

The Relation Between Humility and Tolerance and The Mediating Role of Empathy

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Abstract

Humility is recognized as a potential virtue that promotes prosocial behavior and enhances interpersonal relationships. Despite the growing interest in humility, there remains a lack of studies examining its predictive power in specific prosocial behaviors. Considering this research gap, our study investigates the role of humility in predicting empathy and tolerance. Specifically, we examined whether more humble individuals show higher levels of empathy and tolerance towards those with different views. Furthermore, we examine whether the relationship between humility and tolerance is mediated by empathy. This was examined in a survey with 150 participants. Our findings present significant correlations between humility, empathy, and tolerance. Specifically, participants with higher levels of humility demonstrated higher levels of empathy and tolerance. Importantly, our results indicated that empathy significantly mediated the relationship between humility and tolerance. Our findings contribute to advance knowledge on humility and its implications for fostering prosocial behaviors.

Keywords: humility, empathy, tolerance, openness, society, prosocial behaviors

The Relation Between Humility and Tolerance and The Mediating Role of Empathy

In recent years, there has been a growing interest among researchers in understanding the psychological factors that contribute to prosocial behaviors and the promotion of interpersonal relationships. A key term that has received considerable attention in this regard is humility (Worthington et al., 2017). Humility, often regarded as a virtue, entails an accurate assessment of one's own abilities and accomplishments, along with an openness to recognizing and appreciating the worth of others (Tangney, 2000; Davis et al., 2010, 2011, 2013; Exline, 2012; Exline & Hill, 2012). Also, humility has been strongly related to various positive outcomes, such as other-focused or prosocial behaviors (Exline & Hill, 2012; Worthington et al., 2017). Moreover, humble individuals are believed to perceive their own identity through interpersonal connections, acknowledging and valuing the self in relation to others (Ou et al., 2014). Thus, humility is characterized as a consistent pattern of behaviors that manifests during social interactions, transcending specific situations (Owens et al., 2013).

The main objective of the present study is to explore a novel aspect of humility as a virtue, specifically its potential role in fostering tolerance. This research aims to build upon previous findings that have demonstrated how humility promotes empathy towards others (Worthington, 1998), and empathy as a motivator of tolerance (Hoffman, 2000; Butrus & Witenberg, 2013). By connecting these prior research findings, we seek to extend our understanding by examining whether humility, mediated by empathy, contributes to the development of tolerance. While previous research has examined the individual effects of humility on empathy and empathy on tolerance, there is a notable gap in the literature regarding the comprehensive examination of the sequential relationship among all three constructs. Therefore, this study seeks to fill this gap by exploring the integration of these

relationships, providing a more comprehensive understanding of how humility, empathy, and tolerance are interrelated.

Why tolerance? Dealing with different views

People live together in the globalized world with different cultures, faiths, histories, and backgrounds. In this multicultural world, societies consist of a mix of individuals and groups who may hold different perspectives and opinions that others may not agree with. The question is how people deal with these differences: to what extent are they tolerant? Tolerance, defined as the ability to accept and respect of differences in beliefs, values, opinions, and behaviors of others, is considered an essential characteristic of diverse societies (UNESCO, 1995; Hjerm et al, 2020; Adelman et al., 2022;). For example, tolerance contributes to social cohesion and harmony within diverse perspectives (Butrus & Witenberg, 2013), enables individuals to engage in open-minded conversation and exchange ideas with those who have differing viewpoints (Adelman et al., 2022). Tolerance also cultivates empathy and compassion towards others (Butrus & Witenberg, 2013), and facilitates an environment for an altruistic society (Hoffman, 2000).

Tolerant individuals maintain their own strong views and beliefs while acknowledging that others have the right to dissent from those views and beliefs in their thoughts and actions. Moreover, tolerance itself is closely linked with pro-social behavior, equality, respect, and acceptance (Dusche, 2002). Therefore, tolerance allows for the accommodation of conflicting assertions of beliefs, values, and ideas. It serves as a significant principle that underlies social cohesion and peaceful coexistence among people of diverse cultures, religions, and backgrounds to avoid conflicts within society and promote harmonious relationships (Vogt, 1997). To promote harmonious relationships and societies, it is therefore important to understand what could increase tolerance.

What makes people tolerant? The role of empathy

Understanding the factors that influence tolerance is essential for promoting and exploring how individuals vary in their capacity to exhibit tolerant attitudes. Several valuable traits that are related to tolerance include openness, agreeableness, and empathy (Butrus & Witenberg, 2013). Particularly, empathy has been found to have a significant relationship with tolerance (Hoffman, 2000; Butrus & Witenberg, 2013). Empathy, defined as an emotional response triggered by perceiving or understanding someone else's emotional state (Feshbach, 1978), plays a crucial role in fostering tolerance (Monroe & Martinez-Marti, 2008). When individuals empathize with others, they become open to their feelings and perspectives, even when those individuals hold different viewpoints. Moreover, empathy has been identified as a mediator in the relationship between agreeableness and tolerance, particularly among individuals from different backgrounds (Witenberg, 2007). Individuals with high levels of empathic concern are more likely to exhibit behaviors that play a crucial role in reducing prejudice and fostering tolerance (Batson et al., 2002). These findings suggest that empathy plays a significant role in shaping individuals' judgments of tolerance, highlighting its importance in fostering tolerant attitudes.

