

# Agreeableness and Its Consequences: A Quantitative Review of Meta-Analytic Findings

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## Abstract

Agreeableness impacts people and real-world outcomes. In the most comprehensive quantitative review to date, we summarize results from 142 meta-analyses reporting effects for 275 variables, which represent  $N > 1.9$  million participants from  $k > 3,900$  studies. Arranging variables by their content and type, we use an organizational framework of 16 conceptual categories that presents a detailed account of Agreeableness' external relations. Overall, the trait has effects in a desirable direction for 93% of variables (grand mean  $\bar{\rho}_M = .16$ ). We also review lower order trait evidence for 42 variables from 20 meta-analyses. Using these empirical findings, in tandem with existing theory, we synthesize eight general themes that describe Agreeableness' characteristic functioning across variables: self-transcendence, contentment, relational investment, teamworking, work investment, lower results emphasis, social norm orientation, and social integration. We conclude by discussing potential boundary conditions of findings, contributions and limitations of our review, and future research directions.

## Keywords

agreeableness, personality, meta-analysis, second-order meta-analysis, consequences, Big Five, HEXACO

A chef in Chicago blends her passion for food and social work to give away thousands of free, healthy meals to families in need across the city (Humankind, 2020). When a group of high school students learned that a Vietnam veteran in their town had been defrauded by a contractor and had been forced to live for a year in decrepit housing, they took action. In 51 days, the teens tore down the old house and built the man a new home from the ground up (Militarykind, 2021). In 2019, Americans donated an estimated US\$449.64 billion to U.S. charities, which is among the highest years for giving on record (Giving USA Foundation, 2020). Yet, despite the COVID-19 pandemic, in 2020, charitable giving increased by an estimated 2% (MacLaughlin et al., 2021). Whether it is contributing time, energy, or money, prosocial acts have meaningful consequences. They also share a common psychological antecedent: the personality construct of *Agreeableness*. Also labeled *love*, *likeability*, and *friendly compliance* (see Digman, 1990), Agreeableness is the personality trait primarily concerned with helping and building positive relationships with others.

Agreeableness meaningfully impacts people and real-world outcomes; however, focus on its external relations has been overshadowed by recent scholarly attention to its internal structure. Agreeableness' negative relations to the "dark traits" (Moshagen et al., 2018) have been subject to debate. Some scholars assert that the dark traits form a functionally

distinct construct (Moshagen et al., 2020), whereas others contend they merely reflect the opposite pole of Agreeableness (i.e., antagonism; Vize et al., 2021). Other scholars are seeking to uncover the nature and number of Agreeableness' lower order traits (e.g., Crowe et al., 2018; DeYoung et al., 2007) and to explore their diverse relations (e.g., Entringer et al., 2021; Soutter & Möttus, 2020). Other scholars still advocate the deconstruction of Agreeableness, as it has been traditionally understood, in favor of an alternative reconceptualization of the construct (see Ashton & Lee, 2007; Ashton et al., 2014).

Although we recognize the abovementioned efforts to explicate the internal and structural validity evidence, we argue that a renewed focus on the external validity evidence is needed. Namely, a quantitative review of Agreeableness' effects for consequential variables across the lifespan (cf. Ozer & Benet-Martinez, 2006), which would facilitate a synthesis and a functional summary of decades of research on this construct. The difficulty, however, is that the

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Agreeableness literature is massive—it encompasses effects for hundreds of variables, investigated across myriad studies, and reported in thousands of articles that are scattered throughout the research record. Although an exhaustive summary of the empirical evidence is not possible, an alternative solution is to review findings that are reported in existing meta-analyses (Wilmot & Ones, 2019; Wilmot et al., 2019).

Accordingly, we quantitatively review meta-analyses reporting effects of Agreeableness for consequential variables over the lifespan. Altogether, we identify 142 distinct meta-analyses that report independent effects for 275 unique variables, representing  $N > 1.9$  million participants across  $k > 3,900$  studies. We update all these estimates using a common set of corrections so that statistical artifacts are similarly addressed across contributing records. Then, when possible, we combine independent meta-analyses via *second-order meta-analysis* (Schmidt & Oh, 2013). We also analyze effects of Agreeableness' lower order traits for 42 variables from 20 meta-analyses.

In view of the considerable array of findings, we draw on existing organizational schemas (Ozer & Benet-Martínez, 2006; Wilmot et al., 2019), as well as theoretically relevant models of personality and motivation (Kanfer et al., 2017), psychological well-being (Anglim et al., 2020), physical health (Bleidorn et al., 2020), prosocial behavior (Habashi et al., 2016), leadership (DeRue et al., 2011), job attitudes (Judge et al., 2017), performance (Campbell & Wiernik, 2015), career success (Ng et al., 2005), and antisocial behavior (Vize, Miller, & Lynam, 2018), to posit a framework of 16 conceptual categories of variables that are arranged under four general content domains: (a) individual (motivational constructs, personal values, psychological health, physical health, and medical conditions), (b) interpersonal (interpersonal attitudes, collaboration, and leadership), (c) work/school (vocational interests, work attitudes, performance, and extrinsic career success), and (d) antisocial (dark traits, antisocial attitudes, counterproductivity, and turnover/accidents). Using the evidence, we seek to answer four major research questions: (a) How helpful is Agreeableness for consequential variables across the lifespan? (b) In which categories does it have its most helpful effects? (c) How do Agreeableness' lower order traits contribute to these effects? and (d) What themes capture the characteristic functioning of Agreeableness across consequential variables?

This article makes three major contributions to the literature. First, we present the largest, most comprehensive quantitative review of Agreeableness' consequential effects available in the scholarly record. By organizing variables across 16 conceptual categories, we provide a rich and detailed summary of Agreeableness' effects across key domains of life. Overall, the trait displays effects in a helpful direction for 93% of variables and has a grand mean effect of  $\bar{\rho}_M = .16$  ( $SD = .13$ ), which shows its generally favorable contribution to most consequential external variables.

Second, we develop a distribution of Agreeableness' effects. Using variables with effects  $\bar{\rho} \geq .20$ , in tandem with extant theory, we synthesize eight themes that concisely capture the characteristic functioning of Agreeableness. Specifically, (a) *self-transcendence* (i.e., aspirations to grow as a person and connect with the transcendent), (b) *contentment* (i.e., acceptance of and adjustment to life), (c) *relational investment* (i.e., positive relationships), (d) *teamworking* (i.e., coordination with others), (e) *work investment* (i.e., willingness to expend effort), (f) *lower results emphasis* (i.e., lower productivity outcomes and greater leniency), (f) *social norm orientation* (i.e., norm awareness and compliance), and (g) *social integration* (i.e., integrability into social roles and institutions). Established from the evidence, the themes serve as a firm foundation of knowledge and as a scaffold for future research and theory. Third, we offer an integrative hierarchical model of Agreeableness, which organizes 10 lower order traits across two models of personality, based on an integration of their consequential external effects. Findings display traits' predictive utility and their divergent functioning (e.g., the compassion aspect contributes to self-transcendence, the politeness aspect contributes to social integration, and the cooperativeness facet contributes to teamworking), which provides a fuller account of Agreeableness' characteristic functioning. The lower order trait evidence also has implications for assessment (e.g., the Big Five aspect of politeness and HEXACO honesty–humility are largely functionally overlapping constructs) and we provide recommendations for future research. Altogether, our article advances psychological science by presenting the most exhaustive treatment anywhere of the external consequences of Agreeableness; it acts as a summary of past scholarship and as a helpful guide for future work.

