**ORIGINAL ARTICLE** 



# The correlation between honesty-humility and attitude toward counterfeit luxury

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# Abstract

This research focuses on the relation between Honesty-Humility and attitude toward counterfeit luxury. Honesty-Humility is defined as the tendency to be fair in dealing with others. Given that the act of knowingly purchasing a counterfeit could be judged as morally questionable, immodest, and manipulative, we predicted that people lower in Honesty-Humility would report more positive attitudes toward counterfeit luxury. Given that related research from behavioral research revealed Honesty-Humility to be the key predictor for unethical behavior, we further predicted this association to remain robust even when controlling for relevant control variables (i.e., self-concept, risk aversion, materialism, and Honesty-Propriety). As expected, two preregistered online studies (Study 1: N=566; Study 2: N=501) revealed that people with higher Honesty-Humility scores reported more of a negative attitude toward counterfeit luxury. This effect was mainly driven by the Fairness-facet of Honesty-Humility, and only materialism proved to be a further significant predictor for attitude toward counterfeit consumption. The role of the Honesty-Humility factor in research on counterfeit consumption is discussed, directions for future research are given, and as practical implication, first approaches are developed that possible intervention campaigns against counterfeit consumption should consider.

**Keywords** Honesty-Humility  $\cdot$  Fairness  $\cdot$  Counterfeit luxury  $\cdot$  Counterfeit consumption

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# 1 Introduction

Counterfeiting describes the act of illegally producing identical copies of current brands. Many forms of counterfeits exist, ranging from counterfeited currency/ banknotes to pharmaceutical drugs to luxury goods (Deisingh, 2005; Nia & Zaichkowsky, 2000). It has emerged as a phenomenon with serious economic implications as the demand for counterfeited luxury shows to be already robust and increasing (Bian et al., 2016; Sondhi, 2017). Because the negative effects of counterfeiting outweigh the positive effects for companies of the original products whose luxury brands suffer (Loken & Amaral, 2010), it is important to further develop the current state of research in this field. One perspective one can apply in this research field is to investigate which personality type is particularly prone to counterfeit consumption. Because we became aware that one key predictor for general exploitive (Zettler et al., 2020) and unethical behavior (Lee et al., 2005) has not been considered so far in research on counterfeit consumption-namely the Honesty-Humility factor from the HEXACO model of personality (Ashton & Lee, 2007)-the present research aims to investigate the predictive value of the Honesty-Humility trait on participant's attitude toward counterfeit luxury.

## 1.1 Predictors of counterfeit consumption

There are several studies that applied the above-described perspective and investigated which personality traits predict counterfeit consumption, revealing a partially mixed patter. For example, one frequently studied personality trait is materialism (i.e., the importance people attach to material possessions). However, while some studies found that people higher in materialism reported a stronger intention to buy counterfeited goods (Jun et al., 2012; Swami et al., 2009), other studies did not find such a significant association (Wee et al., 1995). A study conducted by Teah and Phau (2008) predicted that value consciousness and novelty seeking (i.e., people's curiosity for diversity and distinction) should have a positive influence on consumers attitude toward counterfeit luxury, and further they predicted that integrity (i.e., people's personal sense of justice), personal gratification (i.e., people's desire for achievement, recognition, and luxury) and status consumption (i.e., people who strive for acknowledgment and outward proof for others' observation) should have a negative influence. Their results only revealed that integrity, personal gratification, and status consumption significantly predicted consumers attitudes in the hypothesized direction. This finding was replicated by a study conducted by Turkyilmaz and Uslu (2014), who additionally found that people higher in materialism and readiness to take risk also reported more positive attitudes toward counterfeited luxury.

Swami and colleagues (2009) were one of the few in this research area that used a global personality model—that is also widely recognized in psychological science—to test the predictive value of these traits for attitudes towards counterfeiting, namely the Big Five model of personality (Costa & McCrae, 1985). Only Conscientiousness (i.e., people with higher scores are described as self-disciplined, organized, and goal-directed) appeared to be a significant predictor in the way that people lower in this trait reported more positive attitudes (Swami et al., 2009).

Because it is a valuable tool for estimating the average population effect from multiple data that investigate the same research question, the meta-analysis of Eisend et al. (2017) probably provides the most meaningful result. They investigated several demographics (i.e., age, education, employment status, family, gender, and income) and several psychographic characteristics (i.e., fashion seeking, innovativeness, integrity, materialism, risk aversion, self-concept, status-seeking, smart shopping, and susceptibility) regarding attitudes toward, intentions for, and behaviors related to counterfeit luxury brands. Eisend et al. (2017) drew from 98 independent samples, including 610 effect sizes to reveal that demographics do not explain counterfeit purchase, but psychographics such as materialism [i.e., "consumer's value orientation, reflecting the importance (s)he places on the acquisition and possession of material objects" (p. 93)], risk aversion [i.e., "consumer's general tendency to avoid risks and to be conservative" (p. 93)], and self-concept [i.e., "consumer's positive perception of him- or herself and independence from others" (p. 94)] explained up to 25% of the variance. In particular, more materialistic and risk-avoidant people with a more negative self-concept are the most likely to buy counterfeit luxury.

