

Be it Ever so Humble: An Updated Account and Measurement of Humility

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Abstract

What does it mean to be humble? We review different accounts of humility, arguing that at the core, humility is the *epistemically* and *ethically aligned* psychological positioning of ourselves within the larger context of the universe—one in which we understand and experience ourselves as a small part of a larger universe and as one among a host of other morally relevant beings. This can be operationalized and measured along the dual dimensions of *low self-focus* and *high other-focus*. We discuss the development and validation of a new scale to measure humility along these two dimensions—the former breaking down further into religious and secular components—and provide evidence for the distinctness of humility from other related constructs, such as modesty and open-mindedness. We also show that people’s humility scores are related to their general ethical orientation, variables indicative of psychological health and wellbeing, and mature religious beliefs and practices.

Be it Ever so Humble:

An Updated Account and Measurement of Humility

Humility has a long and checkered theoretical past. While it has been touted as a most rare, desirable virtue (Francis of Assisi, 1215; Aquinas, 1274; Wirzba, 2008), others have scorned it, discounting—and even disparaging—its value (Hume, 1777/1960; Sidgwick, 1874/2011; Spinoza, 1677/1955), a few even arguing that it is a vice (Nietzsche, 1886/1966). And even those viewing it as a virtue have disagreed about its nature and function (Cottingham, 2006; Davie, 1999; Hare, 1996; Kellenberger, 2010; Kupfer, 2003; Nadelhoffer, Wright, Echols, Perini, & Venezia, 2015; Richards, 1988; Snow, 1995).

Humility is also empirically problematic. Whether virtue or vice, it is notoriously hard to measure (Davis, Worthington, & Hook, 2010; Exline & Geyer, 2004; Lee & Ashton, 2004; Rowatt, Ottenbreit, Nesselroade, & Cunningham, 2002; Rowatt et al., 2006; Tangney, 2000, 2002). This is because, like other virtues, it is difficult to determine whether someone possesses the requisite cognitive, affective, and motivational states by measuring only externally observable behaviors. A person can behave *generously* without actually being *generous*—e.g., she might regularly donate to a charity simply because wants to impress someone. Similarly, a person can behave humbly without actually being humble.

One useful alternative is to measure the relevant internal states through introspection (i.e., self-report). Unfortunately, this alternative is complicated when it comes to humility (Davis, et al., 2010; Tangney, 2000). Consider the statement “I am very humble”. It is not clear how genuinely humble vs. non-humble people would respond to this—and without knowing how self-report scores differ as a function of the underlying disposition, it is hard to know what they measure. This problem has led at least one prominent researcher to conclude that humility “may

represent one of those relatively rare personality constructs that is simply unamenable to self-report methods” (Tangney, 2000, p. 78).

In this paper, we will address both of these challenges. First, we will explore some theoretical issues concerning humility and then argue for a particular account of humility that we believe captures its two core features—namely, low self-focus and high other-focus. Second, we will briefly review previous measurement attempts, discussing some of the strengths and limitations of extant approaches. Finally, we will present a new scale that we specifically designed to bypass the theoretical and empirical problems that have traditionally impeded research on humility.

Theoretical Issues

While nearly all of the extant accounts of humility that we reviewed made reference to a kind of “shrinking” of the self—or, more specifically, the *value, esteem, care, and prioritization* given it—there are also striking differences between these accounts. For instance, according to perhaps the most historically prominent and influential view of humility, to be humble involves what Aquinas calls “self-abasement to the lowest place” (II-II, Q. 161, Art. 1, ad. 2). This “self-abasement” account of humility (Nadelhoffer, Wright, Echols, Perini, & Venezia, 2015) has been defended by a host of theologians and philosophers—for instance, St. Bernard of Clairvaux (1942), Kempis (1441/1940), Maimonides (1972), Horneck (1651), and Baxter (1830). Here, the paradigmatic act of humility is kneeling prostrate before God, as it signifies the recognition of one’s own lowliness and insignificance in relation to God’s greatness.

Christianity is not the only religion to reference this view. According to the Buddhist Middle Way, humility allows “a path out of the dualism of endless seesawing between arrogance and self-doubt” (Weber, 2006, p. 213) because “...whenever I associate with others *I will learn*

to think of myself as the lowest among all, and respectfully hold others to be supreme, from the very depths of my heart” (Langri Thangpa & Hopkins, 2014, p. 36, italics added).

This account also shows up in more secular settings. The *Oxford English Dictionary* (McArthur, 1998), defines humility as “the quality of being humble or of having a lowly opinion of oneself; meekness, lowliness, humbleness: the opposite of pride or haughtiness”. And a number of researchers have adopted a self-abasement view of humility (see Klein, 1992; Knight & Nadel, 1986; Langston & Cantor, 1989; Weiss & Knight, 1980). According to this account of humility, the humble person is someone “who accepts his lowly position as *due him*” (Taylor, 1985, p. 17, emphasis added).

Unsurprisingly, this way of conceptualizing the nature of humility has drawn substantial criticism—especially when it comes to humility’s status as a virtue. For instance, both Spinoza (1677/1955) and Sidgwick (1874/2011) have argued that it could not be virtuous to require people to think poorly of themselves or to have distorted views of their accomplishments and value (p. 161). On similar grounds, Hume considered humility a “monkish virtue”—one that “serve[d] no manner of purpose” (Hume 1777/1960, p. 108)—and Nietzsche considered it an emotional crutch used by the weak to help ease the “pressure of existence” (Nietzsche 1886/1966, p. 207).

While we agree that humility so defined is highly problematic, we see no reason to adopt this definition. On our view, defining humility in a way that requires self-abasement, low self-worth, and the like, unnecessarily problematizes humility, calling into question its status as a virtue. After all, the self-abasement view of humility is neither the only nor the most plausible conception of humility. So, rather than adopting this view and thereby inheriting all of its

theoretical baggage, it makes more sense to adopt a less problematic view of humility which is more amenable with treating it as a virtue to be valued rather than a vice to be disvalued.