## Agreeableness

### Theoretical Foundations

Individual differences in altruism, sympathy, cooperativeness, honesty, and modesty have been a subject of significant group and social interest from time immemorial. More recently, this pattern of behavior has been organized under the label of Agreeableness (Norman, 1963; Tupes & Cristal, 1961/1992). The prototypical *agreeable* person is sympathetic, considerate, truthful, supportive, and arouses liking in others. By comparison, the prototypical *disagreeable* person is critical, skeptical, hostile, condescending, and manipulative of others (Graziano & Tobin, 2017).

Agreeableness is core to all major descriptive models and theories of personality (Ashton & Lee, 2007; Costa & McCrae, 1992; Digman, 1990; Goldberg, 1990; Tellegen & Waller, 2008; Wiggins, 1991). Agreeableness concerns motivation to maintain positive relationships (Graziano & Eisenberg, 1997), ability to empathize with the perspectives of others (Nettle & Liddle, 2008), and tendencies to cooperate

and coordinate goals with others (Van Egeren, 2009). It has links to brain regions implicated in decoding the mental states of others (i.e., theory of mind; T. A. Allen et al., 2017; Andrews-Hanna et al., 2014) and empathic concern (Hou et al., 2017), as well as processes involved in social accommodation and self-regulation of aggression (Graziano & Habashi, 2010; Meier et al., 2006). Agreeableness is genetically heritable ( $h = .35$ ; Vukasovic & Bratko, 2015), but environmental effects do influence its phenotypic expression (Briley & Tucker-Drob, 2014). Concerning assessment, Agreeableness scores correlate across different measures ( $\bar{r} = .47$ ; Pace & Brannick, 2010), assessment occasions (test–retest  $\bar{r} = .54$ ; Roberts & DelVecchio, 2000), and rating sources (interrater reliability and self–other consensus  $\bar{\rho} = .40$ ; Connelly & Ones, 2010; cf. also Kim et al., 2018). Women tend to score higher in Agreeableness than men ( $\bar{\delta} = .19$ ; Murphy et al., 2020), but racial/ethnic group differences are effectively nil in large samples (Foldes et al., 2008). Levels of Agreeableness also change over the life course; scores tend to trend negatively from late childhood into adolescence, then trend positively into emerging adulthood, and then, again, trend higher into middle age (Roberts et al., 2006; Soto et al., 2011; Specht et al., 2011).

Taken together, the scientific literature indicates that individuals higher in Agreeableness are genetically predisposed and environmentally influenced to be more motivated by the goal of cultivating and maintaining positive relationships. Because these tendencies are relatively stable after early adulthood, they have major implications for consequential variables over the lifespan.

### An Integrative Hierarchical Model

Considerable evidence shows that personality can be modeled using a general framework, which is organized hierarchically and exhibits a complex structure (Markon et al., 2005; Stanek & Ones, 2018). As one of the Big Five (or Five-Factor Model) traits, Agreeableness is properly conceptualized as a *general factor*, which means it is made up of the covariance of its associated characteristics of altruism, straightforwardness, cooperativeness, and so on (Edwards, 2001). Although the preponderance of extant research, particularly in social and organizational psychology, treats Agreeableness as unidimensional, a growing body of evidence shows the usefulness of modeling it as a hierarchical and multidimensional construct (e.g., Anglim et al., 2020; Vize, Miller, & Lynn, 2018).

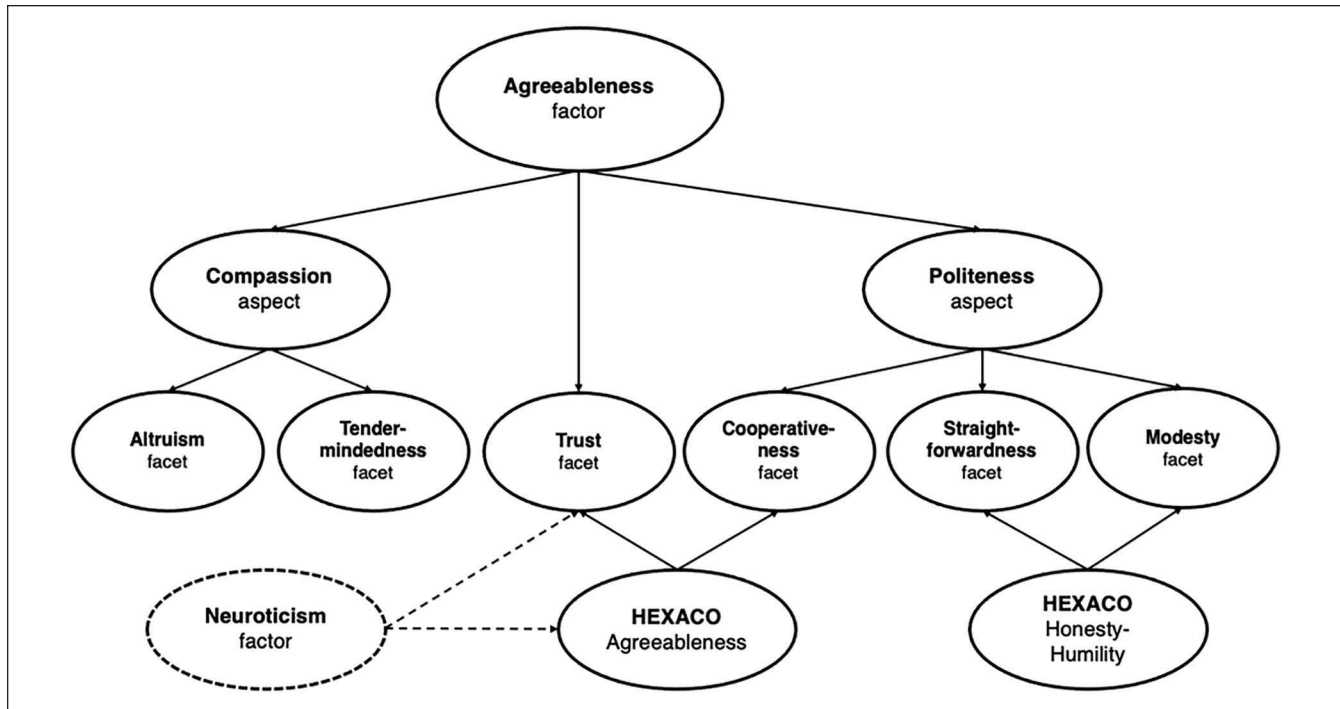
Meta-analyses and multi-inventory studies of the substructure of Agreeableness (Crowe et al., 2018; Davies, 2012; Judge et al., 2013; Ludeke et al., 2019) indicate that it is a hierarchical construct with two trait levels: meso-level *aspects* (DeYoung et al., 2007) and micro-level *facets* (cf. Costa & McCrae, 1992). The *compassion* aspect consists of two facets: *altruism* (also labeled *nurturance* [e.g., Wiggins, 1991]) and *tendermindedness* (or *sympathy*; Goldberg et al.,