Although we have mentioned one study that used the global five-dimensional personality model called the Big Five to predict attitude towards counterfeit luxury consumption (cf. Swami et al., 2009), we are not aware of a single study that used the six-dimensional personality model called the HEXACO model of personality (Ashton & Lee, 2007), which includes a separate honesty-related personality trait called Honesty-Humility. The global Honesty-Humility factor can be operationalized into four narrow facets: Sincerity (i.e., the tendency to be genuine in interpersonal relations) and Fairness (i.e., the tendency to avoid fraud and corruption) theoretically represent honesty, and Greed-Avoidance (i.e., the tendency to be uninterested in high status symbols and wealth) and Modesty (i.e., the tendency to be unassuming) theoretically represent humility. Persons with higher scores on this factor refrain from manipulating others for their personal gain and from breaking rules; moreover, they are assumed to be uninterested in lavish wealth and luxuries. Thus, recent research revealed Honesty-Humility to be a reliable and robust predictor for unethical behavior (e.g., Lee et al., 2005) and actual dishonesty (e.g., Hilbig & Zettler, 2015; Reinhardt & Reinhard, 2023; Schild et al., 2020).

#### 1.2 The present research

Even though some people may consider the consumption of counterfeit luxury brands a "twilight zone of ethical and unethical" (Sondhi, 2017, p. 207), the sale itself is illegal. Further, given the negative consequences of counterfeit consumption (e.g., Loken & Amaral, 2010), the willful purchase of counterfeited products represents an unethical behavior with the aim to create a desired identity of oneself that probably cannot be created legally (e.g., Eisend et al., 2017). In particular, people lower in Honesty-Humility should view counterfeit luxury as an effective way to portray themselves as more privileged than others (represented by lower scores on the Modesty and Greed-Avoidance facet) and thereby manipulate others who then have the impression that the person has more money than the person has actually invested in the products (represented by lower scores on the Sincerity facet). Additionally, the sale itself is illegal, and people lower in Honesty-Humility are assumed to demonstrate unethical behavior more often (represented by lower scores on the Fairness facet). According to the above the present main hypothesis is derived: People lower in Honesty-Humility will report more positive attitudes toward counterfeit luxury (*Hypothesis 1*).

Given that recent (mostly psychological) research on general deceptive behavior revealed Honesty-Humility to be the key predictor for dishonesty, with no other personality trait as for example from the remaining HEXACO traits (Thielmann et al., 2016), the Dark Triad traits (Pfattheicher et al., 2018) and the Big Five traits (Heck et al., 2018) showing any incremental validity beyond the Honesty-Humility factor in explaining deceptive behavior, we assume Honesty-Humility to also be the key predictor for attitudes toward counterfeit luxury consumption. Notability, in the research field of counterfeit consumption, no study thus far has addressed the predictive value of Honesty-Humility, which is why we aim now to close this theoretically so obvious gap by bringing both lines of research together. As our second hypothesis, we therefore predict that the significant association between Honesty-Humility and attitudes toward counterfeits should remain significant even when controlling for self-concept, risk aversion, materialism, and Honesty-Propriety (Hypothesis 2). We decided for these control variables, because Eisend et al. (2017) identified these variables as important predictors for attitudes towards counterfeit consumption. In this vein, testing the predictive value of the Honesty-Humility trait against these variables provides a strict test of our hypothesis. In the same vein, Honesty-Propriety as another honesty-related personality trait which emanated from the Big Six model of personality (Saucier, 2009) was included in Study 2.

Summarized, the aim of the present study is to establish the Honesty-Humility trait within the context of counterfeit consumption of luxury goods which was neglected so far, even there are good theoretical arguments because in other research areas of exploitive and unethical behavior, Honesty-Humility turned out as the key predictor (Heck et al., 2018; Hilbig & Zettler, 2015; Lee et al., 2005; Pfattheicher et al., 2018; Reinhardt & Reinhard, 2023; Schild et al., 2020; Thielmann et al., 2016). By testing different predictors against each other (as supposed within *Hypothesis 2*), it can be determined which criterion has the highest and most reliable predictive value, and which should therefore be the focus of future research.

