The Role of Cultural Orientation in Luxury Consumption Intentions: Assessing Moderation Within the Theory of Planned Behavior Model

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Abstract

This research examined whether cultural values moderate relationships between Theory of Planned Behavior (TPB) predictors and luxury purchase intentions among American consumers. Specifically, horizontal/vertical individualism-collectivism were tested as moderators of the links between attitudes, social norms, perceived control and intentions to buy luxuries. Although past research shows cultural values directly impact luxury consumption, few studies establish their conditional effects on cognitive antecedents from TPB models. A sample of 449 U.S. residents completed online surveys measuring cultural orientations, TPB components regarding luxury goods, and demographics. Results showed attitudes, subjective norms, and perceived behavioral control positively predicted luxury purchase intentions, replicating past findings. However, moderation analyses indicated none of the cultural dimensions significantly affected the magnitude of TPB construct relationships with intention. Additional analyses revealed potential small moderating effects in the hypothesized directions that may require much larger samples to detect. Overall, the research implies a more complex interplay between cultural values, cognitions, and luxury consumption intentions, warranting further investigation into direct and conditional effects. The dimensions of vertical/horizontal individualism-collectivism likely shape luxury buying both indirectly through TPB constructs and directly as broader social norms.

Keywords: Individualism, Collectivism, Vertical Individualism, Horizontal Individualism, Vertical Collectivism, Horizontal Collectivism, Theory of Planned Behavior, Attitudes, Subjective Norms, Perceived Behavioral Control, Luxury Consumption

Introduction

Luxury consumption in the United States plays an important role in the global luxury market, making it a key economic and cultural force. Despite economic uncertainties, the U.S. luxury market continues to thrive, contributing significantly to the industry's overall growth ("Global Luxury Goods Market Takes 2022 Leap Forward and Remains Poised for Further Growth Despite Economic Turbulence," n.d.). According to projections, the United States is anticipated to lead the market for personal luxury goods, with an estimated revenue of 83.3 billion U.S. dollars, surpassing other major players, including China, and maintaining this position through 2028 (Statista, n.d.). This dominance not only reflects economic strength but also underscores the American consumer's persistent appetite for luxury items. Studies suggest that as average income rises, so does income inequality, fostering a heightened demand for luxury goods among American citizens (Akarsu et al., 2023). Beyond its economic impact, luxury consumption in the United States thus becomes a crucial aspect, shaping both the nation's economy and the social dynamics associated with wealth and inequality.

The concept of luxury originated from Latin words referring to excess and extravagance (Di Liso, 2023). Traces of luxury goods date back to ancient Egypt, where items like jewelry denoted social status. By the 17th century, luxury transformed from an attribute to manufactured products characterized by superior craftsmanship and uniqueness (De Luxe, 2023). The new luxury paradigm focuses less on material possessions and more on experiential dimensions, according to Danziger (2005). The definition of luxury connects to human needs and varies across time periods and societies, as asserted by Cabigiosu (2020). Today, luxury encapsulates the entire consumer experience, not just tangible possessions.

As the concept of luxury has evolved over time, motivations behind luxury consumption have similarly transformed. Luxury goods consumption can be driven by both external and

internal motivations. Externally motivated individuals may purchase luxuries to publicly display wealth, status, and position (Truong et al., 2008). In contrast, those guided by internal motivations buy luxuries for inner satisfaction and pleasure (Tsai, 2005). Clear connections exist between motivation type and cultural orientation, with patterns emerging in how cultures emphasize different internal and external drivers (Hennessy et al., 2014). Independent, individualistic cultures tend to promote more extrinsic, external motivators as people desire autonomy and options. On the other hand, interdependent, collectivist cultures see more intrinsic, internal motivators related to belonging, shared norms, and duty.

This research draws from the theory of planned behavior as a framework for examining intentions to purchase luxury goods. The key objective is to investigate whether attitude, subjective norms, and perceived behavioral control are related to purchase intention in the specific context of luxury consumption. Additionally, the research aims to explore if horizontal and vertical dimensions of individualism-collectivism moderate the relationships between the theory of planned behavior constructs among luxury consumers in the United States.

Theory of Planned Behavior and Luxury Consumption

The Theory of Planned Behavior (TPB), proposed by Icek Ajzen in 1985, has been widely employed to comprehend and forecast consumer behavior, particularly in the realm of luxury consumption. This theory posits that behavioral intentions, influenced by attitudes, subjective norms, and perceived behavioral control, are pivotal in determining an individual's engagement in a specific behavior (Conner, 2020). Attitudes consist of a person's beliefs about the behavior and how much value is placed on the outcome. Subjective norms are the perceived social pressures to perform or not perform the behavior. Perceived behavior control is the perceived ease or difficulty of performing the behavior due to resources and opportunities available. In the context of luxury consumption, attitude pertains to a consumer's positive or negative attitude

towards luxury goods, subjective norm involves the impact of significant individuals on the intention to buy luxury goods, and perceived behavioral control reflects the perceived ease or difficulty in executing the behavior, often influenced by factors like time and financial resources (Canguende-Valentim et al., 2022).