2006). It reflects tendencies for emotional attachment to and concern for others. It is also theoretically and empirically related to empathy (DeYoung, 2015; Hou et al., 2017) and is chiefly responsible for the effects of Agreeableness for prosocial behavior (Habashi et al., 2016). The *politeness* aspect comprises three facets: *straightforwardness* (also labeled *non-manipulativeness* [e.g., Davies, 2012] or *morality* [e.g., Goldberg et al., 2006]), *modesty*, and *cooperativeness* (or *compliance* [Costa & McCrae, 1992]). Politeness reflects tendencies for suppressing and avoiding aggressive or norm-violating impulses and behavior. It is linked to emotional regulation and the behavioral inhibition system (DeYoung, 2015; Smits & Boeck, 2006). Neuroscientific findings suggest that the two aspects have distinct neurobiological links to dopamine (compassion; Depue & Morrone-Strupinsky, 2005; DeYoung, 2013) and serotonin (politeness; DeYoung et al., 2007; Wright et al., 2019), which may partly explain their respective approach-versus-avoidance functions. Finally, the *trust* facet is a better marker of global Agreeableness than either aspect. However, because it blends variance from Agreeableness and (low) neuroticism (cf. McCarthy et al., 2017; Woods & Anderson, 2016), trust has been labeled a “compound trait” (Stanek & Ones, 2018; Appendix B). This concept of blending or dividing variance across domains is relevant to the HEXACO model.

The HEXACO model of personality (Ashton & Lee, 2007) is a more recent model of trait structure. In this model and its related scales, variance associated with Agreeableness is divided across three factors: honesty–humility, agreeableness, and emotionality<sup>1</sup> (cf. Ashton et al., 2014). *Honesty–humility* involves truthful, fair, and modest behavior; it relates strongly to the politeness aspect of Agreeableness (Ludeke et al., 2019). Furthermore, as Figure 1 displays, external relations of honesty–humility can be estimated using the two facets of straightforwardness and modesty (see Crowe et al., 2018, Table 3). *Agreeableness* concerns forgiving, gentle, and patient behavior. It, too, relates moderately to politeness but also relates strongly negatively to neuroticism’s aspect of *volatility*, which concerns the expression of anger (DeYoung et al., 2007; Ludeke et al., 2019). Evidence shows that cooperativeness and trust facets can be used to estimate external relations to agreeableness (Crowe et al., 2018, Table 3). Thus, Figure 1 presents our integrative hierarchical model of Agreeableness, which organizes 10 traits across two structural models of personality.

### A Quantitative Review of Meta-Analytic Findings

Agreeableness has been studied extensively as a predictor and correlate of consequential external variables. Despite its inclusion in dozens of meta-analyses, a comprehensive review of its findings has never been undertaken. Drawing on evidence from 142 published meta-analyses identified and retained using the approaches detailed below, we answer the following questions: To what extent is Agreeableness



**Figure 1.** Hierarchical structure of the lower order traits of Agreeableness and their interrelations with HEXACO honesty–humility and agreeableness (based on Crowe et al., 2018; DeYoung et al., 2007; Ludeke et al., 2019). The negative relations of neuroticism are denoted by dashed lines.

helpful across the lifespan? Where does it display its strongest effects? How do its lower order traits contribute? And what themes characterize its functioning?

## Method

### Literature Search

We used four search strategies to locate Agreeableness meta-analyses appearing between January 1990 and January 1, 2021. We used the following search string in (a) PsycINFO [(meta-analy\* or quantitative review or systematic review).m\_titl. and (personality or temperament or trait or (five factor model) or ffm or (big five) or empathy or agreeableness or emotional stability or (neuroticism) or conscientiousness or extraversion or openness).ab] and (b) a parallel search string in the Web of Science, both of which limited records to the English language only, (c) we gathered studies from the References of reviews of personality meta-analyses (i.e., Barrick et al., 2001; Borghans et al., 2008; Brandstatter, 2011; Connelly et al., 2014; Judge et al., 2008; Ones et al., 2005, 2007; Ozer & Benet-Martínez, 2006; Roberts et al., 2007; Schmidt et al., 2008; Wilmot & Ones, 2019; Wilmot et al., 2019), and (d) we conducted manual searches, on December 31, 2020, for in-press articles in outlets that frequently publish meta-analyses (i.e., *European Journal of Personality*, *European Journal of Work and Organizational Psychology*,

*Human Performance*, *International Journal of Selection and Assessment*, *Journal of Applied Psychology*, *Journal of Management*, *Journal of Occupational and Organizational Psychology*, *Journal of Personality and Social Psychology*, *Journal of Research in Personality*, *Journal of Vocational Behavior*, *Leadership Quarterly*, *Personality and Individual Differences*, *Personality and Social Psychology Review*, *Personnel Psychology*, *Perspectives on Psychological Science*, *Psychological Bulletin*). The total number of records identified through electronic, reference, and manual searching was 5,933. After removing duplicates, 3,917 remained eligible for screening.

### Record Inclusion Criteria

A record had to meet four criteria to be included in our final database. Specifically, it had to be (a) a meta-analysis (i.e., primary studies excluded), (b) published (i.e., unpublished theses, dissertations, and conference papers excluded), (c) in the English language, and (d) that reported an effect of Agreeableness for at least one consequential variable. After our initial screening, we excluded 3,581 records because they were not meta-analyses, they did not report an Agreeableness effect, or they did not report an effect for a relevant variable. We also excluded 58 unpublished records. Thus, after our initial screening, we included 278 qualifying meta-analyses in our final database.

