis in 25 years of IB research", *Journal of World Business*, Vol. 53 No. 2, pp. 280-289.

Geldhof, G.J., Preacher, K.J. and Zyphur, M.J. (2014), "Reliability estimation in a multilevel confirmatory factor analysis framework", *Psychological Methods*, Vol. 19 No. 1, pp. 72-91.

Gouveia, V.V. and Ros, M. (2000), "Hofstede and Schwartz's models for classifying individualism at the cultural level: their relation to macro-social and macro-economic variables", *Psicothema*, Vol. 12 No. 1, pp. 25-33.

Hall, E.T. (1983), *The Dance of Life*, Anchor Press Garden City, New York, NY.

Harzing, A.-W. (2018), "Journal quality list 2018", available at: https://harzing.com/resources/journal-quality-list (accessed October 16, 2018).

Hofstede, G. (1980), *Culture's Consequences: International Differences In Work-Related Values*, Sage, Berverly Hills, CA.

Hofstede, G. (2001), *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations Across Nations*, Sage, Thousand Oaks, CA.

Hofstede, G. and Bond, M.H. (1988), "The confucius connection: from cultural roots to economic growth", *Organizational Dynamics*, Vol. 16 No. 4, pp. 5-21.

Hofstede, G., Hofstede, G.J. and Minkov, M. (2010), *Cultures and Organizations: Software of the Mind*, McGraw-Hill Publication, New York, NY.

House, R., Javidan, M., Hanges, P. and Dorfman, P. (2002), "Understanding cultures and implicit leadership theories across the globe: an introduction to project GLOBE", *Journal of World Business*, Vol. 37 No. 1, pp. 3-10.

House, R.J., Hanges, P.J., Javidan, M., Dorfman, P.W. and Gupta, V. (2004), *Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies*, Sage, Thousand Oaks, NY.

Hudson, S., Huang, L., Roth, M.S. and Madden, T.J. (2016), "The influence of social media interactions on consumer–brand relationships: a three-country study of brand perceptions and marketing behaviors", *International Journal of Research in Marketing*, Vol. 33 No. 1, pp. 27-41.

Hui, M.K., Ho, C.K. and Wan, L.C. (2011), "Prior relationships and consumer responses to service failures: a cross-cultural study", *Journal of International Marketing*, Vol. 19 No. 1, pp. 59-81.

Hult, G.T.M., Ketchen, D.J. Jr, Griffith, D.A., Finnegan, C.A., Gonzalez-Padron, T., Harmancioglu, N., Huang, Y., Talay, M.B. and Cavusgil, S.T. (2008), "Data equivalence in cross-cultural international business research: assessment and guidelines", *Journal of International Business Studies*, Vol. 39 No. 6, pp. 1027-1044.

Human Development Index (2018), "Human development Index 2018", available at: www.hdr.undp.org/en/2018-update (accessed October 24, 2018).

Inglehart, R. (1997), *Modernization and Postmodernization: Cultural, Economic, and Political Change In 43 Societies*, Cambridge University Press, Princeton, NJ.

Inglehart, R. and Baker, W.E. (2000), "Modernization, cultural change, and the persistence of traditional values", *American Sociological Review*, Vol. 65 No. 1, pp. 19-51.

Jak, S., Oort, F.J. and Dolan, C.V. (2013), "A test for cluster bias: detecting violations of measurement invariance across clusters in multilevel data", *Structural Equation Modeling: A Multidisciplinary Journal*, Vol. 20 No. 2, pp. 265-282.

Javidan, M., House, R.J., Dorfman, P.W., Hanges, P.J. and De Luque, M.S. (2006), "Conceptualizing and measuring cultures and their consequences: a comparative review of globe's and Hofstede's approaches", *Journal of International Business Studies*, Vol. 37 No. 6, pp. 897-914.