Both studies were preregistered at AsPredicted (Study 1: https://aspredicted. org/7fk6n.pdf; Study 2: https://aspredicted.org/ab85y.pdf). Data and Syntax of both studies and Supplemental Material can be found in the Open Science Framework (https://osf.io/hmnpt/). At our university, it is not a common practice to request an ethic vote for studies that do not involve active deception of the participants and that are solely based on self-reports. Importantly, in both studies, all ethical guidelines were followed.

# 2 Study 1

## 2.1 Method

#### 2.1.1 Subjects

We conducted an a priori power analysis with an assumed power of 0.95, setting the Type I error rate at p < .05 and assuming a small effect size of r = .15. The power analysis for correlation (two-tailed) revealed a minimal sample size of N = 567. To plan for possible exclusions, our goal was to collect the data of 600 individuals. Recruiting of the participants took place via Amazon Mechanical Turk where we have not set a specific filter for participation with which it is a convince sample. To ensure that participants were attentive and answered the survey questions truthfully, we included an attention check question and a bot check question. If one of these questions was answered incorrectly, the study ended prematurely. At the end, participants had the opportunity to exclude their data due to lack of attention.

The sample realized 604 observations with 38 exclusions, resulting in a final sample size of N=566 participants (57.4% male, 42.6% female), with a mean age of 37.19 (SD=9.92), ranging from 20 to 70 years. Most of the participants reported being employed (65.9%), followed by self-employed (29.2%), work seeking (3.9%) and being student (0.4%). 0.7% had chosen the option "other" regarding the question of their profession. Regarding their ethnicity, most participants indicated being Caucasian (80.2%), followed by Asian (9.9%), African American (2.8%), Hispanic (2.5%), Indian (2.5%), and Asian American (1.2%). 0.9% had chosen the option "other" regarding their ethnicity.

### 2.1.2 Procedure and measures

The whole survey consisted of an online questionnaire in English language. First, participants were welcomed to our survey on attitudes toward counterfeit luxury and asked to agree to the informed consent. We then asked them to answer demographic questions (i.e., age, gender, profession, and ethnicity), followed by the assessment of each participant's Honesty-Humility scores and attitude toward counterfeit luxury. Finally, they were asked to answer the attention check and the bot check.

We used the 16 relevant items of HEXACO-PI-R (100-Version) created by Ashton and Lee (2009) to measure Honesty-Humility (e.g., "I am an ordinary person who is no better than others."). Participants were asked to rate their agreeableness on a fivepoint scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). We summarized all items to one variable ( $\alpha$ =0.57).

We used the 15 items of a scale created by Sondhi (2017) for assessing attitude toward counterfeit luxury (e.g., "I don't feel it is immoral to buy counterfeit brands."). Participants were asked to rate their agreeableness on a five-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*), with higher values representing more positive attitudes toward counterfeit luxury. We summarized all items to one dependent variable ( $\alpha$ =0.95), which we abbreviate as ACL.

## 2.1.3 Analytic strategy

As preregistered, we calculated a two-tailed correlation coefficient between Honesty-Humility and ACL. Following this, we conducted a linear regression model with Honesty-Humility as predictor for ACL (Model 1). Even though it was not preregistered, we controlled for participants' gender and age in a second step (Model 2).

# 2.2 Results

Participants showed a mean value of 4.75 (SD=0.37) for Honesty-Humility and a mean value of 3.73 (SD=0.77) for ACL. The mean value for ACL was significantly above the midpoint of the scale; t(565)=22.66, p<.001, d=0.77, 95% CI=[0.67; 0.80].

For a first test of our *Hypothesis 1*, the Pearson correlation coefficient was computed to determine the relationship between Honesty-Humility and ACL. The conducted correlation analysis showed a statistically significant negative correlation; r=-.73, p<.001, 95% CI = [-0.76; -0.68]. Following Cohen (1988), this finding can be interpreted as a large effect size.

For a more detailed test of *Hypothesis 1*, we then conducted the linear regression analysis as described above. Model 1, which only includes Honesty-Humility as predictor for ACL, was statistically significant;  $R^2=0.53$ , F(1, 564)=626.27, p<.001. It showed that Honesty-Humility significantly predicted ACL in Model 1; B = -1.50, SE = 0.06,  $\beta = -0.73$ , p<.001, 95% CI = [-1.62; -1.39]. This indicates that participants lower in Honesty-Humility hold more positive attitudes toward counterfeit luxury consumption (see Fig. 1). In the second step, we included participants' gender and age as control variables. Model 2 was statistically significant;  $R^2=0.53$ ,



Fig. 1 Scatterplot of the Linear Regression of Honesty-Humility on ACL of Study 1. *Note.* ACL=attitudes toward counterfeit luxury with higher values indicating more positive attitudes; H-H=Honesty-Humility

F(3, 565)=210.13, p<.001. There was no significant change in  $R^2$  due to the inclusion of the control variables;  $\Delta R^2=0.00, p=.223$ . The significant negative association between Honesty-Humility and ACL remained robust in Model 2; B = -1.51,  $SE=0.06, \beta = -0.73, p<.001, 95\%$  CI = [-1.63; -1.39]. Neither participants' gender,  $B=0.06, SE=0.05, \beta=0.04, p=.194, 95\%$  CI = [-0.03; 1.15], nor participants' age,  $B=0.003, SE=0.002, \beta=0.04, p=.162, 95\%$  CI = [-0.001; 0.008], significantly predicted ACL.