## Meta-Analytic Database

We systematically extracted descriptive information, including the name, source, and the description of the external variable, its total number of independent samples (i.e.,  $k$ ), total sample size (i.e.,  $N$ ), its mean sample-size-weighted observed effect size (e.g.,  $\bar{r}$ ,  $\bar{d}$ , or  $\bar{z}$ ), and an index of between-studies variability (e.g., standard error, standard deviation, confidence or credibility intervals). Information about predictor and/or a criterion reliability was also coded or estimated. Some meta-analyses did not report complete descriptive information, so some estimation was required (for details, see the online supplemental material).

We also coded variables based on the type of scale that was used to assess Agreeableness (i.e., direct vs. indirect measures; cf. Hurtz & Donovan, 2000), the research context (i.e., general vs. workplace settings), and the criterion-rating source (i.e., self-, informant-, and mixed-ratings). For other-rated criteria, we also noted the type of relationship (e.g., supervisor, peer, and subordinate). A final code was made indicating whether or not a variable was included in multiple meta-analyses. Although the effects for most variables were reported in only one meta-analysis, several (e.g., overall job performance) were included in multiple meta-analyses. To determine whether these meta-analyses contained non-overlapping primary studies, we examined their Methods and References sections. Meta-analyses with evidence of overlapping primary studies were noted accordingly, but meta-analyses with evidence of non-redundancy were marked for potential second-order cumulation.

## Variable Inclusion Criteria

The goal of our study was to examine relations of Agreeableness and its lower order traits to consequential external variables that would permit inferences to the general adult population. Hence, a variable had to meet five criteria to be included in our review. Specifically, it had to (a) have sufficient data for analysis (i.e.,  $N$ ,  $k$ ,  $\bar{r}$  reported), (b) use self-reports of Agreeableness (i.e., other-, mixed-, or team-ratings excluded), (c) report an individual-level effect for a consequential criterion (Ozer & Benet-Martinez, 2006; demographics, cognitive abilities excluded), (d) permit inferences to the general population (i.e., job-specific studies, clinical populations and variables excluded), and (e) come from an independent meta-analysis (i.e., only one effect per variable). We dropped variables following their first missed inclusion criterion. For variables with multiple effects, we used the effect from the newer or more comprehensive meta-analysis. Variables with effects from multiple independent meta-analyses were combined via second-order meta-analysis (Schmidt & Oh, 2013). Based on these criteria, 139 meta-analyses were excluded, but 142 meta-analyses reporting effects of Agreeableness for a total of 275 variables were ultimately retained.

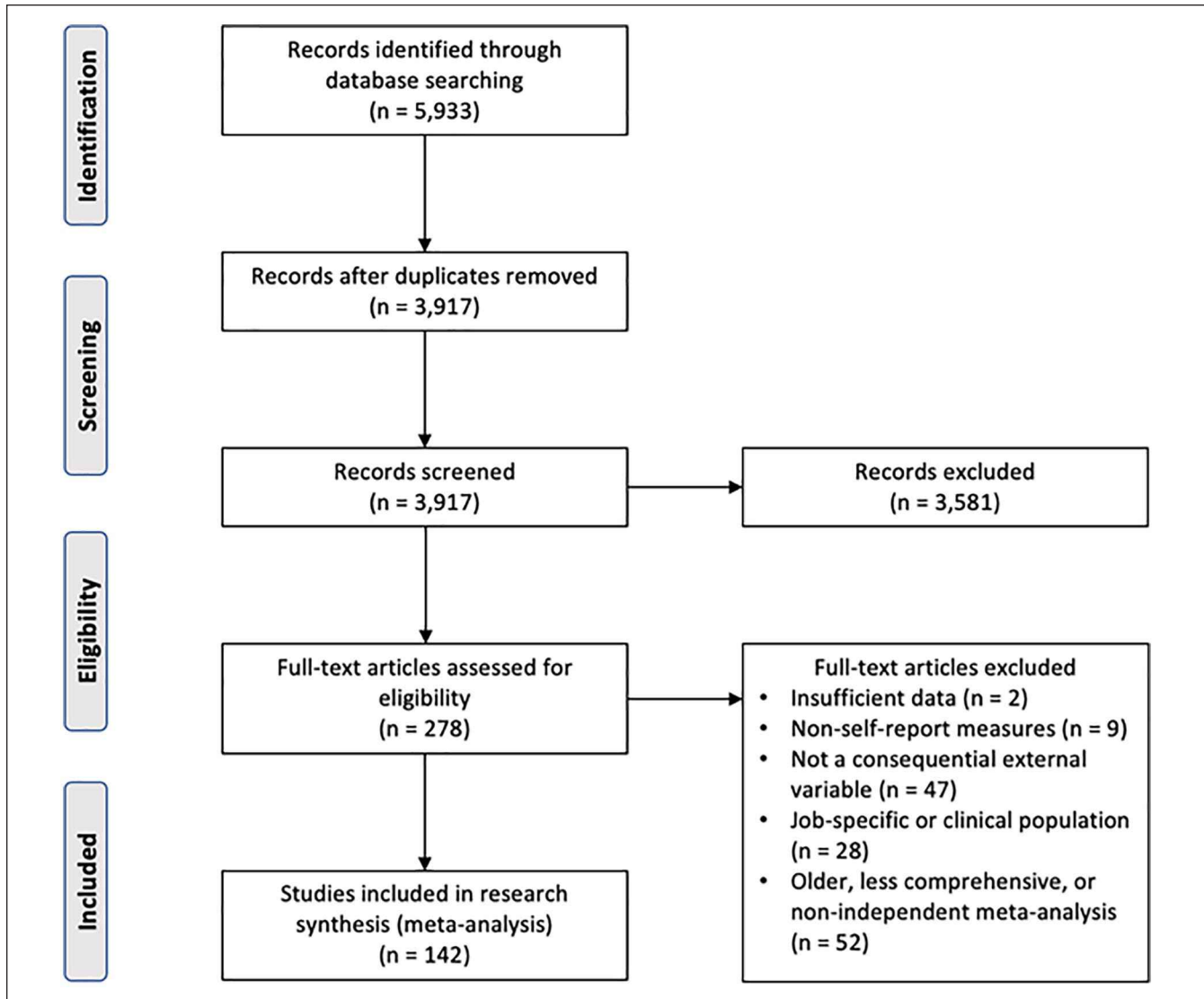
To be included in our review of Agreeableness' lower order traits, a variable also had to meet the same inclusion criteria, with two modifications. Specifically, self-reports of at least one aspect (compassion or politeness), facet (altruism, tendermindedness, straightforwardness, trust, modesty, or cooperativeness)<sup>2</sup> or HEXACO factor (honesty–humility or agreeableness) shown in Figure 1, was assessed. To allow for comparability of findings, lower order trait effects ( $f$ ) had to come from a meta-analysis reporting an effect for Agreeableness and (g) involve one of the 275 qualifying variables. For variables with multiple effects, we selected the effect from the newer or more comprehensive study. In the end, 42 variables from 20 meta-analyses met the inclusion criteria.