When applied to luxury consumption, research overall indicates consistent positive relationships between attitudes, subjective norms, and intentions to purchase luxury goods (Kim & Karpova, 2010; Zhang et al., 2013). In line with findings from other behavioral domains, favorable personal evaluations and perceived social pressure typically increase desires for luxury items. However, the role of perceived behavioral control is less clear. Some studies reveal significant positive links between perceived capability to obtain luxuries and higher purchase intentions (Jain et al., 2017). Yet other work demonstrates no association, suggesting barriers may not deter luxury buyers (Canguende-Valentim et al., 2022)

Rather than labeling these discrepant control findings as indicative of "complex interplay", it is important to identify potential moderators. One possibility is that cultural orientation impacts how perceptions of difficulty in procuring luxuries shape intentions. The current research aims to test cultural values as moderators to provide greater specificity around the conditions in which perceived behavioral control does or does not influence luxury purchase intentions. Presumably, cultural background should help account for some of the mixed findings regarding behavioral control.

Cultural Values in Luxury Consumption

The dimensions of individualism-collectivism have long been useful in explaining cross-cultural variation in human behavior, as they shape people's motivations and actions (Aaker et al., 1997; Gürhan-Canli et al., 2018). People in more collectivist cultures tend to prioritize group identity, interdependence, shared values, and social harmony (Hofstede, 1980). As such, they

often consume luxury goods for symbolic purposes like expressing affiliation with groups, conveying status, or signaling conformity to cultural norms. In contrast, those from individualistic cultures emphasize independence, personal autonomy, and self-fulfillment (Hofstede, 1980). Thus they are more likely to pursue luxury goods for reasons tied to individual reward, uniqueness, self-expression, or pleasure.

For example, Wong et al. (1998) discovered that relative to Western/individualistic consumers, Southeast Asians place greater emphasis on publicly visible luxury goods that communicate social relationships and group belonging, rather than private hedonic value. This aligns with Southeast Asia's more collectivist orientations. Additionally, Zici et al. (2021) found individualism positively predicts materialistic values and consuming luxuries as status symbols meant to express one's personal identity and values. In summary, people from varying cultural backgrounds often consume luxury goods for divergent symbolic motivations rooted in the degree of independence versus interdependence emphasized in their societies. Both individualist and collectivist orientations shape luxury consumption, but in different ways.

The concepts of individualism and collectivism can be further broken down into two subtypes - horizontal and vertical. This represents additional dimensions along which cultures can be distinguished based on their values and orientations. Vertical individualist cultures value personal achievement and gaining status by differing oneself from others (Shavitt & Barnes, 2018). People in these cultures seek recognition for their accomplishments. Horizontal individualist cultures also value distinguishing oneself, but based on satisfying one's unique preferences and concerns, without a focus on social hierarchy.

On the collectivist side, vertical collectivist cultures prioritize interdependence through fulfilling roles and conforming to norms associated with one's hierarchical position in groups like society, family and other in-groups. There is a priority placed on hierarchy in these cultures. In

contrast, horizontal collectivist cultures value interdependence through a lens of equality within the in-group - the emphasis is on sociability, benevolence, and harmony among group members rather than hierarchy.

Cultural orientations have demonstrated direct effects on luxury consumption intentions and behaviors. For example, Shammout et al. (2022) found that vertical individualism, which emphasizes status and hierarchy, had a positive relationship with materialistic values in Jordan. The power and achievement values underlying vertical individualism promote materialism. In the context of sustainable luxury buying, Ali et al. (2019) found that both horizontal and vertical collectivist values, as well as vertical individualist competitiveness, increased intentions to purchase green luxury cars. Collectivists recognize societal benefits, while status-seeking vertical individualists aim to be "the best" through luxury, even if green.

These studies reveal main effects of cultural values on luxury consumption, without positioning those cultural dimensions as moderators. The current research moves beyond existing work by theorizing and testing horizontal/vertical individualism/collectivism as moderators that interact with key predictors from the Theory of Planned Behavior in predicting intentions. This advances understanding by specifying the conditions under which central TPB relationships may vary across cultural groups, above and beyond direct cultural effects.

Overview: The focus of the paper

While the Theory of Planned Behavior (TPB) has been frequently employed to understand luxury purchase intentions and behavior, there has been little examination of how cultural values may alter key relationships in the model. Specifically, few studies have tested cultural orientation as a moderator of the links between TPB predictors (attitudes, social norms, perceived control) and luxury consumption intentions. Although some research has shown cultural dimensions like individualism-collectivism moderate TPB relationships in various other

contexts at both individual and country levels, this potential moderating role has not been thoroughly investigated regarding luxury goods, especially in individualist cultures like the United States. Given support for cultural moderation in other behavioral domains, the current study predicted that horizontal and vertical individualism-collectivism would similarly condition the strengths of associations between TPB antecedents and intentions to buy luxuries among American consumers.