In light of these considerations, we prefer to focus our attention on accounts of humility that cast it in a much more favorable light. As Emmons (1998) wrote:

Although humility is often equated in people's minds with low self-regard and tends to activate images of the stoop-shouldered, self-deprecating, weak-willed soul only too willing to yield to the wishes of others, in reality humility is the antithesis of this caricature. (p. 33)

According to this view, one need not be self-deprecating to be humble—one need only “keep one's accomplishments, traits, abilities...in perspective, even if stimulated to exaggerate them” (Richards, 1988, p. 256; see also Snow, 1995). In other words, humility does not require us to hold ourselves in low regard, but rather it merely requires us not to be *enamored with* ourselves. Like previous views, this account involves a “reduction” of the self—but here it involves a “decentering” rather than a “decreasing”. We cease to experience ourselves as centers of our own universe, recognizing that there is more to think about, and to *care* about, than ourselves.

As C.S. Lewis (2012) wrote, “Humility is not thinking less of yourself but thinking of yourself less”, implying that humility is not about *how* we think, but rather *how much* we think, about ourselves. The focus shifts outward—towards the needs and wellbeing of others. So conceived, humility would likely involve “hypo-egoic” states—such as those described in moments of flow and de-individuation—when people are fully occupied with activities, or transcendence, when we feel connected to something larger (Leary, Adams, & Tate, 2006). Such states involve a “quieting” of the self, resulting in a shift of awareness *away* from oneself and

towards other things (Leary & Terry, 2012), increased self-regulation (Leary, et al., 2006), and optimal functioning/well-being (Leary & Guadango, 2011).

It is arguably something like this conception of humility that motivated Tangney (2000) to identify humility as an accurate assessment of one's talents and achievements, and the ability to acknowledge one's mistakes, imperfections, gaps in knowledge, and limitations, along with an openness to new ideas, contradictory information, and advice, and a general appreciation of the value of other people and things. Others have defined humility along similar lines—such as having a moderate or accurate view of oneself (Baumeister & Exline, 2002; Emmons, 1999; Rowatt et al. 2002; Sandage & Wiens, 2001; Tangney, 2000, 2009), often accompanied by a relative lack of self-preoccupation (Tangney, 2000; Templeton, 1997) or desire to distort information, or otherwise “self-enhance” or make oneself look and feel better (Peterson & Seligman, 2004), as well as an open-minded willingness to admit mistakes, seek new information, and a general desire to learn (Hwang, 1982; Tangney, 2000, 2009; Templeton, 1997).

Still others have defined it in terms of related interpersonal qualities, such as the presence of empathy, gentleness, respect, and appreciation for the equality, autonomy, and value of others (Halling, Kunz, & Rowe, 1994; Means, Wilson, Sturm, Bion, & Bach, 1990; Sandage, 1999; Tangney, 2002, 2009), gratitude (Emmons, 2007), a willingness to share credit for accomplishments and acknowledge mistakes (Exline & Geyer, 2004; Tangney, 2000, 2009; Vera & Rodriguez-Lopez, 2004), an openness to new or divergent ideas (Gantt, 1976; Harrell & Bond, 2006; Morris, Brotheridge, & Urbanski, 2005; Neuringer, 1991; Tangney, 2000, 2009; Templeton, 1995), and a willingness to surrender oneself to God or some other transcendent power (Emmons & Kneezel, 2005; Murray, 2001; Powers, Nam, Rowatt, & Hill, 2007). As

Rowden (2009) put it, humility involves a shift from the narrow preoccupation with self *or* other into the broader consideration of self *and* other.

These personal and interpersonal qualities would naturally follow from (and contribute to) the overall shift in self-focus, “forgetting of the self”, that comes with humility. And humility facilitates a realistic appraisal of ourselves—our strengths, capacities, weaknesses, and limitations—precisely because it removes (or reduces) the need to *inflate* or *deflate* our own value or significance. Correspondingly, it becomes unnecessary to inflate or deflate our estimation of other people’s value or significance. And this “unencumbered” encountering of others as individuals in their own right naturally facilitates an appreciation of and compassion for their welfare, increasing our focus on (and interest in) its protection and promotion (LaBouff, Rowatt, Johnson, Tsang, & Willerton, 2012).

One worry about defining humility simply in terms of such qualities, however, is that it is not clear which of them *constitute* humility and which are simply *related to* humility—e.g., as a precursor, a parallel process, or a downstream consequence. Humble people may indeed possess and express all of the above attributes and qualities, and they may even do so *because* they are humble, but that does not mean that those attributes and qualities *are* humility. Therefore, we need an account of the *core* of humility.

Our account. We propose that the *core* of humility is a particular psychological positioning of ourselves within the larger context of the universe—one that is both *epistemically* and *ethically aligned*. The epistemic alignment comes from the understanding and experiencing of ourselves *as we, in fact, are*—namely, as finite and fallible beings that are part of something much larger than ourselves. This is often experienced spiritually, as a connection to God or some higher power, though it can also be experienced through an awareness of one’s place in, and

connection to, the natural or cosmic order (a state of “existential awareness”). The ethical alignment comes from the understanding and experiencing of oneself as only one among a host of other morally relevant beings, whose interests are as legitimate, and as worthy of attention and concern, as one’s own (a state of “extended compassion”). In this way, humility is a corrective to our natural tendency to strongly prioritize or privilege ourselves (our own needs, interests, benefits, etc.)—i.e., to seek “premium treatment” for ourselves, even at significant cost to others.

We further propose that this positioning manifests as—and thus can be operationalized and empirically measured along—two distinct, though related, dimensions.

Low self-focus. The first dimension is low “self-focus”. Not to be confused with low self-esteem or self-concern, it is rather the reduction in *self-prioritization* that follows from this proper psychological positioning. Behavioral manifestations of low self-focus commonly include (among other things) a lack of desire to self-aggrandize or self-promote and an openness to new and challenging information; a simplicity in self-presentation and/or life-style (i.e., modesty, open-mindedness, etc.).

High other-focus. The second dimension is high “other-focus”—the corresponding increase in one’s orientation *outwards*, specifically towards other morally relevant beings. This is accompanied by an increased prioritization of their needs, interests, and benefits and increased concern for their wellbeing, as well as an increased appreciation for the value of others, generally speaking. Behavioral manifestations of high other-focus commonly include, among other things, a greater acceptance of others’ beliefs, values, and ideas—even when different from one’s own—and an increased desire to help and be of service to others (i.e., tolerance, civic-mindedness, etc.).

This two-dimensional account of humility has received at least *prima facie* empirical support from qualitative analyses conducted elsewhere (Nadelhoffer et al., 2015). In addition, it makes clearer the status of humility as a virtue—perhaps even the rarest, most desirable of virtues—and suggests links to other desirable psychological states, traits, and capacities.