Empathy motivates individuals to help others, leads to a sense of justice for others, and reduces hostility against them (Hoffman, 2000). It involves understanding and sharing others' emotions and is associated with pro-social and altruistic behaviors (Graziano & Eisenberg, 1997; Hoffman, 2000). Moreover, empathy helps individuals overcome personal biases and stereotypes, fostering an open-minded and inclusive mindset towards those who are different from oneself. By cultivating empathy, individuals are empowered to challenge preconceived notions and actively promote understanding and acceptance of others (Monroe & Martinez-Marti, 2008). Therefore, by allowing individuals to appreciate different perspectives and experiences, empathy promotes greater understanding and acceptance, thus facilitating the development of tolerance (Davis, 1983). The question, however, is which

people are likely to feel empathy and hence be tolerant. Characteristics that one needs are to be open to other people's views and not too full of oneself. Humble people may have these characteristics.

Who are empathic and tolerant? The role of humility

Humility is a complex concept with multiple dimensions, primarily defined as (a) the ability to accurately evaluate oneself and recognize personal limitations (b) a tendency to focus less on oneself and prioritize others, and (c) the capacity to regulate one's emotions effectively (Tangney, 2000; Davis et al., 2010; Exline & Hill, 2012). According to Owen et al. (2013), humility involves accurately assessing oneself, appreciating the strengths of others, and being open to new ideas and feedback. Additionally, humility can contribute to the reduction of conflicts and the fostering of openness to new and diverse ideas (Tangney, 2000; Morris et al., 2005; Harrell & Bond, 2006). During conflicts, humble individuals tend to demonstrate respect and empathy while accepting their subordinate position to higher authority (Davis et al., 2010). Humility contributes to forgiveness by fostering empathy, contrition, and a willingness to reconcile between both transgressors and victims (Worthington, 1998). Moreover, humble individuals show empathy, respect, and openness towards others who hold different perspectives (Means et al., 1990).

Wright et al. (2017) discovered a positive correlation between humility and tolerance. (see also, Davis et al., 2010). Hence, humility likely stimulates both empathy and tolerance. Individuals who are humble, consider diverse perspectives, and are more likely to demonstrate attitudes of tolerance. If an individual is humble, they are more focused on what other people think and take their perspective, which could stimulate tolerance. By including humility in our study, we aim to gain a deeper comprehension of the factors that influence tolerant behaviors and the development of empathy in diverse societies.

Present study

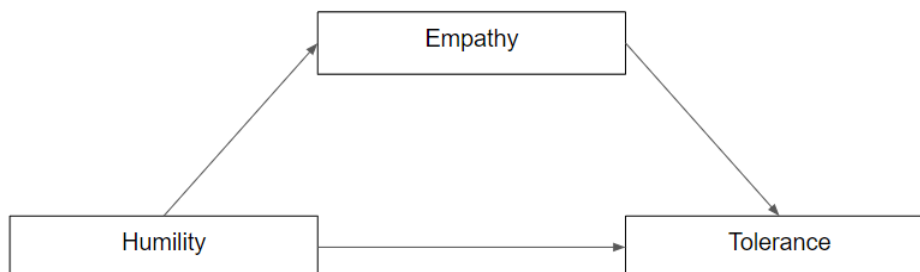
The present study aims to examine the role of humility as a predictor of tolerance, mediated by empathy. Building upon previous research that has highlighted the significance of empathy in predicting tolerance (Butrus & Witenberg, 2013), we seek to further explore the unique contribution of humility to this relationship. Humility, characterized by respect, empathy, and openness toward others (Davis et al., 2010), is hypothesized to positively influence tolerance by fostering empathic understanding and compassion. To investigate these relationships, we employed a two-step approach. First, we administered a self-report measure to assess participants' personal humility. Second, we utilized a self-made story-based approach, presenting participants with four distinct individual situations specifically designed to bring up responses related to tolerance and empathy. That is, we presented situations describing actors with which we expected people would disagree. We measured to what extent they empathized with the actors in the stories and tolerated their views.

The aim of this study is to investigate the correlation between humility and tolerance, while also exploring the potential role of empathy as a mediator. By examining these constructs in real-life situations, our study seeks to provide a comprehensive understanding of how humility influences tolerance, with empathy potentially playing a mediating role. We believe that this approach will enable us to gain deeper insights into the underlying mechanisms through which humility fosters tolerant attitudes and the involvement of empathy in this process. Our hypotheses are as follows:

Hypothesis 1: Individuals who are more humble feel more empathy towards those who do not share their views.

Hypothesis 2: Individuals who are more humble are more tolerant towards those who do not share their views.

Hypothesis 3: The relationship between humility and tolerance is mediated by empathy. See Figure 1 for the hypothesized model.

Figure 1.*Hypothesized model*

Note. The model was created to summarize the relationship between humility, empathy, and tolerance.