Subjective Norm

In the study of culture on the construct factor of perceived risk toward online shopping behavior (Zendehdel et al., 2016) and study predicting male Chinese university student' exercise behavior using the theory of planned behavior (Haitao et al., 2023), the interactions involving Horizontal Collectivism (HC) and Vertical Collectivism (VC) with subject norms and intention were found to be significant, meaning the cultural value positively moderated the relationship between subjective norms and intention. Therefore, it would make sense to say that vertical collectivism causes positive norms from authority figures to intensify intentions to follow ingroup luxury consumption expectations, by prioritizing adherence to duties and hierarchy. Horizontal collectivism values reinforce synchronized intentions to make purchases approved by peers to maintain harmony through shared obligations.

H1: Horizontal Collectivism positively moderates the relationship between subjective norms and intention in the context of luxury consumption. The intentions of those higher in horizontal collectivism are more shaped by ingroup members regarding luxury goods.

H2: Vertical Collectivism positively moderates the relationship between subjective norms and intention. The intentions of those higher in vertical collectivism are more shaped by ingroup members regarding luxury goods.

Attitude

The study of culture on the construct factor of perceived risk toward online shopping behavior (Zendehdel et al., 2016) and the study of predicting male Chinese university student' exercise behavior using the theory of planned behavior (Haitao et al., 2023) also found the interaction involving Horizontal Collectivism (HC) and Vertical Collectivism (VC) with attitude and intention were found to be significant. Therefore, in the context of luxury consumption, vertical collectivism places importance on group norms, duties, and hierarchies, where positive attitudes aligned with ingroup duties reinforce intentions to adhere to expected consumption patterns, reflecting a value for conformity. On the other hand, horizontal collectivism emphasizes equality, harmony, and shared goals, with positive attitudes toward mutual luxury pursuits reinforcing cooperative intentions and synchronized consumption.

H3: Vertical Collectivism positively moderates the relationship between attitude and intention. The intentions of those higher in vertical collectivism are more shaped by a positive attitude toward luxury goods.

H4: Horizontal Collectivism positively moderates the relationship between attitude and intention. The intentions of those higher in horizontal collectivism are more shaped by a positive attitude toward luxury goods.

Based on a study of Environmental Attitude and Individualism Interaction to Investigate Switch Intention to Public Transport, vertical individualism as a moderator does positively influence the relationship of Environmental attitude and Switch Intention (Rosa, 2020). This means that the combination of vertical individualism and environmental attitude had a negative impact on individuals' intention to switch to public transportation. Therefore, in the context of luxury consumption, vertical individualism's competitive worldview, achievement orientation, social mobility motivations, and desire for privilege might amplify intentions to consume luxuries seen favorably as status symbols.

H5: Vertical Individualism positively moderate the relationship between attitude and intention. The intentions of those higher in vertical individualism are more shaped by a positive attitude toward luxury goods.

Perceived Behavioral Control

Research on vertical individualism reveals a cultural emphasis that consistently positively moderates the relationship between perceived behavioral control and intentions across domains. For example, a study on food consumption found VI strengthened the link between perceived capability of preparing meal and subsequent intentions to make it, as competence at difficult tasks has heightened meaning for vertical individualists (Xie et al., 2012). Similarly, research on COVID prevention behaviors showed vertical orientation amplified that vertical orientation significantly positively moderated the indirect effect of message framing on intentions through perceived control (So et al., 2023). This pattern translates to luxury consumption as well.

Vertical individualist cultures positively affect the connection between perceived ability to secure limited-edition goods and intentions to acquire them for competitive status-pursuit, social mobility, and exclusive privilege. Overall, by imbuing confidence over difficult goal attainment with implications for self-enhancement and culturally revered achievements, vertical individualism makes perceived behavioral control especially influential over intentions.

H6: Vertical Individualism positively moderates the relationship between perceived behavioral control and intention. The intentions of those higher in vertical individualism are more shaped by an easy perceived behavioral control toward luxury goods.

Method

Participants and Procedure

In October 2023, Prolific survey platform members could participate in an online survey on Cultural Values and Luxury Consumption. After IRB approval, data were beginning to be

collected. Sample size was determined by the funding available to undergraduate research student in the psychology apartments, which is sufficient to compensate 450 Prolific participants. Participants were paid \$1 for a 5-minute study. Initially, there are 450 participants completed the survey. Only U.S residents were recruited for the study. Exclusion criteria included if they use AI to complete the survey and if they pay attention to complete the survey. If any participant answered yes to both questions, they were excluded from the study. The final sample size was 499.

All participants are U.S citizens (100%). The mean age of participant was 36.74 years old (SD = 12.135), ranging from 18 to 77, 299 (51%) identified as male, 214 (47.7%) as female and 6 (1.3%) as others. The majority of the sample were very liberal (22%) (M = 3.04, SD = 1.63) and have income range from \$50 000 to \$149 999 annually (19.4%) (M = 3.66, SD = 1.86).

The study was an online questionnaire that took 5 minutes to complete. Participants read and signed an informed questionnaire that indicating that there were no potential risks and would receive monetary compensation for the survey's completion. The participants were then instructed to complete the following sections Horizontal and Vertical Individualism and Collectivism, Theory of Planned Behavior (attitudes, subjective norms, perceived behavioral control, and intention) in the concept of luxury consumption, and demographics. Participants were provided with a definition of luxury foods before responding to the theory of planned behavior. Upon completion of the sections, participants were debriefed and thanked.