Jin, B., Yong Park, J. and Kim, J. (2008), "Cross-cultural examination of the relationships among firm reputation, e-satisfaction, e-trust, and e-loyalty", *International Marketing Review*, Vol. 25 No. 3, pp. 324-337.

Jung, J.M., Polyorat, K. and Kellaris, J.J. (2009), "A cultural paradox in authority-based advertising", *International Marketing Review*, Vol. 26 No. 6, pp. 601-632.

Kaminska, O., McCutcheon, A.L. and Billiet, J. (2010), "Satisficing among reluctant respondents in a cross-national context", *Public Opinion Quarterly*, Vol. 74 No. 5, pp. 956-984.

Keh, H.T. and Sun, J. (2008), "The complexities of perceived risk in cross-cultural services marketing", *Journal of International Marketing*, Vol. 16 No. 1, pp. 120-146.

Keh, H.T., Ji, W., Wang, X., Sy-Changco, J.A. and Singh, R. (2015), "Online movie ratings: a cross-cultural, emerging Asian markets perspective", *International Marketing Review*, Vol. 32 Nos 3/4, pp. 366-388.

Kirkman, B.L., Lowe, K.B. and Gibson, C.B. (2017), "A retrospective on culture's consequences: the 35-year journey", *Journal of International Business Studies*, Vol. 48 No. 1, pp. 12-29.

Kluckhohn, C. (1951), "Values and value-orientation in the theory of action: an exploration in definition and classification", in Parsons, T. and Shils, E. (Eds), *Toward A General Theory of Action*, Harvard University Press, Cambridge, MA, pp. 388-433.

Krautz, C. and Hoffmann, S. (2017), "The tenure-based customer retention model. a cross-cultural validation", *Journal of International Marketing*, Vol. 25 No. 3, pp. 83-106.

Kumar, V. and Pansari, A. (2016), "National culture, economy, and customer lifetime value: assessing the relative impact of the drivers of customer lifetime value for a global retailer", *Journal of International Marketing*, Vol. 24 No. 1, pp. 1-21.

Kwak, H., Jaju, A. and Larsen, T. (2006), "Consumer ethnocentrism offline and online: the mediating role of marketing efforts and personality traits in the United States, South Korea, and India", *Journal of the Academy of Marketing Science*, Vol. 34 No. 3, pp. 367-385.

Laforet, S. and Chen, J. (2012), "Chinese and British consumers' evaluation of Chinese and international brands and factors affecting their choice", *Journal of World Business*, Vol. 47 No. 1, pp. 54-63.

Lam, D., Lee, A. and Mizerski, R. (2009), "The effects of cultural values in word-of-mouth communication", *Journal of International Marketing*, Vol. 17 No. 3, pp. 55-70.

Lee, J., Garbarino, E. and Lerman, D. (2007), "How cultural differences in uncertainty avoidance affect product perceptions", *International Marketing Review*, Vol. 24 No. 3, pp. 330-349.

Lee, S.-G., Trimi, S. and Kim, C. (2013), "The impact of cultural differences on technology adoption", *Journal of World Business*, Vol. 48 No. 1, pp. 20-29.

Leisinger, K.M. (2005), "The corporate social responsibility of the pharmaceutical industry: idealism without illusion and realism without resignation", *Business Ethics Quarterly*, Vol. 15 No. 4, pp. 577-594.

Lemmens, A., Croux, C. and Dekimpe, M.G. (2007), "Consumer confidence in Europe: United in diversity?", *International Journal of Research in Marketing*, Vol. 24 No. 2, pp. 113-127.

Lieven, T. and Hildebrand, C. (2016), "The impact of brand gender on brand equity: findings from a large-scale cross-cultural study in ten countries", *International Marketing Review*, Vol. 33 No. 2, pp. 178-195.

Lord, R. and Maher, K. (1991), *Leadership and Information Processing: Linking Perceptions and Processes*, Unwin-Everyman, Boston, MA.

Luke, D.A. (2004), *Multilevel Modeling*, Sage, Thousand Oaks, CA.