Empirical Issues

With a proposed account of humility in hand, we need to address the challenges associated with measuring it empirically. Given the potential problem with self-report measures discussed above (Davis et al., 2010; see also Tangney, 2002, 2009), some researchers have developed alternative measurement strategies. For example, some researchers rely on informant (3rd person) ratings of humility (Lee et al., 2009; Rowatt et al., 2006; and Davis et al., 2010), others on implicit association tests (Powers, Nam, Rowatt, & Hill, 2007; Rowatt et al., 2006), and still others on participants' comparisons of self to others (Rowatt et al., 2002). While each of these alternative approaches to measuring humility has value, we were reluctant to forgo the benefits of self-report entirely, so we decided to explore instead whether we could develop an approach that would at least *mitigate* (if not eliminate) the self-enhancement worry.

The two most prominent humility self-report measures are the Values in Action Inventory Modesty-Humility subscale (VIA; Peterson & Seligman, 2004), and the HEXACO Honesty-Humility subscale (Lee & Ashton, 2004). Unfortunately, neither of these scales was appropriate for our purposes, as their characterization of humility is inconsistent with our own. Plus, both rely on self-report questions that ask people about their humility *directly*—e.g., “I am always humble about the good things that happen to me”—which makes responses especially vulnerable to the “self-enhancement” worry discussed above. This aside, both scales are problematic because they conflate humility with other related—though arguably distinct—constructs, such as

modesty (both scales), honesty, sincerity, greed-avoidance, and fairness (HEXACO only). As a consequence, both scales include only a few items actually targeting humility rather than other constructs related to (but distinct from) humility—thus, neither scale provides us with fine-grained data concerning the construct of humility.

We examined three additional self-report measures for humility. The first two were Elliot's (2010) Humility Scale and Quiros' (2008) Healthy Humility Inventory. Both were developed for doctoral dissertations and neither (to our knowledge) has been published. The third self-report measure for humility we considered is the Dispositional Humility Scale found in Landrum (2011). However, while this scale purports to measure dispositional humility, it seems to measure instead two related but distinct things: (a) how much people like individuals who have certain character traits related to humility, and (b) the folk concept of humility as measured by people's explicit judgments concerning the character traits associated with "high levels" of humility. Moreover, because Landrum (2011) does not provide data on the validity of the scale (reporting instead on the results from an initial exploratory factor analysis), it's impossible to know whether these preliminary findings will hold up. Indeed, Landrum acknowledges in the title of the paper that the scale represents a "first approximation."

For these reasons, we decided to develop and validate our own scale, presented below.

Study 1: Exploratory Factor Analyses

Our goal was two-fold: 1) to develop a scale to measure what we take to be the core features of humility, and 2) to employ statements that avoided the vulnerability associated with self-report measures of humility. To do this, we developed statements designed to gauge people's psychological positioning relative to the "*bigger picture*" and to *others* (i.e., low self-focus and high other-focus), as well as to gauge people's attitudes about humility indirectly. All of the

statements were worded to minimize the triggering of self-enhancement and social desirability mechanisms (verified using the 13-statement Marlow-Crowne Social Desirability Scale; Ballard, 1992).

Method

We collected three separate rounds of data for exploratory factor analyses (EFA) to select the statements that best tapped into the underlying construct. We used principal components for our fitting procedure and the Kaiser criterion (1960) for factor extraction (eigenvalues > 1.0). We chose orthogonal (Varimax) rotation because we viewed the humility dimensions of low self-focus and high other-focus as orthogonal (i.e., people could be high in one without being high in the other). And we wanted the rotation most likely to pull apart the variance between the statements and highlight the distinct nature of the underlying constructs (Tabachnick & Fidell, 2007). Also, other humility scales had employed Varimax rotation.

Finally, following guidelines of Hair, Anderson, Tatham, & Black (1998), we retained statements with primary loadings above .400 “substantial loadings” for the next level of analysis—all other statements were eliminated. Given our treatment of the underlying constructs as orthogonal, we were only interested in statements that uniquely tapped into only one factor. Therefore, statements with secondary loadings greater than .300 on another factor(s) were also eliminated—though we made exceptions for statements with secondary loadings of no higher than .350, if the primary loading $> .600$.

Participants

We recruited participants using Qualtrics’ online panelist service. While all participants responded appropriately to attention checks, we nonetheless evaluated their responses and any that displayed excessive response perseverance were removed. This was defined as displaying at

least two of the following: an statement-response average > 6 or < 2 (scale: 1 to 7); an statement-response $SD < 1.0$; no statement responses crossing the midpoint of 4; statement-response minimum > 3 or maximum < 5 ; and/or an statement-response range < 3 .

Round 1. We recruited 620 participants: 48% male; 87% White/Caucasian, 6% Black/African-American, 3% Asian/Pacific Islander, and 4% Hispanic/Latino; age range from 18 to 69 years ($M = 41.4$, $SD = 14.7$). Response evaluation resulted in the deletion of 17 participants.

Round 2. We recruited 450 participants: 50% male; 78% White/Caucasian, 12% Black/African-American, 5% Asian/Pacific Islander, and 4% Hispanic/Latino; age range from 18 to 76 years ($M = 41.0$, $SD = 14.9$). Response evaluation resulted in the deletion of 3 participants.

Round 3. We recruited 443 participants; 48% male; 83% White/Caucasian, 8% Black/African-American, 4% Asian/Pacific Islander, and 5% Hispanic/Latino; age range from 18 to 80 years ($M = 48.5$, $SD = 13.7$). Response evaluation resulted in the deletion of 3 participants.

Materials and Procedure

For every round, participants were presented with a randomized order of statements developed to serve as potential items for our humility scale and were asked to rate their agreement, using a 7-point Likert scale anchored with 1: Strongly Disagree and 7: Strongly Agree. They also answered demographic questions and a 13-statement version of the Marlow-Crowne Social Desirability Scale (Ballard, 1992). This scale was reliable across administration rounds (Chronbach alphas ranged from .72 to .83). Higher social desirability scores reflect the tendency to present oneself in an unrealistically favorable light—of particular concern here—so we eliminated any statements too strongly correlated ($> .4$) with social desirability.