## 2.3 Discussion

This is the first work made available in the broad literature about counterfeit luxury consumption that showed Honesty-Humility—a personality factor derived from the HEXACO model of personality (Ashton & Lee, 2007)—to be a valid predictor of attitude toward counterfeit luxury consumption. In line with our *Hypothesis 1*, people with lower levels of Honesty-Humility were found to hold more positive attitudes toward counterfeit luxury consumption. The found effect size can be evaluated as large, and it was highly significant. Moreover, in line with the findings of Eisend et al. (2017), demographics (i.e., participants' age and gender) did not contribute to the explained variance of ACL.

Even though it was not preregistered, we further aimed to test the hypothesis for the narrow facets of Honesty-Humility (i.e., Sincerity, Fairness, Greed-Avoidance, and Modesty) to check if the association is driven by all facets or if some show a stronger predictive value than others (e.g., van Rensburg et al., 2018). However, internal consistencies of all four facets were very low (all  $\alpha s \le 0.44$ ; for more details, see Sect. 1.1 in the Supplemental Material in the OSF). These low scores probably arouse because participants who took part in our survey were inattentive. The explanation of inattentiveness may seem confusing at first glance due to the excellent internal reliability of ACL; however, if one considers that the only scale to use reversed items is the Honesty-Humility scale, these heterogeneous internal reliability scores may very well be attributed toward inattentiveness because non-attentive subjects would mostly stick to a unipolar style of answering (Weijters et al., 2013). Because we included several response quality screening techniques (i.e., attention checks, bot checks), however, the overall data quality can be considered as given (Arias et al., 2020; Peer et al., 2022).

To replicate the findings of Study 1, we planned to conduct a second study. To test the robustness of the found association between Honesty-Humility and ACL, we decided to include the relevant control variables self-concept, risk aversion, and materialism as postulated by Eisend et al. (2017). We also included Honesty-Propriety derived from the Big Six model of personality (Saucier, 2009) as another honesty-related personality factor.

# 3 Study 2

# 3.1 Method

# 3.1.1 Subjects

We conducted an a priori power analysis with an assumed power of 0.99, setting the Type I error rate at p=.001 and assuming a small-to-medium effect size of r=.25. The power analysis for correlation (two-tailed) revealed a minimal sample size of N=479. To plan for possible exclusions, our goal was to collect the data of 500 individuals. Recruiting of the participants took place via Prolific where we have not set a specific filter for participation with which it is a convince sample. To ensure the subjects were attentive and answered the survey questions truthfully, we included an attention check question ("In this line, please choose option 4."). Further, participants were given the opportunity to exclude their data due to lack of attention.

The sample realized 503 observations with two exclusions, resulting in a final sample size of N=501 participants (49.9% male, 48.3% female, 1.8% non-binary), with a mean age of 41.26 (SD=14.04), ranging from 18 to 93 years. Most of the participants reported being employed (60.9%), followed by self-employed (13.6%), work seeking (7.6%) and being student (6.2%). 11.8% had chosen the option "other" regarding the question of their profession. Regarding their ethnicity, most participants indicated being Caucasian (71.5%), followed by African American (9.8%), Hispanic (7.4%), Asian (5.2%), Asian American (2.0%), African (0.8%), Indian (0.4%), and 3.0% had chosen the option "other" regarding their ethnicity.

## 3.1.2 Procedure and measures

The whole survey consists of an online questionnaire in English language. First, participants were welcomed to our survey on attitudes toward counterfeit luxury and asked to agree to the informed consent. We next asked them to answer demographic questions, followed by the assessment of each participant's Honesty-Humility scores (as in Study 1). We included the measurements of self-concept, risk aversion, materialism, and Honesty-Propriety. Participants were asked to answer questions concerning their ACL (as in Study 1). At the end, they were asked to answer the attention check.

We used the 12 items created by Campbell et al. (1996; e.g., "In general, I have a clear sense of who I am and what I am.") to measure participants self-concept. Participants were asked to rate their agreeableness on a five-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). We summarized all items to one variable.

Risk aversion was measured with six items from the General Risk Aversion Scale created by Mandrik and Bao (2005; e.g., "I avoid situations that have uncertain outcomes."). Participants were asked to rate their agreeableness on a seven-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). We summarized all items to one variable.

