

11-4-2021

Trust Propensity Across Cultures: The Role of Collectivism

Stanford A. Westjohn

Peter Magnusson

The University of Texas Rio Grande Valley

George R. Franke

Yi Peng

Follow this and additional works at: https://scholarworks.utrgv.edu/marketing_fac



Part of the [Marketing Commons](#)

Recommended Citation

Westjohn SA, Magnusson P, Franke GR, Peng Y. Trust Propensity Across Cultures: The Role of Collectivism. *Journal of International Marketing*. November 2021. doi:10.1177/1069031X211036688

This Article is brought to you for free and open access by the Robert C. Vackar College of Business & Entrepreneurship at ScholarWorks @ UTRGV. It has been accepted for inclusion in Marketing Faculty Publications and Presentations by an authorized administrator of ScholarWorks @ UTRGV. For more information, please contact justin.white@utrgv.edu, william.flores01@utrgv.edu.

Author Accepted Manuscript



JOURNAL of
International Marketing

Trust Propensity across Cultures: The Role of Collectivism

Journal:	<i>Journal of International Marketing</i>
Manuscript ID	JIM.20.0055.R3
Manuscript Type:	New Submission
Keywords:	Cultural Values < Topics, Behavioral Experiments < Methods, Hierarchical Models < Methods, Trust
Note: The following files were submitted by the author for peer review, but cannot be converted to PDF. You must view these files (e.g. movies) online.	
Capco Insurance COL extended.mp4 Capco Insurance IDV extended.mp4	

SCHOLARONE™
Manuscripts

Author Accepted Manuscript

Trust Propensity across Cultures: The Role of Collectivism

ABSTRACT

Does collectivism influence an individual's willingness to trust others? Conflicting empirical results from past research and the role of trust in international marketing make this question important to resolve. We investigate this question across cultures and at the individual level with four studies using multiple methods. Study 1 establishes correlational evidence between societal-level collectivism and individual-level trust propensity with results from a multi-level analysis of data from over 6,000 respondents in 36 different countries. Study 2 offers an individual-level analysis using the trust game, introducing a more rigorous behavioral outcome variable. Study 3 contributes causal evidence at the individual level based on experiments in both the US and China and offers evidence of social projection as the explanatory mechanism. Finally, Study 4 demonstrates managerial relevance by using advertising to prime collectivism and assessing its effect on trust in the firm.

Keywords: trust, cultural values, individualism, collectivism, experiments, multi-level modeling

Author Accepted Manuscript

Trust plays a critical role in international marketing (Aulakh et al. 1996) including in relationships between international exchange partners (Katsikeas et al. 2009; Wang et al. 2020), international strategic alliance partners (Robson et al. 2008), and even between consumers and brands (Chaudhuri and Holbrook 2001; Xie et al. 2015). Identifying how trust is developed in the context of parties who are otherwise unfamiliar with each other has been identified as an important area of inquiry for international marketing (Samiee et al. 2015).

The development of trust is influenced through a number of factors and cognitive processes (Doney et al. 1998). One such factor driving the development of trust is *trust propensity*, which is an individual difference variable defined as a generalized expectancy that the words or promises of others are reliable (Rotter 1967). Trust propensity is important because it not only contributes to the formation of trust, but it establishes the initial level of trust prior to any knowledge of the trustee. This is relevant as marketers are exposed to new relationships in which trust is important, for example, with customers in new foreign markets or team projects across organizational and national boundaries (Colquitt et al. 2007). In such situations involving unfamiliar actors and objects, trust propensity may be the most relevant trust antecedent (Bigley and Pearce 1998).

This raises a key question as to what factors predict differences in trust propensity. It has been suggested that there may be cross-cultural differences in trust propensity, particularly focusing on the cultural value of collectivism (Huff and Kelley 2003; Johnson and Cullen 2002). However, the relationship between collectivism and trust propensity is not well understood, suffers from competing conceptual arguments, and empirical results have offered conflicting evidence about its role. Collectivism is defined as the view of the self as either a relatively independent and autonomous actor (i.e., individualism) versus an interdependent actor embedded

Author Accepted Manuscript

in groups (i.e., collectivism) (Hofstede 1980). The competing conceptual arguments can briefly be summarized as on the one hand, collectivism's focus on harmony and collaboration with others has been argued to support a positive relationship between collectivism and trust propensity. In contrast, others have suggested that the association between collectivism and trust propensity is constrained due to collectivism's concurrent emphasis on strong family and group ties, which produces security but not trust (Yamagishi 2011). Still others suggest that both individualism and collectivism can each have a positive effect on trust development depending on the cognitive process used to develop trust (Doney et al. 1998). Another competing perspective suggests that the best cultural predictor of trust propensity may not be values, but rather the strength of social norms and sanctioning in societies, a concept Gelfand et al. (2006) conceptualize as cultural tightness.

Empirically, findings have been inconclusive and contradictory with some finding evidence of a positive relationship between collectivism and trust propensity (Zeffane 2017), others a negative relationship (Huff and Kelley 2003), and still others no relationship (Torres and Bligh 2012). Thus, given the contradictory and inconclusive state of research on the relationship between collectivism and trust propensity, and the importance of trust in international marketing, the objective of this study is to provide new theoretical insights and robust empirical evidence on the relationship between collectivism and trust propensity.

In the conceptual development section, we review the literature and acknowledge the competing theoretical perspectives on cross-national differences in trust propensity. Yet, as preview to our findings, we consistently find a positive relationship between collectivism and trust propensity. We propose a theoretical framework that explains differences in trust propensity based on social projection as the theoretical mechanism linking collectivism and trust propensity.

Author Accepted Manuscript

Social projection theory (Krueger 1998), whose main tenets are that people tend to believe that others are similar to them in terms of how they think, feel, and behave, offers a new theoretical lens through which we can explain differences in trust propensity using collectivism as antecedent to trust propensity.

Empirically, we offer robust and converging evidence by combining multiple studies. This includes a large-scale study of approximately 6,000 respondents spanning 36 countries, in which we offer strong correlational evidence of a relationship between collectivism and trust propensity. However, although societal-level studies can offer evidence of correlation, evidence of causation in such studies can only be argued theoretically. One remedy identified by Oyserman and Lee (2008) is the use of experiments involving priming study respondents as an effective means to simulate chronic intercultural value differences and demonstrate that cross-national differences (e.g., in trust propensity) are indeed due to value differences such as collectivism. Thus, using individual-level experiments makes the discovery of causal evidence possible by isolating confounding variables. We complement the large cross-cultural study with four experiments to offer converging empirical evidence. We highlight the contribution and key elements of each study in Table 1.

We suggest that our study contributes to the literature on trust propensity as follows. Cultural tightness and its emphasis on norms and social sanctions (Gelfand et al. 2006) has been advanced as a theoretical explanation for differences in trust propensity (Yamagishi 2011). Instead, we introduce social projection theory as an explanatory mechanism to account for the relationship between collectivism and trust propensity. In the multi-level study (Study 1), we directly compare the effect of cultural tightness to the effect of collectivism in predicting trust propensity, and the results seem to favor the proposed values-based explanation.

Author Accepted Manuscript

Further, by introducing social projection theory and conducting experiments, we bring greater clarity to the relationship between collectivism and trust propensity which has had contradictory results in prior research (e.g., Huff and Kelley 2003; Zeffane 2017). The combined empirical evidence in the studies we report offers strong support of a positive relationship between collectivism and trust propensity and in part explains differences in cross-national differences in trust propensity.

We suggest that one reason for the inconclusive empirical findings in past research is that many studies examining trust propensity rely on the *World Values Survey* (WVS), which uses only a single item with dichotomous response categories (e.g., Brockman et al. 2020; Delhey and Newton 2005; Johnson and Cullen 2002). Although convenient, this item falls short of generally accepted psychometric guidelines and this may in part explain conflicting results. To overcome this shortcoming, we employ a more rigorous multi-item latent construct approach, which offers a finer-grained measure with more variance in the range of trust propensity. In addition, instead of relying solely on a self-report of trust propensity, in Study 2, we employ a behavioral measure to indicate trust propensity.

Existing studies on collectivism and trust are correlational studies and regardless of their sample size are inadequate at offering evidence of causation due to confounding variables and the inability to isolate the effect of cultural values. Therefore, in addition to the large sample multi-country multi-level study, we report results from individual-level studies that manipulate collectivism (interdependent self-construal) to offer causal evidence of the role of collectivism.

Finally, we highlight the managerial relevance of this research by demonstrating that firms can use marketing communication to prime collectivism in consumers to instill greater trust propensity. This is valuable because it more closely resembles actual methods through

Author Accepted Manuscript

which marketers communicate to potential buyers and offers a more rigorous test.

“Insert Table 1 about here”

CONCEPTUAL BACKGROUND

Conceptualization of Trust Propensity

In a business environment increasingly reliant on various forms of interfirm cooperation, the role of trust as a foundation for effective economic exchange and development has been well established (e.g., Knack and Keefer 1997). The literature distinguishes between at least three perspectives on trust. The first perspective focuses on the relationship. This perspective views trust as a willingness to rely on an exchange partner in whom one has confidence (Moorman et al. 1993) or as “trust as existing when one party has confidence in an exchange partner’s reliability and integrity” (Morgan and Hunt 1994, p. 23). The second perspective focuses on the characteristics of the trustee. This concept has generally been called trustworthiness (Mayer et al. 1995; Tullberg 2008) and in short suggests that some people are more likely to be considered trustworthy.

The third perspective, which is the focus of this study, focuses on a person’s predisposition to trust others, i.e., trust propensity. We note that others have used different labels for this concept, such as dispositional trust (Kramer 1999), generalized trust (Nee et al. 2018), social trust (Bergh and Öhrvall 2018), or interpersonal trust (Rotter 1967). Trust propensity is an important concept because the characteristics of the trustor play a stronger role than those of the trustee in developing trust, especially in the early stages of a relationship (Jones and Shah 2016).

Rotter (1967) conducted some of the foundational research into what he called

Author Accepted Manuscript

interpersonal trust, or the general expectation that the word, promise, verbal or written statement of another could be relied upon. Following this seminal research, subsequent studies established that some people have a greater tendency than others to be trusting (Colquitt et al. 2007). This perspective views trust propensity as a general disposition that a person would carry from one specific situation to another.

Trust Propensity across Cultures

Empirical research on the relationship between trust propensity and individualism-collectivism has been inconclusive. Some have found evidence of a positive relationship between collectivism and trust propensity (Zeffane 2017). Others have found evidence of a negative relationship (Huff and Kelley 2003), and others still have found no relationship between trust and collectivism (Torres and Bligh 2012).