Round 1. At this early stage, wanted to cast our net as widely as possible, developing statements to span the full range of the two dimensions of our operational definition of humility. Therefore, our team (composed of two philosophers and three psychologists) developed a list of 210 statements that thoroughly canvassed the conceptual territory (URL link for complete list of statements will be inserted here—removed for blind review). The list included statements designed to capture *high other-focus* and *low self-focus*—both *religious* and *cosmic* aspects. It also included statements designed to measure potential behavioral manifestations of humility, such as *open-mindedness*, *public* and *private modesty*, *arrogance* and *entitlement* (reversed score), *moral flexibility* vs. *conviction*. And it included statements designed to gauge people’s *attitudes about humility*, without asking them directly whether they possessed it (e.g., “humility is a virtue”).

In order to make the scale more manageable, we first produced correlation matrices for each of the (hypothetical) constructs mentioned above and eliminated statements with weak (or no) relationships with the other associated statements. For example, we had included 29 statements designed to measure *open-mindedness* and eliminated 14 of them because they were not as strongly correlated with each other, as were the other 15 statements. We also did not keep statements too strongly correlated with each other, suggesting statement duplication ($> .7$). In general, we kept statements with correlations ranging between .4 and .6 (though a few had correlations up to .7). This eliminated 73 statements, narrowing the statements to 137. Finally, 8 statements were dropped for having high ($> .4$) correlations with social desirability, reducing the final set of statements for EFA to 129.

These statements were analyzed using EFA and a determination was made about which to eliminate, based on the criteria established above. EFA was conducted again, followed by the

elimination process, until we reached a point where no further statements qualified for elimination. In total, the EFA process culminated in 52 statements loading on 10 factors, discussed below. To confirm that Varimax was appropriate we conducted two additional orthogonal (Quartimax, Equamax) and two oblique (Oblimin, Promax) rotations on the final set of 52 statements. The factors that emerged for each rotation were virtually identical, verifying the appropriateness of using the Varimax rotation.

Round 2. In addition to the 52 statements from Round 1, we added 43 additional statements designed to refine statement wording and provide a more complete canvassing of the 10 factors, bringing the total number to 95 statements. The strongest correlation with social desirability was $r = .247$, so no statements were eliminated. In total, EFA process culminated in 50 statements loading on 10 factors (5 statements for each factor), discussed below. Additional orthogonal (Quartimax, Equamax) and oblique (Oblimin, Promax) rotations on the 50 statements revealed the same 10 factors with virtually identical loadings in each case.

To further explore the relationship between the different factors, we conducted an additional series of EFAs, forcing the number of factors (from 1 to 10) with the 50 statements in order to better ascertain the relationships between the factors (and underlying constructs they represent). This revealed that, of the 10 factors, those that captured low self-focus (*religious* and *cosmic humility*), high other-focus, and people's attitudes about humility most strongly hung together, loading onto one factor for the forced 1 factor through 6 factor EFAs (Fig. 1). This was consistent with our account, which places low self-focus and high-other focus at the "core" of humility.

Round 3. We started this round with the 20 statements related to this "core" (5 statements per factor, 4 factors). We then examined those statements we had chosen for the

cosmic humility factor for Round 2 that had failed to substantially load. Upon closer examination, we decided that two separate factors may actually be warranted—the original *cosmic humility*, which is the reduced self-focus that results from our connection to the larger cosmos as a whole (e.g., “I frequently think about how much bigger the universe is than our power to comprehend”), and something more like *environmental humility*, which is the low self-focus that results from our connection to the natural world and to other living species (e.g., “I often feel in awe of the natural splendor of the world”). Because of this, we decided to break these two apart, using some original statements and adding new ones. We also added new statements to *religious humility*, along with changing the wording of two of the Round 2 statements slightly—specifically, varying the title being used to refer to God (e.g., Supreme Being, Higher Power, Creator) to avoid factor loading based on wording. We added new statements to both *value of humility* and *high other-focus*. Finally, we added statements for another element of other-focus that we felt had not received sufficient coverage—the notion of *other credit* (i.e., seeing others as being central to your success, e.g., “I wouldn’t be where I am today without the help of other people”).

In total, we added 56 new statements, bringing the total to 76. One statement was correlated with social desirability ($r = .441$), so it was eliminated—the next largest correlation was $r = .245$. Once again, the remaining statements were analyzed using EFA. In total, the EFA process culminated in 25 statements loading on 5 factors (5 statements per factor)—the original four, plus *environmental (low self-focus) humility*. Additional orthogonal (Quartimax, Equamax) and oblique (Oblimin, Promax) rotations on the final set of 25 statements found the same 5 factors with virtually identical loadings.

Results and Discussion

None of the EFA rounds displayed problems with sampling adequacy. Bartlett's test of sphericity was significant each time, $X^2(1485) = 5560.21 - 17246.15, p < .001$, and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was excellent (.87 -.91, Pett, Lackey, & Sullivan, 2003).

Round 1

The EFA yielded 14 factors with eigenvalues above 1.0 that included 71 statements. Factor 1 included 7 statements related to the *religious aspect of low self-focus* (Cronbach's alpha = .91) and Factor 2 included 8 statements related to the *cosmic aspect of low self-focus* ($\alpha = .85$). Factor 3 included 7 statements related to *moral flexibility* ($\alpha = .86$), Factor 4 included 5 statements related to *open-mindedness* ($\alpha = .86$), Factor 5 included 6 statements related to the *value of humility* ($\alpha = .84$), Factor 6 included 5 statements related to *moral conviction* ($\alpha = .79$), Factors 7 and 8 included 10 statements related to *modesty* (internal vs. public, 5 statements each, $\alpha = .80$), Factor 9 included 4 statements related to *intolerance* ($\alpha = .85$), and Factor 10 included 3 statements related to *high other-focus* ($\alpha = .78$). The other four factors contained statements that were not easily classifiable, had weak loadings, and/or were too similar to statements in other factors—therefore, the statements from those factors were dropped. None of the 10 factors were strongly ($> .4$) correlated with social desirability (Factor 10 was the highest, $r = .192$).

