

**Materialism and Cultural Orientation:
The Role of Vertical/Horizontal Individualism within and across Cultures**

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Abstract

A common expectation of the materialism literature is that highly individualistic people are more materialistic due to a substitution of goods for social relationships as self-identifiers; although the evidence is mixed. Including the vertical-horizontal distinction into the individualist-collectivist framework is expected to provide more insight into the drivers of materialism. We test our hypotheses using hierarchical regression based on online survey data from young adults from seven countries with widely varying cultural orientations. We find the materialism-success dimension is positively correlated with VI and negatively correlated with HI and that both orientations are positively correlated with the materialism-happiness dimension. Also, the effect of individual-level VI is stronger when country-level VI is lower.

Keywords: Materialism, cross-cultural consumer behaviour, vertical-horizontal individualism

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Introduction and Literature Review

Given the widespread association marketing has with materialism, materialism has received surprisingly little attention in the discipline. Materialism is typically viewed as a relatively stable value or trait that is more common in some cultures and people than in others (e.g., Ger and Belk, 1996, 1999; Clarke and Micken, 2002). Highly individualistic people are often expected to be more materialistic because they are assumed to be more likely to substitute goods for social relationships as self-identifiers (Clarke and Micken, 2002; Wong, 1997); although the evidence in support of this straightforward assertion is mixed (Ger and Belk, 1996, 1999; Eastman et al., 1997). We propose that the inclusion of the vertical-horizontal distinction, recently incorporated into the individualist-collectivist framework, should further our understanding of the drivers of materialism. Specifically, we suggest vertical-individualism, with its emphasis on improving individual status, is a critical driver of materialism-success, whereas horizontal-individualism, with its emphasis on equality in status and uniqueness, will decrease materialism-success. However, vertical-individualism and horizontal-individualism are both expected to be positively related to materialism-happiness. These relationships are explored using data collected in seven countries with wide range of cultural orientations.

Materialism has been conceptualised as an enduring belief that it is important to a person's identity to own material possessions. The construct is frequently conceptualised as having three dimensions: centrality, happiness, and success (Richins and Dawson, 1992). Centrality captures the idea that "materialist place possessions and their acquisition at the center of their lives" (Richins and Dawson, 1992, p. 304) and is embodied in the tongue-in-cheek saying 'I shop, therefore I am'. The happiness dimension captures a belief that having things is essential to happiness; materialists believe increasing consumption will increase their well-being in life. The third dimension assesses a tendency by materialists to judge their own and others' success by the number and quality of the things they own, capturing the ability goods have to confer status and project a desired self-image (Richins and Dawson, 1992).

Some of the earliest work on materialism in marketing recognises the importance of cross-cultural differences (Ger and Belk, 1996, 1999). However, relatively little research has explored the link between cultural orientation and materialism. Existing research suggests materialism is positively correlated with individualism and negatively correlated with collectivism (Wong, 1997; Clarke and Micken, 2002). This link between materialism and a cultural orientation toward individualism is implicitly stated in Mukerji's (1983, p. 8) definition of materialism as "a cultural system in which material interests are not made subservient to other social goals". However, past research has had mixed results. In one of the earliest efforts, Wong (1997) found US undergraduates' individualism was unrelated to their materialism, although their collectivism was significantly negatively related to materialism. More recently, Clarke and Micken (2002) found undergraduate business students in highly individualist countries, (USA and Australia - ranked 1 and 2/50; Hofstede, 2001), had a significantly higher level of materialism than did students in a moderately individualistic country (Mexico - ranked 30/50); although France (ranked 10/50 on individualism) had the highest level of materialism. Finally, Wong, Rindfleisch and Burroughs (2003) found adults' individualism (measured as vertical individualism) was positively related to their materialism in US, Thai, Japanese, Korean and Singaporean samples.

Recent advances in the conceptualisation of cultural orientations suggest that distinguishing the vertical and horizontal aspects of individualism will offer insight into their relationship with materialism.¹ Triandis and colleagues (e.g., Singelis et al., 1995; Triandis and Gelfand, 1998) have argued that individualist and collectivist cultures are better understood by incorporating a distinction that separates societies based on how hierarchical a society is. This added distinction breaks the traditional two-group model into four groups (Vertical Individualists, Vertical Collectivist, Horizontal Individualists, and Horizontal Collectivists). Shavitt et al. (2006, p. 326) offer concise descriptions of each orientation: Vertical Individualists (VI) are concerned “with improving their individual status and distinguishing themselves from others via competition, achievement and power”; Vertical Collectivists (VC) “focus on complying with authorities and on enhancing the cohesion and status of their in-groups, even when that entails sacrificing their own personal goals”; Horizontal Individualists (HI) “prefer to view themselves as equal to others in status. Rather than standing out, the focus is on expressing one’s uniqueness and establishing one’s capability to be successfully self-reliant”; and Horizontal Collectivists (HC) focus on “sociability and interdependence with others within an egalitarian framework.” These orientations have been shown to have convergent and divergent validity (e.g., Triandis and Gelfand (1998)).