We used the seven items created by Schaefer et al. (2004; e.g., "Others judge me by the kinds of things I own.") to measure materialism. Participants were asked to rate their agreeableness on a seven-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). We summarized all items to one variable.

We measured Honesty-Propriety with the seven relevant items of the Big Six Questionnaire created by Thalmayer and Saucier (2014; e.g., "I like to do frightening things."). Participants were asked to respond on a five-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). We summarized all items to one variable.

### 3.1.3 Analytic strategy

As preregistered, we calculated a two-tailed correlation coefficient between Honesty-Humility and ACL. Next, we conducted a linear regression model with Honesty-Humility as predictor for ACL (Model 1). In the second step, we added all control variables, including self-concept, risk aversion, materialism, and Honesty-Propriety (Model 2). In the third step, we controlled for participants' gender and age (Model 3).

As additional analysis, and as preregistered, we conducted another linear regression analysis on ACL that simultaneously included all four narrow facets of Honesty-Humility (i.e., Sincerity, Fairness, Greed-Avoidance, and Modesty) as predictors in a first model (Model 1). Models 2 and 3 are parallel to the regression analysis described above.

#### 3.2 Results

See Table 1 for means, standard deviations, intercorrelations (Pearson's r), and confidence intervals of all study variables of Study 2. The mean value for ACL was sig-

Table 1 Means, Standard Deviation	s, Cronbach's Alpha,	Intercorrelations	(Pearson's r), ar	nd Confidence
Intervals of Study Variables of Study	y 2			

	Mean	SD	range	α	(1)	(2)	(3)	(4)	(5)	(6)
(1) ACL	2.11	0.82	1-5	0.94	_					
(2) H-H	3.59	0.67	1–5	0.86	-0.38*** [-0.45; -0.30]	-				
(3) S-C	6.67	0.89	1–5	0.92	-0.23*** [-0.31; -0.14]	0.35*** [0.27; 0.43]	-			
(4) R A	4.55	1.06	1–7	0.80	0.09* [0.01; 0.18]	-0.03 [-0.12; 0.06]	-0.16*** [-0.24; -0.07]	_		
(5) MA	3.42	1.23	1–7	0.83	0.38*** [0.31; 0.45]	-0.69*** [-0.73; -0.64]	-0.31*** [-0.38; -0.23]	0.11* [0.02; 0.19]	-	
(6) H-P	3.89	0.70	1–5	0.77	-0.26*** [-0.34; -0.18]	0.55*** [0.48; 0.61]	0.40*** [0.32; 0.47]	0.26*** [0.17; 0.34]	-0.34*** [-0.41; -0.26]	-

*Note.* Values in brackets are 95% confidence intervals. ACL=attitude toward counterfeit luxury with higher values standing for more positive attitudes; H-H=Honesty-Humility; S-C=self-concept; R A=risk aversion; MA=materialism; H-P=Honesty-Propriety.

\**p* < .05, two-tailed. \*\**p* < .01, two-tailed. \*\*\**p* < .001, two-tailed.

nificantly below the midpoint of the scale; t(500) = -24.15, p < .001, d = -1.08, 95% CI = [-1.19; -0.97].

Supporting *Hypothesis 1*, the two-tailed Pearson correlation showed a statistically significant negative correlation between Honesty-Humility and ACL; r=-.38, p<.001, 95% CI = [-0.45; -0.30]. In alignment with Cohen (1988), this finding can be interpreted as a large effect size. Results further showed significant negative correlations for ACL with self-concept (r=-.23, p<.001, 95% CI = [-0.31; -0.14]) and Honesty-Propriety (r=-.26, p<.001, 95% CI = [-0.34; -0.18]) and significant positive correlations for ACL with risk aversion (r=.09, p=.037, 95% CI=[0.01; 0.18]) and materialism (r=.38, p<.001, 95% CI=[0.31; 0.45]). Means, standard deviations, Cronbach's Alpha, and intercorrelations for the narrow facets of Honesty-Humility are available in the Supplemental Material (see Sect. 1.2).

Table 2 shows linear regression coefficients for the overall Honesty-Humility score and all preregistered control variables on ACL. Model 1, which includes only Honesty-Humility as predictor, was statistically significant;  $R^2=0.15$ , F(1, 490)=85.52, p<.001. It showed that Honesty-Humility significantly predicted ACL in Model 1, indicating that participants lower in Honesty-Humility hold more positive attitudes toward counterfeit luxury consumption (see Fig. 2).