Round 2

The EFA yielded 10 factors with eigenvalues above 1.0 that included 50 statements. Factor 1 included 5 statements related to the *religious aspect of low self-focus* ($\alpha = .92$), Factor 2 included 5 statements related to *internal modesty* ($\alpha = .90$), Factor 3 included 5 statements related to *public modesty* ($\alpha = .85$), Factor 4 included 5 statements related to *moral flexibility* (α

= .80), Factor 5 included 5 statements related to the *cosmic aspect of low self-focus* ($\alpha = .82$), Factor 6 included 5 statements related to *intolerance* ($\alpha = .79$), Factors 7 included 5 statements related to *high other-focus* ($\alpha = .79$), Factors 8 included 5 statements related to *moral conviction* ($\alpha = .80$), Factor 9 included 5 statements related to *open-mindedness* ($\alpha = .79$), and Factor 10 included 5 statements related to the *value of humility* ($\alpha = .79$). No factor was strongly ($> .4$) correlated with social desirability (Factor 7 was the highest, $r = .269$).

In order to explore the relationship between these different constructs more carefully, we ran these 50 statements through a series of forced factors (1-10) to see how statements loaded under restricted conditions. First, all 50 statements were forced into one factor, which resulted in statements from the following factors collapsing together: the *religious* and *cosmic aspects of low self-focus*, *value of humility*, *internal modesty*, *moral conviction*, and *high other-focus*. The statements from the other factors failed to substantially load. At two forced factors, the statements from *religious* and *cosmic aspects of low self-focus*, *value of humility*, *modesty (public and internal)*, and *high other-focus* all loaded on one factor. At three forced factors, the *moral conviction* statements substantially loaded along with *religious* and *cosmic aspects of low self-focus*, *value of humility*, and *high other-focus* on one factor. At both four and five forced factors, the *religious* and *cosmic aspects of low self-focus*, *value of humility*, and *high other-focus* statements substantially loaded on the first factor alone. At six forced factors, the *religious* and *cosmic aspects of low self-focus* and *value of humility* statements substantially loaded on the first factor, with the *high other-focus* statements now finally breaking off into their own (sixth) factor—helping to support the theoretical distinction between *low self-focus* and *high other-focus*. Everything else was the same. Collectively, these results suggest that while modesty and moral

conviction are strongly related to humility, the “core” of humility is as we operationalized it—*low self-focus* (religious/cosmic) and *high other-focus*—along with people’s attitudes about its value. This has important implications for the two dominant scales (VIA scale and the HEXACO), since they both collapse humility and modesty (and for the HEXACO, also honesty, sincerity, greed-avoidance, and fairness) together.

Round 3

The EFA yielded 6 factors with eigenvalues above 1.0 that included 41 statements. Factor 1 included 13 statements related to the *religious aspect of low self-focus* ($\alpha = .97$), Factor 2 included 7 statements related to the *value of humility* ($\alpha = .85$), Factor 3 included 6 statements related to *environmental aspect of low self-focus* ($\alpha = .85$), Factor 4 included 6 statements related to *high other-focus* ($\alpha = .85$), Factor 5 included 6 statements related to the *cosmic aspect of reduced self-focus* ($\alpha = .83$), Factor 6 included 3 statements related to *other credit* ($\alpha = .73$). In the end, we decided to drop this factor since only three of the eight statements substantially loaded and the Cronbach’s alpha was low. We also cut statements from the remaining five factors with the lowest factor loadings (and/or most statement similarity with other statements) in order to bring the final version of the scale down to 25 statements (five factors, five statements per factor). No factor strongly correlated with social desirability (Factor 1 was the highest at $r = .206$). Having settled on these 25 statements, we proceeded to collect a final round of data for a confirmatory factor analysis (CFA) to validate our scale.

Study 2: Confirmatory Factor Analysis

Methods

CFA statistically examines how well a specified model “fits” the data (Pedhazur & Schmelkin, 1991). It assesses how adequately each observed variable represents latent variables

via standardized regression weights. Researchers specify exact linkage patterns between observed variables and underlying factors a priori, based on theoretical knowledge and/or prior research and then test the goodness of this fit (Byrne, 1994). There are several measures available to assess the fit of a model. The Chi-square (X^2) test, the Goodness of Fit Index (GFI), and the Comparative Fit Index (CFI) all compare the similarity of the covariance matrix predicted by the model to the observed indicators' covariance matrix. Higher values (ideally above .90) for the GFI/CFI are desirable, as are non-significant X^2 values (Bentler, 1993)—though the X^2 statistic is considered too stringent for psychometric research (Hopwood & Donnellan, 2010; Paulhus & Carey, 2011; Raykov, 1998). The Root Mean Square Error of Approximation (RMSEA) and the Adjusted Goodness of Fit Index (AGFI) are also reported, which take into account model complexity. RMSEA values below .05 indicate good fit, between .05 and .08 fair fit, between .08 and .10 mediocre fit, and above .10 poor fit (Browne & Cudeck, 1993; MacCallum, Browne, & Sugawara, 1996). In addition, AGFI values above .80 are reasonable (Cole, 1987; Pedhazur & Schmelkin, 1991). Finally, Bozdogan's (1987) Consistent AIC (CAIC) is reported. Lower CAIC values are desired when making cross-model comparisons (Bentler, 1993) and should be lower than those reported for the saturated model (an alternative indicating all possible relationships among variables) and independence model (a null model containing no relationships). We used AMOS4 to perform CFA (Arbuckle, 1999) to test our five-factor/25-statement model, which specified 25 regressions (association between the 5 statements and the 5 latent variables), 5 covariances (i.e., curved arrows between each latent variables), and 25 variances (error terms for each observed variable) for a total of 55 parameters.

Participants

We exceeded the minimum criteria of 10 cases per parameter (Schreiber et al., 2006), collecting data from 600 participants with no missing data, using Qualtrics' panelist service. They were 50% male; 83% White/Caucasian, 10% Black/African-American, 3% Asian/Pacific Islander, 4% Hispanic/Latino; age range from 18 to 80 ($M = 49.9$, $SD = 13.5$). Given that we had statements all connected to the same underlying construct, we decided against eliminating response perseverence, unless responses were identical ($SD = 0$) for all 25 statements. One participant was eliminated for this reason.

Materials and Procedure

Participants were presented with statements from the final version of the Humility Scale and were asked to rate their agreement on the same 7-point Likert scale. No other statements were given.