Method

Participants and design

The study included a sample of 155 undergraduate students from the Psychology program at the University of Groningen who voluntarily signed up to participate. We used a Monte Carlo Power Analysis to estimate how many participants we need to have for a power of .8. For the power, we set a correlation of at least .25 between humility and tolerance, and .3 between humility and empathy, as well as for empathy and tolerance to test the indirect effects that we aimed to explore. This resulted in a sample of 150. According to the preregistration of this study, we excluded five participants who completed less than 50% of the questionnaire, resulting in a final sample size of 150 participants. Participants received course credit in exchange for their participation.

The age range of participants varied from 16 to 28 years or older, with the majority falling within the age range of 20-21 (42%), followed by 18-19 (39.3%), 22-23 (11.3%), 24-25 (3.3%), 26-27 (2.0%), 16-17 (1.3%), and 28 or older (0.7%). Regarding gender

distribution, the sample included 40 males, 108 females, 1 participant identifying as non-binary or third gender, and 1 participant who preferred not to disclose their gender.

Participants were recruited from various continents, including 1 participant each from West Asia, East Asia, North America, South America, and Africa, while no participants were from Oceania. The majority of participants (145) were from Europe.

The study aimed to examine the potential associations between humility, empathy, and tolerance, with a particular focus on investigating the role of humility as a predictor of individuals' tolerant behaviors in different scenarios through the mediating variable of empathy. In other words, humility was included as the predictor variable, empathy as the mediating variable, and tolerance as the dependent measure. The study was approved by the ethics committee of the department of psychology.

Procedure

Participants were recruited for this study through the SONA system, and data collection was conducted using an online survey platform, 'Qualtrics'. Participants were asked to provide demographic information: gender, age, and on which continents they were raised.

After accessing the online survey, participants were informed of the study and asked to give their consent to participate. After this, they were asked to fill out the questionnaire. They could indicate their level of agreement or disagreement with all statements provided on a 7-point Likert scale (ranging from 1 (strongly disagree) to 7 (strongly agree)).

First, humility level of participants was measured. Participants completed two self-report measures of humility in a counterbalanced order. This was assessed using two self-report measures: the HEXACO-PI-R (Ashton & Lee, 2007) and the Humility/Modesty Subscale of the Values in Action Inventory of Strengths (VIA-IS, Peterson & Seligman, 2004).

To evaluate participants' levels of empathy and tolerance, a questionnaire was developed. This questionnaire presented participants with a series of four different stories, each depicting a unique situation. The stories concern different people: a man expressing support for the death penalty toward the murderer who killed his daughter, a man refusing life-saving medical treatment for his daughter based on religious or personal beliefs, a woman believing a woman's primary role is to take care of her family as being a housewife, and a man bringing pressure on his son to conform to his decisions regarding the son's life. We aimed to create stories that most participants would disagree with as we wanted to test whether they could still empathize with these people and be tolerant towards them. After each story, participants were asked to respond to a set of items assessing their empathy and tolerance levels with the person depicted in the story.

However, before reading these stories, participants were instructed to complete a measure of attitudes regarding the issues covered in the stories in order to test whether the stories were indeed counter-attitudinal. The examples are “I am in favor of the death penalty.”, “People should be allowed to refuse life-saving medical treatments of people under their care (e.g., their children) based on religious or personal beliefs.”, “A woman's primary role is to care for her family and home.”, and “Children should always behave in line with their parents' opinions and values.”.

After this, participants were debriefed and thanked for their participation in the study. During the debriefing, the purpose of the study was explained, and participants were given an opportunity to ask questions or provide feedback. Additionally, participants were thanked for their time and contribution to the research.

Measures

Humility. The HEXACO-PI-R is a comprehensive 100-item personality inventory developed by Ashton and Lee (2007) that consist with six dimensions of personality:

Honesty-Humility, Emotionality, Extraversion, Agreeableness, Conscientiousness, and Openness to Experience. In this study, we focused on the 16-item Honesty-Humility subscale of the HEXACO-PI-R, which specifically examines the qualities of sincerity, fairness, greed-avoidance, and modesty (Ashton & Lee, 2007). However, it is worth noting that only the items related to modesty on the HEXACO-PI-R can be considered as indicators of humility (“I am an ordinary person who is no better than others.”, “I wouldn’t want people to treat me as though I were superior to them.”, “I think that I am entitled to more respect than the average person is.”, and “I want people to know that I am an important person of high status.”). The other dimensions of the HEXACO-PI-R were combined into a scale and controlled for in the regression analysis. This approach allowed for isolating the unique effect of modesty on the dependent variable. The mean score of modesty from the HEXACO-PI-R was 5.31 ($SD = .98$). Cronbach’s α for the modesty in the current sample was .573. Although the Cronbach’s α value falls slightly below the commonly recommended threshold of .70, it still indicates a satisfactory level of internal consistency for the modesty items in the questionnaire used to measure humility.