Some of this empirical ambiguity may be due to the frequent use of what we consider a psychometrically suboptimal way to operationalize trust propensity. The WVS includes a single item, which researchers have used as a proxy for trust propensity: “Generally speaking, would you say that most people can be trusted or that you can’t be too careful in dealing with people?” The dichotomous response categories were “Most people can be trusted” and “Can’t be too careful.” Based on this question researchers have calculated the percentage of people within a country responding that most people can be trusted (Johnson and Cullen 2002). Most psychometric guidelines would advise against drawing firm conclusions of data using a single item with a dichotomous response category. Given the shortcomings of this measure, it is perhaps not surprising that the results are inconsistent across the different waves of the WVS. Indeed, over the seven waves of data collected by the WVS Association from 1984-2020, the correlation between the WVS trust item and Hofstede’s collectivism is sometimes positive and

Author Accepted Manuscript

sometimes negative and ranges from 0.14 to -0.56. Furthermore, depending on which wave is being analyzed, a variety of countries that are quite different from each other, e.g., China, Sweden, and Saudi Arabia, have had the highest level of agreement with the WVS trust question. Thus, empirical analysis based on WVS data is psychometrically suboptimal, and empirical findings would be more credible if combined with other studies using alternative measures of trust propensity.

Alongside ambiguous empirical results, a review of the literature reveals conflicting perspectives on how individualism-collectivism is expected to relate to trust propensity. Given the lack of empirical consensus and theoretical counterarguments, we review both perspectives.

Collectivism and Trust Propensity

The individualism-collectivism value reflects the relationship between individuals and society as being either individual-focused or group-focused. Collectivism refers to a society in which people from birth onwards are integrated into strong, cohesive in-groups that throughout people's lives continue to protect them in exchange for unquestioning loyalty. In contrast, individualism refers to a society in which the ties between individuals are loose. Everyone is expected to look after him or herself and his or her immediate family (Hofstede et al. 2010). Individualist values stress personal responsibility and achievement, and individuals are self-oriented rather than group-oriented. In collectivist societies, individuals are integrated into cohesive in-groups, and group goals and norms outweigh personal goals and attributes in guiding behavior (Triandis 1995).

Collectivist societies have been described as trust-based societies where reciprocity norms and mutual interdependence govern relationships (Hofstede 1980). For example, Japan has been used as an illustration of a country that emphasizes trust and cooperation (Hagen and

Author Accepted Manuscript

Choe 1998), epitomized by the Japanese concept of *Wa*, which emphasizes sharing, cooperation, warmth, and fellowship (Rohlen 1974). It has been suggested that through an institutional environment that fosters goodwill, trust, and cooperation, Japanese firms are able to lower transaction costs and generate higher relational rents compared with Western counterparts (Dyer and Singh 1998). Similarly, when conflicts arise in societies with strong collectivist values, conflicts should preferably be worked out through mutual discussion or mediation. The use of legal documents and enforcements is evidence of mistrust, which tends to be a strong contrast with more litigious individualist societies (Sullivan and Peterson 1982). In effect, trust serves as a foundation for social and business relationships. In contrast, individualist societies tend to be dominated by arm's-length relationships (Samaha et al. 2014). Members of individualist societies generally desire independence from any sort of group affiliation and relationships are formed primarily with a self-serving purpose (Steensma et al. 2000). Combined, these arguments suggest a positive relationship between collectivism and trust propensity.

However, several theorists have advanced a competing perspective. For example, Huff and Kelley (2003) suggest that aspects of collectivist culture inhibit trust and that collectivists are relatively ineffective with strangers. Yamagishi (2011, p. 1) opens his book on trust with the claim that “the collectivist society produces security but *destroys trust* [emphasis added].” Rather than trust, collectivist societies depend on a system of mutual monitoring and social sanctioning to enforce compliance with social norms. Yamagishi (2011) suggests that this collective system of mutual sanctioning guarantees mutual cooperation in tight-knit groups, but it leads to insecurity in a broader social environment where such a system does not exist. An example of a public policy initiative that demonstrates this perspective is the recent development of a social credit system in China. It is designed to punish untrustworthy behavior, e.g., spreading false

Author Accepted Manuscript

information or breaking traffic rules, and reward trustworthy behavior like helping neighbors (Kostka 2019). Such a system goes beyond the informal institution of social norms by introducing formal guidelines and punishment and could be viewed as an indicator of low social trust and the necessity for formal social regulation to provide assurances. This competing explanation for cross-national differences in trust propensity has been referred to as cultural tightness, which suggests that strong social norms and sanctions compel others to act in predictably reliable ways and that violating trust would be punished with social sanctions (Gelfand et al. 2011). The social norms and sanctions argument has also been advanced as a theoretical explanation linking collectivism and trust propensity (Hagen and Choe 1998). However, at the same time cultural tightness has been argued as distinct from collectivism (Triandis 1989) and has been found to be only moderately correlated with collectivism (Carpenter 2000). For example, Gelfand et al. (2006) identify Brazil as being collectivist but culturally loose and Germany as individualist but culturally tight.

We suggest that the focus on harmony and collective good embodied by the value of collectivism suggests that collectivism has a positive relationship with trust propensity. The compliance and predictably reliable behavior found in culturally tight societies is less reflective of trust and more reflective of coercive compliance as a remedy to low trust. In sum, trust seems to be more instrumental to the functioning of society in collectivist cultures, suggesting that trust propensity is higher in collectivist societies.

H₁: There is a positive relationship between collectivism and trust propensity.

Social Projection of Individual-level Values

Collectivism is not only a country-level variable. There is an individual-level equivalent

Author Accepted Manuscript

to individualism-collectivism often referred to as independent vs. interdependent self-construal (Markus and Kitayama 1991) which has been investigated as such in the international marketing literature (e.g., Hui et al. 2011). Importantly, individuals from an individualist heritage (e.g., North American, Western European) are more likely to have an independent self-construal; whereas individuals with a background originating from a collectivist heritage (e.g., East Asian, Latin American) have a tendency to have an interdependent self-construal (Fischer and Poortinga 2012; Peterson and Barreto 2018; White et al. 2012).

Accepting that collectivism is a value that can be held at the individual level, social projection then is a theoretical lens that could offer valuable insights into how collectivism influences trust propensity and account for trust variation within cultures. For example, in collectivist cultures social projection theory would account for people with low trust propensity by virtue of their individual-level self-construal and whether it was independent (individualist) or interdependent (collectivist). Social projection theory has a long history in social psychology and its key thesis is the tendency to assume that others are similar to oneself, or in other words, people use one's own characteristics as the basis for judging others' characteristics (Overbeck and Droutman 2013). Katz and Allport (1931) introduced the term social projection, after finding that students who admitted to cheating on an exam were more likely to expect that others were also cheating. Assigning similar attributes or attitudes toward others (i.e., most other people cheat) as one holds for oneself is a way to reaffirm and justify one's own actions (i.e., it's ok for me to cheat). Social projection serves as a fundamental pillar of a functioning society and rests on the assumption that "humans continually perceive others and predict what these others think, feel, and, most importantly, what they will do" (Krueger 1998, p. 163).

Empirical evidence has shown that social projection tends to be strong regardless of

Author Accepted Manuscript

whether people predict attitudes, behaviors, or personality traits. For example, people who support a particular political candidate are more likely to believe that most other people also support the same candidate (Van Boven et al. 2012). People's own behavioral preferences for competition or cooperation predict whether they think others prefer competition or cooperation (Dawes et al. 1977). Social projection extends to values in general and to individualism-collectivism in particular. For example, Overbeck and Droutman (2013) found that with respect to collectivism values, participants showed social projection onto others' beliefs. In other words, the participant's collectivism value, which we refer to as one's own collectivism, resulted in a belief that others also held collectivism values, which we refer to as the perceived collectivism of others. In sum, social projection appears to be a well-established phenomenon and emerging evidence suggests that it extends to cultural values.

Applying social projection theory to the context of cultural values and trust propensity, we suggest that people who hold collectivism values will tend to socially project those same values onto others, creating a perceived collectivism consensus. Whether the other person actually shares the collectivism value is irrelevant. The important factor is the perception and belief that the other person shares the collectivism value. While one's own degree of collectivism may indicate a greater propensity to trust others, it is logical that the perception of whether others share that collectivism value plays a role. Indeed, trust propensity is the belief by the trustor that the trustee will act benevolently (e.g., Lewicki and Wiethoff 2000). If the trustor believes the trustee has a shared concern for the group, then the trustor would feel more confident of the trustee's intentions, i.e., that the trustee would act in an honest and fair manner. Thus, social projection helps us understand the mechanism that connects collectivism with trust propensity.

H₂: The positive relationship between one's own collectivism and trust propensity is

mediated by the perceived collectivism of others.

STUDY 1 – LARGE SCALE MULTI-LEVEL ANALYSIS

Sample

Study 1 offers a test of H1 with a large sample of respondents from multiple countries. The sample was obtained in collaboration with the X-Culture project (Taras 2019). X-Culture is a global team project with participants from universities around the world. As part of the project, participants completed a questionnaire, which included the individual-level trust propensity construct. We gathered trust propensity data from 6,429 participants from 44 countries. We only included data from countries for which at least 20 responses had been collected, a quantity consistent with other international marketing research estimating multi-level models with respondents nested within countries (e.g., Steenkamp and Geyskens 2006). This reduced our sample to 6,326 responses from 36 countries.¹ Table 2 reports the sample characteristics with average age of 24 years ($SD = 5.24$) and nearly even gender split (51.4% female).² This matched sample approach where participants share key characteristics (e.g., young and college educated) while differing primarily on nationality helps control for nuisance variables, and is similar to sampling techniques used by Schwartz (teachers and students) and Hofstede (IBM employees).

“Insert Table 2 about here”

Measures

We measured trust propensity with a four-item construct adapted from Mayer and Davis (1999). The items include: 1) Most people can be counted on to do what they promise to do, 2) Most people can be trusted, 3) Most people are honest about their skills and abilities, and 4)

Author Accepted Manuscript

People are generally good and are trying their best. The measure's reliability was strong ($\alpha = 0.88$) and we used an average trust propensity index in the mixed model.

To ensure robustness of results, we merged the individual-level data with cultural values data from three separate values frameworks: Hofstede et al. (2010), Schwartz (1994), and Minkov (2018). For the analysis based on Hofstede, data were not available for four countries in our sample, which reduced the sample size to 6,112 from 32 countries. We complement the analysis using the cultural framework based on Schwartz. At the national, cultural level, Schwartz (1994) developed a circular model of seven cultural values. However, he further condensed the values into two dimensions: conservatism and mastery. The conservatism dimension measures the extent to which individuals focus on the group versus the self, and is conceptually similar to what has generally been referred to as individualism-collectivism (Shao et al. 2010). Unavailability of Schwartz data for a few countries led to a final sample size of 5,889 from 28 countries for the Schwartz-based analysis. Finally, Minkov (2018) has provided a recently updated cultural values framework based on new data gathered from 53,000 respondents across 56 countries. Minkov attempted to replicate Hofstede's framework, but his analysis only found support for the existence of individualism-collectivism and long-term orientation as coherent cultural dimensions. He suggests that power distance is a sub-dimension of collectivism and that masculinity and uncertainty avoidance lack coherence. Thus, we conduct a third analysis based on Minkov's data with a sample size of 5,830 from 28 countries.