To test *Hypothesis 2*, we additionally included the control variables self-concept, risk aversion, materialism, and Honesty-Propriety in a second step (Model 2). Model 2 was statistically significant;  $R^2 = 0.20$ , F(5, 491) = 24.05, p < .001. There was a significant change in  $R^2$  due to the inclusion of the control variables;  $\Delta R^2 = 0.05$ , p < .001. In line with our hypothesis, results revealed that the significant association between Honesty-Humility and ACL remained robust even under the control of self-concept, risk aversion, materialism, and Honesty-Propriety. Materialism and Honesty-Propri-

Model	Predictor	Predictor								
		В	SE B	Low	High	β	р	$R^2$	$\Delta R^2$	
(1)	H-H	-0.47	0.05	-0.57	-0.37	-0.38	< 0.001	0.15	0.15***	
(2)	H-H	-0.17	0.08	-0.33	-0.02	-0.14	0.026	0.20	0.05***	
	S-C	-0.07	0.04	-0.16	0.02	-0.07	0.117			
	R-A	0.07	0.04	0.002	0.14	0.09	0.046			
	MA	0.14	0.04	0.07	0.22	0.22	< 0.001			
	H-P	-0.14	0.07	-0.27	-0.01	-0.12	0.031			
(3)	H-H	-0.18	0.08	-0.33	-0.03	-0.15	0.022	0.20	0.00	
	S-C	-0.05	0.05	-0.14	0.04	-0.06	0.252			
	R-A	0.06	0.04	-0.004	0.13	0.08	0.066			
	MA	0.14	0.04	0.07	0.22	0.21	< 0.001			
	H-P	-0.14	0.07	-0.26	-0.01	-0.11	0.041			
	age	-0.07	0.07	-0.21	0.07	-0.04	0.316			
	gender	-0.003	0.003	-0.01	0.002	-0.06	0.179			

 Table 2
 Regression Coefficients on ACL of Study 2 with the Overall Honesty-Humility Score

*Note.* We excluded all participants who declared non-binary for gender (0=female, 1=male), therefore, N=492. ACL=attitude toward counterfeit luxury with higher values standing for more positive attitudes; H-H=Honesty-Humility; S-C=self-concept; R A=risk aversion; MA=materialism; H-P=Honesty-Propriety.

\**p* < .05, two-tailed. \*\**p* < .01, two-tailed. \*\*\**p* < .001, two-tailed.



Fig. 2 Scatterplot of the Linear Regression of H-H on ACL of Study 2. *Note.* ACL=attitudes toward counterfeit luxury with higher values indicating more positive attitudes; H-H=Honesty-Humility

ety also significantly predicted ACL in Model 2 (see Table 2). In a third step, we controlled for participant's gender and age. Model 3 also reached significance;  $R^2=0.20$ , F(7, 491)=17.58, p<.001. However, there was no significant change in  $R^2$  due to the inclusion of the variables age and gender;  $\Delta R^2=0.00$ , p=.264. Neither age nor gender significantly predicted ACL in Model 3.

Table 3 shows linear regression coefficients for the narrow facets of Honesty-Humility on ACL. Model 1, which simultaneously includes all four narrow facets (i.e., Sincerity, Fairness, Greed-Avoidance, and Modesty) as predictors was statistically significant;  $R^2 = 0.16$ , F(4, 491) = 22.88, p < .001. It showed that only Sincerity and Fairness significantly predict ACL in Model 1, with lower values in Sincerity and Fairness leading to more positive attitudes toward counterfeit luxury. Model 2 was also statistically significant;  $R^2 = 0.21$ , F(8, 491) = 16.27, p < .001. Change in  $R^2$ in Model 2 was statistically significant due to the inclusion of the control variables self-concept, risk aversion, materialism, and Honesty-Propriety;  $\Delta R^2 = 0.05$ , p < .001. Interestingly, the significant negative association between Sincerity and ACL did not remain robust. Only Fairness and materialism reached significance in Model 2, indicating that participants with lower levels on Fairness but higher values on materialism hold more positive attitudes toward counterfeit luxury. We then included age and gender as control variables in Model 3, which also was statistically significant;  $R^2 = 0.22$ , F(10, 491) = 13.32, p < .001. There was no significant change in  $R^2$  in Model 3;  $\Delta R^2 = 0.01$ , p = .238. Neither participants' gender nor their age significantly predicted ACL, but the significant associations between Fairness and ACL, as well as between materialism and ACL, remained robust.