Additionally, the study utilized the Humility/Modesty subscale of the VIA-IS, a 120-item self-report questionnaire (Peterson & Seligman, 2004). In the context of this research, we selected the 5-item Humility/Modesty subscale from the VIA-IS. The items are “I do not act as if I am a special person.”, “I never brag about my accomplishments.”, “I rarely call attention to myself.”, “I have been told that modesty is one of my most notable characteristics.”, and “People are drawn to me because I am humble.” The mean score of Humility/Modesty subscale of the VIA-IS was 4.18 ($SD = .89$). Cronbach’s α for the items in the current sample was .639. This value suggests an acceptable level of internal consistency for the questionnaires used to measure humility and indicates that the items within each questionnaire were reasonably consistent in measuring the intended constructs.

Empathy. Empathy was assessed using questionnaires consisting of four items measuring empathy for each of the four different stories, each presenting a unique scenario specifically designed to test empathy. The questionnaires to assess empathy of the participants included four items, with two items comprising the cognitive empathy scale and two items comprising the affective empathy scale (de Vos et al., 2018). The items focused on the specific actor described in the stories. The items were as follows: “I find it difficult in this case to take the perspective of X.” (recoded), “I can easily place myself in the shoes of X.”, “I empathize with X.”, and “I could not care less for X.” (recoded) The internal consistency or reliability of the combined empathy items in the four different stories was assessed using Cronbach's alpha, Cronbach's alpha (α) = .807 ($M = 4.70$, $SD = .85$). This Cronbach's alpha value suggests a good level of internal consistency among the empathy items, which demonstrates high confidence level to the measures used to assess participants' levels of empathy.

Tolerance. Similarly, tolerance was assessed using questionnaires includes three items measuring different expression of tolerance (Hjerm et al., 2020). The measurement reports each of the three dimensions of tolerance: “tolerance as acceptance of diversity”, “tolerance as respect for diversity”, “tolerance as appreciation for diversity.”, and we employed one item from each dimension. Moreover, the items focused on the specific actor described in the stories. That is, “X should have the right to live and thinks how they wish.”, “I respect X's beliefs and opinions.”, “I like to spend time with X, even if X think differently about important issues than me.” The Cronbach's α for the combined measures of tolerance regarding the different stories was .869 ($M = 4.73$, $SD = .97$). This value suggests a good level of internal consistency to scale participants' level of tolerance.

Result

Preliminary analyses

We conducted an initial analysis to examine the correlations between all variables included in the study. Table 1 presents the correlation coefficients between these measures.¹

Table 1.*Correlations between variables*

		HEXhum	VIAhum	Empathy	Tolerance	HEXother	Attitudes	age	gender
HEXhum	Pearson Correlation	1	.135	.307**	.194*	.249**	-.230**	-.147	.264**
	Sig. (2-tailed)		.100	<.001	.017	.002	.005	.072	.001
	N	150	150	150	150	150	150	150	150
VIAhum	Pearson Correlation	.135	1	.198*	.050	.218**	.151	-.182*	.119
	Sig. (2-tailed)	.100		.015	.539	.007	.066	.026	.148
	N	150	150	150	150	150	150	150	150
Empathy	Pearson Correlation	.307**	.198*	1	.397**	.209*	.134	-.005	.063
	Sig. (2-tailed)	<.001	.015		<.001	.010	.103	.955	.446
	N	150	150	150	150	150	150	150	150
Tolerance	Pearson Correlation	.194*	.050	.397**	1	-.056	.200*	-.023	-.153
	Sig. (2-tailed)	.017	.539	<.001		.494	.014	.779	.062
	N	150	150	150	150	150	150	150	150
HEXother	Pearson Correlation	.249**	.218**	.209*	-.056	1	-.108	-.024	.207*
	Sig. (2-tailed)	.002	.007	.010	.494		.189	.771	.011
	N	150	150	150	150	150	150	150	150
Attitudes	Pearson Correlation	-.230**	.151	.134	.200*	-.108	1	.063	-.303**
	Sig. (2-tailed)	.005	.066	.103	.014	.189		.440	<.001
	N	150	150	150	150	150	150	150	150
age	Pearson Correlation	-.147	-.182*	-.005	-.023	-.024	.063	1	-.326**
	Sig. (2-tailed)	.072	.026	.955	.779	.771	.440		<.001
	N	150	150	150	150	150	150	150	150
gender	Pearson Correlation	.264**	.119	.063	-.153	.207*	-.303**	-.326**	1
	Sig. (2-tailed)	.001	.148	.446	.062	.011	<.001	<.001	
	N	150	150	150	150	150	150	150	150

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

The results revealed significant small to moderate positive correlations between modesty, as measured by the subscale of the HEXACO-PI-R, and both empathy ($r(150)$

¹ To obtain an accurate result for gender-related data, a decision was made to modify the scale used for participants who identified as non-binary or third gender, as well as those who preferred not to disclose their gender as a value of 1.5 on the scale in order to be able to include their data in the analyses.