McClelland, D.C. (1961), *The Achieving Society*, Princeton, Van Nostrand, NJ.

McSweeney, B. (2009), "Dynamic diversity: variety and variation within countries", *Organization Studies*, Vol. 30 No. 9, pp. 933-957.

McSweeney, B. (2013), "Fashion founded on a flaw: the ecological mono-deterministic fallacy of Hofstede, globe, and followers", *International Marketing Review*, Vol. 30 No. 5, pp. 483-504.

Ma, Z., Yang, Z. and Mourali, M. (2014), "Consumer adoption of new products: independent versus interdependent self-perspectives", *Journal of Marketing*, Vol. 78 No. 2, pp. 101-117.

Marquina, P. and Morales, C.E. (2012), "The influence of CSR on purchasing behaviour in Peru and Spain", *International Marketing Review*, Vol. 29 No. 3, pp. 299-312.

Minkov, M. (2018), "A revision of Hofstede's model of national culture: old evidence and new data from 56 countries", *Cross Cultural & Strategic Management*, Vol. 25 No. 2, pp. 231-256.

Minkov, M., Dutt, P., Schachner, M., Morales, O., Sanchez, C., Jandosova, J., Khassenbekov, Y. and Mudd, B. (2017), "A revision of Hofstede's individualism-collectivism dimension: a new national index from a 56-country study", *Cross Cultural & Strategic Management*, Vol. 24 No. 3, pp. 386-404.

Möller, J. and Eisend, M. (2010), "A global investigation into the cultural and individual antecedents of banner advertising effectiveness", *Journal of International Marketing*, Vol. 18 No. 2, pp. 80-98.

Moon, B.-J., Lee, L.W. and Oh, C.H. (2015), "The impact of CSR on consumer-corporate connection and brand loyalty: a cross cultural investigation", *International Marketing Review*, Vol. 32 No. 5, pp. 518-539.

Morgeson, F.V. III, Mithas, S., Keiningham, T.L. and Aksoy, L. (2011), "An investigation of the cross-national determinants of customer satisfaction", *Journal of the Academy of Marketing Science*, Vol. 39 No. 2, pp. 198-215.

Okazaki, S., Mueller, B. and Taylor, C.R. (2010), "Global consumer culture positioning: testing perceptions of soft-sell and hard-sell advertising appeals between US and Japanese consumers", *Journal of International Marketing*, Vol. 18 No. 2, pp. 20-34.

Özsomer, A. (2012), "The interplay between global and local brands: a closer look at perceived brand globalness and local iconness", *Journal of International Marketing*, Vol. 20 No. 2, pp. 72-95.

Park, C., Jun, J. and Le, T. (2015), "Consumer characteristics and the use of social networking sites: a comparison between Korea and the US", *International Marketing Review*, Vol. 32 Nos 3/4, pp. 414-437.

Patterson, P.G., Cowley, E. and Prasongsukarn, K. (2006), "Service failure recovery: the moderating impact of individual-level cultural value orientation on perceptions of justice", *International Journal of Research in Marketing*, Vol. 23 No. 3, pp. 263-277.

Paul, P., Roy, A. and Mukhopadhyay, K. (2006), "The impact of cultural values on marketing ethical norms: a study in India and the United States", *Journal of International Marketing*, Vol. 14 No. 4, pp. 28-56.

Pauwels, K., Erguncu, S. and Yildirim, G. (2013), "Winning hearts, minds and sales: How marketing communication enters the purchase process in emerging and mature markets", *International Journal of Research in Marketing*, Vol. 30 No. 1, pp. 57-68.

Petersen, J.A., Kushwaha, T. and Kumar, V. (2015), "Marketing communication strategies and consumer financial decision making: the role of national culture", *Journal of Marketing*, Vol. 79 No. 1, pp. 44-63.

Petrovici, D., Marinova, S., Marinov, M. and Lee, N. (2007), "Personal uses and perceived social and economic effects of advertising in Bulgaria and Romania", *International Marketing Review*, Vol. 24 No. 5, pp. 539-562.