We propose that incorporating the vertical-horizontal distinction and the dimensionality of materialism will provide greater insight into the link between materialism and cultural orientation. Specifically, we expect VI to be *positively* and HI to be *negatively* related to materialism-success. However, we expect both VI and HI to be *positively* related to materialism-happiness. People with a VI orientation believe society is strongly hierarchical and that standing is achieved through individual success, which should lead to a positive correlation with materialism-success. Conversely, people with a HI orientation have an “aversion to conspicuously successful persons and to braggarts, emphasizing instead the virtues of modesty” (Shavit et al., 2006, p. 326), which should lead to a negative correlation with materialism-success. These relationships are supported by the values literature which finds that VI is positively, and HI negatively, related to achievement and power values (Oishi et al, 1998). However, since both the VI and HI orientations share self-reliance, independence and hedonism, we expect both VI and HI to be *positively* related to materialism-happiness. Finally, materialism is expected to be unrelated to collectivist orientations. Although VCs are strongly hierarchical, the standing within a group is likely to be determined by pre-existing group memberships and success related to group relationship management rather than ownership. Similarly, HCs, with their strong focus on egalitarianism, are less likely to expend scarce resources on material goods, to demonstrate their position in the social order.

The current study explores the role of cultural orientation at both the country and individual level. Our expectation is that the influence of the individual’s personal level of VI on their level of materialism will be moderated by the level of VI in their cultural context, such that individual level of VI will be less influential in people from cultures that are inherently higher on VI. A strong VI culture level is likely led all members toward higher levels of materialism, regardless of personal orientation, due to the influence of social norms on materialism (Ahuvia and Wong, 2002). Whereas people who reside in a low VI culture, but still personally ascribe to a strong VI orientation, should have an even closer relationship between their personal VI level and their materialism. Thus, we hypothesize:

- H1: A person’s level of vertical individualism is a) positively related to their materialism-success and b) positively related to their materialism-happiness.

- H2: A person's level of horizontal individualism is a) negatively related to their materialism-success and b) positively related to their materialism-happiness.
- H3: The level of cultural vertical individualism is positively related to materialism-success.
- H4: The effect of individual-level VI on materialism-success will be moderated by the country-level VI, such that the individual VI effect will be stronger when country-level VI is lower.

The Present Study

Data were collected as part of a larger study designed to develop a cross-culturally valid consumer decision-making model that was tested in the tourism context. The sample countries were chosen for their relevance to the larger tourism context. While there were some limitations in the countries that were chosen, at least one country was chosen that was higher on each of the four cultural dimensions (the USA (VI: n=249), the UK (VI: n=247), Australia (HI: n=463), Germany (VI: n=634), Brazil (HC: n=537), China (VC: n=244) and South Korea (VC: n=430)). Responses were collected over the Internet by a large online panel provider with members in each of the countries. Respondents were recruited by email and paid by the panel provider in 'points' that are used for online purchases. The use of online panels allows for a cost-effective large-scale multi-country sample. The samples were matched, using quotas for age groups and gender within relevant young adult age groups (18-20, 21-23, 24-26, and 27-29). We used young adults because of the need for a more homogeneous sample to increase multi-country measurement convergence and their relevance to both the tourism and materialism topics. The initial questionnaire was developed in English and translated into Mandarin, German, Portuguese, and Korean by bilingual translators living in each of the target countries; then back translated into English by a second translator, following the translation-back-translation method (Brislin, 1970). The researchers and the final translator compared the English versions and resolved any discrepancies in meaning. The survey included questions about shopping habits, traits, values and socio-demographics, as part of a larger study.

Materialism was measured by Richins and Dawson's (1992) 18-item three-dimensional scale on a strongly disagree (1) to strongly agree (7) scale. Reverse items were reworded, as suggested by Wong et al. (2003). The four cultural orientations were measured by Triandis and Gelfand's (1998) 16-item scale on a strongly disagree (1) to strongly agree (7) scale.