Control Variables

For each cultural values framework, we control for the other dimensions suggested by the framework.³ We also control for two individual-level sociodemographic variables (age and gender). Finally, we control for two country-level economic differences that may affect trust

Author Accepted Manuscript

propensity, societal inequality, measured by the Gini index, and GDP per capita (Bergh and Bjørnskov 2014).

Model Estimation

The sample data is multi-level with respondents nested within countries. Applying ordinary least squares regression to multi-level data is inappropriate, because the resulting estimates will be biased and the estimated standard errors of the effects will be too small (Aitkin et al. 1981). Hierarchical linear modeling (HLM), or mixed modeling, has been developed to deal with multi-level data. It enables the simultaneous estimation of relationships of variables at two (or more) levels, using iterative maximum likelihood estimation. Following best-practice guidelines, we centered the respondent-level predictors (Level 1) within countries, and grand-mean-centered the country-level predictors (Level 2) (Raudenbush and Bryk 2002).

Results

Table 3 reports descriptive characteristics and correlations between variables, and results of the HLM model are presented in Table 4. We report unstandardized coefficients as standardized coefficients are problematic due to variance being partitioned across different levels. We first estimated the null model using the full sample of 6,326 observations. The intercepts for trust propensity vary significantly across countries (Wald $Z = 3.70$, $p < 0.001$), and the intraclass correlation suggests that 10.48% of the variance in trust propensity is due to between country differences. Next, we estimated a series of cross-level main effects models to observe differences in trust propensity using three different cultural value frameworks. We began with Hofstede's (2010) framework, which revealed a positive relationship between collectivism and trust propensity ($b = 0.008$, $p < 0.001$). The results are consistent using Schwartz's (1994) conservatism index, i.e., collectivism, which has a positive effect on trust propensity ($b = 0.389$,

Author Accepted Manuscript

$p = 0.02$), and the findings are consistent when using scores provided by Minkov et al. (2017) ($b = 0.002, p = 0.02$). Combined, these findings suggest consistent support for H1.

With respect to control variables, the Hofstede values of uncertainty avoidance and long-term orientation and Schwartz's mastery values are nonsignificant. Hofstede's masculinity value ($b = 0.004, p = 0.05$), and Minkov's flexibility dimension ($b = 0.001, p = 0.02$) are significant. Females have marginally higher trust propensity when analyzed with the available data used in the Hofstede analysis, but not with the slightly smaller datasets used in the Schwartz and Minkov analyses. None of the other covariates, age, GDP per capita, or Gini index are significant. In sum, across all three values frameworks, we find consistent evidence that collectivism is positively related to trust propensity.

“Insert Table 3 about here”

“Insert Table 4 about here”

Cultural Tightness. The presence of strong cultural norms and sanctions referred to as cultural tightness (Gelfand et al. 2006) has been advanced as an alternative to collectivism as an explanation for cross-national differences in trust propensity (Yamagishi 2011). Gelfand et al. (2011) measured cultural tightness with items such as “In this country, there are very clear expectations for how people should act in most situations,” and “In this country, if someone acts in an inappropriate way, others will strongly disapprove.” See Web Appendix A for the full list of items.

To test cultural tightness as an alternative explanation, we re-estimated the multi-level model including the most recent country-level cultural tightness scores reported in Eriksson et al. (2021), which included scores for 57 countries. Matching that list of countries to those in our data produced smaller datasets to analyze in terms of number of countries (Hofstede 24,

Author Accepted Manuscript

Schwartz 23, Minkov 23) compared to the results in Table 4. When including cultural tightness in the multi-level model of these smaller samples, the effects of collectivism on trust propensity remain significant across all three cultural frameworks (Hofstede $b = 0.010$, $t = 4.65$, $p < 0.001$; Schwartz $b = 0.459$, $t = 2.34$, $p = 0.03$; Minkov $b = 0.002$, $t = 2.22$, $p = 0.04$). In contrast, cultural tightness is nonsignificant when estimated alongside Hofstede framework (tightness $b = -0.125$, $t = -1.06$, $p = 0.30$), the Schwartz framework (tightness $b = -0.091$, $t = -0.60$, $p = 0.55$) and the Minkov framework (tightness $b = -0.259$, $t = -1.31$, $p = 0.21$). We also estimated a model that included tightness without any other values scores. This resulted in 24 countries with scores and the model produced results consistent with the earlier model. Cultural tightness was not a significant predictor of trust propensity ($b = 0.092$, $t = 0.70$, $p = 0.49$).

Discussion

The finding that collectivism is positively related to trust propensity provides some clarity to a research question that has long plagued the field. Reliance on the WVS with its single trust question and dichotomous response options inadequately addresses the important question of how cultural values influence trust propensity. Importantly, we also tested a competing theoretical explanation, cultural tightness, and the findings based on the analysis of a large sample of individual respondents nested within countries on a multiple-item trust propensity measure make a meaningful contribution to this literature by highlighting the role of collectivism on trust propensity.

Although these findings have high external validity by employing country-level data on a large sample of participants and using multiple cultural values frameworks, the study is subject to certain limitations. Notably, the study is correlational in nature leaving the possibility for the reverse relationship, i.e., a society consisting of individuals with high trust propensity fosters the

Author Accepted Manuscript

development of the collectivism value. Further, the theoretical mechanism for how collectivism influences trust propensity is still unclear. We attempt to systematically address these limitations in the upcoming studies. Although we believe that the multi-item latent construct employed to measure trust propensity is superior to the WVS single item, it only measures people's attitudes. Therefore, in Study 2, we add a behavioral outcome measure of trust propensity using the trust game. In Study 3, we prime collectivism and individualism values to establish causal evidence and test the social projection hypothesis, and finally in Study 4 we examine a managerially relevant outcome variable, trust in the firm, using advertising as the priming mechanism.

STUDY 2 – THE TRUST GAME

The trust game offers a rigorous test of the hypothesis by employing a behavioral outcome variable as a measure of trust propensity instead of multi-item self-report measure. The trust game, sometimes referred to as the investment game, is an economics experimental tool often used in trust research (Berg et al. 1995). The basic procedure of the game, employed in this study, is as follows. A participant (trustor) is given an endowment of money, ten dollars. The trustor is told that they have the opportunity to entrust their money with another unknown player (trustee). The entrusted money is tripled by the experimenter, which the trustor is aware of, and then the trustee has the option to return all, some, or none of the money to the trustor. To maximize the potential economic gain for both parties, the trustor should send all of the money (ten dollars) to the trustee, which after being tripled would mean that the trustee has thirty dollars to share. Then, the trustee should return an amount larger than ten dollars to the trustor. However, given that the trustee might not share any money back with the trustor, the trustor may

Author Accepted Manuscript

choose to send a lower amount (or even zero dollars) to ensure that the trustor retains at least some (or all) of the original endowment. Thus, based on the design of the game, the amount of money sent by the trustor is a behavioral reflection of the trustor's trust propensity (Berg et al. 1995; Brülhart and Usunier 2012).

Participants and Procedure

We recruited 185 business student participants (53% male) and conducted the experiment in the behavioral lab of a US university. In our version of the game, there is only one live person playing (the trustor) since we are concerned only with the initial trust propensity of the trustor. Participants were informed that the amount returned by the trustee would be determined by a virtual player whose responses are based on those of live players in prior experiments, specifically Berg et al. (1995) and Cox (2004); thus the amounts returned reflected the decisions of actual participants from other studies. Participants were also informed that although they would be using play money during the experiment, twenty percent of them would be randomly selected to be paid in US dollars in the amount as determined by the probability table. Random payment procedures have been used as cost-saving devices in other trust game studies (e.g., Cox 2009) and research suggests that random payment does not systematically affect behavior (Bolle 1990). Participants were asked whether they really believed that there was a chance that they could win some money. The mean response was significantly above the midpoint of the five-point scale ($M = 3.91$, $t = 12.17$, $p < 0.001$), which indicates that the game was perceived to have real behavioral consequences.

Participants first completed a computer questionnaire which explained the trust game process and offered two training exercises. Afterwards, participants were taken to a break-out room, where a lab assistant repeated the instructions of the game. Participants were given \$10

Author Accepted Manuscript

(play money) and asked to insert any amount of money into an envelope to send to the trustee. Immediately following, we asked participants to complete a questionnaire which included the collectivism items. Collectivism was measured with a four-item scale based on Yoo et al. (2011); items are listed in Web Appendix A. The scale demonstrated good reliability ($\alpha = 0.86$) and we averaged all items to create a collectivism index.

Results

The mean amount of money participants inserted into the envelope to be entrusted was \$6.94. The most frequent amounts entrusted were \$5 and \$10, which is consistent with other trust game studies (Berg et al. 1995; Cox 2004). To estimate the effect of collectivism on trust propensity, we conducted regression analysis using the amount of money participants inserted into the envelope as the dependent variable and the participant's collectivism index as antecedent. The results indicate a significant effect of collectivism on the amount of money entrusted ($b = 0.34, t = 2.71, p < 0.01$), and remain consistent when controlling for age, gender, and income.

Discussion

The Study 2 results offer evidence of a relationship between collectivism at the individual level and an alternative measure of trust propensity. Instead of a self-report of whether others can be trusted, a rigorous behavioral measure was used, implying collectivism influences individual-level behavior and underscoring the relevance of understanding the role of collectivism. Combined, Studies 1 and 2 offer correlational evidence of the effect of collectivism on trust propensity. To provide robust evidence and causally isolate the effect of a specific value, it is also advisable to attempt to isolate the effect of values and offer more direct evidence of causation. To accomplish this goal, in Studies 3 and 4, we make the value temporarily accessible

Author Accepted Manuscript

through cultural priming (Oyserman and Lee 2008), which allows us to test for causal evidence.

STUDY 3 – CAUSATION AND MEDIATION

In Study 3, we offer two contributions to the understanding of the link between collectivism and trust propensity. First, we offer further evidence of causality in the relationship between collectivism and trust propensity by priming the collectivism value for one group of participants and observing the effect on trust propensity compared to a group primed with individualism. The two contrasting views of the self as interdependent (collectivism) and independent (individualism) coexist in individuals, and each view can be temporarily activated (Aaker and Lee 2001). As such, we can examine the effect of collectivism on trust propensity in an experimental setting by priming individualism-collectivism at the individual level (Oyserman and Lee 2008; White and Simpson 2013). Second, we provide evidence for a social-projection-based model by examining the influence of one's own collectivism values onto others resulting in a perceived collectivism consensus.

Participants and Procedure

We conducted two separate experiments in two distinct cultural environments as a check on robustness and generalizability of the manipulation. The first experiment was conducted in the US, where we recruited 100 US participants from Amazon's Mechanical Turk consumer panel. The second experiment was conducted in China where we recruited 106 Chinese participants using WeChat, a multipurpose mobile application used for messaging, social media, and mobile payments. A limited number of messaging groups were invited to participate in the survey and be entered into a lottery for a nominal financial award (150 RMB). The use of

Author Accepted Manuscript

crowdsourced samples, such as MTurk and WeChat, have been deemed suitable for experimental research, especially when multiple sources are used (Hulland and Miller 2018). Complete sample characteristics for both experiments are provided in Table 2.