Model	Predictor	Predictor							
		В	SE B	Low	High	β	р	$R^2$	$\Delta R^2$
(1)	SIN	-0.12	0.04	-0.20	-0.03	-0.13	0.007	0.16	0.16***
	FAIR	-0.19	0.04	-0.26	-0.12	-0.25	< 0.001		
	G-A	-0.06	0.04	-0.15	0.03	-0.07	0.173		
	MOD	-0.09	0.05	-0.19	0.004	-0.09	0.060		
(2)	SIN	-0.06	0.04	-0.14	0.03	-0.06	0.202	0.21	0.05***
	FAIR	-0.14	0.04	-0.22	-0.05	-0.18	0.001		
	G-A	0.06	0.05	-0.04	0.16	0.07	0.218		
	MOD	-0.04	0.05	-0.14	0.07	-0.04	0.477		
	S-C	-0.06	0.04	-0.15	0.03	-0.06	0.189		
	RA	0.06	0.04	-0.01	0.13	0.08	0.098		
	MA	0.18	0.04	0.10	0.26	0.28	< 0.001		
	H-P	-0.06	0.07	-0.20	0.07	-0.05	0.362		
(3)	SIN	-0.06	0.04	-0.15	0.03	-0.06	0.188	0.22	0.01
	FAIR	-0.14	0.04	-0.22	-0.05	-0.18	0.002		
	G-A	0.07	0.05	-0.03	0.17	0.08	0.178		
	MOD	-0.05	0.05	-0.15	0.06	-0.05	0.357		
	S-C	-0.04	0.05	-0.13	0.05	-0.05	0.353		
	RA	0.05	0.04	-0.02	0.12	0.07	0.142		
	MA	0.19	0.04	0.11	0.27	0.28	< 0.001		
	H-P	-0.06	0.07	-0.20	0.08	-0.05	0.383		
	age	-0.003	0.003	-0.01	0.002	-0.06	0.182		
	gender	-0.09	0.07	-0.23	0.04	-0.05	0.264		

 Table 3
 Regression Coefficients on ACL of Study 2 with the Narrow Facets of Honesty-Humility

*Note.* We excluded all participants who declared non-binary for gender (0=female, 1=male), therefore, N=492. ACL=attitude toward counterfeit luxury with higher values standing for more positive attitudes; SIN=Sincerity; FAIR=Fairness; G-A=Greed-Avoidance; MOD=Modesty; S-C=self-concept; R A=risk aversion; MA=materialism; H-P=Honesty-Propriety.

\*p < .05, two-tailed. \*\*p < .01, two-tailed. \*\*\*p < .001, two-tailed.

# 3.3 Discussion

In this study, we replicated the findings of our first study indicating that people with lower levels of the Honesty-Humility factor hold more positive attitudes toward counterfeit luxury consumption. Again, the found effect size can be interpreted as large, and it was highly significant. Our results further revealed that this negative correlation remained robust even under control of the variables self-concept, risk aversion, and materialism; based on a meta-analysis from 98 independent samples, including 610 effect sizes, Eisend et al. (2017) postulated these variables to be highly influential in predicting ACL. Interestingly, besides Honesty-Humility as predictor, our regression analysis suggests only materialism as a further valid predictor for ACL, but self-concept and risk aversion failed to reach significance.

We noted inconsistencies because on the one hand, Eisend et al. (2017) defined self-concept as "consumer's positive perception of him- or herself and independence from others" (p. 94) to be one of the most important predictors for counterfeit consumption. However, on the other hand, the reported exemplary scale of Campbell et

al. (1996), which we also used in our study, measures the extent to which the own self-concept is clearly and confidently defined (rather than its positive or negative evaluation). Therefore, the question arises if our null finding is because the underlying operationalization of self-concept fits not to research that revealed self-concept to be a significant predictor for ACL. However, the meta-analysis of Eisend et al. (2017) lacks any additional detailed information. Also concerning the variable risk aversion, it is important to note that both mentioned example papers in the meta-analysis of Eisend et al. (2017) fail to provide sufficient information on how the construct was measured and operationalized in the original studies. Eisend et al. (2017) defined risk aversion as the "consumer's general tendency to avoid risks and to be conservative" (p. 93), which fits the operationalization captured by the General Risk Aversion scale; thus, we decided to use this scale. Future research should, however, take care to define and operationalize relevant constructs in more detail.

Concerning the narrow facets of Honesty-Humility, we first predicted that all four facets should be significantly related to ACL but only found lower levels of Fairness leading to significantly more positive attitudes toward counterfeit consumption.

# 4 General discussion

Results of both preregistered online studies lead us to conclude that the Honesty-Humility factor emanated from the HEXACO model of personality (Ashton & Lee, 2007) is significantly related to attitudes toward counterfeit luxury. In particular, participants lower in Honesty-Humility report more positive attitudes towards counterfeit luxury. By contrast, people with higher Honesty-Humility scores tend to be less attracted to counterfeits as they probably feel less willing to take advantage of counterfeit consumption upon consideration of the negative impact on the original brands.