In sum, 122 meta-analyses reported effects that were included only in the Agreeableness review, nine meta-analyses reported effects that were included only in the review of lower order traits, and 11 meta-analyses reported effects that were included in both reviews (total  $N = 142$ ). Figure 2 presents a flow diagram of our database search, record screening, and inclusion criteria.

## Meta-Analytic Procedures

No new meta-analyses were conducted in this review. Instead, we used procedures from psychometric meta-analysis (Hunter & Schmidt, 2014) to update estimates from meta-analyses included in our review with a common set of statistical corrections. To correct for measurement error, frequency-weighted artifact distributions were developed from data in their source meta-analysis or from other sources in the literature (for details, see the online supplemental material). We used internal consistency reliabilities to correct for error in self-report and objective criteria, and inter-rater reliabilities to correct for error in informant-rated variables (Schmidt et al., 2000).

**Statistical corrections.** All meta-analyses included in our review had a common set of statistics. First, we used descriptive statistics (i.e.,  $k$ ,  $N$ , mean sample-size-weighted observed  $\bar{r}$ , and its standard deviation), which are reported in, or estimable from, their source meta-analysis. Next, we subtracted variance that was attributable to sampling and measurement error from the observed variance; likewise, we corrected the observed correlation for measurement error. Thus, we estimated the mean population correlation (i.e.,  $\bar{\rho}$ ) and its standard deviation (i.e.,  $SD_{\rho}$ ). Both  $\bar{r}$  and  $\bar{\rho}$  are parameter estimates—the latter is corrected for statistical artifacts, but the former is not. Finally, we calculated confidence and credibility intervals around parameters. Confidence intervals (*CI*) estimate the boundaries in which the observed correlation is expected to fall based on the *SE* of the mean observed variance between studies. Credibility intervals (*CR*) are based on the mean corrected variance between meta-analyses (i.e.,  $SD_{\rho}$ ); estimates with 80% intervals that exclude zero



**Figure 2.** Flow diagram of database search, record screening, and inclusion criteria.

are typically interpreted as generalizing across contexts (Hunter & Schmidt, 2014).

**Second-order meta-analyses.** Second-order meta-analysis extends psychometric meta-analysis by enabling the cumulation of independent meta-analytic estimates, which helps refine population parameter estimates and accounts for second-order sampling error (Schmidt & Oh, 2013). As input, the method requires basic descriptive statistics (i.e.,  $k$ ,  $N$ ,  $\bar{r}$ , and  $SD_r$ ) and mean population correlations ( $\bar{\rho}$ ) from two or more meta-analyses. All second-order meta-analyses had a common set of statistics. First,  $m$  reports the number of contributing meta-analyses. Second, the grand mean population correlation (i.e.,  $\bar{\rho}_M$ ) and its associated variance (i.e.,  $VAR_{True}$ ) are second-order parameter estimates, having accounted for measurement error and second-order sampling

error. When  $VAR_{True}$  is zero or negative, it means that all remaining variance from the constituent meta-analyses has been accounted for by second-order sampling error (Schmidt & Oh, 2013).

### Evaluations of Publication Bias and Sensitivity Analyses

Publication bias can influence the psychological record. Meta-analyses are not immune from these effects and several methods have been proposed to test for them (Carter et al., 2019). Accordingly, we conducted evaluations of publication bias and sensitivity analyses for the meta-analyses contributing to our review (for details, see the online supplemental material). Results provide no evidence of bias that threatens the validity of our findings or associated conclusions.

**Table 1.** Organizational Framework of 16 Conceptual Categories.

Variable category	Definition
<b>Individual variables</b>	
Motivational constructs	Variables reflecting internal forces that influence direction, intensity, and persistence of affect, cognition, or behavior
Personal values	Variables reflecting important life goals that influence perception, judgments, or behavior
Psychological health	Variables reflecting emotional or cognitive appraisals of general well-being and psychological functioning that promotes wellness
Physical health	Variables reflecting concurrent engagement in physical health-promoting behavior and indicators of physical fitness
Medical conditions	Variables reflecting a prospective risk of developing adverse medical conditions or physical health outcomes
<b>Interpersonal variables</b>	
Interpersonal attitudes	Variables reflecting emotional or cognitive appraisals of interpersonal relations, as well as social, environmental, and/or spiritual or religious phenomena
Collaboration	Variables reflecting behavioral cooperation or compliance in working together with others
Leadership	Variables reflecting behavior or outcomes associated with the successful influence of others to pursue group goals
<b>Work/School variables</b>	
Vocational interests	Variables reflecting vocational interests in certain careers or work activities
Work attitudes	Variables reflecting emotional or cognitive appraisals of academic or work-relevant phenomena
Performance	Variables reflecting behavioral contributions to relevant academic, group, or institutional goals
Extrinsic career success	Criteria reflecting outcomes of goal contribution or reception of extrinsic rewards indicative of career success
<b>Antisocial variables</b>	
Dark traits	Variables reflecting internal forces that influence affect, cognition, and/or behavior in an antisocial direction
Antisocial attitudes	Variables reflecting antisocial emotional or cognitive appraisals of relevant social phenomena
Counterproductivity	Variables reflecting counterproductive behavior directed at other individuals or at an organization
Turnover/Accidents	Variables reflecting undesirable outcomes in work settings, including turnover and accidents

### Organizational Framework

To manage the reporting of our results, we first organized variables into clusters based on their content and type. Concerning the former, we used existing organizational frameworks (cf. Ozer & Benet-Martínez, 2006; Wilmot & Ones, 2019) to sort variables based on their primary domain of applicability. Specifically, *individual* (i.e., content involving descriptions of the self and domain-general experiences), *interpersonal* (i.e., content involving face-to-face interactions with others), *work/school* (i.e., content involving goal pursuit in work or educational contexts), or *antisocial* (i.e., content involving social or moral impairments and associated behavior or outcomes; cf. Ones & Dilchert, 2013). Concerning the latter, we sorted variables based on their construct type. Specifically, *dispositions* (i.e., relatively stable tendencies of thinking, feeling, and/or behaving across situations), *attitudes* (i.e., cognitive or emotional appraisals of relevant phenomena), *behaviors* (i.e., observable actions under direct control of individuals), or *outcomes* (i.e., outcomes of behavior that are influenced, but not fully controlled, by individuals; Campbell & Wiernik, 2015). Using these two dimensions of content and type, in conjunction with existing models of personality and external criteria (e.g., Anglim et al., 2020; Bleidorn et al., 2020; DeRue et al., 2011; Habashi et al., 2016; Judge et al., 2017; Kanfer et al., 2017; Ng et al., 2005; Vize, Miller, & Lynam, 2018), we arranged

qualifying variables into an organizational framework of 16 conceptual categories, which are defined in Table 1 (for details about descriptions, rating sources, and meta-analytic sources of all variables, see Table S1).<sup>3</sup> Finally, within each category, we organized the variables by career domain (i.e., education, job applicancy, on the job, across the career, non-work/domain-general; cf. Wilmot et al., 2019) and valence (i.e., positive vs. negative).