We employed the same one-way between-subjects ANOVA design (individualism versus collectivism) in both experiments. Thus, in order to examine the effect of collectivism on trust propensity in an experimental setting, we prime individualism-collectivism at the individual level as has been done in other research (Oyserman and Lee 2008). Participants were randomly assigned to one condition, and completed the priming task (see Web Appendix B), which was an adapted version of the similarities and differences with family and friends (SDFF) task (Trafimow et al. 1991). Participants in the collectivism condition described three things they had in common with their family and friends, and then described an experience when they sacrificed something for the good of the group. Conversely, participants in the individualism condition described three things that made them unique compared to their family and friends, and then described an experience when they accomplished a goal independently.

We measured trust propensity (DV), perceived collectivism of others (mediator), and collectivism of self (manipulation check) with four-item scales. Trust propensity (US $\alpha = 0.90$; CN $\alpha = 0.83$) was measured with the same scale as in Study 1 based on Mayer and Davis (1999). We created a new scale to measure the perceived collectivism of others by modifying the scale used to measure one's own collectivism (US $\alpha = 0.93$; CN $\alpha = 0.91$). One's own collectivism was measured with the same scale based on Yoo et al. (2011) as in Study 2. Items demonstrated good reliability (US $\alpha = 0.88$; CN $\alpha = 0.90$) and were averaged to create a collectivism index. All items and experimental procedures were pre-tested in a pilot study⁴ with US participants, and all items are listed in Web Appendix A.

Results

First, to check whether the priming task was effective, we compared the two groups on collectivism using ANOVA. As expected, participants assigned to the collectivism condition scored higher on collectivism than those assigned to the individualism condition in both the US sample ($M_{\text{Collectivism}} = 4.88$, $M_{\text{Individualism}} = 3.95$, $F(1, 98) = 10.76$, $p = 0.001$) and the Chinese sample ($M_{\text{Collectivism}} = 5.23$, $M_{\text{Individualism}} = 4.36$, $F(1, 104) = 10.24$, $p = 0.002$). With respect to trust, participants in the collectivism condition scored higher on trust propensity than participants in the individualism condition for both the US sample ($M_{\text{Collectivism}} = 3.75$, $M_{\text{Individualism}} = 3.23$, $F(1, 98) = 7.60$, $p < 0.01$) and the Chinese sample ($M_{\text{Collectivism}} = 3.68$, $M_{\text{Individualism}} = 3.40$, $F(1, 104) = 4.28$, $p = 0.04$). These results offer causal evidence and support for H1. Participants' perceptions of the collectivism of others were also greater in the collectivism condition than in the individualism condition for both the US sample ($M_{\text{Collectivism}} = 4.73$, $M_{\text{Individualism}} = 4.01$, $F(1, 98) = 5.35$, $p = 0.02$) and the Chinese sample ($M_{\text{Collectivism}} = 4.89$, $M_{\text{Individualism}} = 4.32$, $F(1, 104) = 5.01$, $p = 0.03$).

To test whether social projection mediates the relationship between collectivism and trust propensity, we used Model 4 of the Hayes (2017) PROCESS macro to detect any significant indirect effects. The experimental condition (individualism-collectivism prime) was modeled as the focal antecedent, and the respondent's estimate of others' collectivism as the mediator. We also included age and gender as covariates. Results reported in Table 5 indicate a significant effect of the condition (individualism = 0, collectivism = 1) on the mediator, perceived collectivism of others, in both the US sample ($b = 0.72$, $t = 2.26$, $p = 0.03$) and the Chinese sample ($b = 0.46$, $t = 1.83$, $p = 0.07$). When trust propensity is regressed onto both the condition and the perceived collectivism of others, the condition is marginally significant in the US sample

Author Accepted Manuscript

($b = 0.34, t = 1.88, p = 0.06$) and nonsignificant in the Chinese sample ($b = 0.10, t = 0.86, p = 0.39$). More importantly, the respondent's perceived collectivism of others is significant in both the US sample ($b = 0.25, t = 4.41, p < 0.01$) and the Chinese sample ($b = 0.28, t = 6.21, p < 0.01$). A 90% bootstrap confidence interval based on 5,000 bootstrap samples for the indirect effects (US $b = 0.18$; China $b = 0.13$) is entirely above zero for the US [0.040, 0.360] and China [0.003, 0.271], indicating a significant indirect effect of collectivism on trust propensity.

As a robustness test and to offer a more direct cross-cultural comparison, we repeated the mediation analysis using country as the focal antecedent instead of the experimental condition. Country (US/China) is not a perfect proxy for individualism-collectivism especially since half the sample in each country was primed with individualism and the other half collectivism. However, the US and China are near cultural polar opposites with respect to individualism-collectivism and regression analysis using country (US = 0, China = 1) as the focal antecedent produced supportive results. The effect of country on the perceived collectivism of others was nearly significant ($b = 0.43, t = 1.86, p = 0.06$). When regressing trust propensity on both country and perceived collectivism of others, the effect of country weakened ($b = -0.07, t = -0.61, p = 0.54$) while the effect of perceived collectivism of others ($b = 0.28, t = 7.89, p < 0.01$) was strong. Further the bootstrap confidence interval is entirely above zero [0.014, 0.237] supporting the indirect effect.

“Insert Table 5 about here”

Discussion

The experimental results from Study 3 offer causal evidence that is consistent with the findings from Studies 1 and 2. Combined, these studies offer strong support for the positive relationship between collectivism and trust propensity. Further, the results support the social

Author Accepted Manuscript

projection hypothesis, which suggests that the effect of one's own collectivism value indirectly influences trust propensity through one's perception of the collectivism of others. In other words, people project their own level of collectivism onto others; then believing that others share a benevolent concern for others, people are more likely to trust others.

STUDY 4 – COLLECTIVISM, TRUST PROPENSITY AND TRUST IN THE FIRM

In Study 4 we not only seek further evidence of the causal link between collectivism and trust propensity found in Study 3, but also add managerial relevance by examining the distal effects on a managerially relevant dependent variable, i.e., trust in the firm. Further, instead of priming collectivism with a writing task as done in Study 3, we use advertising messages as a managerially relevant prime, as has been done in prior research (Ma et al. 2014).

Customer perceptions of the firm, such as trust in the firm, are an important and relevant aspect of marketing performance (Katsikeas et al. 2016). According to a 2019 Gallup survey (Khoury and Crabtree 2019), 60% of US adults, and 68% of adults worldwide, believe corruption is widespread in business indicating a lack of trust. Thus, firms in general have a strong need to rebuild the perception of trust.

Given that trust propensity is defined as the expectancy that the words or promises of others are reliable (Rotter 1967), we expect that trust will be extended unto firms. In sum, the model in Study 4 is a serial multiple mediation model; collectivism (vs. individualism) advertisement → participant's collectivism → trust propensity → trust in the firm.

We accomplish this by presenting advertisements to participants, so the manipulation itself is a relevant managerial tool. We expected to find that exposure to advertisements

Author Accepted Manuscript

emphasizing collectivism values would activate the participant's interdependent self, affecting their trust propensity and ultimately trust in the firm.

Participants and Procedure

We recruited US consumers for the experiment by employing graduate students trained in recruiting techniques to collect responses and direct participants to an online survey. The sample consisted of 211 participants (51.7% male, $M_{\text{age}} = 38.6$). Complete sample characteristics are provided in Table 2. To begin the experiment, participants were randomly assigned to view one of two different sets of advertisements (one emphasizing individualism values and the other collectivism values) in order to prime the participant's level of collectivism. Each set included a print and video advertisement for a fictitious insurance company called CAPCO (see Web Appendix C). Participants viewed the video advertisement, followed by the print advertisement. We then measured the participant's trust in the firm ($\alpha = 0.91$), trust propensity ($\alpha = 0.82$), the participant's own level of collectivism ($\alpha = 0.68$), and perceived collectivism of the firm as a manipulation check ($\alpha = 0.94$). All measurement items are reported in Web Appendix A.

Results

First, we conducted an ANOVA to test whether participants who viewed the collectivism advertisements perceived the company to be positioned as more collectivist than participants who viewed the advertisements emphasizing individualist values. The results indicate that the advertisements were perceived as intended with respect to the perceived collectivism of the firm ($M_{\text{Collectivism Ads}} = 4.74$, $M_{\text{Individualism Ads}} = 2.25$, $F(1, 209) = 500.43$, $p < 0.001$).

To assess whether the collectivism versus individualism positioned advertisements had a significant effect on trust in the firm, we conducted a serial mediation analysis in SPSS using Model 6 of the PROCESS macro which executes a series of regression models (Hayes 2017),

Author Accepted Manuscript

whose results are reported in Table 6. The first model results indicate that the condition (individualism ads = 0, collectivism ads =1) had a significant effect on the participant's level of collectivism ($b = 0.31, t = 2.91, p < 0.01$). The second model revealed that the participant's collectivism significantly predicted their trust propensity ($b = 0.17, t = 3.18, p < 0.01$). More importantly, the final model, which assessed the effect on trust in the firm, implied the presence of serial mediation with a significant effect of trust propensity ($b = 0.40, t = 4.99, p < 0.01$), but nonsignificant effects of the condition ($b = 0.14, t = 1.49, p = 0.14$) and the participant's collectivism ($b = 0.02, t = 0.32, p = 0.75$). We tested the significance of the serially mediated indirect effect of the condition (condition \rightarrow collectivism \rightarrow trust propensity \rightarrow trust in the firm) using 5,000 bootstrap samples which estimated an effect of $b = 0.02$ with a 95% confidence interval that did not include zero [0.004, 0.047]. Thus, the viewing of advertisements emphasizing collectivism values had a significant indirect effect on trust in the firm.

“Insert Table 6 about here”

Discussion

Study 4 offers evidence of a causal relationship between collectivism and trust propensity building on the correlational evidence from Studies 1 and 2 and adding to the causal evidence from Study 3. Further, an indirect effect on trust in the firm was observed. Notably, the level of participant's collectivism was the result of a priming induced by positioning in advertisements, which could be used as practical guidance for managers to enhance consumer trust in their firm.

GENERAL DISCUSSION

Trust is an increasingly important concept in international marketing as consumers

Author Accepted Manuscript

encounter new foreign and global brands and as organizations expose employees to new relationship situations through cross-functional and oftentimes virtual teams, structural reorganizations, and collaborative projects across organizational and cultural boundaries (Colquitt et al. 2007). Our multi-method approach across four studies incorporated multi-level data from many countries to establish correlational evidence, followed by individual-level experiments that incorporated a behavioral measure of trust, offered causal evidence, identified social projection as the theoretical mechanism, and demonstrated the effect in a managerially relevant context. In sum, we found strong evidence that one's own collectivism value influences trust propensity and demonstrated that collectivism (interdependent self-construal) can be activated at the individual level through marketing communication. The findings have a number of theoretical and managerial implications.