The measurement properties of the materialism and cultural orientation dimensions were examined using confirmatory factor analysis (CFA) and Fornell and Larcker's (1981), initially in the USA, and then in the other countries. One-factor congeneric models were examined for the materialism-subscales that did not fit the data well. The removal of one item from materialism-success produced a good fit ($\chi^2_5 = 10.11$, $p = 0.07$; CFI = 0.99; RMSEA = 0.06); the removal of two items from materialism-centrality produced a good fit ($\chi^2_2 = 2.55$, $p = 0.28$; CFI = 0.99; RMSEA = 0.03) and the removal of one item from materialism-happiness produced a good fit ($\chi^2_2 = 3.76$, $p = .15$; CFI = 1; RMSEA = 0.06). The reliabilities were all high (>0.80) and the AVEs suggested convergent validity (>0.70 for success and happiness and 0.54 for centrality). However, the shared variance between success and centrality was greater than the lowest AVE score, which suggested discriminant validity could not be assumed between these two constructs. Consequently, the centrality dimension was dropped, as it was not focal to the current research. The subscales' metric invariance was then assessed by examining the χ^2_{diff} between an unconstrained model and a model in which the

measurement weights were constrained equal across all of the countries. Metric invariance was achieved for the two sub-scales (Success: $\chi^2_{\text{diff3}} = 11.33$, $p = 0.01$, with remaining fit indices < 0.01 ; Happiness: $\chi^2_{\text{diff3}} = 5.07$, $p = 0.17$).

The one-factor congeneric models for the 4-item HC subscale had a good fit ($\chi^2_2 = 0.80$, $p = 0.67$; CFI = 1; RMSEA < 0.01). The removal of one item from each of the other subscales led to a good fit, after fixing two of the error variances to be equal to provide the necessary degree of freedom (VI: $\chi^2_1 = 1.84$, $p = 0.17$; CFI = 0.99; RMSEA = 0.06; HI: $\chi^2_1 = 0.30$, $p = 0.59$; CFI = 1; RMSEA < 0.01 ; and VC: $\chi^2_1 = 0.02$, $p = 0.90$; CFI = 1; RMSEA < 0.01). The reliabilities were all acceptable (ranging from 0.73 for VI to 0.87 for VC) and the AVEs suggested convergent validity (ranging from 0.49 for VI to 0.68 for VC). The shared variance between each of the dimensions was less than the lowest AVE score, suggesting discriminant validity. Partial metric invariance was achieved for each scale (HI: $\chi^2_{\text{diff3}} = 5.33$, $p = 0.15$; VI: $\chi^2_{\text{diff3}} = 1.93$, $p = 0.59$; VC: $\chi^2_{\text{diff3}} = 4.21$, $p = 0.24$; HC: $\chi^2_{\text{diff6}} = 6.50$, $p = 0.37$).

The following model specifications were used to examine the hypothesised relationships and the regressions were estimated using the SAS PROC MIXED procedure, following the approach suggested by Singer (1998):

$$\begin{aligned} \text{Level 1: } \mathbf{MAT}_{ij} &= \boldsymbol{\beta}_{0j} + \boldsymbol{\beta}_{1j}(\mathbf{VI}_{ij} - \mathbf{MEANVI}_j) + \boldsymbol{\beta}_{2j}(\mathbf{HI}_{ij} - \mathbf{MEANHI}_j) + r_{ij}, \boldsymbol{\beta}_{0j} = \boldsymbol{\gamma}_{00} + \mathbf{u}_{0j}, \boldsymbol{\beta}_{1j} = \boldsymbol{\gamma}_{10} + \mathbf{u}_{1j}; \\ \text{Level 2: } \boldsymbol{\beta}_{0j} &= \boldsymbol{\gamma}_{00} + \boldsymbol{\gamma}_{01}\mathbf{MEANVI}_j + \mathbf{u}_{0j}, \end{aligned}$$

In this case, i indicates individuals; j indicates groups; MAT represents a person's materialism and VI and HI represent a person's vertical and horizontal individualism, respectively. MEANVI represents a country cohort's mean vertical individualism. Combining the 2 levels yields the hierarchical model:

$$\begin{aligned} \text{Multilevel: } \mathbf{MAT}_{ij} &= \boldsymbol{\gamma}_{00} + \boldsymbol{\gamma}_{01}\mathbf{MEANVI}_j + \boldsymbol{\gamma}_{10}(\mathbf{VI}_{ij} - \mathbf{MEANVI}_j) + \boldsymbol{\gamma}_{20}(\mathbf{HI}_{ij} - \mathbf{MEANHI}_j) \\ &+ \boldsymbol{\gamma}_{11}\mathbf{MEANVI}_j(\mathbf{VI}_{ij} - \mathbf{MEANVI}_j) + \boldsymbol{\mu}_{0j} + \boldsymbol{\mu}_{1j}(\mathbf{VI}_{ij} - \mathbf{MEANVI}_j) + r_{ij}. \end{aligned}$$