Raudenbush, S.W. and Bryk, A.S. (2002), *Hierarchical Linear Models: Applications and Data Analysis Methods*, Sage, Thousand Oaks, CA.

Reardon, J., Miller, C., Foubert, B., Vida, I. and Rybina, L. (2006), "Antismoking messages for the international teenage segment: the effectiveness of message valence and intensity across different cultures", *Journal of International Marketing*, Vol. 14 No. 3, pp. 115-138.

Rezsohazy, R. (2001), "Values, sociology of", in Smelser, N.J. and Baltes, P.B. (Eds), *International Encyclopedia of the Social & Behavioral Sciences*, Vol. 11, Elsevier, Oxford, pp. 16153-16157.

Rippé, C.B., Weisfeld-Spolter, S., Yurova, Y. and Sussan, F. (2015), "Is there a global multichannel consumer?", *International Marketing Review*, Vol. 32 Nos 3/4, pp. 329-349.

Rokeach, M. (1973), *The Nature of Human Values*, Free press, New York, NY.

Rubera, G., Ordanini, A. and Griffith, D.A. (2011), "Incorporating cultural values for understanding the influence of perceived product creativity on intention to buy: an examination in Italy and the US", *Journal of International Business Studies*, Vol. 42 No. 4, pp. 459-476.

Sarstedt, M., Wilczynski, P. and Melewar, T. (2013), "Measuring reputation in global markets – a comparison of reputation measures' convergent and criterion validities", *Journal of World Business*, Vol. 48 No. 3, pp. 329-339.

Schlager, T. and Maas, P. (2013), "Fitting international segmentation for emerging markets: conceptual development and empirical illustration", *Journal of International Marketing*, Vol. 21 No. 2, pp. 39-61.

Schumann, J.H.V., Wangenheim, F., Stringfellow, A., Yang, Z., Blazevic, V., Praxmarer, S., Shainesh, G., Komor, M., Shannon, R.M. and Jiménez, F.R. (2010), "Cross-cultural differences in the effect of received word-of-mouth referral in relational service exchange", *Journal of International Marketing*, Vol. 18 No. 3, pp. 62-80.

Schwartz, S.H. (1992), "Universals in the content and structure of values: theoretical advances and empirical tests in 20 countries", *Advances in Experimental Social Psychology*, Vol. 25, pp. 1-65.

Schwartz, S.H. (1994), *Beyond Individualism/Collectivism: New Cultural Dimensions of Values*, Sage, Thousand Oaks, CA.

Schwartz, S.H. (2014), "National culture as value orientations: consequences of value differences and cultural distance", in Ginsburgh, V.A. and Throsby, D. (Eds), *Handbook of the Economics of Art and Culture*, Elsevier, North Holland, pp. 547-586.

Schwartz, S.H. and Boehnke, K. (2004), "Evaluating the structure of human values with confirmatory factor analysis", *Journal of Research in Personality*, Vol. 38 No. 3, pp. 230-255.

Segalla, M., Rouziès, D., Besson, M. and Weitz, B.A. (2006), "A cross-national investigation of incentive sales compensation", *International Journal of Research in Marketing*, Vol. 23 No. 4, pp. 419-433.

Sharma, A., Kumar, V. and Borah, S.B. (2017), "Ritualization: a strategic tool to position brands in international markets", *Journal of International Marketing*, Vol. 25 No. 2, pp. 1-24.

Singh, J., Lentz, P. and Nijssen, E.J. (2011), "First-and second-order effects of consumers' institutional logics on firm–consumer relationships: a cross-market comparative analysis", *Journal of International Business Studies*, Vol. 42 No. 2, pp. 307-333.

Singh, S. (2006), "Cultural differences in, and influences on, consumers' propensity to adopt innovations", *International Marketing Review*, Vol. 23 No. 2, pp. 173-191.