Results and Discussion

Observed variables were assigned to their latent factors and the path weights were estimated using the standard maximum-likelihood method for all models. The analysis of the five-factor model yielded acceptable estimates for four of the five indices—GFI (.900), CFI (.926), and AGFI (.873). The RMSEA was .060, indicating fair fit. Also the CAIC values were lower for our model than either the saturated or independent model (1271.4 vs. 2404.0 and 8105.4). The standardized regression weights were all strong, their ranges being: Religious Humility .76 to .92, Cosmic Humility .66 to .78, Environmental Humility .57 to .82, Value of Humility .56 to .74, and Other Focus .69 to .79. We verified that the subscales resulting from the CFA were reliable using Cronbach alphas: *religious aspect of low self-focus* ($\alpha = .92$), *cosmic aspect of low self-focus* ($\alpha = .83$), *environmental aspect of low self-focus* ($\alpha = .83$), *value of*

humility ($\alpha = .78$), and *high other-focus* ($\alpha = .86$). Overall, the regression weights and goodness of fit indices suggest that the model fit is reasonable and the reliability analyses suggest that the statements are acceptably cohesive.

Since the modification indices for our original model indicated covariance between some of the error variables in the model (MIs between 10.3 and 40.4), we introduced correlations between these error variables (nine in total) into the model. This resulted in an improved model fit—specifically, GFI (.918), CFI (.947), and AGFI (.896) all increased and the RMSEA dropped to .051, indicating a good fit. The CAIC value dropped to 1169.0, remaining below either the saturated or independent model.

Finally, we also tested a second model, one that specified a higher-order humility factor. Compared to our primary model, there was no indication that this yielded a superior model (all fit indices were comparable (Fig. 2)).

Study 3: Reliability and Validity

Though a full vetting of our scale will be reported elsewhere (*citation removed for review*), below we provide preliminary evidence in support of our newly developed scale's reliability and validity. In particular, we examined our scale's relationship to existing humility scales, as well as to measures of self vs. other-orientation and psychological wellbeing.

Methods

Participants

We collected data through Amazon Mechanical Turk across six different rounds of data collection, conducted within a six-month period. In total, we had 644 participants fill out the surveys, with 20 discarded due to incomplete surveys, leaving 624 participants. Of these, 509 were unique (non-duplicates) participants: 48% female; 76% Caucasian, 8% African-American,

8% Asian-American, 5% Hispanic, and 3% other. We had 101 participants that filled out the surveys more than once, providing us with test-retest data.

Materials and Procedure

We administered our humility survey, along with several other relevant surveys. Specifically, we administered HEXACO honesty-humility subscale (Lee & Ashton, 2004), the VIA's modesty-humility subscale (Peterson & Seligman, 2004), along with Elliott's (2010) and Quiros' (2008) humility surveys. We also administered the following battery of scales:

- Humanitarian-Egalitarian Scale (Katz & Hass, 1988): measures attitudes about the importance of equality and a sense of community.
- Civic Responsibility Survey (Furco, Muller, & Ammon, 1998): measures attitudes about the importance of community and civic responsibility.
- Schwartz Value Scale (Schwartz & Bilsky, 1987): measures self (agency) vs. other (community) value orientations.
- Empathy Quotient Scale (Shaw, Baker, Baren-Cohen, & David, 2004): measures cognitive, emotional, and social empathy.
- Forgiveness Scale (Thompson, & Synder, 2003): measures one's willingness to forgive transgressions.
- Moral Identity (Aquino & Reed, 2002): measures the importance of being a good person to one's self-identity.
- Gratitude and Resentment Test (Watkins, Woodward, Stone, & Kolts, 2003): measures dispositional gratitude.
- Self-Compassion Scale (Neff, 2003): measures one's ability to extend compassion to oneself in instances of failure or perceived inadequacy.

- Life-Regard Index (Debats, 1990): measures one's sense of a meaningful life, both in terms of "framing" and whether it is experienced as meaningful and fulfilling.
- Psychological Wellbeing (Ryff, 1989): measures one's sense of autonomy, mastery and competence, personal growth, purpose in life, self-acceptance, as well as positive relations with others.
- Adult Attachment Scale (Collins & Read, 1990): measures secure vs. insecure attachment styles in adults.
- Faith Maturity Scale (Benson, Donahue, & Erickson, 1993): measures one's relationship to god or the divine and one's commitment to service to others.
- Religiosity Scale (Allport & Ross, 1967): measures people's extrinsic vs. intrinsic religiosity.

These were administered in several different rounds to minimize participant fatigue. We aimed for no more than 60 minutes, on average, to complete the battery. All rounds included our humility scale, a 13-item Social Desirability scale (Ballard, 1992), and demographic questions.

Results

Reliability: Internal Consistency

Coefficient alphas. We calculated the Chronbach's (1951) coefficient alphas for each of the Humility Scale sub-scales and for the scale as a whole. The alpha for the full scale was $\alpha = .914$, while the range of alpha as for the sub-scale was $\alpha = .954$ (Religious Humility) to $.840$ (Cosmic Humility).

Inter-item correlations. We calculated the scales' inter-item correlations, which revealed that the within sub-scale inter-item correlations are, as would be expected, higher (range of $r_s = .62-.84$) than the item correlations across subscales (range of $r_s = .09-.35$).

Split-half reliability. We created two scale averages by “splitting” the scale items (first split half = items 1, 2, 6, 7, 8, 11, 12, 16, 17, 18, 21, and 22; second split half = remaining items). We correlated participants’ scores on these averages and found a strong positive correlation, $r(450) = .858, p < .001$.

Social Desirability

Though the scale items were rigorously vetted for correlations with social desirability during the scale construction process, we nonetheless examined its correlation with each scale item (along with the sub-scale factors) once again and found no worrisome correlations, with the range being $r_s(501) = -0.120$ to $.228$.

Test-Retest Reliability

As mentioned above, 101 participants (50% female; 75% Caucasian, 8% African-American, 8% Asian-American, and 6% Hispanic) completed our humility scale more than once, giving us test-retest data with at least a two month-window in between. Time 1 and Time 2 scores on the humility scale were compared and there were no significant differences found for any of the sub-scales, $t_s(100) = -0.81- 0.11, p_s = .42-.92$.

Scale Validity

Other humility scales. We compared our scale to several other existing scales and found strong correlations where expected—for example, Quiros’ measure of spirituality was strongly correlated with religious humility, his measure of other focus with our measure of other focus. Interestingly, his measure of accurate self-knowledge was correlated with our measure of cosmic humility. There were some modest correlations with the HEXACO honesty-humility scale, most strongly with the fairness subscale, and with the VIA modesty-humility scale—most strongly

with our measure of other focus and value of humility, which measured people's attitudes about humility more directly (see Table 1 for details).