Altogether, we conducted 50 second-order meta-analyses for Agreeableness (18% of total variables) and three second-order meta-analyses for two lower order traits (see Tables S2 to S6).

### Results

Tables 2 to 5 present effects of Agreeableness within our organizing framework. To compute overall descriptive statistics, we rekeyed effects for variables with a negative (e.g., dark traits) or a neutral valence (e.g., personal values) in a positive direction. To interpret effect sizes, we used the empirical benchmarks of nil/negligible ( $\bar{\rho} = .05$ ), small ( $\bar{\rho} = .10$ ), medium ( $\bar{\rho} = .20$ ), and large ( $\bar{\rho} = .30+$ ; cf. Funder & Ozer, 2019). In view of the large quantity of results, we mainly focus our reporting on variables with more substantial relations to Agreeableness (i.e.,  $\bar{\rho} \geq .20$ ).

**Table 2.** Meta-Analyses of Agreeableness Across Categories of Individual Variables.

Variable	<i>m</i>	<i>k</i>	<i>N</i>	$\bar{r}$	<i>SD<sub>r</sub></i>	$\bar{\rho}$	<i>SD<sub>ρ</sub></i>	95% CI		80% CR	
								LO	HI	LO	HI
<b>Motivational constructs</b>											
Psychological needs											
Autonomy	1	7	1,834	.24	.09	<b>.32</b>	.10	.17	.31	.19	.44
Competence	1	7	1,834	.25	.09	<b>.31</b>	.08	.19	.32	.21	.42
Relatedness	1	7	1,834	.36	.07	<b>.46</b>	.06	.31	.42	.38	.54
Goal orientation											
Learning	1	9	2,448	.15	.06	<b>.19</b>	.02	.11	.19	.17	.21
Performance avoidance	1	5	1,405	-.15	.06	<b>-.19</b>	.03	-.21	-.10	-.23	-.16
Performance prove	1	9	2,448	-.06	.06	<b>-.08</b>	.01	-.10	-.02	-.09	-.06
Regulatory focus											
Prevention	1	6	1,697	.05	.20	<b>.06</b>	.23	-.11	.21	-.24	.36
Promotion	1	6	1,697	.18	.08	<b>.23</b>	.07	.12	.25	.13	.32
Academic self-efficacy	1	5	875	.07	.08	<b>.09</b>	.00	.004	.14	.09	.09
Academic procrastination	1	5	1,811	-.10	.06	<b>-.12</b>	.03	-.15	-.05	-.16	-.09
Job search self-regulation	1	3	1,002	.11	.12	<b>.13</b>	.13	-.02	.24	-.03	.30
Drive: Assessment center ratings	2	8	5,726	.13	.12	<b>.16</b>	.04	.05	.22	.11	.22
Employee engagement											
Overall	1	33	17,626	.21	.11	<b>.26</b>	.12	.17	.25	.10	.41
Absorption	1	13	4,813	.13	.10	<b>.16</b>	.10	.08	.18	.02	.29
Dedication	1	13	4,813	.17	.12	<b>.21</b>	.13	.10	.24	.04	.38
Vigor	1	13	4,812	.17	.12	<b>.21</b>	.13	.10	.24	.04	.38
Demonstrating effort	1	7	9,123	.13	.06	<b>.20</b>	.08	.08	.18	.09	.31
Motivations for performance											
Expectancy	1	5	875	.09	.08	<b>.13</b>	.00	.02	.16	.13	.13
Goal-setting	1	4	373	-.24	.20	<b>-.30</b>	.22	-.44	-.04	-.57	-.02
Self-efficacy	1	6	1,099	.09	.15	<b>.12</b>	.17	-.03	.21	-.11	.34
Motivations to lead											
Affective-identity	1	27	8,695	.09	.13	<b>.11</b>	.15	.04	.14	-.08	.30
Non-calculative	1	20	6,360	.27	.15	<b>.35</b>	.18	.21	.34	.12	.57
Social-normative	1	20	5,734	.21	.15	<b>.28</b>	.18	.15	.28	.05	.51
Entrepreneurial intentions	1	6	1,889	.03	.15	<b>.04</b>	.16	-.09	.15	-.17	.24
Proactive career orientation	1	9	4,408	.18	.05	<b>.23</b>	.03	.15	.21	.19	.27
Workaholism	1	5	1,807	-.01	.12	<b>-.01</b>	.13	-.12	.10	-.18	.15
Procrastination	1	24	5,001	-.12	.06	<b>-.14</b>	.00	-.14	-.10	-.14	-.14
<b>Personal values</b>											
Self-transcendence	1	57	55,110	.38	.10	<b>.50</b>	.12	.35	.41	.34	.66
Benevolence	1	56	55,072	.45	.13	<b>.60</b>	.17	.42	.48	.39	.82
Universalism	1	54	54,364	.29	.10	<b>.37</b>	.12	.26	.32	.23	.52
Self-enhancement	1	55	54,624	-.20	.13	<b>-.27</b>	.17	-.24	-.16	-.49	-.04
Achievement	1	55	54,946	-.18	.18	<b>-.24</b>	.23	-.23	-.13	-.53	.06
Hedonism	1	53	54,165	-.08	.09	<b>-.11</b>	.11	-.10	-.06	-.24	.03

(continued)



Table 2. (continued)