Snijders, T.A. and Bosker, R.J. (2012), *Multilevel Analysis. An Introduction To Basic and Advanced Multilevel Modeling*, Sage, Los Angeles, CA.

Søndergaard, M. (1994), "Research note: Hofstede's consequences: a study of reviews, citations and replications", *Organization Studies*, Vol. 15 No. 3, pp. 447-456.

Soyez, K. (2012), "How national cultural values affect pro-environmental consumer behavior", *International Marketing Review*, Vol. 29 No. 6, pp. 623-646.

Spence, M. (1973), "Job market signaling", *The Quarterly Journal of Economics*, Vol. 87 No. 3, pp. 355-374.

Steenkamp, J.-B.E. and de Jong, M.G. (2010), "A global investigation into the constellation of consumer attitudes toward global and local products", *Journal of Marketing*, Vol. 74 No. 6, pp. 18-40.

Steenkamp, J.-B.E. and Geyskens, I. (2006), "How country characteristics affect the perceived value of web sites", *Journal of Marketing*, Vol. 70 No. 3, pp. 136-150.

Steenkamp, J.-B.E., Hofstede, F.t. and Wedel, M. (1999), "A cross-national investigation into the individual and national cultural antecedents of consumer innovativeness", *Journal of Marketing*, Vol. 63 No. 2, pp. 55-69.

Strizhakova, Y., Coulter, R.A. and Price, L.L. (2011), "Branding in a global marketplace: the mediating effects of quality and self-identity brand signals", *International Journal of Research in Marketing*, Vol. 28 No. 4, pp. 342-351.

Swoboda, B. and Hirschmann, J. (2017), "Perceptions and effects of cross-national corporate reputation: the role of Hofstede's cultural value approach", *International Marketing Review*, Vol. 34 No. 6, pp. 909-944.

Swoboda, B., Puchert, C. and Morschett, D. (2016), "Explaining the differing effects of corporate reputation across nations: a multilevel analysis", *Journal of the Academy of Marketing Science*, Vol. 44 No. 4, pp. 454-473.

Swoboda, B., Huber, C., Schuster, T. and Hirschmann, J. (2017), "Corporate reputation effects across nations: the impact of country distances and firm-specific resources", *Management International Review*, Vol. 57 No. 5, pp. 717-748.

Tang, L. (2017), "Mine your customers or mine your business: the moderating role of culture in online word-of-mouth reviews", *Journal of International Marketing*, Vol. 25 No. 2, pp. 88-110.

Taras, V., Steel, P. and Kirkman, B.L. (2010), "Negative practice–value correlations in the GLOBE data: unexpected findings, questionnaire limitations and research directions", *Journal of International Business Studies*, Vol. 41 No. 8, pp. 1330-1338.

Taras, V., Steel, P. and Kirkman, B.L. (2016), "Beyond geography in the search for cultural boundaries", *Management International Review*, Vol. 56 No. 4, pp. 455-487.

Thomas, D.C., Ravlin, E.C., Liao, Y., Morrell, D.L. and Au, K. (2016), "Collectivist values, exchange ideology and psychological contract preference", *Management International Review*, Vol. 56 No. 2, pp. 255-281.

Thompson, F.M. and Chmura, T. (2015), "Loyalty programs in emerging and developed markets: the impact of cultural values on loyalty program choice", *Journal of International Marketing*, Vol. 23 No. 3, pp. 87-103.

Torelli, C.J., Özsomer, A., Carvalho, S.W., Keh, H.T. and Maehle, N. (2012), "Brand concepts as representations of human values: do cultural congruity and compatibility between values matter?", *Journal of Marketing*, Vol. 76 No. 4, pp. 92-108.

Triandis, H.C. (1995), *Individualism & Collectivism*, Westview press, Boulder, CO.

Tsui, A.S., Nifadkar, S.S. and Ou, A.Y. (2007), "Cross-national, cross-cultural organizational behavior research: advances, gaps, and recommendations", *Journal of Management*, Vol. 33 No. 3, pp. 426-478.

