From Honesty–Humility to fair behavior – Benevolence or a (blind) fairness norm?

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ABSTRACT

Recent research has identified trait Honesty–Humility as a vital determinant of a variety of cooperative, fair, or pro-social behaviors. However, it is less clear what drives the link between Honesty–Humility and the tendency to exhibit fair behavior which we first demonstrate in a meta-analysis of prior work using the dictator game. To close this gap, we test two potential explanations, namely benevolence versus an internalized (blind) fairness norm. In a redistribution paradigm, we implemented an unfair situation in which participants and their hypothetical counterparts received asymmetric rewards for the same performance in a quiz. The asymmetry was either to the participants' advantage or disadvantage, manipulated experimentally. Finally, participants were empowered to redistribute all rewards at will. In line with the benevolence account, individuals high in Honesty–Humility established a fair distribution if they themselves were advantaged (thus making sure they do not exploit others) whereas they refrained from rectifying the asymmetry (by taking points from the other) if they were disadvantaged. Vice versa, the pattern cannot be accommodated by the idea of a (blind) fairness norm which would have implied that individuals high in Honesty–Humility establish an equal distribution irrespective of who is advantaged.

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Cooperation represents a key aspect of social behavior, fostering benefits of groups rather than individual agents (cf. Sullivan, Snyder, & Sullivan, 2008). A basic ingredient of individuals' inclination to cooperate is fairness (e.g., Arneson, 1982; Fehr & Schmidt, 1999), which – in distributive terms – denotes "the concern for how money or goods are distributed among individuals" (Kamas & Preston, 2012, p. 538). Understanding individual differences in fairness hence provides important insights into interpersonal as well as societal functioning. Correspondingly, many studies have investigated the relation between fairness and basic personality traits (e.g., Ben-Ner, Kong, & Putterman, 2004; Kurzban & Houser, 2001).

In recent years, research relying on the HEXACO Model of Personality (comprising the traits Honesty–Humility, Emotionality, Extraversion, Agreeableness, Conscientiousness, and Openness to Experience; e.g., Ashton & Lee, 2007; Lee & Ashton, 2004) has provided a fruitful approach and a more fine-grained understanding of the traits influencing fairness. The HEXACO model has emerged from lexical studies across various languages,

essentially representing a variant and extension of the classical Big Five framework (e.g., McCrae & Costa, 1985): Beyond factors that are equivalent across the two frameworks (Extraversion, Conscientiousness, and Openness), the HEXACO model encompasses variants of Emotionality (i.e., Neuroticism) and Agreeableness (see Ashton, Lee, & De Vries, 2014, for a recent review). In addition – and most prominently – the model proposes a sixth basic factor termed Honesty–Humility, specifically capturing individual differences in fairness.

Essentially, Honesty–Humility represents "the tendency to be fair and genuine in dealing with others, in the sense of cooperating with others even when one might exploit them without suffering retaliation" (Ashton & Lee, 2007, p. 156). As such, high levels of Honesty–Humility stand for sincerity, fairness, greed-avoidance, and modesty whereas low levels imply dishonesty, unfairness, greed, and pretentiousness. In line with this theoretical conceptualization, Honesty–Humility relates negatively to crime, delinquency (e.g., Dunlop, Morrison, Koenig, & Silcox, 2012; Van Gelder & De Vries, 2014), and counterproductive work behavior (e.g., Marcus, Lee, & Ashton, 2007) but positively to integrity (Lee, Ashton, Morrison, Cordery, & Dunlop, 2008) and fairness-related behaviors such as pro-social distribution decisions (Ackermann, Fleiß, & Murphy, in press; Hilbig, Glöckner, & Zettler, 2014).

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In particular, several studies (Hilbig, Thielmann, Hepp, Klein, & Zettler, 2015; Hilbig & Zettler, 2009; Hilbig, Zettler, Leist, & Heydasch, 2013; Thielmann & Hilbig, 2014; Thielmann, Hilbig, & Niedtfeld, 2014) have linked Honesty–Humility to fair behavior in the dictator game (for a recent review of personality influences on various games, see Zhao & Smillie, in press). In this paradigm, an individual is asked to divide an endowment at will between herself and an unknown other. Across studies, individuals high in Honesty–Humility gave more, thus refraining from abusing their power to exploit the other. Summarizing these findings in a meta-analysis ($N = 1231$), the sample-size weighted average correlation (cf. Field, 2001) between Honesty–Humility and dictator game giving was $r = .29$ and thus a medium-sized effect (Cohen, 1988).

Although these findings clearly demonstrate that individuals high in Honesty–Humility behave more pro-socially, the conclusions are merely relative. That is, such a positive association does not necessarily imply that individuals high in Honesty–Humility are also more inclined towards fair behavior in absolute terms – in the sense of sharing equally which most people (i.e., more than 80%) perceive to be the fair solution in the dictator game (Mellers, Haselhuhn, Tetlock, Silva, & Isen, 2010). To investigate this more directly, we re-analyzed the data referred to above, testing whether individuals high in Honesty–Humility are actually more likely to *share equally* in this game. Indeed, amongst individuals high in Honesty–Humility (i.e., those with values larger or equal to the median), 64.4% chose the equal split, whereas only 34.6% of their counterparts low in Honesty–Humility did so, $OR = 3.42$, 95% CI [2.71, 4.33], $\chi^2(1) = 109.48$, $p < .001$.[1] This finding clearly indicates that high levels of Honesty–Humility are not only related to more pro-sociality or non-exploitation in relative terms, but also to more fairness in absolute terms.