Theoretical Implications

Prior research on the drivers of trust propensity often centered on personality traits (e.g., Alarcon et al. 2018), and efforts to examine cultural value influences on trust propensity are characterized by competing perspectives and conflicting results. The theoretical perspective we adopt is that collectivism's focus on harmony and collaboration with others is associated with trust propensity through the mechanism of social projection. Others have suggested that individualism can have a positive effect on trust development (Doney et al. 1998), and still others suggest that the strength of social norms and sanctioning in societies, a concept Gelfand et al. (2006) terms cultural tightness, is a predictor of trust propensity.

The results observed in the multi-level model with data from 6,326 participants from 36 countries suggest significant cross-cultural differences with respect to trust propensity influenced by the collectivism value. The data offer evidence of the relationship, however, we also

Author Accepted Manuscript

recognize that significant within-country variance on values is common. So, although there appear to be cross-cultural differences, just as with cultural values, it is only on the average that trust propensity varies from country to country and cannot be assumed that any particular individual from a given country has more or less trust propensity. Although cultural tightness is a conceptually appealing predictor of trust, our multi-level model based on a large sample of individuals nested within countries suggests that cultural tightness does not predict trust propensity. Instead, the evidence suggests a positive relationship between collectivism and trust propensity, helping to clarify the role of collectivism with respect to competing perspectives.

The evidence for the relationship between collectivism and trust propensity appears particularly strong for several reasons. First, this investigation not only establishes correlational evidence of the relationship, but by experimentally priming the collectivism value, it offers causal evidence of the relationship. Second, trust propensity was measured in a number of ways. Instead of relying on the psychometrically weak WVS single-item dichotomous measure, trust propensity was assessed in this investigation using a multi-item measure, which may explain some inconsistencies in past research, and in the trust game in Study 2, a behavioral measure of trust propensity was used.

In our view, perhaps the most impactful theoretical implication revolves around independent vs. interdependent self-construal, the individual-level manifestation of individualism vs. collectivism. We successfully activated the collectivism value experimentally even when using advertising messages as the stimuli. The consistent findings at the societal and individual levels across these studies offer additional support for the assertion by Oyserman and Lee (2008) that some cultural values can be investigated at the individual level using experiments as has been done with individualism-collectivism (White et al. 2012), power distance (Gao et al. 2016),

Author Accepted Manuscript

and long-term orientation (Bearden et al. 2006). In so doing, we established causal evidence of the relationship between collectivism and trust propensity, as well as identified the potential for marketers to do the same in order to induce trust propensity.

Social projection offers a new lens through which to view the collectivism – trust propensity relationship. Social projection clarifies how collectivism influences propensity to trust others. A person's own collectivism value through the process of social projection creates a perceived collectivism consensus between the self and others. Assuming a shared concern for the welfare of others, the trustor develops a greater trust propensity. It is important to note that a perceived collectivism consensus is merely a perception and does not necessarily reflect reality; it can sometimes be a false consensus (Ross et al. 1977). In other words, the perception of others to some degree merely reflects one's own preferences. Although the prevalence of collectivism itself is predictive of trust propensity, Study 3 offers evidence that it is the perceived collectivism of others that drives trust. Indeed, in the US sample the direct effect of collectivism is rather weak and it is not close to significance in the Chinese sample when the mediator, perceived collectivism of others, is included in the model.

We focus on a trust-inducing value; however, other values and attitudes that potentially facilitate or hinder trust development could also be socially projected. It is not simply the perceived consensus that facilitates trust, rather it is the perceived consensus in a trust-inducing value that develops trust propensity. Indeed, in some of the earliest research on social projection, students who cheated believed that the majority of other students cheated as well (Katz and Allport 1931). Thus, people who have a disposition toward dishonesty would be likely to believe that others are dishonest as well, therefore hindering trust development.

Managerial Implications

Implications for managers are highlighted primarily in the results of Study 4, which tested the theoretical model using a priming process that more closely resembles reality and measuring a downstream consequence of trust propensity, i.e., trust in the firm. Trust in the firm has become increasingly important. According to a 2019 Gallup survey, the view of corporations as being corrupt is a majority view worldwide (Khoury and Crabtree 2019). Thus, understanding one of the antecedents to trust in the firm is a step in the right direction for firms to address the problem.

The priming task from Study 4 highlights a potentially useful tool for firms. Priming values in research studies has typically been accomplished by asking study participants to complete a cognitive task such as arranging words in an order that produces logical sentences or writing about an experience identifying similarities and differences with family and friends, as employed in Study 3. Study 4 demonstrated that the collectivism value could also be activated by asking study participants to view advertisements. Since this procedure more closely resembles how firms communicate with buyers, it implies that trust in the firm may be influenced indirectly through promotional messaging that stresses collectivism values.

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

Trust propensity is a disposition to trust others that would influence many areas of life. Study 4 places participants in a consumption context of evaluating a firm; however, the other studies are not context specific. So, extending these results to other specific managerial situations would be helpful and further study is warranted. The samples, especially in Study 1, represented

Author Accepted Manuscript

a generally young population, and the trust disposition of older people could potentially differ. Thus, to bolster confidence in the managerial implications, a replication of studies using middle-aged managers could be undertaken. However, age was controlled for in the Study 1 mixed model and was nonsignificant, and when included as a covariate in the analyses for Studies 2, 3 and 4, the results are consistent.

While this investigation offers causal evidence for the link between collectivism and trust propensity, additional research should seek to identify moderators of the collectivism-trust relationship. Study 4 indicates how firms could position marketing communications to prime consumers' collectivism and leverage the collectivism-trust relationship to enhance trust in the firm. However, the identification of additional variables that actually moderate the collectivism-trust relationship would benefit managers by offering additional managerial levers.

Within reason we tried to limit the differences between the ads in Study 4 to words and images relevant to the values as much as possible. However, we balanced that need with the goal of providing a more real-world-like stimulus to activate either individualism or collectivism. Thus, different ads might offer even greater control over potential confounds.

We tested only one trust-relevant value, collectivism. There are likely other trust-relevant values that potentially compete for influence on trust propensity and perhaps even counteract the positive effect of collectivism. The results from Study 1 suggested that masculinity (Hofstede framework) and flexibility (Minkov framework) are significant predictors of trust propensity. Given the centrality of individualism-collectivism as the most important cultural value, we limited the scope in this paper to that value. However, future research may want to investigate further the effects of masculinity, flexibility, and other potential predictors of trust propensity. Particularly, the effect for masculinity seems somewhat counterintuitive as one might expect that

Author Accepted Manuscript

feminine values, such as compassion and nurturing would be more closely related to trust propensity than masculine values, such as assertiveness and toughness. Thus, future research may want to investigate this finding further.

Trust propensity is a disposition and not a sole determinant of any situationally-specific trust. So, while understanding the collectivism profile of another person or their culture offers some insight about their trust propensity, it is only a starting point. The trustor's willingness to trust a specific trustee will change based on experience. However, this research offers evidence that the collectivism value of the trustor influences the foundational starting point of the initial willingness to trust others.

Peer Review Version

Author Accepted Manuscript

NOTES

¹A sensitivity analysis with different cutoff rules (15, 25, and 30) produced results robust to different cutoffs. We present results with 20 as the cut-off.

²Unfortunately, 498 respondents had missing information for gender. To avoid losing valuable sample size, we coded missing data as 0.5. Results were robust if these responses were excluded from the analysis.

³Power distance was not included in the Hofstede analysis because it is strongly correlated with collectivism. However, a model that includes power distance in the analysis produces qualitatively identical results. Collectivism still has a significant relationship, whereas power distance (as expected given its correlation with collectivism) has a significant positive effect. Given our conceptual focus on collectivism, it seems appropriate to focus on that value in the empirical analysis.

⁴Pilot study included 83 US participants (47% female, $M_{\text{age}} = 37$) from Amazon's Mechanical Turk consumer panel. Participants were randomly assigned to either the collectivism or individualism condition, and completed the SDFP priming task. The priming task was effective, ($M_{\text{Collectivism}} = 4.97$, $M_{\text{Individualism}} = 3.95$, $F(1, 81) = 11.99$, $p < 0.001$), and participants in the collectivism condition scored higher on trust propensity than participants in the individualism condition ($M_{\text{Collectivism}} = 3.78$, $M_{\text{Individualism}} = 3.32$, $F(1, 81) = 7.37$, $p < 0.01$).

REFERENCES

- Aaker, Jennifer L. and Angela Y. Lee (2001), "'I' Seek Pleasures and 'We' Avoid Pains: The Role of Self-Regulatory Goals in Information Processing and Persuasion," *Journal of Consumer Research*, 28 (1), 33-49.
- Aitkin, Murray, Dorothy Anderson, and John Hinde (1981), "Statistical Modelling of Data on Teaching Styles," *Journal of the Royal Statistical Society: Series A (General)*, 144 (4), 419-48.
- Alarcon, Gene M., Joseph B. Lyons, James C. Christensen, Margaret A. Bowers, Samantha L. Klosterman, and August Capiola (2018), "The Role of Propensity to Trust and the Five Factor Model across the Trust Process," *Journal of Research in Personality*, 75, 69-82.
- Aulakh, Preet S., Masaaki Kotabe, and Arvind Sahay (1996), "Trust and Performance in Cross-Border Marketing Partnerships: A Behavioral Approach," *Journal of International Business Studies*, 27 (5), 1005-32.
- Bearden, William O., R. Bruce Money, and Jennifer L. Nevins (2006), "A Measure of Long-Term Orientation: Development and Validation," *Journal of the Academy of Marketing Science*, 34 (3), 456-67.
- Berg, Joyce, John Dickhaut, and Kevin McCabe (1995), "Trust, Reciprocity, and Social History," *Games and Economic Behavior*, 10 (1), 122-42.
- Bergh, Andreas and Christian Bjørnskov (2014), "Trust, Welfare States and Income Equality: Sorting out the Causality," *European Journal of Political Economy*, 35, 183-99.

Author Accepted Manuscript

- Bergh, Andreas and Richard Öhrvall (2018), "A Sticky Trait: Social Trust among Swedish Expatriates in Countries with Varying Institutional Quality," *Journal of Comparative Economics*, 46 (4), 1146-57.
- Bigley, Gregory A. and Jone L. Pearce (1998), "Straining for Shared Meaning in Organization Science: Problems of Trust and Distrust," *Academy of Management Review*, 23 (3), 405-21.
- Bolle, Friedel (1990), "High Reward Experiments without High Expenditure for the Experimenter?," *Journal of Economic Psychology*, 11 (2), 157-67.
- Brockman, Paul, Sadok El Ghouli, Omrane Guedhami, and Ying Zheng (2020), "Does Social Trust Affect International Contracting? Evidence from Foreign Bond Covenants," *Journal of International Business Studies*.
- Brühlhart, Marius and Jean-Claude Usunier (2012), "Does the Trust Game Measure Trust?," *Economics Letters*, 115 (1), 20-23.
- Carpenter, Sandra (2000), "Effects of Cultural Tightness and Collectivism on Self-Concept and Causal Attributions," *Cross-Cultural Research*, 34 (1), 38-56.
- Chaudhuri, Arjun and Morris B Holbrook (2001), "The Chain of Effects from Brand Trust and Brand Affect to Brand Performance: The Role of Brand Loyalty," *Journal of marketing*, 65 (2), 81-93.
- Colquitt, Jason A., Brent A. Scott, and Jeffery A. LePine (2007), "Trust, Trustworthiness, and Trust Propensity: A Meta-Analytic Test of Their Unique Relationships with Risk Taking and Job Performance," *Journal of Applied Psychology*, 92 (4), 909-27.
- Cox, James C. (2004), "How to Identify Trust and Reciprocity," *Games and Economic Behavior*, 46 (2), 260-81.