In Study 2, we further tested the four narrow facets of Honesty-Humility (i.e., Sincerity, Fairness, Greed-Avoidance, and Modesty) on their predictive value for counterfeit consumption and identified the Fairness facet as the driving force for the overall effect. People with lower levels of Fairness are described as willing to take advantage of others or of society as a whole for their personal benefit, which fits well with counterfeit consumption. However, the notion that the overall effect of Honesty-Humility is driven only by the Fairness facet is surprising. From a theoretical point of view, it is obvious to assume that people with lower scores on Greed-Avoidance (i.e., people who are highly interested in lavish wealth and luxury goods), people with lower scores on Sincerity (i.e., people who are willing to manipulate others), and people with lower scores on Modesty (i.e., people who consider themselves as entitled to more privileges than others) should also hold significantly more positive attitudes toward counterfeit luxury consumption compared to people with higher scores on these facets; however, we found no empirical evidence for these theoretically logical associations.

Even though a recent meta-analysis conducted by Eisend et al. (2017) revealed the variables self-concept, risk aversion, and materialism to be highly influential in predicting counterfeit luxury consumption, we found the negative association between Honesty-Humility and counterfeit consumption to remain robust even when controlling for these variables. Interestingly, besides Honesty-Humility as predictor, our study suggests that only materialism is a further valid predictor, but self-concept and risk aversion failed to reach significance in our regression analysis.

# 4.1 Limitations

Although our results supported our hypotheses, some limitations exist. First, we can only derive correlation and not causation from our studies due to the chosen study design. Further, our study was based only on self-reported attitudes toward counterfeit luxury consumption. Even though Eisend et al. (2017) found in their meta-analysis attitudes and intention to be highly correlated (r=.41), the correlation between attitudes and actual behavior was descriptively smaller (r=.28). Thus, conducting a correlation study that measures actual behavior toward counterfeit consumption would be helpful for the generalizability of our finding to the real world; in other words, this would increase the ecological validity of our present findings. Second, internal consistencies of the narrow facets of the Honesty-Humility factor were poor in Study 1. We attribute this to possible problems with increased inattentiveness of the participants who conducted the survey. Therefore, it is important to include several quality screening techniques (i.e., attention checks, bot checks) to confirm overall data quality (e.g., Arias et al., 2020). Furthermore, because we managed to replicate the findings of Study 1 in our second study, we conclude that our found negative association can be interpreted as reliable and robust.

## 4.2 Theoretical implications

The present research contributes to international marketing theory because, to the best of our knowledge, it is the first empirically based research paper that establishes the Honesty-Humility trait within the context of counterfeit consumption of luxury goods and that shows its reliable and medium sized predictive value for attitudes towards counterfeited luxury. However, future research should replicate this finding with different samples. Even Eisend et al. (2007) postulated that demographics such as age, education, employment status, family, gender, and income do not predict attitudes toward counterfeit consumption, it should be tested if the predictive influence of the Honesty-Humility trait is also robust within these different samples. Further, future research should replicate our findings with different methods, as for example by measuring actual rather self-reported behavior.

As already discussed, the present research clears up old research—so to say—by revealing that other traits that were recently indicated as significant predictors for counterfeit consumption do not withstand testing against the Honesty-Humility trait (i.e., self-concept and risk aversion). Importantly, we noted inconsistencies in the operationalization of these constructs (see the discussion of Study 2) and thus recommend future research to be more precise in defining relevant predictors.

## 4.3 Practical implications

How can the results found here be used to steer consumer behavior in the interests of companies and the government (i.e., to decrease counterfeit luxury consumption)? By helping to better understand the personality structure of people who have a positive attitude towards counterfeit consumption, this work provides useful information that can help to better target their interventions. In other words, understanding the personality of people who consume counterfeited goods is important in the applied context because it helps for a more effective targeting in anticounterfeiting campaigns.

Since Honesty-Humility turns out to be the most important characteristic for the prediction of counterfeit consumption, one starting point is to look at *where* people lower in Honesty-Humility spend time and how to reach them there. For example, one valid sign for people lower in Honesty-Humility is their high interest for gambling and financial speculation (Lee & Ashton, 2012). To frequently risk ample money by gambling or speculation expresses the desire to quickly get rich with low effort. Places where this is possible are for example the stock exchange, amusement halls, and of course certain services that are accessible via the Internet (e.g., online poker tournaments). Thus, this is where intervention campaigns can be placed to reach the identified target group.

However, it is not only important where this is done, but also the *content* of such a campaign must appeal to people with lower scores on Honesty-Humility. One possible starting point could be to address issues that are important to people with lower Honesty-Humility values, such as being perceived more valuable than others. For example, intervention campaigns could therefore address the fact that others can very quickly recognize a fake by sight due to the lower quality, which could then have a negative effect on the image of the person in question.

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#### Declarations

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