= .307, $p < .001$) and tolerance ($r(150) = .194, p = .017$). Additionally, we found a significant positive correlation between humility/modesty, as measured by the VIA-IS, and empathy ($r(150) = .198, p = .015$). These findings provide support for our hypotheses concerning the relationships between humility, empathy, and tolerance. However, we did not find a significant correlation between humility/modesty, as measured by the VIA-IS, and tolerance ($r(150) = .050, p = .539$). Notably, we found significant positive correlation between empathy and tolerance ($r(150) = .397, p < .001$). This finding provides support for the previous studies claimed that tolerance closely related to empathy (Butrus & Witenberg, 2013; Hoffman, 2000).

Moreover, we assessed the participants' attitudes towards the issues covered in the stories selected for the empathy and tolerance. The mean score indicates that, on average, participants held negative stands towards the issues presented (i.e., $M = 2.238; SD = 1.021$). Interestingly, the results presented in Table 1 revealed a significant positive correlation between the participants' attitudes and tolerance ($r(150) = .200, p = .014$) not with empathy ($r(150) = .199, p = .015$). These findings suggest that individuals who hold less closed or negative attitudes towards differences demonstrate higher levels of tolerance towards those differences. Additionally, we could find a significant positive correlation was found between gender and modesty, as measured by the subscale of the HEXACO-PI-R ($r(150) = .264, p < .001$). Specifically, female participants reported higher levels of humility than male participants. Age, on the other hand, was negatively correlated with humility/modesty, as measured by the VIA-IS ($r(150) = -.182, p = .026$), with younger participants reporting higher levels of humility than older ones.

Testing the hypotheses

The results were obtained through two different analysis methods, Model 1 and Model 2. In Model 1, no variables that were measured were controlled. Next, Model 2

involved controlling for certain variables, such as age, gender, attitudes, and other measures from the HEXACO-PI-R honesty-humility domain (sincerity, fairness, and greed avoidance). Controlling for these variables allows researchers to identify the effects of the variables of interest and examine their impact while consider potential factors.

To test our hypothesis 1 of the study, “People who are more humble feel more empathy with those who do not share their views.”, a regression analysis was conducted to explore the predictive power of humility to empathy. The result of regression model indicated the significance of the model with both humility scales. For Model 1 see in table 2, modesty, as measured by the subscale of the HEXACO-PI-R, predicted empathy, $R^2=.094$, $F(1,148) = 15.392$, $\beta = .307$, $t(148) = 3.923$, $p < .001$.

Table 2.

Regression Analysis between Modesty from HEXACO-PI-R and Empathy

	Model 1						Model 2					
	R^2	B	S.E.	95%CI	Beta	p	R^2	B	S.E.	95%CI	Beta	p
	.094						.162					
(constant)		3.293	.364			<.001		1.861	.664			<.001
HEXhum		.264	.067	[.131,.397]***	.307	<.001		.276	.071	[.136,.416]***	.321	<.001
Age								.036	.071	[-.102,.174]	.041	.610
Gender								.058	.166	[-.270,.385]	.030	.728
Attitudes								.190	.067	[.058,.323]**	.230	.005
HEXother								.164	.088	[-.010,.338]	.149	.064

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

a. Dependent Variable: Empathy

b. Predictors: (Constant), HEXhum (Model 1)

c. Predictors: (Constant), HEXhum, age, gender, attitudes, HEXother (Model 2)

In addition, humility/modesty, as measured by the VIA-IS, predicted empathy scale, $R^2=.039$, $F(1,148) = 6.067$, $\beta = .198$, $t(148) = 2.463$, $p = .015$. See table 3.

Table 3.

Regression Analysis between Humility/Modesty from VIA-IS and Empathy

	Model 1						Model 2					
	R ²	B	S.E.	95%CI	Beta	p	R ²	B	S.E.	95%CI	Beta	p
	.039						.089					
(constant)		3.905	.328			<.001		2.674	.660			<.001
VIAhum		.189	.077	[.037,.340]*	.198	.015		.128	.081	[-.031,.287]	.134	.115
Age								.031	.074	[-.114,.176]	.036	.672
Gender								.126	.171	[-.213,.465]	.066	.463
Attitudes								.125	.071	[-.015,.265]	.151	.079
HEXother								.202	.092	[.020,.385]*	.184	.030

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

- a. Dependent Variable: Empathy
- b. Predictors: (Constant), VIAhum (Model 1)
- c. Predictors: (Constant), VIAhum, age, gender, attitudes, HEXother (Model 2)

This suggests as expected that humility significantly predicted empathy. However, Model 2 showed different result in two different humility measurements. Modesty, as measured by the subscale of the HEXACO-PI-R, continued to significantly predicted empathy, $R^2=.162$, $F(1,148) = 5.576$, $\beta = .321$, $t(148) = 3.907$, $p < .001$ after controlling for the additional variables (see in table 2). However, humility/modesty, as measured by the VIA-IS, did not predicted empathy scale, $R^2=.089$, $F(1,148) = 2.824$, $\beta = .134$, $t(148) = 1.587$, $p = .115$ after controlling for the additional variables (see in table 3).

To test our second hypothesis “People who are more humble are more tolerant towards those who do not share their views.”, we conducted a regression analysis between the humility measure and tolerance. The results in Model 1 showed that modesty, as measured by the subscale of the HEXACO-PI-R, predicted tolerance, $R^2=.038$, $F(1,148) = 5.800$, $\beta = .194$, $t(148) = 2.408$, $p = .017$ (see in table 4).