Author Accepted Manuscript

- Cox, James C. (2009), "Trust and Reciprocity: Implications of Game Triads and Social Contexts," *New Zealand Economic Papers*, 43 (2), 89-104.
- Dawes, Robyn M, Jeanne McTavish, and Harriet Shaklee (1977), "Behavior, Communication, and Assumptions About Other People's Behavior in a Commons Dilemma Situation," *Journal of personality and social psychology*, 35 (1), 1.
- Delhey, Jan and Kenneth Newton (2005), "Predicting Cross-National Levels of Social Trust: Global Pattern or Nordic Exceptionalism?," *European Sociological Review*, 21 (4), 311-27.
- Doney, Patricia M., Joseph P. Cannon, and Michael R. Mullen (1998), "Understanding the Influence of National Culture on the Development of Trust," *Academy of Management Review*, 23 (3), 601-20.
- Dyer, Jeffrey H. and Harbir Singh (1998), "The Relational View: Cooperative Strategy and Sources of Interorganizational Competitive Advantage," *Academy of Management Review*, 23 (4), 660-79.
- Eriksson, Kimmo, Pontus Strimling, Michele J. Gelfand, Junhui Wu, Jered Abernathy, Charity S. Akotia, . . . Paul A. M. Van Lange (2021), "Perceptions of the Appropriate Response to Norm Violation in 57 Societies," *Nature Communications*, 12 (1), 1481-91.
- Fischer, Ronald and Ype H. Poortinga (2012), "Are Cultural Values the Same as the Values of Individuals? An Examination of Similarities in Personal, Social and Cultural Value Structures," *International Journal of Cross Cultural Management*, 12 (2), 157-70.
- Gao, Huachao, Karen Page Winterich, and Yinlong Zhang (2016), "All That Glitters Is Not Gold: How Others' Status Influences the Effect of Power Distance Belief on Status Consumption," *Journal of Consumer Research*, 43 (2), 265-81.

Author Accepted Manuscript

- Gelfand, Michele J, Lisa H Nishii, and Jana L Raver (2006), "On the Nature and Importance of Cultural Tightness-Looseness," *Journal of Applied psychology*, 91 (6), 1225-44.
- Gelfand, Michele J., Jana L. Raver, Lisa Nishii, Lisa M. Leslie, Janetta Lun, Beng Chong Lim, . . . Susumu Yamaguchi (2011), "Differences between Tight and Loose Cultures: A 33-Nation Study," *Science*, 332 (6033), 1100-04.
- Hagen, James M. and Soonkyoo Choe (1998), "Trust in Japanese Interfirm Relations: Institutional Sanctions Matter," *Academy of Management Review*, 23 (3), 589-600.
- Hayes, Andrew F (2017), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach* (Second ed.). New York: Guilford Press.
- Hofstede, Geert (1980), *Culture's Consequences*. Beverly Hills, CA: Sage.
- Hofstede, Geert, Geert Jan Hofstede, and Michael Minkov (2010), *Cultures and Organizations: Software of the Mind* (3rd ed.). New York: McGraw-Hill.
- Huff, Lenard and Lane Kelley (2003), "Levels of Organizational Trust in Individualist Versus Collectivist Societies: A Seven-Nation Study," *Organization Science*, 14 (1), 81-90.
- Hui, Michael K., Candy K. Y. Ho, and Lisa C. Wan (2011), "Prior Relationships and Consumer Responses to Service Failures: A Cross-Cultural Study," *Journal of International Marketing*, 19 (1), 59-81.
- Hulland, John and Jeff Miller (2018), "'Keep on Turkin'?" *Journal of the Academy of Marketing Science*, 46 (5), 789-94.
- Johnson, Jean L. and John B. Cullen (2002), "Trust in Cross-Cultural Relationships," in *The Blackwell Handbook of Crosscultural Management*, Martin J. Gannon and Karen Newman, eds. Oxford, UK: Blackwell, 335-60.

Author Accepted Manuscript

- Jones, Stephen L. and Priti Pradhan Shah (2016), "Diagnosing the Locus of Trust: A Temporal Perspective for Trustor, Trustee, and Dyadic Influences on Perceived Trustworthiness," *Journal of Applied Psychology*, 101 (3), 392-414.
- Katsikeas, Constantine S., Neil A. Morgan, Leonidas C. Leonidou, and G. Tomas M. Hult (2016), "Assessing Performance Outcomes in Marketing," *Journal of Marketing*, 80 (2), 1-20.
- Katsikeas, Constantine S., Dionysis Skarmeas, and Daniel C. Bello (2009), "Developing Successful Trust-Based International Exchange Relationships," *Journal of International Business Studies*, 40 (1), 132-55.
- Katz, Daniel and Floyd Henry Allport (1931), *Students' Attitudes: A Report of the Syracuse University Reaction Study*. Syracuse, New York: The Craftsman Press.
- Khoury, Ghassan and Steve Crabtree (2019), "Are Businesses Worldwide Suffering from a Trust Crisis?" (accessed October 1, 2020, [available at <https://www.gallup.com/workplace/246194/businesses-worldwide-suffering-trust-crisis.aspx>]).
- Knack, Stephen and Philip Keefer (1997), "Does Social Capital Have an Economic Payoff? A Cross-Country Investigation," *The Quarterly Journal of Economics*, 112 (4), 1251-88.
- Kostka, Genia (2019), "What Do People in China Think About 'Social Credit' Monitoring?," in The Washington Post, March 21 (accessed [available at https://www.washingtonpost.com/politics/2019/03/21/what-do-people-china-think-about-social-credit-monitoring/?utm_term=.d1de8cd8669e]).
- Kramer, Roderick M. (1999), "Trust and Distrust in Organizations: Emerging Perspectives, Enduring Questions," *Annual Review of Psychology*, 50 (1), 569-98.

Author Accepted Manuscript

- Krueger, Joachim (1998), "On the Perception of Social Consensus," in *Advances in Experimental Social Psychology*, Mark P. Zanna, ed. Vol. 30: Academic Press, 163-240.
- Lewicki, Roy J. and Carolyn Wiethoff (2000), "Trust, Trust Development, and Trust Repair," in *The Handbook of Conflict Resolution : Theory and Practice*, Morton Deutsch and Peter T. Coleman, eds. Vol. 1st ed. San Francisco, Calif: John Wiley & Sons, Inc. [US], 86-107.
- Ma, Zhenfeng, Zhiyong Yang, and Mehdi Mourali (2014), "Consumer Adoption of New Products: Independent Versus Interdependent Self-Perspectives," *Journal of Marketing*, 78 (2), 101-17.
- Markus, Hazel R. and Shinobu Kitayama (1991), "Culture and the Self: Implications for Cognition, Emotion, and Motivation," *Psychological Review*, 98 (2), 224-53.
- Mayer, Roger C. and James H. Davis (1999), "The Effect of the Performance Appraisal System on Trust for Management: A Field Quasi-Experiment," *Journal of Applied Psychology*, 84 (1), 123-36.
- Mayer, Roger C., James H. Davis, and F. David Schoorman (1995), "An Integrative Model of Organizational Trust," *Academy of Management Review*, 20 (3), 709-34.
- Minkov, Michael (2018), "A Revision of Hofstede's Model of National Culture: Old Evidence and New Data from 56 Countries," *Cross Cultural & Strategic Management*, 25 (2), 231-56.
- Minkov, Michael, Pinaki Dutt, Michael Schachner, Oswaldo Morales, Carlos Sanchez, Janar Jandosova, . . . Ben Mudd (2017), "A Revision of Hofstede's Individualism-Collectivism Dimension," *Cross Cultural & Strategic Management*, 24 (3), 386-404.

Author Accepted Manuscript

- Moorman, Christine, Rohit Deshpandé, and Gerald Zaltman (1993), "Factors Affecting Trust in Market Research Relationships," *Journal of Marketing*, 57 (1), 81-101.
- Morgan, Robert M. and Shelby D. Hunt (1994), "The Commitment-Trust Theory of Relationship Marketing," *Journal of Marketing*, 58 (3), 20-38.
- Nee, Victor, Håkan J. Holm, and Sonja Opper (2018), "Learning to Trust: From Relational Exchange to Generalized Trust in China," *Organization Science*, 29 (5), 969-86.
- Overbeck, Jennifer R and Vitaliya Droutman (2013), "One for All: Social Power Increases Self-Anchoring of Traits, Attitudes, and Emotions," *Psychological Science*, 24 (8), 1466-76.
- Oyserman, Daphna and Spike W.S. Lee (2008), "Does Culture Influence What and How We Think? Effects of Priming Individualism and Collectivism," *Psychological Bulletin*, 134 (2), 311-42.
- Peterson, Mark F. and Tais S. Barreto (2018), "Interpreting Societal Culture Value Dimensions," *Journal of International Business Studies*, 49 (9), 1190-207.
- Raudenbush, Stephen W. and Anthony S. Bryk (2002), *Hierarchical Linear Models: Applications and Data Analysis Methods*. Thousand Oaks, CA: Sage Publication.
- Robson, Matthew J., Constantine S. Katsikeas, and Daniel C. Bello (2008), "Drivers and Performance Outcomes of Trust in International Strategic Alliances: The Role of Organizational Complexity," *Organization Science*, 19 (4), 647-65.
- Rohlen, Thomas P. (1974), *For Harmony and Strength : Japanese White-Collar Organization in Anthropological Perspective*. Berkeley: University of California Press.
- Ross, Lee, David Greene, and Pamela House (1977), "The "False Consensus Effect": An Egocentric Bias in Social Perception and Attribution Processes," *Journal of Experimental Social Psychology*, 13 (3), 279-301.