Measures

Horizontal and Vertical Individualism and Collectivism

The items to measure HI, VI, HC, and VC were based on the scale from Triandis & Gelfrand (1998). The items were rated on a Likert-type scale from 1 to 7 with 1 as strong disagree to 7 as strongly agree. Subscale items sere averaged to create mean scores. The

Cronbach's alpha for HI subscale items was α =.646. The Cronbach's alpha for VI subscale items was α =.700. The Cronbach's alpha for HC subscale items was α =.732. The Cronbach's alpha for VC subscale items was α =.754.

Attitude

Three items were used to measure positive or negative sentiments towards luxury goods. Adopted from Jain et al., (2017), they were rated on a 5-point Likert scale, , where 1 was denoted as strongly disagree and 5 denoted as strongly agree. The item for this measure included the statements, "my attitude toward purchasing luxury good is positive", "I think luxury goods have worth of money", and "luxury goods are beneficial". The Cronbach's alpha for this measure was $\alpha = .886$.

Subjective Norm

Subjective norm refers to the impact of significant individuals (family, acquaintances, coworkers, and relatives) on an individuals' intention of buying luxury goods. It was 4 items scale, measure as a 5 point Likert scale, derived from Canguende-Valentim and Vale (2022), where 1 denoted as strongly disagree and 5 denoted as strongly agree. The item for this measure include the statements, "most people who are important to me think that I should purchase luxury goods", "many people around me have luxury goods", "I feel social pressure to buy luxury goods", and "the people who I listen to could influence me buy luxury goods". The Cronbach's alpha for this measure was $\alpha = .830$.

Perceived Behavioral Control

PBC aids in the prediction of luxury consumption behavior that people wish to do but are unable to do because to a lack of opportunity and/or resources (e.g. time, money). It was a 3 items scale, measure as a 5-point Linkert scale, derived from Jain et al., (2017), where 1 denoted as strongly disagree and 5 denoted as strongly agree. The item for this measure included the

statements, "I have money to buy luxury goods", "for me, purchase of luxury goods is very easy", and "For me, purchase of luxury goods is possible". The Cronbach's alpha for this measure was $\alpha = .916$.

Purchase Intention

Purchase intention refers to individual's intention to buy luxury good. It was a 3 items scale, measured as a 5-point Linkert scale, derive from Jain et al., (2017), where 1 denoted as strongly disagree and 5 denoted as strongly agree. The item for this measure include the statements, "the probability that I would buy luxury goods within the next 12 months is high", "I will recommend my friends and relatives purchase luxury products", and "I would think about luxury goods as a choice when buying something". The Cronbach's alpha for this measure was $\alpha = .887$.

Results

Correlation analysis

According to Table 2, it showed the significant correlation between the three variables from the Theory pf Planned Behavior Constructs with Intentions to consume luxury goods: attitudes (r= .701, p<.001), subjective norms (r= .649, p<.001), and perceived behavioral control (r= .596, p<.001). Attitudes were found to have a positively correlation with VI ((r= .263, p<.001), HC (r= .129, p<.001), and VC (r= .227, p<.001). Subjective norms were found to have a positive correlation with VI (r= .413, p<.001), HC (r= .139, p<.001), and VC (r= .202, p<.001). Perceived behavioral control was found to have a positive correlation with VI (r= .191, p<.001) and VC (r= .225, p<.001). Intention was also found to have direct positive correlation with VI (r= .271, p<.001), HC (r= .100, p<.005), and VC (r= .226, p<.001).

Moderation Analysis

Multiple regression analysis was conducted to examine the effects of TPB constructs, cultural value orientations, and the interaction between the two sets of variables on luxury consumption. To test hypotheses 1 to 6, these interactions – ATxVI, ATxVC, ATxHC, SBxVC, SNxHC, PBCxVI – were created. Table 3 showed the results of the regression analyses. In the first step of the hierarchical regression analysis, demographic covariates shown to be correlated with intention (political orientation and personal income) were entered. It showed that personal income significantly predict intention on luxury consumption (β = -.209, p<.001) but not political orientation (β = .126, p=.007). These two variables together accounted for 6.8% of the variance in intention to buy luxury goods, F(2, 446) = 16.346, p<.001.

The effect of four cultural values and three TPB construal were entered in the second step. The results showed that personal income was no longer significantly predict intention (β = .024, p=.439). As expected, the three TBP construal were significant predict luxury consumption intention: attitudes (β = .443, p<.001), subjective norms (β = .317, p<.001), and perceived behavioral control (β = .318, p<.001). The four cultural value orientations were found to be not significantly predict intention to consume luxury goods: HC (β =-.032, p=.271), VC (β = .028, p=.368), HI (β =.006, p=.832), and VI (β = -.028, p=.376). These nine variables together accounted for 68.2% of the variance in intention to buy luxury goods, F(7,439) = 107.912, p<.001. The cultural values and TPB constructs explained an additional 61.4% of the variance in intentions to buy luxury goods, beyond what was explained by political orientation and income alone.