Usunier, J.-C. and Cestre, G. (2007), "Product ethnicity: revisiting the match between products and countries", *Journal of International Marketing*, Vol. 15 No. 3, pp. 32-72.

van der Lans, R., van Everdingen, Y. and Melnyk, V. (2016), "What to stress, to whom and where? A cross-country investigation of the effects of perceived brand benefits on buying intentions", *International Journal of Research in Marketing*, Vol. 33 No. 4, pp. 924-943.

van Ittersum, K. and Wong, N. (2010), "The lexus or the olive tree? Trading off between global convergence and local divergence", *International Journal of Research in Marketing*, Vol. 27 No. 2, pp. 107-118.

Vlachopoulos, S.P. (2008), "The basic psychological needs in exercise scale: measurement invariance over gender", *Structural Equation Modeling*, Vol. 15 No. 1, pp. 114-135.

Walsh, G. and Beatty, S.E. (2007), "Customer-based corporate reputation of a service firm: scale development and validation", *Journal of the Academy of Marketing Science*, Vol. 35 No. 1, pp. 127-143.

Walsh, G., Beatty, S.E. and Shiu, E.M. (2009), "The customer-based corporate reputation scale: Replication and short form", *Journal of Business Research*, Vol. 62 No. 10, pp. 924-930.

Walsh, G., Shiu, E. and Hassan, L.M. (2014), "Cross-national advertising and behavioral intentions: a multilevel analysis", *Journal of International Marketing*, Vol. 22 No. 1, pp. 77-98.

Wang, Y. and Sun, S. (2010), "Examining the role of beliefs and attitudes in online advertising: a comparison between the USA and Romania", *International Marketing Review*, Vol. 27 No. 1, pp. 87-107.

Winterich, K.P. and Zhang, Y. (2014), "Accepting inequality deters responsibility: how power distance decreases charitable behavior", *Journal of Consumer Research*, Vol. 14 No. 2, pp. 274-293.

Yang, H., Stamatogiannakis, A. and Chattopadhyay, A. (2015), "Pursuing attainment versus maintenance goals: the interplay of self-construal and goal type on consumer motivation", *Journal of Consumer Research*, Vol. 42 No. 1, pp. 93-108.

Yeung, M.C., Ramasamy, B., Chen, J. and Paliwoda, S. (2013), "Customer satisfaction and consumer expenditure in selected European countries", *International Journal of Research in Marketing*, Vol. 30 No. 4, pp. 406-416.

Yim, M.Y.-C., Sauer, P.L., Williams, J., Lee, S.-J. and Macrury, I. (2014), "Drivers of attitudes toward luxury brands: a cross-national investigation into the roles of interpersonal influence and brand consciousness", *International Marketing Review*, Vol. 31 No. 4, pp. 363-389.

Zakaria, N. (2017), "Emergent patterns of switching behaviors and intercultural communication styles of global virtual teams during distributed decision making", *Journal of International Management*, Vol. 23 No. 4, pp. 350-366.

Zarantonello, L., Jedidi, K. and Schmitt, B.H. (2013), "Functional and experiential routes to persuasion: an analysis of advertising in emerging versus developed markets", *International Journal of Research in Marketing*, Vol. 30 No. 1, pp. 46-56.

Zhang, Y., Winterich, K.P. and Mittal, V. (2010), "Power distance belief and impulsive buying", *Journal of Marketing Research*, Vol. 47 No. 5, pp. 945-954.

Zhou, L., Yang, Z. and Hui, M.K. (2010), "Non-local or local brands? A multi-level investigation into confidence in brand origin identification and its strategic implications", *Journal of the Academy of Marketing Science*, Vol. 38 No. 2, pp. 202-218.

Appendix

The web-appendix is available upon request from the corresponding author.

Corresponding author
Bernhard Swoboda can be contacted at: b.swoboda@uni-trier.de