Author Accepted Manuscript

- Rotter, Julian B. (1967), "A New Scale for the Measurement of Interpersonal Trust," *Journal of Personality*, 35 (4), 651-65.
- Samaha, Stephen A., Joshua T. Beck, and Robert W. Palmatier (2014), "The Role of Culture in International Relationship Marketing," *Journal of Marketing*, 78 (5), 78-98.
- Samiee, Saeed, Brian R. Chabowski, and G. Tomas M. Hult (2015), "International Relationship Marketing: Intellectual Foundations and Avenues for Further Research," *Journal of International Marketing*, 23 (4), 1-21.
- Schwartz, Shalom H. (1994), "Beyond Individualism/Collectivism: New Cultural Dimensions of Values," in *Individualism and Collectivism: Theory, Method, and Applications*, Uichol Kim, Harry C. Triandis, Cigdem Kagitcibasi, Sang-Chin Choi, and Gene Yoon, eds. Thousand Oaks, CA: Sage Publications, 85-119.
- Shao, Liang, Chuck Kwok, and Omrane Guedhami (2010), "National Culture and Dividend Policy," *Journal of International Business Studies*, 41 (8), 1391-414.
- Steenkamp, Jan-Benedict and Inge Geyskens (2006), "How Country Characteristics Affect the Perceived Value of Web Sites," *Journal of Marketing*, 70 (3), 136-50.
- Steensma, H. Kevin, Louis Marino, K. Mark Weaver, and Pat H. Dickson (2000), "The Influence of National Culture on the Formation of Technology Alliances by Entrepreneurial Firms," *Academy of Management Journal*, 43 (5), 951-73.
- Sullivan, Jeremiah and Richard B. Peterson (1982), "Factors Associated with Trust in Japanese-American Joint Ventures," *Management International Review*, 22 (2), 30-40.
- Taras, Vas (2019), "X-Culture," (accessed February, 2019), [available at <https://x-culture.org/for-researchers/data/>].

Author Accepted Manuscript

- Torres, Alejandro and Michelle Bligh (2012), "How Far Can I Trust You? The Impact of Distance and Cultural Values on Leaders' Trustworthiness," *Journal of Leadership, Accountability and Ethics*, 9 (2), 23-38.
- Trafimow, David, Harry C. Triandis, and Sharon G. Goto (1991), "Some Tests of the Distinction between the Private Self and the Collective Self," *Journal of Personality and Social Psychology*, 60 (5), 649-55.
- Triandis, Harry C (1989), "The Self and Social Behavior in Differing Cultural Contexts," *Psychological review*, 96 (3), 506.
- Triandis, Harry Charalambos (1995), *Individualism & Collectivism*. Boulder, CO, US: Westview Press.
- Tullberg, Jan (2008), "Trust—the Importance of Trustfulness Versus Trustworthiness," *The Journal of Socio-Economics*, 37 (5), 2059-71.
- Van Boven, Leaf, Charles M Judd, and David K Sherman (2012), "Political Polarization Projection: Social Projection of Partisan Attitude Extremity and Attitudinal Processes," *Journal of Personality and Social Psychology*, 103 (1), 84.
- Wang, Mengyang, Qiyuan Zhang, and Kevin Zheng Zhou (2020), "The Origins of Trust Asymmetry in International Relationships: An Institutional View," *Journal of International Marketing*, 28 (2), 81-101.
- White, Katherine, Jennifer J Argo, and Jaideep Sengupta (2012), "Dissociative Versus Associative Responses to Social Identity Threat: The Role of Consumer Self-Construal," *Journal of Consumer Research*, 39 (4), 704-19.
- White, Katherine and Bonnie Simpson (2013), "When Do (and Don't) Normative Appeals Influence Sustainable Consumer Behaviors?," *Journal of Marketing*, 77 (2), 78-95.

Author Accepted Manuscript

Xie, Yi, Rajeev Batra, and Peng Siqing (2015), “An Extended Model of Preference Formation between Global and Local Brands: The Roles of Identity Expressiveness, Trust, and Affect,” *Journal of International Marketing*, 23 (1), 50-71.

Yamagishi, Toshio (2011), *Trust: The Evolutionary Game of Mind and Society*. Tokyo: Springer Tokyo.

Yoo, Boonghee, Naveen Donthu, and Tomasz Lenartowicz (2011), “Measuring Hofstede's Five Dimensions of Cultural Values at the Individual Level: Development and Validation of Cvscale,” *Journal of International Consumer Marketing*, 23 (3-4), 193-210.

Zeffane, Rachid (2017), “Gender, Individualism–Collectivism and Individuals’ Propensity to Trust: A Comparative Exploratory Study,” *Journal of Management & Organization*, 26 (4), 1-15.

Author Accepted Manuscript

Table 1. Overview of study properties and contribution

Study	Collectivism	Trust Propensity	Contribution
1	Societal level 3 different frameworks: Hofstede, Schwartz, Minkov	Individual level 4-item measure	Large scale, cross-cultural, multilevel evidence 6,326 respondents, 36 countries
2	Individual level, measured	Behavioral – money entrusted	Behavioral outcome measure at the individual level
3	Individual level Primed using writing task	Individual level 4-item measure	Evidence of social projection mechanism and causality
4	Individual level Primed using advertisements	Individual level 4-item measure	Managerial context: ad primes, trust in the firm

Author Accepted Manuscript

Table 2 Sample characteristics

Characteristic	Study 1		Study 2 (US)		Study 3 (US)		Study 3 (China)		Study 4 (US)	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Total <i>n</i>	6,326		185		106		100		211	
Countries	36		1		1		1		1	
<i>Gender</i>										
Male	2,832	48.6	99	53.5	37	34.9	68	68.0	102	51.7
Female	2,996	51.4	86	46.5	69	65.1	32	32.0	109	48.3
<i>Age</i>										
18-29	5,497	86.9	183	98.9	75	70.8	39	39.0	74	35.1
30-39	629	9.9	2	0.2	21	19.8	43	43.0	53	25.1
40-49	155	2.5	0	0.0	8	7.5	11	11.0	30	14.2
50-59	41	0.6	0	0.0	2	1.9	6	6.0	34	16.1
60+	4	0.1	0	0.0	0	0.0	1	1.0	20	9.5
<i>Education</i>										
Some high school	NA		0	0.0	1	0.9	0	0.0	1	0.5
High school diploma	NA		26	14.1	11	10.4	8	8.0	15	7.1
Some college	NA		158	85.4	20	18.9	29	29.0	34	16.1
Bachelor degree	NA		1	0.5	45	42.5	54	54.0	110	52.1
Graduate degree	NA		0	0.0	29	27.4	9	9.0	51	24.2
<i>Annual Household Income</i>										
<\$24,000	NA		17	9.2	15	14.2	11	11.0	15	7.2
\$24,000-44,999	NA		4	2.2	42	39.6	34	34.0	13	6.3
\$45,000-74,999	NA		17	9.2	25	23.6	31	31.0	50	24.0
\$75,000-120,000	NA		55	29.7	16	15.1	17	17.0	58	27.9
>\$120,000	NA		92	49.7	8	7.6	7	7.0	72	34.1

Income band cutpoints for Chinese sample in RMB are 25,000; 75,000; 125,000; and 175,000.

Table 3 Study 1 Correlation matrix and descriptive statistics

	1	2	3	4	5	6	7	8	9	10	11	12	13
1 Trust Propensity	1												
2 Conservatism (S)	0.15**	1											
3 Mastery (S)	0.04**	0.48**	1										
4 Collectivism (H)	0.20**	0.50**	0.02	1									
5 Masculinity (H)	0.03*	0.25**	0.34**	-0.11**	1								
6 Uncertainty Avoid (H)	0.04**	-0.24**	-0.70**	0.43**	-0.18**	1							
7 Long-Term Orient (H)	0.02	-0.47**	-0.28**	0.01	-0.35**	0.18**	1						
8 Collectivism (M)	0.16**	0.84**	0.29**	0.76**	0.23**	0.10**	-0.29**	1					
9 Flexibility (M)	-0.06**	-0.44**	0.07**	-0.57**	-0.17**	-0.37**	-0.63**	-0.66**	1				
10 GDP per Capita	-0.14**	-0.49**	-0.04**	-0.89**	0.12**	-0.38**	0.08**	-0.79**	0.54**	1			
11 Gini	0.01	0.54**	0.59**	0.16**	0.41**	-0.32**	0.75**	0.46**	-0.57**	-0.09**	1		
12 Age	-0.05**	0.07**	0.11**	-0.06**	-0.02	-0.14**	0.05**	-0.01	0.05**	0.00	0.05**	1	
13 Gender (male=1)	-0.05**	-0.06**	-0.01	-0.09**	-0.06**	-0.06**	-0.04**	-0.10**	0.09**	0.06**	-0.05**	0.04**	1
Mean	3.72	3.66	4.02	38.63	56.25	60.64	38.48	4.49	-12.30	36,901	43.94	24.08	0.51
SD	0.70	0.27	0.15	30.03	11.48	18.61	21.86	70.60	83.98	19,484	6.74	5.24	0.48

** $p < 0.01$; * $p < 0.05$ H = Hofstede framework, S = Schwartz framework, M = Minkov framework. Collectivism variable estimates are the reverse-coded results for the Hofstede and Minkov individualism indexes for consistency with the other studies.

Author Accepted Manuscript

Table 4 Study 1 HLM results

Individual <i>N</i> Number of Countries	Analysis based on Hofstede				Analysis based on Schwartz				Analysis based on Minkov			
	Estimate	Standard Error	<i>t</i>	<i>p</i>	Estimate	Standard Error	<i>t</i>	<i>p</i>	Estimate	Standard Error	<i>t</i>	<i>p</i>
	6,112				5,889				5,830			
	32				28				28			
Predictor												
Intercept	4.184	(0.433)	9.65	0.00	1.111	(1.165)	0.95	0.35	3.861	(0.301)	12.82	0.00
Collectivism (H)	0.008	(0.002)	4.79	0.00								
Masculinity (H)	0.004	(0.002)	2.09	0.05								
Uncertainty Avoid (H)	-0.002	(0.002)	-1.34	0.19								
Long-Term Orient (H)	0.000	(0.001)	0.19	0.84								
Conservatism (S)					0.389	(0.157)	2.48	0.02				
Mastery (S)					0.364	(0.261)	1.40	0.17				
Collectivism (M)									0.002	(0.000)	2.54	0.02
Flexibility (M)									0.001	(0.000)	2.43	0.02
GDP per Capita	0.000	(0.000)	1.35	0.19	0.000	(0.000)	0.15	0.88	0.000	(0.000)	-0.29	0.77
Gini	-0.004	(0.007)	-0.49	0.63	-0.004	(0.007)	-0.55	0.58	0.000	(0.006)	0.02	0.98
Gender (male=1)	-0.035	(0.018)	-1.94	0.05	-0.028	(0.018)	-1.50	0.13	-0.029	(0.018)	-1.59	0.11
Age	-0.003	(0.002)	-1.73	0.08	-0.003	(0.002)	-1.80	0.07	-0.003	(0.001)	-1.68	0.09

H = Hofstede framework, S = Schwartz framework, M = Minkov framework. Collectivism variable estimates are the reverse-coded results for the Hofstede and Minkov individualism indexes for consistency with the other studies.