The addition of the interaction terms comprising the ATxVI (β = -.024, p=.459), ATxVC (β = .022, p=.510), ATxHC (β = .024, p=.468), SNxVC (β =-.040, p=.266), SNxHC (β =-.011, p=.757), and PBCxVI(β = .026, p=.395) in the third step all failed to result in a significant change in explained variance (R^2 =.680, F(6,433) = 64.516, p<.001). The addition of the

interaction terms in Step 3 did not result in any additional variance explained in intentions to buy luxury goods. Rather, there was a slight decrease of 0.2% in variance explained from the previous model with just main effects. The three TPB constructs remained significant in predicting luxury consumption intention: attitudes (β = .444, p<.001), subjective norms (β = .319, p<.001), and perceived behavioral control (β = .322, p<.001).

PROCESS Analysis

The interaction of ATxHC and PBCxVI, the two interactions with the lowest p values, were further analyzed as regression slope by using PROCESS – a computational tool invented by Hayes (2022). The two interactions were tested without demographic and other covariates. Consistent with the hierarchical regression analysis, none of the interactions was significant separate either. For the first interaction ATxHC (β =.09, p=.098), regression slopes were computed for the regression of luxury consumption attitudes at two levels of Horizontal Collectivism: -1 and +1 SD from the mean. As it was shown in Figure 1, regardless of HC, there was an association between attitude and intention. However, the association was slightly stronger at the high level of HC. This is consistent with H4, but the difference was not significant.

For the second interaction PBCxVI (β =.0375, p=.1993), regression slopes were computed for the regression of luxury consumption perceived behavioral control at two level of Vertical Individualism: -1 and +1 SD from the mean. As it was shown in Figure 2, As it was shown in Figure 1, regardless of VI, there was an association between perceived behavioral control and intention. However, the association was slightly stronger at the high level of VI. This is consistent with H6, but the difference was not significant.

Discussion

Our study focusses on the moderate effect of cultural value orientation

Horizontal/Vertical Individualism and Collectivism on Theory of Planned Behavior in the

context of luxury consumption. Although we did not focus on the main effects of TPB, we did find that all three TPB constructs – attitudes, subjective norms, and perceived behavioral control – significantly predicted intention to buy luxury goods. These finding are consistent with and replicate the results from Kim & Karpova (2010) and Jain (2020). Their research concluded all three constructs positively correlated with the intention to buy luxury goods. This suggests that the model of Theory of Planned Behavior would be a good fit for explaining luxury consumption intention.

However, none of the hypothesized interactions was significant. All cultural orientations do not significantly moderate the relationship between the TPB constructs and intention in the context of luxury consumption. Because each TPB is already strongly correlated with intention, there might be less room for cultural orientations to affect the magnitude of their effects.

Our first interpretation is that broader cultural values shape consumer intentions directly, rather than moderating the effects of TPB on intentions. According to our correlation analyses, three of the cultural orientations were correlated with intention but their effects became insignificant after Step 2 of the regression model, indicating mediations. The directs effect of cultural orientations on intention were mediated by TPB. This interpretation is consistent with a study on the effects of cultural orientations on intention of meat consumption via the theory of planned behavior (Witkowski, 2023). The result showed that all four cultural orientations directly indirectly predict the intention to consume meat through the theory of planned behavior. Therefore, a direct influence of cultural values and an indirect influence mediated through TPB components may be at play in predicting luxury consumption intentions as well, rather than a moderating role.

Our second interpretation is that the moderation effects potentially exist, but due to a limited sample size, is too small to be detected. Out of all the interactions tested, the interactions

between attitudes x horizontal collectivism and perceived behavioral control x vertical individualism were shown to have the largest effects. When analyzed further through regression slopes in PROCESS, the results indicated that even though the interactions were not statistically significant, they still predicted luxury consumption intention in the expected direction - higher attitudes and perceived behavioral control predicted greater intentions to consume luxury goods. Therefore, even though the result showed that the interactions were insignificant, but their patterns are as hypothesized.

The non-significant results could potentially be due to the relatively small sample size of the study. According to methodological recommendations, decent sample sizes for survey research examining cultural influences are often over 1,000 participants or more (Schweizer & Lang, 1989). Also, the shape of an interaction effect has a major influence on the sample size required to detect it with adequate statistical power (Sommet et al., 2023). Reversed interactions have simple slopes going in opposite directions. A typical reversed interaction with medium-sized simple slopes has an effect size similar to a main effect and thus needs a comparable sample size to detect. However, fully attenuated interactions have one null simple slope. With one medium and one null simple slope, the overall effect size is half that of a reversed interaction. To detect this, it requires around 4 times the sample size. Moreover, partially attenuated interactions involve simple slopes in the same direction but different magnitudes. Even with a smaller and a medium simple slope, the effect size can be 5 times smaller than a reversed interaction.

Since the interactions observed between cultural values and TPB constructs exhibited positive slopes in the same direction across moderator levels, they would be classified as partially attenuated interactions. The difference is in the degree or magnitude - not the direction. The sample size of 449 may have only provided enough power to detect a partially attenuated

interaction half or a fifth the size as a reversed interaction. Therefore, to reliably assess the subtle shape differences observed here, a sample 5-10 times larger is likely needed - so 2,245 to 4,490 participants. The complex relationships between cultural values, cognitions, and consumer behavior warrant further investigation in larger and more diverse samples.