Table 4.

Regression Analysis between Modesty from HEXACO-PI-R and Tolerance

	Model 1						Model 2					
	R ²	B	S.E.	95%CI	Beta	p	R ²	B	S.E.	95%CI	Beta	p

	.038			.131						
(constant)	3.716	.428		<.001	3.940	.773		<.001		
HEXhum	.191	.079	[.034,.348]***	.194	<.001	.294	.082	[.131,.457]***	.299	<.001
Age						-.048	.081	[-.209,.112]	-.049	.553
Gender						-.366	.193	[-.747,.016]	-.168	.060
Attitudes						.201	.078	[.046,.356]*	.213	.011
HEXother						-.093	.103	[-.296,.109]	-.074	.363

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

a. Dependent Variable: Tolerance

b. Predictors: (Constant), HEXhum (Model 1)

c. Predictors: (Constant), HEXhum, age, gender, attitudes, HEXother (Model 2)

This finding indicated a significant contribution of modesty to the prediction of tolerance. However, when examining the relationship between humility/modesty, as measured by the VIA-IS, and the tolerance scale, the regression analysis showed no significant prediction between two variables, $R^2=.003$, $F(1,148) = .378$, $\beta = .050$, $t(148) = .615$, $p = .539$ (see in table 5).

Table 5.

Regression Analysis between Humility/Modesty from VIA-IS and Tolerance

	Model 1						Model 2					
	R²	B	S.E.	95%CI	Beta	p	R²	B	S.E.	95%CI	Beta	p
	.003						.055					
(constant)		4.501	.382			<.001	5.099	.768				<.001
VIAhum		.055	.089	[-1.22,231]	.050	.539	.037	.094	[-.149,.694]	.034	.694	
Age							-.068	.086	[-.237,.101]	-.069	.430	
Gender							-.276	.200	[-.671,.119]	-.127	.169	
Attitudes							.150	.082	[-.013,.312]	.158	.072	
HEXother							-.028	.107	[-.240,.184]	-.022	.796	

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

a. Dependent Variable: Tolerance

b. Predictors: (Constant), VIAhum (Model 1)

c. Predictors: (Constant), VIAhum, age, gender, attitudes, HEXother (Model 2)

Thus, while modesty, as measured by the HEXACO-PI-R, was found to be a significant predictor of tolerance, the humility/modesty measure from the VIA-IS did not show a significant association with tolerance. These findings provide partial support for our second hypothesis regarding the relationship between humility, measured by different humility scale, and tolerance. Similarly, Model 2 showed that modesty, as measured by the subscale of the HEXACO-PI-R, significantly predicted tolerance, $R^2=.131$, $F(1,148) = 4.356$, $\beta = .299$, $t(148) = 3.572$, $p < .001$ after controlling for the additional variables (see in table 4). Humility/modesty, as measured by the VIA-IS, and the tolerance scale, the regression analysis showed no significant prediction between two variables, $R^2=.055$, $F(1,148) = 1.690$, $\beta = .034$, $t(148) = .394$, $p = .694$ after controlling for the additional variables (see in table 5).

Finally, we examined the mediation effect of empathy in accordance with our third hypothesis “The relation between humility and tolerance is mediated by empathy”. Table 6 presents the results of the mediation analysis.

Table 6.

Regression Analysis between Modesty from HEXACO-PI-R and Tolerance Mediated by Empathy

	Model 1						Model 2					
	R^2	B	S.E.	95%CI	Beta	p	R^2	B	S.E.	95%CI	Beta	p
	.163						.241					
(constant)		2.313	.500			<.001		3.171	.745			<.001
HEXhum		.079	.078	[-.076,.233]	.080	.316		.180	.081	[.019,.340]*	.183	.028
Empathy		.426	.091	[.247,.605]***	.373	<.001		.413	.091	[.233,.593]***	.361	<.001
Age								-.063	.076	[-.214,.088]	-.064	.410
Gender								-.389	.181	[-.747,-.032]*	-.179	.033
Attitudes								.122	.075	[-.027,.272]	.129	.107
HEXother								-.161	.097	[-.354,.031]	-.128	.099

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

- a. Dependent Variable: Tolerance
- b. Predictors: (Constant), HEXhum, Empathy (Model 1)
- c. Predictors: (Constant), HEXhum, Empathy, age, gender, attitudes, HEXother (Model 2)

Initially, the path from modesty (HEXACO-PI-R) to empathy was found to be positive and statistically significant in both Model 1 and 2 ($B = .264$, $S.E. = .067$, $p < .001$; $B = .276$, $S.E. = .071$, $p < .001$), indicating that higher levels of modesty are associated with increased levels of empathy. When we added empathy as a mediator, the direct path from modesty to tolerance was positive but not significant in Model 1 ($B = .079$, $S.E. = .078$, $p = .316$), but was positive and significant in Model 2 ($B = .180$, $S.E. = .081$, $p = .028$). However, the indirect effect of empathy on tolerance was positive and significant in both Model 1 and 2 ($B = .426$, $S.E. = .091$, $p < .001$; $B = .413$, $S.E. = .091$, $p < .001$), suggesting mediation. To further examine whether these were significant mediation, we conducted non-parametric bootstrapping analysis. The results revealed a significant mediated effect, with an indirect effect (IE) of .1126 and a 95% confidence interval (CI) ranging from .0485 to .1900. These findings provide support for our hypothesis that empathy plays a mediating role in the relationship between humility and tolerance. These results suggest the importance of empathy as a mechanism through which humility contributes to fostering greater tolerance towards diverse perspectives. However, note that these findings are based on correlations, hence no conclusion can be made with regard to casual influence.