However, although extant evidence linking Honesty–Humility to fair behavior is consistent, it remains unclear *why* individuals with high levels of Honesty–Humility are more inclined towards fair behavior. Specifically, the empirical picture allows for two alternative explanations. First, the HEXACO theory suggests that this pattern is essentially due to *benevolence*. That is, Honesty–Humility is conceptualized in terms of non-exploitation, implying that individuals high in Honesty–Humility should be motivated to avoid having an edge over others (i.e., receiving more for similar input compared to others), but not mind the opposite. In simple terms, they may share equally in the dictator game due to their benevolent nature – placing high importance on justice for others, without insisting on justice for themselves.

Alternatively, extant evidence could also be accounted for by an internalized ("blind") *fairness norm* (i.e., a general preference for equality) in individuals high in Honesty–Humility. In terms of equity sensitivity (Huseman, Hatfield, & Miles, 1985, 1987), individuals high in Honesty–Humility might generally prefer equivalent input–outcome-ratios both for others and themselves and thus insist that no-one is under- or over-rewarded. In simple terms, they may share equally in the dictator game because this is the social fairness norm (Mellers et al., 2010), thus placing high importance on justice for both others and themselves.

The purpose of the present study was to disentangle these two explanations. The benevolence account implies a mechanism that may be summarized as "I need to ensure I do not get more than others; I should not take advantage of others" in individuals high in Honesty–Humility. The fairness norm account, by contrast, implies "I need to ensure we all get the same (for similar input)". So, to tease the two apart, we used a paradigm in which participants were asked to re-distribute points that they – and a

hypothetical other – earned through exerting (cognitive) effort in a quiz. Establishing an unfair situation, there were asymmetric rewards in the form of different gains (points earned) for the same number of correct solutions. Thus, the same effort and success in the quiz came with different outcomes. This asymmetry was either in favor of the participant (advantage-self) or in favor of the hypothetical other (advantage-other). Finally, participants could redistribute all points at will between themselves and the other. That is, participants were empowered to give points to or take points from the other and thus to increase or reduce the asymmetry (or leave it unaltered).

This redistribution paradigm allows for disentangling benevolence from an internalized fairness norm as the two make incompatible predictions: According to benevolence – and the HEXACO theory – individuals high in Honesty–Humility should use their redistribution-power to reduce asymmetry *only if* they themselves are in the advantageous position. That is, if participants get more points than the other for the same performance in the quiz, those high in Honesty–Humility should give points to the other to reduce this unfairness. However, if participants actually get fewer points in the quiz than the other, those high in Honesty–Humility should refrain from taking points from the other due to their unwillingness to abuse their power over the final distribution of points. Participants' final share should therefore be lower for individuals with high levels of Honesty–Humility, irrespective of the direction of asymmetry. In statistical terms, the benevolence account would thus essentially imply a main effect of Honesty–Humility on the final share.

By contrast, according to an internalized fairness norm, individuals high in Honesty–Humility should be motivated to establish fairness in general, that is, an equal split (e.g., Kahneman, Knetsch, & Thaler, 1986; Van Dijk & Vermunt, 2000). Hence, they should not only give points to the other if they themselves are profiting from the asymmetry, but also take points from the other if the other is in the advantageous position. In other words, the fairness norm account predicts that the final distribution is always fair for individuals high in Honesty–Humility – no matter who was initially advantaged. In turn, the fairness norm account would imply an interaction between Honesty–Humility and the direction of asymmetry (advantage-self vs. advantage-other) in predicting the final share. Specifically, it would predict that individuals high in Honesty–Humility decrease their final share if they are initially advantaged but also increase their final share if they are initially disadvantaged.

1. Methods

1.1. Materials

To measure Honesty–Humility, we used the German version (Moshagen, Hilbig, & Zettler, 2014) of the 60-item HEXACO Personality Inventory Revised (HEXACO-60; Ashton & Lee, 2009). For each of the six HEXACO dimensions, the inventory contains 10 items to be answered on a five-point Likert-type scale. Sample items for Honesty–Humility are "Having a lot of money is not especially important to me" and "I would never accept a bribe, even if it were very large". In our study, Cronbach's α for Honesty–Humility was .79.

As introduced above, individuals' redistribution decision in a *redistribution paradigm*[2] (that is, the final distribution of points in this paradigm) served as the main dependent variable – to differentiate between benevolence and internalized fairness norm. The

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[1] Regressing the dictator game allocation (equal split: yes vs. no) on the (continuous) Honesty–Humility scores in a logistic regression analysis yielded similar results, $OR = 2.90$, 95% CI [2.36, 3.55], $p < .001$.

[2] The paradigm is structurally similar to a variant of the dictator game in which dictators earn their endowment (Cherry, Frykblom, & Shogren, 2002). However, contrary to the standard dictator game, both individuals earn an endowment and, more importantly, there is asymmetry in the earnings (different payoff for the same effort or success).