Variable	m	k	N	$\bar{r}$	$SD_r$	$\bar{\rho}$	$SD_\rho$	95% CI		80% CR	
								LO	HI	LO	HI
Power	1	54	54,599	-.31	.15	<b>-.42</b>	.20	-.35	-.27	-.68	-.15
Openness to change	1	55	54,624	-.04	.11	<b>-.05</b>	.14	-.07	-.01	-.23	.12
Self-direction	1	55	54,959	-.04	.14	<b>-.06</b>	.18	-.08	-.004	-.29	.18
Stimulation	1	51	53,692	-.04	.09	<b>-.05</b>	.11	-.06	-.02	-.19	.08
Conservation	1	55	54,624	.12	.08	<b>.17</b>	.10	.10	.14	.04	.30
Conformity	1	55	54,959	.18	.08	<b>.25</b>	.11	.16	.20	.11	.39
Security	1	54	54,377	.00	.12	<b>.00</b>	.17	-.03	.03	-.21	.21
Tradition	1	51	53,692	.15	.09	<b>.22</b>	.12	.13	.17	.07	.36
<b>Psychological health</b>											
Happiness	1	4	441	.30	.08	<b>.35</b>	.00	.22	.38	.35	.35
Quality of life	1	4	767	.23	.08	<b>.30</b>	.04	.16	.31	.25	.36
Subjective well-being											
Life satisfaction	2	209	147,241	.20	.08	<b>.24</b>	.00	.19	.21	.24	.24
Negative affect	1	120	39,023	-.25	.11	<b>-.30</b>	.11	-.27	-.23	-.44	-.15
Positive affect	1	122	40,714	.19	.13	<b>.22</b>	.14	.17	.21	.04	.40
Psychological well-being											
Autonomy	1	16	6,102	.10	.11	<b>.12</b>	.12	.05	.15	-.03	.28
Environmental mastery	1	15	5,953	.28	.10	<b>.34</b>	.11	.23	.33	.20	.48
Personal growth	1	15	5,713	.31	.10	<b>.39</b>	.11	.26	.36	.25	.53
Positive relations with others	1	17	6,233	.39	.09	<b>.47</b>	.09	.35	.43	.35	.59
Purpose in life	1	14	5,492	.28	.06	<b>.34</b>	.04	.25	.31	.28	.40
Self-acceptance	1	13	5,281	.28	.06	<b>.33</b>	.05	.25	.31	.28	.39
Pride											
Authentic	1	41	41,527	.22	.07	<b>.27</b>	.07	.20	.24	.18	.36
Hubristic	1	41	41,527	-.40	.08	<b>-.48</b>	.09	-.43	-.38	-.60	-.36
Sense of coherence	1	11	11,556	.28	.05	<b>.36</b>	.05	.25	.31	.29	.42
Stress tolerance: Assessment center ratings	2	9	5,705	.10	.08	<b>.12</b>	.06	.05	.15	.04	.21
Coping styles											
Broad engagement	1	45	11,392	.05	.07	<b>.07</b>	.03	.03	.07	.03	.11
Broad disengagement	1	29	9,063	-.13	.05	<b>-.17</b>	.00	-.15	-.11	-.17	-.17
Mixed emotion focus	1	8	645	-.09	.03	<b>-.12</b>	.00	-.11	-.07	-.12	-.12
Negative emotion focus	1	16	4,877	-.09	.04	<b>-.12</b>	.00	-.11	-.07	-.12	-.12
Substance use	1	11	3,279	-.18	.03	<b>-.24</b>	.00	-.20	-.16	-.24	-.24
Loneliness											
Overall	1	55	37,880	-.24	.12	<b>-.30</b>	.14	-.28	-.21	-.49	-.12
Emotional	1	13	8,954	-.15	.12	<b>-.18</b>	.15	-.21	-.08	-.37	.002
Social	1	12	8,265	-.22	.23	<b>-.28</b>	.28	-.35	-.09	-.64	.09
Burnout											
Emotional exhaustion	2	49	13,728	-.15	.12	<b>-.18</b>	.00	-.19	-.12	-.18	-.18
Depersonalization	2	50	13,146	-.24	.12	<b>-.31</b>	.00	-.27	-.20	-.31	-.31

(continued)

Table 2. (continued)

Variable	<i>m</i>	<i>k</i>	<i>N</i>	$\bar{r}$	<i>SD<sub>r</sub></i>	$\bar{\rho}$	<i>SD<sub>ρ</sub></i>	95% CI		80% CR	
								LO	HI	LO	HI
Personal accomplishment	2	50	11,508	.23	.13	<b>.29</b>	.00	.19	.26	.29	.29
Internet addiction	1	12	11,849	-.23	.05	<b>-.28</b>	.05	-.26	-.20	-.35	-.21
Problematic Facebook use	1	15	7,217	-.06	.12	<b>-.07</b>	.13	-.12	.001	-.24	.10
<b>Physical health<sup>a</sup></b>											
Disease avoidance	1	16	33,381	-.05	.05	<b>-.07</b>	.06	-.08	-.03	-.15	.01
Physical activity	2	67	137,141	.01	.07	<b>.01</b>	.00	-.01	.02	.01	.01
Walking speed	1	5	15,568	-.01	.03	<b>-.02</b>	.02	-.04	.01	-.05	.01
Sedentary behavior	1	19	26,708	-.04	.10	<b>-.06</b>	.12	-.09	.001	-.22	.10
Inflammatory markers <sup>b</sup>	1	8	34,634	-.01	.02	<b>-.01</b>	.02	-.02	.01	-.03	.01
Obesity <sup>b</sup>	1	9	78,931	.01	.03	<b>.01</b>	.03	-.01	.03	-.03	.05
Sexual dysfunction	1	13	10,309	-.04	.05	<b>-.05</b>	.03	-.06	-.02	-.09	-.01
Smoking <sup>b</sup>	2	15	83,655	-.01	.03	<b>-.01</b>	.01	-.02	.01	-.02	.004
Excessive alcohol use <sup>b</sup>	1	8	72,949	-.04	.01	<b>-.05</b>	.00	-.05	-.03	-.05	-.05
<b>Medical conditions<sup>a</sup></b>											
Risks for conditions <sup>b</sup>											
Obesity	1	6	43,638	.01	.01	<b>.01</b>	.01	-.001	.02	.001	.02
Diabetes	1	5	34,903	.02	.02	<b>.02</b>	.02	-.001	.03	-.002	.04
Disability	1	7	45,176	.00	.02	<b>.00</b>	.02	-.01	.02	-.03	.03
Cancer	1	6	42,843	-.02	.02	<b>-.02</b>	.02	-.04	-.003	-.05	.005
Cognitive decline	1	3	6,087	.00	.00	<b>.00</b>	.00	.00	.00	.00	.00
Alzheimer's disease	1	3	3,342	-.04	.01	<b>-.05</b>	.00	-.05	-.03	-.05	-.05
Risk for mortality <sup>b</sup>											
All-cause	2	16	137,866	.00	.01	<b>.00</b>	.01	-.01	.01	-.01	.01
Cancer	1	3	21,835	.00	.03	<b>.00</b>	.03	-.03	.03	-.04	.04
Coronary heart disease	1	3	24,541	-.05	.04	<b>-.05</b>	.04	-.09	-.01	-.10	-.003
Stroke	1	3	24,541	-.02	.02	<b>-.03</b>	.01	-.04	-.01	-.04	-.01

Note. Values with effects  $\bar{\rho} \geq .20$  are presented in grayscale. *m* = number of independent meta-analyses; *k* = number of independent samples; *N* = total sample size;  $\bar{r}$  = *M* sample-size-weighted observed correlation; *SD<sub>r</sub>* = *M* observed standard deviation;  $\bar{\rho}$  = estimated population correlation (bold) corrected for unreliability; *SD<sub>ρ</sub>* = standard deviation of population correlation; 95% CI = 95% confidence interval around observed correlation; 80% CR = 80% credibility interval around population correlation.