Discussion

The aim of this research was to examine whether humility predicts tolerance through empathy. We hypothesized that (1) People who are more humble feel more empathy with those who do not share their views. (2) People who are more humble are more tolerant towards those who do not share their views. (3) The relation between humility and tolerance is mediated by empathy. In line with hypothesis 1, we found that humility indeed predicted empathy. This suggests that individuals who possess higher levels of humility are more likely to experience and express empathy towards those who hold different viewpoints. These

findings align with previous research suggesting that humility fosters prosocial attitudes and behaviors, including empathy (Worthington, 1998; Exline & Hill, 2012).

Regarding hypothesis 2, we found that individuals who are more modest are more likely to demonstrate tolerance towards those with divergent perspectives. However, this was only found for one of our measurements of humility, namely the HEXACO-PI-R (Ashton & Lee, 2007). The other humility scale, the Humility/Modesty Subscale of the Values in Action Inventory of Strengths (VIA-IS, Park et al., 2005), did not predict tolerance

Finally in line with hypothesis 3, we found that empathy at least partially mediates the association between humility and tolerance. Specifically, people who are more humble (according to the HEXACO-PI-R measure) are more likely to empathize with people who have different opinions and hence feel more tolerant towards them. This finding highlights the role of empathy as a mechanism through which humility contributes to fostering greater tolerance towards people with diverse perspectives.

Theoretical Implications

This study provides several theoretical contributions to the existing research on the relationship between humility, empathy, and tolerance. By examining the associations and predictive power of humility on empathy and tolerance, the study suggests possible underlying mechanisms and implications for social attitudes and behaviors. These theoretical implications contribute to a deeper understanding of the role of humility in promoting positive interpersonal dynamics and fostering a more tolerant society.

Firstly, the study findings provide evidence for a positive association between humility and empathy. This suggests that individuals who are more humble are more likely to exhibit empathetic tendencies towards others who do not share their views. This finding aligns with the character of humility, which involves demonstrating respect, empathy, and openness towards others (Means et al., 1990; Davis et al., 2010). Previous research has also

indicated that humility fosters prosocial attitudes and behaviors, including empathy (Worthington, 1998; Davis et al., 2010; Exline & Hill, 2012). Understanding the connection between humility and empathy can provide insights into how humility influences prosocial behavior and interpersonal relationships.

Secondly, the study reveals a positive association between humility and tolerance. Individuals who are more humble exhibit more tolerant attitudes towards others who do not share their views. This finding adds to the limited existing research on this topic, which has meaningfully underscored the importance of humility as a potential predictor of tolerance. These findings align with prior research (Means et al., 1990; Davis et al., 2010), further supporting the notion that humility plays a meaningful role in fostering acceptance and understanding among individuals with differing viewpoints.

Most importantly, the study highlights the mediating role of empathy in the relationship between humility and tolerance. This novel finding suggests that empathy serves as a mechanism through which humility positively influences tolerance. As far as we know, previous research has not investigated this mediation model. It highlights the importance of addressing attitudes and promoting empathetic responses to enhance tolerance within social contexts. It suggests that people who are more humble are likely to show more empathy (i.e., try to understand how others feel and take their perspective) to those who disagree, which makes them more accepting of these people's divergent viewpoints.

Furthermore, our study included factors such as age, gender, attitudes, and other HEXACO-PI-R scales (the qualities of sincerity, fairness, and greed-avoidance) of participants which can influence the result of the study to see whether the predicted relationships hold when you control for other variables that potentially influence this relationship (e.g., women may be more humble than men, people who are older may be less humble than who are younger, or people with less negative attitudes may be more tolerant).

However, despite controlling other variables, the predicted relations still hold. This suggests that various measurements of humility may have varied predictive power when it comes to explaining empathy and tolerance. Additionally, it indicates the importance of considering additional factors when seeking to understand the relationship between humility, empathy, and tolerance.

Strengths and limitations of the current findings

The findings of this study hold practical significance. Our findings contribute to our theoretical understanding of humility's role in promoting tolerance within diverse social contexts. This contribution is particularly significant based on the teachability aspect of humility (Owen et al., 2013). The identification of humility as a predictor of empathy and tolerance has practical implications for interventions aimed at fostering more inclusive and tolerant attitudes and behaviors. By targeting humility as a potential trait to cultivate, practitioners and educators can develop programs and strategies to enhance empathy and tolerance among individuals and within communities. Promoting humility may involve encouraging self-reflection, perspective-taking, and open-mindedness, which can ultimately contribute to the development of more studies related with humility.