An important direction for future inquiry is to examine the role of quality perceptions in luxury purchase intentions through the lens of TPB. As some research indicates, luxury products are often purchased for superior quality and craftsmanship rather than solely for displaying status or wealth (Jain, 2018). Luxury goods are seen as long-lasting investments due to their durability and timeless nature (Kapferer & Bastien, 2019). Therefore, perceived quality should directly inform consumer attitudes about luxury goods and subsequent intentions to purchase them. There may be cultural differences as well in terms of whether quality itself enhances symbolic meaning or is appreciated for instrumental reasons. Investigating the relationships between perceived luxury quality, cultural values, TPB components like attitudes and control beliefs, and consumption intentions would provide greater insight into the nuances of luxury consumer behavior and values across cultures. The quality facet of luxury perception warrants deeper investigation.

References

- Aaker, J. L., & Maheswaran, D. (1997). The Effect of Cultural Orientation on Persuasion. The Journal of Consumer Research., 24(3), 315–328. https://doi.org/10.1086/209513
- Akarsu, M. Z., Gharehgozli, O., & Dubey, R. S. (2023). Wealth and want: Income inequality and demand for luxury goods in the United States. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.4357801
- Ali, A., Xiaoling, G., Ali, A., Sherwani, M., & Muneeb, F. M. (2019). Customer motivations for sustainable consumption: Investigating the drivers of purchase behavior for a green-luxury car. Business Strategy and the Environment, 28(5), 833–846.

 https://doi.org/10.1002/bse.2284
- Cabigiosu, A. (2020). An overview of the luxury fashion industry. In Palgrave advances in luxury (pp. 9–31). https://doi.org/10.1007/978-3-030-48810-9_2
- Canguende-Valentim, C. F., & Damp; Vale, V. T. (2022). Examining the intention to purchase luxury goods based on the planned behaviour theory. Open Journal of Business and Management, 10(01), 192–210. https://doi.org/10.4236/ojbm.2022.101012
- Conner, M. (2020). Theory of Planned Behavior. Handbook of Sport Psychology, Fourth Edition, 1–18. https://doi.org/10.1002/9781119568124.ch1
- Danziger, P. (2005). Let Them Eat Cake: Marketing Luxury to the Masses As well as the Classes. https://dl.acm.org/citation.cfm?id=1407254
- De Luxe, S. (2023, June 8). History of luxury. Sup de Luxe.

 https://www.supdeluxe.com/en/school-news/history-luxury#:~:text=Luxury%20has%20been%20around%20for,precious%20ornaments%20a

 nd%20representative%20statuettes.

- Di Liso, S. (2023, October 6). The future meaning of LUXURY. Italo Ferretti Luxury Store.

 https://italoferretti.com/the-future-meaning-of-luxury/
- Global luxury goods market takes 2022 leap forward and remains poised for further growth despite economic turbulence. (n.d.). Bain. https://www.bain.com/about/media-center/press-releases/2022/global-luxury-goods-market-takes-2022-leap-forward-and-remains-poised--for-further-growth-despite-economic-turbulence/
- Gürhan-Canli, Z., Sarial-Abi, G., & Hayran, C. (2018). Consumers and Brands across the Globe:

 Research Synthesis and New Directions. Journal of International Marketing., 26(1), 96–

 117. https://doi.org/10.1509/jim.17.0063
- Haitao Feng, Jie Guo, Li Hou. The moderating role of individualism/collectivism in predicting male Chinese university students' exercise behavior using the theory of planned behavior. Journal of Men's Health. 2023. 19(8);10-21.
- Hayes, A. F. (2022). Introduction to mediation, moderation, and conditional process analysis a regression-based approach. The Guilford Press.
- Hennessey, B., Moran, S., Altringer, B., & Amabile, T.M. (2014). Extrinsic and intrinsic motivation. In C.L. Cooper (Ed.), Wiley Encyclopedia of Management. John Wiley & Sons.
- Hofstede, G. (1980). Culture's consequences: International differences in work-related values.

 Beverly Hills, CA: Sage.
- Icek Ajzen & B. L. Driver (1992) Application of the Theory of Planned Behavior to Leisure Choice, Journal of Leisure Research, 24:3, 207-224, DOI: 10.1080/00222216.1992.11969889