The fixed component of the equation includes $\boldsymbol{\gamma}_{00} + \boldsymbol{\gamma}_{01}\mathbf{MEANVI}_j + \boldsymbol{\gamma}_{10}(\mathbf{VI}_{ij} - \mathbf{MEANVI}_j) + \boldsymbol{\gamma}_{20}(\mathbf{HI}_{ij} - \mathbf{MEANHI}_j) + \boldsymbol{\gamma}_{11}\mathbf{MEANVI}_j(\mathbf{VI}_{ij} - \mathbf{MEANVI}_j)$, while the random component includes $\boldsymbol{\mu}_{1j}(\mathbf{VI}_{ij} - \mathbf{MEANVI}_j) + r_{ij}$. The level 1 error term (r_{ij}) is assumed to be normally distributed with a mean of 0 and a variance of σ^2 . The random intercept ($\boldsymbol{\mu}_{0j}$) is assumed to be multivariate normally distributed over the groups, with an expected value of 0 and a variance of $\boldsymbol{\tau}_{00}$. The coefficient $\boldsymbol{\beta}_{0j}$ was specified as random so as to allow the intercept to vary across groups. In our model, respondents are nested within groups, in this case the country cohorts. The Level 1 predictors were centred within country cohort and Level 2 predictors were centred by the grand-mean (Raudenbush and Bryk, 2002; Steenkamp, ter Hofstede and Wedel, 2006).

Results

Table 1 presents the parameter symbols and estimates of effects on materialism-success and materialism-happiness. The intercept estimated the average country cohort materialism-success score as 3.61 and the average materialism-happiness score as 4.22.

Table 1: Effects on Materialism (unstandardised coefficients)

Independent Variables	Materialism- success	Materialism- happiness
Intercept ($\boldsymbol{\gamma}_{00}$)	3.61***	4.22***
Main effects: Individual		

VI (γ_{10})	.65***	.48***
HI (γ_{20})	-.05**	.16***
Main effects: Country		
MEANVI (γ_{01})	.79**	.61*
Cross level interactions		
VI x MEANVI (γ_{11})	-.12*	.00
Explained variance (%)		
Individual-level	35%	23%
Country-level	89%	72%

* $p < .05$, ** $p < .01$, *** $p < .001$

H1 argues that the higher a person's VI, a) the higher the degree of materialism-success and b) the higher the degree of materialism-happiness. H1a and H1b were supported, materialism-success $\gamma_{10} = 0.65$ ($p < 0.001$); materialism-happiness $\gamma_{20} = 0.48$ ($p < 0.001$). H2 argues that the higher a person's HI, a) the lower the degree of materialism-success and b) the higher the degree of materialism-happiness. H2a and H2b were also supported: materialism-success $\gamma_{10} = -0.05$ ($p < 0.01$); materialism-happiness $\gamma_{20} = 0.16$ ($p < 0.001$). We also anticipated a main effect of the average vertical individualism in a country cohort (H3). Consistent with H3, the degree of vertical individualism of the country cohorts had a positive effect on materialism-success $\gamma_{01} = 0.79$, and to a lesser extent on materialism-happiness $\gamma_{01} = 0.61$. Finally, H4 argues for a cross-level interaction between the individual and country level materialism-success variables. H4 was also supported; the positive effect VI had on materialism-success was weaker in cultures in which higher vertical-individualism was the norm ($\gamma_{11} = -0.12$, $p < 0.05$). Table 1 also reports the explained variance, which indicates the percentage of explainable variation, explained at each level, following Singer (1998). At the country level, VI explains 89% of the explainable variation in country-level mean materialism-success and 72% of the explainable variation in country-level mean materialism-happiness. In addition, the variance component for the intercept (success = 0.04; $p = 0.07$; happiness = 0.04; $p = 0.08$) was not significant, suggesting there is very little additional variation in country-level materialism that is not explained by the model. At the individual level, VI and HI explain 35% of the within-country cohorts' explainable variation in materialism-success and 23% of the explainable variation in materialism-happiness.

Discussion

The current study refines our understanding of the relationship between individualism and materialism, by illustrating the differential influences the vertical (emphasising hierarchy) and horizontal (emphasising equality) dimensions have on materialism-success, but not on materialism-happiness. It shows the importance of distinguishing between aspects of individualism that address differences between countries such Australia's (HI) and the USA's (VI) culture as these differences have important implications for cross-cultural researchers and for marketers trying to develop appropriate strategies for each country.

¹ Interestingly, all of the countries mentioned in the prior paragraph were vertical countries.

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