However, several limitations should be acknowledged. Firstly, the study employed self-report measures, which are subject to response biases and may not capture the full complexity of these constructs. The analyses conducted with humility, as measured by the HEXACO-PI-R and VIA-IS, which are scales that are often used in humility research (e.g. Davis et al., 2010; Peters et al., 2011; LaBouff et al., 2012; Banker & Leary, 2020) revealed different results. This indicates that different measurements of humility may have distinct relations with tolerance. This emphasizes the significance of using multiple measures to accurately understand the multidimensional nature of humility. In comparison to the HEXACO-PI-R measurement, the humility measurement employed by the VIA-IS scale

presents participants with more direct statements and words related to humility. For instance, the VIA-IS scale includes items such as “People are drawn to me because I am humble.” In contrast, the HEXACO-PI-R includes items like “I think that I am entitled to more respect than the average person is.” However, as mentioned by David et al. (2010) in their study on relational humility, individuals who are truly humble may not explicitly claim to be humble. Therefore, the measurement of the Humility/Modesty Subscale of the Values in Action Inventory of Strengths (VIA-IS) seems to have limitations in accurately capturing an individual's level of humility. These findings contribute to the theoretical understanding of humility as a complex construct and provide insights into the measurement of humility in future research.

Future studies could incorporate objective measures or utilize multiple methods to enhance the validity of the findings. David et al. (2011) highlighted significant challenges in measuring humility through self-report assessments, as individuals who possess genuine humility often rate themselves as not being humble. This finding underscores the inherent difficulty in capturing humility accurately solely through self-report measures. It suggests that self-perceptions may not fully capture the complexity and nuances of humility, emphasizing the need for alternative assessment methods that go beyond individuals' own self-assessments. Further research exploring different measurement approaches that do not rely on self-reports could provide a more comprehensive understanding of humility and its underlying dimensions.

Additionally, it is important to acknowledge that the study focused on a specific context and population, which may limit the generalizability of the findings to other cultural or demographic groups. The sample consisted predominantly of college students from a psychology department in the Netherlands, meaning that the participants shared a similar educational background. Furthermore, 145 out of the 150 participants were from European

continents, introducing potential sample bias and limiting the external validity of the study. The homogeneity of the sample in terms of educational level and cultural background may restrict the extent to which the findings can be applied to individuals from different educational backgrounds and diverse cultural settings. The findings may not fully capture the variations in the relationships between humility, empathy, and tolerance that could exist across different populations, such as individuals from collectivistic countries or those with different educational levels would provide a more comprehensive and representative picture of the associations between these constructs.

Future Research

This study offers valuable insights into the complex interplay between humility, empathy, and tolerance. However, there are several avenues for future research that can further enhance our understanding of this topic. Firstly, conducting longitudinal or experimental studies would enable a better comprehension of the temporal relationships between humility, empathy, and tolerance. By examining these constructs over an extended period, or by manipulating individuals' levels of humility, it would be possible to observe its casual effects on tolerance in society.

Furthermore, the limitations of the empathy and tolerance measures used in this study raise the need for investigation into the influence of cultural factors on the relationship between humility, empathy, and tolerance. Since cultural values and norms differ across societies, exploring how cultural contexts shape these relationships would provide a more comprehensive understanding. Conducting comparative studies across different cultures would provide insights into the generalizability of the findings and enable the identification of specific cultural factors that may moderate the observed associations.

Moreover, future research could employ multidimensional measures of humility to gain a more comprehensive understanding of its various facets and their unique relationships

with empathy and tolerance. Exploring additional dimensions of humility, such as self-awareness, self-transcendence, or willingness to learn from others, would allow for the investigation of a broader range of humility-related characteristics and their contributions to empathy and tolerance.

Conclusion

This study highlights the associations between humility, empathy, and tolerance, the role of different measurements of humility, and the predictive power of humility on tolerance mediated by empathy. These theoretical contributions advance our understanding of the complex dynamics underlying humility, empathy, and tolerance, providing valuable insights for future research and interventions aimed at fostering a more inclusive and tolerant society.

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this case to take the perspective of May							
I can easily place myself in the shoes of May	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I empathize with May	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I could not care less for May	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
May should have the right to live and thinks how he wishes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I respect May's beliefs and opinions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like to spend time with May, even if she thinks differently about important issues than me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Story 4:Chul-soo

Chul-soo, a 50-year-old man, raises his son in South Korea with a strict belief that children should always follow their parents' opinions and values without question. This is common in Confucianism. Chul-soo has high expectations for his son and wants him to become a doctor or a lawyer, which are highly esteemed professions in Korean society. Chul-soo believes that this path would provide his son with the best opportunities for success and a comfortable life. The fact that his son may have different ideas about his future is no relevant for Chul-soo. Chul-soo wants his son to succeed and believes that his decisions are in his son’s best interest, which reflects Confucian values of paternalistic leadership.