Table 5 Study 3 – indirect effect of one’s own collectivism on trust propensity

	Model 1 Perceived Collectivism of Others			Model 2 Trust Propensity		
	<i>b</i>	<i>t</i>	<i>p</i>	<i>b</i>	<i>t</i>	<i>p</i>
<i>US Sample</i>						
<i>n = 100</i>						
Condition (COL=1)	0.72	2.26	0.03	0.34	1.88	0.06
Perceived COL of others				0.25	4.41	<0.01
<i>Control Variables</i>						
Age	-0.00	-0.00	0.99	-0.00	-0.46	0.65
Gender (male=1)	0.02	0.06	0.96	0.05	0.27	0.79
R ² = 0.23						
Indirect effect				<i>b</i> = 0.18 (CI 0.040-0.360)		
<i>Chinese Sample</i>						
<i>n = 106</i>						
Condition (COL=1)	0.46	1.83	0.07	0.10	0.86	0.39
Perceived COL of others				0.28	6.21	<0.01
<i>Control Variables</i>						
Age	0.05	3.02	<0.01	0.00	0.47	0.64
Gender (male=1)	0.04	0.15	0.88	-0.31	-2.66	0.01
R ² = 0.36						
Indirect effect				<i>b</i> = 0.13 (CI 0.003-0.271)		
<i>Combined Sample (US and China)</i>						
<i>n = 206</i>						
Country (CN=1)	0.43	1.86	0.06	-0.07	-0.61	0.54
Perceived COL of others				0.28	7.89	<0.01
<i>Control Variables</i>						
Age	0.03	2.11	0.04	-0.00	-0.46	0.65
Gender (male=1)	0.12	0.54	0.59	-0.12	-1.06	0.29
R ² = 0.24						
Indirect effect				<i>b</i> = 0.12 (CI 0.014-0.237)		

Indirect effect was estimated using 5,000 bootstrap samples to create a 90% confidence interval. *b* = unstandardized regression coefficient. COL = collectivism. CI = confidence interval. CN = China.

Author Accepted Manuscript

Table 6 Study 4 – effect of collectivism on trust in the firm

	Model 1 Collectivism			Model 2 Trust Propensity			Model 3 Trust in the Firm		
	<i>b</i>	<i>t</i>	<i>p</i>	<i>b</i>	<i>t</i>	<i>p</i>	<i>b</i>	<i>t</i>	<i>p</i>
Condition (Collectivism ad = 1)	0.31	2.91	<0.01	0.18	2.25	0.03	0.14	1.49	0.14
Collectivism				0.17	3.18	<0.01	0.02	0.32	0.75
Trust Propensity							0.40	4.99	<0.01
<i>Control Variables</i>									
Age	-0.00	-0.59	0.56	0.00	0.26	0.80	-0.00	-1.11	0.27
Gender (male=1)	0.20	1.90	0.06	-0.24	-2.90	<0.01	-0.20	-2.10	0.04

R² = 0.17

Indirect effect:

b = 0.02 (CI 0.004-0.047)condition → collectivism → trust
propensity → trust in the firm

Indirect effect was estimated using 5,000 bootstrap samples to create a 95% confidence interval. *b* = unstandardized regression coefficient. Condition = individualism versus collectivism ad condition. CI = confidence interval.

Author Accepted Manuscript

Trust Propensity across Cultures: The Role of Collectivism

Stanford A. Westjohn*
Associate Professor of Marketing
Culverhouse College of Business
University of Alabama
Box 870225
Tuscaloosa, Alabama 35487 USA
Email: sawestjohn@cba.ua.edu

Peter Magnusson
Professor of Marketing
Robert C. Vackar College of Business and Entrepreneurship
University of Texas Rio Grande Valley
1201 W University Dr.
Edinburg, Texas 78539 USA
Email: peter.magnusson@utrgv.edu

George R. Franke
Professor of Marketing
Culverhouse College of Business
University of Alabama
Box 870225
Tuscaloosa, Alabama 35487 USA
Email: gfranke@cba.ua.edu

Yi Peng
Assistant Professor of Marketing
Tennessee Tech University
Johnson Hall 335
Cookeville, Tennessee 38505 USA
Email: ypeng@tntech.edu

* Corresponding Author

Author Accepted Manuscript

Contents

WEB APPENDIX A.....	1
Measurement items and sources	1
WEB APPENDIX B.....	3
Study 3 Individualism-Collectivism priming tasks.....	3
WEB APPENDIX C.....	4
Study 4 Advertisements.....	4

These materials have been supplied by the authors to aid in the understanding of their paper. The AMA is sharing these materials at the request of the authors.

WEB APPENDIX A**Measurement items and sources**

Trust propensity – adapted from Mayer and Davis (1999) Study 1: $\alpha=0.88$, Study 3: US $\alpha=0.90$, CN $\alpha=0.83$; Study 4: US $\alpha=0.82$

Most people can be counted on to do what they promise to do.

Most people can be trusted.

Most people are honest about their skills and abilities.

People are generally good and are trying their best.

Trust in the firm – adapted from Mayer and Davis (1999) Study 4: $\alpha=0.91$

Most people at [the firm] can be counted on to do what they promise to do.

Most people at [the firm] can be trusted.

Most people at [the firm] are honest about their skills and abilities.

People at [the firm] are generally good and are trying their best.

One's Own Collectivism – adapted from Yoo et al. (2011) Study 2: $\alpha=0.86$; Study 3: US $\alpha=0.88$, CN $\alpha=0.90$; Study 4: US $\alpha=0.68$

Individuals should sacrifice self-interest for the group.

Group success is more important than individual success.

Individuals should only pursue their goals after considering the welfare of the group.

Group loyalty should be encouraged even if individual goals suffer.

Collectivism of Others – adapted from Yoo et al. (2011) Study 3: US $\alpha=0.93$; CN $\alpha=0.91$

Most people believe that individuals should sacrifice self-interest for the group.

Most people believe that group success is more important than individual success.

Most people believe that individuals should only pursue their goals after considering the welfare of the group.

Most people believe that group loyalty should be encouraged even if individual goals suffer.

Collectivism of the Firm – Manipulation check Study 4: $\alpha=0.94$

Please take a look at the following list of opposing statements about CAPCO, the company in the advertisement you just viewed. Indicate how closely you believe the company reflects one statement or the other. (semantic differential scale)

CAPCO emphasizes individuals helping themselves by working independently.

CAPCO believes that individuals are better off when working hard to help themselves.

CAPCO believes that individuals should protect themselves.

CAPCO emphasizes the welfare of the individual.

CAPCO emphasizes people helping each other by working together.

CAPCO believes that we are better off when working hard together for the good of the group.

CAPCO believes that we should protect the group, and the group should protect us.

CAPCO emphasizes the welfare of the group.

Cultural Tightness – from online supplement to Gelfand et al. (2011).

Most people believe that individuals should sacrifice self-interest for the group.

Most people believe that group success is more important than individual success.

Most people believe that individuals should only pursue their goals after considering the welfare of the group.

Most people believe that group loyalty should be encouraged even if individual goals suffer.

Author Accepted Manuscript

Trust propensity scale 1 (strongly disagree) to 5 (strongly agree). Collectivism scale 1 (strongly disagree) to 7 (strongly agree). Collectivism in Study 1 was measured as the corresponding values framework scores. α = Cronbach's alpha. Native Chinese speakers translated all items for the Chinese questionnaire from English to Simplified Chinese, which were then back-translated by different translators to ensure translation equivalence. Cultural tightness items are listed for reference only. We did not measure tightness directly and instead relied on the country-level scores reported by Gelfand et al. (2011).

Peer Review Version

WEB APPENDIX B

Study 3 Individualism-Collectivism priming tasks

Collectivism Condition Prime (Adapted from SDFP-Trafimow, D., Triandis, H. C., & Goto, S. G. 1991)

For the next few minutes, please think about what you have in common with your family and friends, and write complete sentences in response to the questions below.

First, what are 3 things you have in common with your family and friends?

Now, think about a time when you sacrificed something for the good of benefiting your family, a group of friends, or teammates. In a few sentences, describe the situation below, e.g., what did you sacrifice and how did it benefit the collective group?

Individualism Condition Prime (Adapted from SDFP-Trafimow, D., Triandis, H. C., & Goto, S. G. 1991)

For the next few minutes, please think about what makes you unique and different from your family and friends, and write complete sentences in response to the questions below.

First, what are 3 things that make you unique and different from your family and friends?


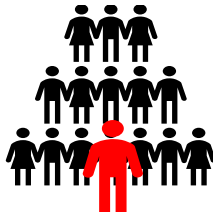
Now, think about a time when you achieved a personal goal resulting from figuring something out independently on your own, or after having made a tremendous individual effort, even though your friends or family did not support you. In a few sentences, describe the situation below, e.g., what obstacles did you overcome to achieve the goal on your own, or how did others interfere with your efforts?


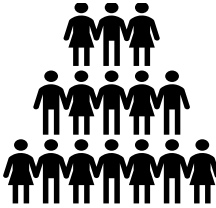
Author Accepted Manuscript

WEB APPENDIX C

Study 4 Advertisements

Note to reviewers: The video ads were attached as separate files with closed captions to the submission. One of the authors narrated the audio, so in order to protect author identity in the review process, the audio has been temporarily removed.

PRINT AD - IDV	<u>SCRIPT FOR VIDEO AD</u>
<p data-bbox="284 625 706 735">CAPCO</p> <p data-bbox="295 766 673 808">i n s u r a n c e</p> <p data-bbox="219 861 771 966">Our people believe that insurance is for the sake of protecting <i>your personal</i> financial wellbeing.</p>   <p data-bbox="227 1470 763 1543">What works for one person, won't always work for another.</p> <p data-bbox="349 1575 641 1648">Your needs are <i>unique</i>. Protect yourself.</p>	<p data-bbox="1071 630 1128 661">IDV</p> <p data-bbox="820 703 1388 819">The people at CAPCO Insurance believe that insurance is for the sake of protecting your personal financial wellbeing.</p> <p data-bbox="844 850 1364 924">What works for one person won't always work for another.</p> <p data-bbox="950 955 1250 1039">Your needs are unique. Protect yourself.</p> <p data-bbox="990 1071 1209 1102">Capco Insurance.</p>

PRINT AD - COL	<u>SCRIPT FOR VIDEO AD</u>
<p data-bbox="282 659 708 772">CAPCO</p> <p data-bbox="293 800 672 846">i n s u r a n c e</p> <p data-bbox="217 894 773 1003">Our people believe that insurance is people working <i>collectively</i> to help each other.</p>   <p data-bbox="261 1499 727 1570">We are better when we pull together for the <i>good of the group</i>.</p> <p data-bbox="323 1610 667 1682">Help protect the group and the group will protect you.</p>	<p data-bbox="1068 669 1138 701">COL</p> <p data-bbox="813 741 1393 850">The people at CAPCO Insurance believe that insurance is people working collectively to help each other.</p> <p data-bbox="824 890 1382 961">We are better when we pull together for the good of the group.</p> <p data-bbox="836 1001 1370 1073">Help protect the group and the group will protect you.</p> <p data-bbox="992 1108 1214 1140">Capco Insurance.</p>