Importantly, the subscales of our humility scale were only moderately correlated with internal and public modesty (range of r s between .09-.39—the strongest correlation being between value of humility and internal modesty). They were also correlated with open-mindedness (range of r s between .34-.38—again, with the strongest correlation being with value of humility, $r = .54$).

Related constructs. We examined the relationship between our humility scale and several other related constructs. We made three specific predictions, discussed below. All of the correlations reported below were significant at $\alpha < .01$.

***Prediction 1: Ethical orientation.** Participants' scores on our subscales should be positively correlated with their general ethical orientation—and, specifically, their capacity for "other-regard".*

Participants' humility subscales were all positively correlated with their sense of civic-responsibility, $r_s(159) = .22-.36$ (Furco, et al., 1998), their commitment to benevolence and the upholding of community values and tradition, $r_s(160) = .24-.69$ (Schwartz & Bilsky, 1987), while all but their religious humility were positively correlated with the strength of their humanitarian-egalitarian ideals, $r_s(161) = .27-.40$ (Katz & Hass, 1988), their commitment to universalism, $r_s(160) = .39-.71$, and the strength of their moral identity, $r_s(156) = .24-.44$ (Aquino & Reed, 2002).

Participants' environmental humility and other focus were positively correlated with their emotional and cognitive empathy, $r_s(186) = .20-.51$, as well as their capacity for forgiveness, $r_s(155) = .20-.29$.

Prediction 2: Indicators of psychological health and wellbeing. *Participants' scores on our subscales should be positively correlated with variables associated with psychological health—and negatively correlated with variables associated with psychological disorder/disease.*

Participants' humility subscales were all positively correlated with their positive life-regard—specifically, the manner in which they “framed” their lives, $rs(156) = .19-.31$ (Debats, 1990)—and their sense of life purpose $rs(156) = .21-.36$ (Ryff, 1989).

Their environmental humility, value of humility—and, less so, their cosmic humility—scores were positively correlated with their agentic values of self-direction and achievement (though not power, stimulation, or hedonism), $rs(160) = .21-.48$ (Schwartz & Bilsky, 1987), as well as their sense of autonomy, environmental mastery, personal growth, and positive relationships—the latter of which was also correlated with other focus, $rs(156) = .21-.45$ (Ryff, 1989). They were positively correlated with increased mindfulness, $rs(154) = .33-.34$ (Neff, 2003) and a greater appreciation for the simple pleasures of life and other people, $rs(78) = .42-.60$ (Thompson & Synder, 2003). They were also positively correlated with secure attachment and negatively correlated with anxious attachment, $rs(155) = -.33$ and $.26$, respectively (Collins & Read, 1990).

Prediction 3: religiosity/spirituality. *Participants' religious humility scores should be positively correlated with variables associated with other religious beliefs, values, and practices.* Specifically, their religious humility was positively correlated with people's intrinsic (but not extrinsic) religiosity, $r(150) = .58$ (Allport & Ross, 1967), their level of faith maturity, both in terms of a relationship to the divine and a commitment to service, $rs(155) = .62-.76$ (Benson, et al., 1993).

General Discussion

The objective of this paper was to argue for what we think is the most promising account of humility and introduce a newly developed scale for its measurement, with preliminary evidence of its validation. The account we proposed is that humility is, at its core, an *epistemically* and *ethically aligned* psychological positioning of ourselves within the larger context of the universe—one in which we understand and experience ourselves as we are and as one among a host of other morally relevant beings. We further proposed that this positioning should be operationalized and empirically measured along two distinct, though related, dimensions: low self-focus and high other-focus.

We suggested that these dimensions get expressed in a variety of related qualities, attitudes, and behaviors—such as a lack of desire to self-aggrandize or self-promote and an openness to new and challenging information; a simplicity in self-presentation and/or life-style (i.e., modesty, open-mindedness, etc.), as well as a greater acceptance of others' beliefs, values, and ideas—even when different from one's own—and an increased desire to help and be of service to others (i.e., tolerance, civic-mindedness, etc.). And our analyses support this idea, at least insofar as the core of humility, while related, was nonetheless distinct from (and correlated with) modesty and open-mindedness. A more in-depth exploration of the relationship between these different constructs will need to be conducted.

We also provided preliminary evidence that humility, as we are measuring it, is strongly related to other ethically relevant variables, as well as a host of indicators of psychological thriving and wellbeing. This suggests that, when it comes to positive psychology—understanding how people develop to be healthy, happy, and morally decent human beings—humility is going to play an important role.

Limitations

One of the most important limitations is that we created the scale with a predominantly white and entirely US sample. Moving forward, it will be critical to examine how well it measures humility in other cultures, especially where their conception of humility differs from our own.

Future Directions

Given the definition of humility that we have argued for, it is possible that humility is not just one among other important virtues, but instead what we might think of as a “foundational” or “meta” virtue—i.e., a *pre-condition* for developing other virtues. After all, it seems likely that the full cultivation of other virtues (e.g., honesty, generosity, compassion, etc.) would require the very sort of psychological positioning that humility generates—a “decentering” of self that decreases the felt weight of our own needs and interests, while at the same time increasing the felt weight of the needs and interests of others. Of course, this supposition needs further theoretical and empirical support—but, for those of us interested in the development and expression of virtue and moral excellence, it warrants further inquiry.

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Table 1. Correlations of our Humility Scale with other scales.

	Quiros Health Humility				HEXACO Honesty-Humility					Elliott Humility Scale	VIA Mod-Hum
	Self-Knowledge	Other Focus	Openness	Spirituality	Fairness	Greed Avoidance	Modesty	Sincerity	HH Avg		
Religious	.226**	.234**	-.102	.795**	.297**	.034	-.056	.206**	.212**	-.027	.361**
Cosmic Humiity	.413**	.289**	.121	.209**	.128*	.103	.073	.096	.144*	.022	.264*
Environmental	.392**	.362**	.108	.095	.156*	.155*	.051	.114	.170**	-.031	.387**
Value of Humility	.301**	.420**	.054	.061	.293**	.080	.156*	.052	.218**	.104	.625**
Other Focus	.279**	.564**	.100	.204**	.224**	.143*	.203**	.143*	.253**	.231**	.604**
Humility Average	.441**	.511**	.051	.490**	.336**	.136*	.103	.198**	.296**	.076	.611**