- Jain, S. (2018). Factors affecting sustainable luxury purchase behavior: A conceptual framework.
 Journal of International Consumer Marketing, 31(2), 130–146.
 https://doi.org/10.1080/08961530.2018.1498758
- Kapferer, J. N. & Bastien, V. (2009). The specificity of luxury management: Turning marketing upside down. The Journal of Brand Management, 16(5-9), 311-322
- Kim, H., & Karpova, E. (2010). Consumer attitudes toward fashion counterfeits: Application of the theory of planned behavior. Clothing and Textiles Research Journal, 28(2), 79-94. https://doi.org/10.1177/0887302X09332513
- Kim, H., & Karpova, E. (2010). Consumer attitudes toward fashion counterfeits: Application of the theory of planned behavior. Clothing and Textiles Research Journal, 28(2), 79-94. https://doi.org/10.1177/0887302X09332513
- Rosa. (2020). ENVIRONMENTAL ATTITUDE AND INDIVIDUALISM INTERACTION TO INVESTIGATE SWITCH INTENTION TO PUBLIC TRANSPORT. Eurasia: Economics & Business., 3(33).
- Schweizer, T., & Lang, H. (1989). Sample size and research strategy in cultural anthropology. Current Anthropology, 30(4), 514–517. https://doi.org/10.1086/203776
- Shammout, E., D'Alessandro, S., Small, F., & Nayeem, T. (2022). Lifting the curtain on cultural values, materialism and luxury consumption: Evidence from Jordan. Journal of Consumer Behaviour, 21(5), 987–1001. https://doi.org/10.1002/cb.2053
- Shavitt, S., & Barnes, A. J. (2018). Cross-Cultural consumer psychology. Consumer Psychology Review, 2(1), 70–84. https://doi.org/10.1002/arcp.1047
- So, J., & Agrawal, N. (2023). Cultural orientation and perceived control over COVID-19 preventive behaviors. Social Influence, 18(1), 2219462. https://doi.org/10.1080/15534510.2023.2219462

- Sommet, N., Weissman, D. L., Cheutin, N., & Elliot, A. J. (2023). How many participants do I need to test an interaction? Conducting an appropriate power analysis and achieving sufficient power to detect an interaction. Advances in Methods and Practices in Psychological Science, 6(3), 1-21. https://doi.org/10.1177/25152459231178728
- Statista. (n.d.). Luxury Goods Worldwide | Statista Market forecast.

 https://www.statista.com/outlook/cmo/luxury-goods/worldwide#revenue
- Triandis, H.C., Bontempo, R., Betancourt, H., Bond, M., Leung, K., Brenes, A., Georgas, J., Hui, C.H., Marin, G., Setiadi, B., Sinha, J.B.P., Verma, J., Spangenberg, J., Touzard, H. and de Montmollin, G. (1986), The measurement of the etic aspects of individualism and collectivism across cultures. Australian Journal of Psychology, 38: 257-267.
 https://doi.org/10.1080/00049538608259013
- Truong, Y., Simmons, G., McColl, R., & Kitchen, P. (2008), "Status and Conspicuousness -Are They Related? Strategic Marketing Implications for Luxury Brands", Journal of Strategic Marketing, Vol.16 No.3, pp.189-203.
- Tsai, S. (2005), "Impact of personal orientation on luxury-brand purchase value", International Journal of Market Research, Vol. 47No. 4, pp. 429-54.
- Witkowski, J. (2023). The effects of horizontal & vertical individualism/collectivism on environmentally focused meat consumption via the theory of planned behavior.

 Unpublished manuscript, Department of Psychology, Dickinson College.
- Wong, N.Y., & Ahuvia, A.C. (1998). Personal Taste and Family Face: Luxury Consumption in Confucian and Western Societies. Psychology & Marketing, 15(5), 423-441.
- Xie, C., Bagozzi, R. P., & Stli, J. (2012). Cognitive, emotional, and sociocultural processes in consumption. Psychology & Samp; Marketing, 30(1), 12–25. https://doi.org/10.1002/mar.20585

- Zendehdel, M., Paim, L.H., & Delafrooz, N. (2016). The moderating effect of culture on the construct factor of perceived risk towards online shopping behaviour. Cogent Business & Management, 3(1). https://doi.org/10.1080/23311975.2016.1223390
- Zhang, B., & Kim, J.-H. (2013). Luxury fashion consumption in China: Factors affecting attitude and purchase intent. Journal of Retailing and Consumer Services, 20(1), 68-79.
- Zici, A., Quaye, E. S., Jaravaza, D. C., & Saini, Y. (2021). Luxury purchase intentions: The role of individualism-collectivism, personal values and value-expressive influence in South Africa. Cogent Psychology, 8(1), 1991728.

https://doi.org/10.1080/23311908.2021.1991728

 Table 1

 Demographic Characteristics of Study Population

Demographic Characteristics of Study	-	0/
Characteristics	N	%
Gender	200	F-1
Male	299	51
Female	214	47.7
Others	6	1.3
Race/Ethnicity		
White/Caucasian	304	67.7
Black/African American	40	8.9
Asian/Pacific Islander	53	11.8
Native American/Alaskan	1	0.2
Native	17	
Bi or Multiracial	17	3.8
Hispanic/Latino/Latina	32	7.1
Others	2	0.4
Political Orientation		
1 Very Liberal	99	22
2	96	21.4
3	73	16.3
4	102	22.7
5	44	9.8
6	19	4.2
7 Very Conservative	16	3.6
Personal Income (in dollars)		
0 to 9 999	62	13.8
10 000 to 29 999	75	16.7
30 000 to 49 999	86	19.2
50 000 to 74 999	87	19.4
75 000 to 99 999	56	12.5
100 000 to 149 999	50	11.1
150 000 and greater	18	4.0
Prefer not to answer	15	3.3
Total	499	100

Table 2Correlations between cultural orientations, TPB constructs, and intention to consume luxury goods, N = 499

	Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	Horizontal Individualism	1							
(2)	Vertical Individualism	.163**	1						
(3)	Horizontal Collectivism	-0.03	0.005	1					
(4)	Vertical Collectivism	0.052	.279**	.355**	1				
(5)	Attitudes	0.08	.263**	.129**	.227**	1			
(6)	Subjective Norms	-0.049	.413**	.139**	.202**	.495**	1		
(7)	Perceived Behavioral Control	0.029	.191**	0.074	.225**	.373**	.426**	1	
(8)	Intentions	0.035	.271**	.100*	.226**	.701**	.649**	.596**	1

Note: *p < .05. **p < .01. ***p < .001.