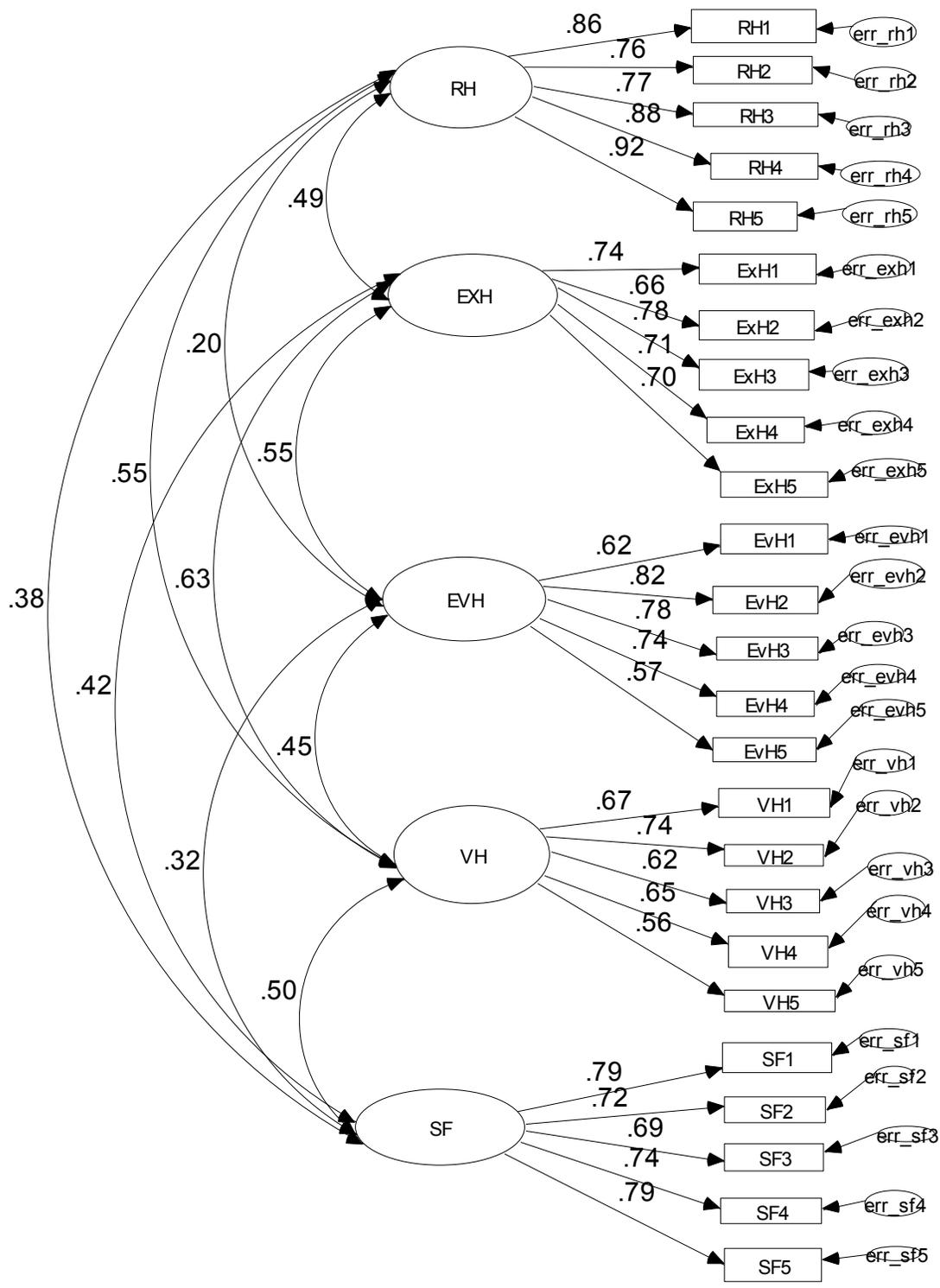
** Correlation is significant at the 0.01 level (2-tailed).

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

Figure 1.

	Forced Factors									
	1	2	3	4	5	6	7	8	9	10
Factor 1: Religious Humility	1	1	1	1	1	1		2	2	1
Factor 5: Cosmic Humility	1	1	1	1	1	1		5	6	5
Factor 7: Other Focus	1	1	1	1	1	6		8	9	7
Factor 10: Value of Humility	1	1	1	1	1	1		7	8	10
Factor 9: Open-Mindedness			3	4	3	3			7	9
Factor 2: Internal Modesty	1	1	2	3	4	4		3	3	2
Factor 3: Public Modesty		1	2	3	5	5		6	5	3
Factor 4: Moral Flexibility				2	2	2				4
Factor 6: Intolerance								4	4	6
Factor 8: Moral Conviction	1	2	1					1	1	8

Figure 2. Original CFA Model



APPENDIX

FINAL SCALE STATEMENTS

Religious Humility (Low Self-Focus: Existential Awareness)

1. I often feel humble when I think of a Higher Power.
2. God requires us to be humble.
3. Ultimately, there is a Supreme Being who gets all of the credit and glory for our individual accomplishments.
4. My Creator works through me in all my good actions.
5. I accept my total dependence upon the grace of God.

Cosmic Humility (Low Self-Focus: Existential Awareness)

6. I often find myself pondering my smallness in the face of the vastness of the universe.
7. I often think about the fragility of existence.
8. I frequently think about how much bigger the universe is than our power to comprehend.
9. When I look out at the stars at night, I am often deeply humbled.
10. I feel awe towards the mysteries and complexities of life.

Environmental Humility (Low Self-Focus: Existential Awareness)

11. Humans have to learn to share the Earth with other species.
12. We should always try to be in harmony with Mother Nature.
13. I often feel in touch with Mother Nature.
14. It's important from time to time to commune with nature.
15. Caring for humanity requires us to care about the environment.

Other Focus (High Other-Focus: Extended Compassion)

16. I often place the interests of others over my own interests.
17. My friends would say I focus more on others than I do myself.
18. I always find myself making sacrifices for others.
19. My actions are often aimed towards the wellbeing of others.
20. I care about the welfare others, at times more than my own welfare.

Valuing Humility (Indirect Measure of Humility)

21. Humility is a virtue.
22. I find humble people to be very admirable.
23. A good dose of humble pie is often necessary.
24. Teaching kids the value of humility is very important to their development.
25. It's important to always keep one's accomplishments in perspective.