 Table 3

 Hierarchical Regression Results for Intention of Luxury Consumption

Variable	В	95% CI for B		SE B	β	R²	ΔR^2
		LL	UL	-			
Step 1						0.068	0.068***
Political Orientation	0.12	0.033	0.208	0.044	208		
Income	.176***	0.099	0.252	0.039	0.092		
Step 2						0.682	0.620***
Political Orientation	-0.04	-0.1	0.011	0.028	-0.033		
Income	-0.02	-0.071	0.031	0.026	0.039		
Vertical Individualism	-0.05	-0.145	0.041	0.047	-0.028		
Horizontal Individualism	0.04	-0.047	0.126	0.044	-0.006		
Vertical Collectivism	0.01	-0.089	0.111	0.051	0.028		
Horizontal Collectivism	0039	-0.126	0.048	0.044	-0.032		
Attitudes	0.743***	0.637	0.848	0.054	0.443		
Subjective Norms	0.386***	0.302	0.469	0.042	0.317		
Perceived Behavioral Control	0.293***	0.231	0.354	0.031	0.318		
Step 3						0.68	0.002
Political Orientation	-0.04	-0.1	0.012	0.028	-0.048		
Income	-0.02	-0.07	0.032	0.026	0.041		
Vertical Individualism	-0.05	-0.146	0.045	0.049	-0.024		
Horizontal Individualism	0.024	-0.067	0.155	0.046	-0.005		

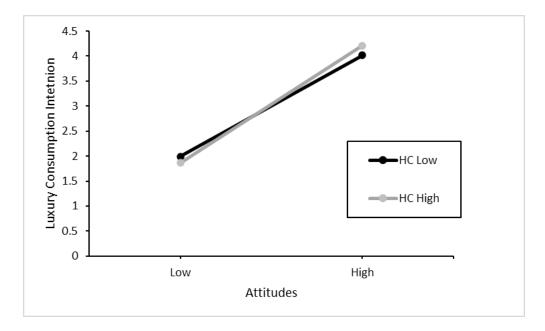
THE ROLE OF CULTURAL ORIENTATION IN LUXURY CONSUMPTION INTENTIONS: ASSESSING MODERATION WITHIN THE THEORY OF PLANNED BEHAVIOR MODEL

Vertical Collectivism	0.01	-0.088	0.115	0.052	0.026	
Horizontal Collectivism	-0.04	-0.128	0.048	0.045	-0.03	
Attitudes	0.743***	0.637	0.849	0.054	0.444	
Subjective Norms	0.389***	0.304	0.473	0.043	0.319	
Perceived Behavioral Control	-0.031***	0.234	0.359	0.032	0.322	
AT x VI	-0.03	-0.144	0.052	0.042	-0.024	
AT x VC	0.03	-0.062	0.124	0.047	0.022	
AT x HC	0.04	-0.065	0.142	0.053	0.024	
SN x VC	-0.04	-0.144	0.032	0.037	-0.04	
SN x HC	-0.01	-0.099	0.072	0.044	-0.011	
PBC x VI	0.02	-0.27	0.068	0.024	0.026	

Note. CI = confidence interval; LL = lower limit; IL = upper limit; AT = attitudes; SN = subjective norms; PBC = perceived behavioral control; HC = horizontal collectivism; VC = vertical collectivism; HI = horizontal individualism; VI = vertical individualism. *<math>p < .05. **p < .01. ***p < .001.

Figure 1

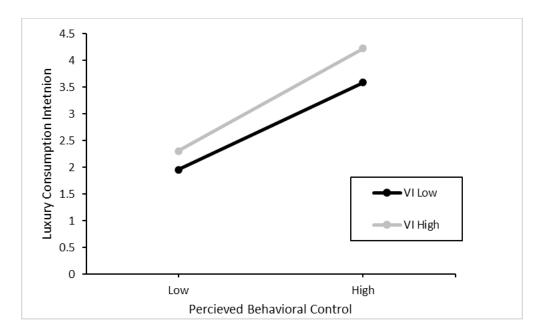
The moderating effect of horizontal collectivism on the relationship between attitude and intention



Note: Low = -1 SD from the mean; High = +1 SD from the mean; $HC = horizontal\ collectivism$

Figure 2

The moderating effect of vertical individualism on the relationship between perceived behavioral control and intention



Note: Low = -1 SD from the mean; High = +1 SD from the mean; VI = vertical individualism