<sup>a</sup>Variables in the physical health category are from studies using concurrent designs, whereas variables in the medical conditions category are from studies using prospective designs. <sup>b</sup>Following medical conventions, effects of demographic characteristics (i.e., sex, age, race/ethnicity, and education) have been partialled out.

Table 3. Meta-Analyses of Agreeableness Across Categories of Interpersonal Variables.

Variable	<i>m</i>	<i>k</i>	<i>N</i>	$\bar{r}$	<i>SD<sub>r</sub></i>	$\bar{\rho}$	<i>SD<sub>ρ</sub></i>	95% CI		80% CR	
								LO	HI	LO	HI
<b>Interpersonal attitudes</b>											
Social support perceptions	1	84	37,678	.25	.12	<b>.33</b>	.14	.23	.28	.15	.51
Job characteristic perceptions: Social											
Social overall	1	36	16,877	.24	.10	<b>.31</b>	.12	.21	.27	.16	.47
Absence of conflict	1	8	5,184	.22	.07	<b>.29</b>	.08	.17	.27	.19	.39
Feedback from others	1	2	945	.16	.09	<b>.21</b>	.10	.04	.28	.08	.34
Interaction outside the organization	1	2	945	.21	.16	<b>.28</b>	.20	-.01	.43	.02	.53
Interdependence	1	6	2,196	.18	.07	<b>.24</b>	.07	.12	.24	.15	.33
Social support	1	25	10,484	.21	.11	<b>.28</b>	.13	.17	.26	.11	.44

(continued)

**Table 3. (continued)**

Variable	m	k	N	$\bar{r}$	SD <sub>r</sub>	$\bar{p}$	SD <sub>p</sub>	95% CI		80% CR	
								LO	HI	LO	HI
<b>Leadership perceptions</b>											
Transformational leadership	1	13	4,070	.20	.12	<b>.24</b>	.13	.13	.27	.08	.40
Contingent rewards	1	3	1,201	.14	.04	<b>.18</b>	.00	.09	.19	.18	.18
Passive leadership	1	4	1,389	-.22	.09	<b>-.31</b>	.10	-.31	-.13	-.44	-.18
Leader-member exchange	1	9	2,290	.16	.08	<b>.19</b>	.06	.11	.21	.12	.27
<b>Experienced workplace mistreatment</b>											
Abusive supervision	1	20	6,933	-.14	.12	<b>-.18</b>	.14	-.19	-.09	-.35	-.002
Workplace bullying	1	4	1,860	-.02	.06	<b>-.02</b>	.04	-.08	.04	-.08	.03
Workplace ostracism	1	5	1,141	-.26	.13	<b>-.31</b>	.14	-.38	-.15	-.49	-.13
Forgivingness	1	18	3,735	.37	.19	<b>.47</b>	.23	.28	.46	.17	.77
Intimate partner satisfaction	1	19	3,848	.14	.10	<b>.20</b>	.10	.10	.18	.07	.33
Marital satisfaction	1	19	3,071	.24	.07	<b>.29</b>	.00	.21	.27	.29	.29
Sexual satisfaction	1	9	7,286	.11	.03	<b>.13</b>	.00	.09	.12	.13	.13
Sexual desire	1	11	7,793	-.08	.12	<b>-.11</b>	.14	-.15	-.02	-.28	.07
Religiosity	1	47	14,432	.19	.07	<b>.23</b>	.05	.17	.21	.16	.30
Spirituality	1	27	8,888	.21	.05	<b>.25</b>	.00	.19	.23	.25	.25
Pro-environmental attitudes	2	29	40,881	.16	.08	<b>.20</b>	.04	.13	.19	.14	.25
Pro-environmental behavior	2	24	13,683	.11	.08	<b>.14</b>	.03	.08	.15	.10	.19
Political orientation: Liberal	1	70	71,245	.02	.08	<b>.02</b>	.09	-.001	.04	-.09	.13
<b>Collaboration</b>											
<b>Employment interviews</b>											
Behavioral/High structure interviews	2	9	1,230	.02	.08	<b>.02</b>	.00	-.04	.07	.02	.02
Conventional/Low structure interviews	1	18	2,159	.12	.08	<b>.17</b>	.00	.08	.16	.17	.17
<b>Assessment center ratings</b>											
Communication	2	10	6,029	.09	.11	<b>.11</b>	.00	.02	.16	.11	.11
Consideration of others	2	10	5,943	.09	.06	<b>.12</b>	.08	.06	.13	.01	.23
Influencing others	2	13	6,496	.11	.10	<b>.13</b>	.06	.06	.16	.06	.21
Role-play: Assessment center exercise	1	4	1,087	.01	.08	<b>.01</b>	.06	-.07	.09	-.06	.09
Negotiation performance	2	11	900	.14	.18	<b>.20</b>	.00	.04	.25	.20	.20
Interpersonal sensitivity	1	6	474	.04	.10	<b>.05</b>	.00	-.04	.12	.05	.05
Prosocial behavior	1	128	24,282	.10	.11	<b>.12</b>	.09	.06	.14	.01	.23
“Getting along” performance	2	33	3,278	.12	.10	<b>.20</b>	.00	.09	.16	.20	.20
Interpersonal citizenship behavior	1	19	5,608	.13	.07	<b>.18</b>	.06	.10	.16	.11	.25
<b>Networking behavior</b>											
Overall	1	15	3,186	.10	.13	<b>.12</b>	.14	.03	.17	-.05	.30
Internal	1	7	1,729	.17	.14	<b>.21</b>	.15	.07	.27	.01	.41
External	1	4	1,062	.04	.09	<b>.05</b>	.08	-.05	.13	-.05	.15
<b>Social network roles</b>											
Expressive: Brokerage	1	56	3,073	.03	.14	<b>.03</b>	.00	-.01	.07	.03	.03
Expressive: Indegree	1	57	4,017	.06	.12	<b>.07</b>	.00	.03	.09	.07	.07
Instrumental: Brokerage	1	57	3,200	.01	.14	<b>.01</b>	.06	-.03	.05	-.07	.09
Instrumental: Indegree	1	61	4,571	.04	.15	<b>.05</b>	.10	.003	.08	-.08	.17
Social network site use	1	40	13,671	-.01	.08	<b>-.01</b>	.07	-.04	.02	-.10	.08

(continued)

Table 3. (continued)

Variable	<i>m</i>	<i>k</i>	<i>N</i>	$\bar{r}$	$SD_r$	$\bar{\rho}$	$SD_\rho$	95% CI		80% CR	
								LO	HI	LO	HI
<b>Social investments</b>											
Family	1	10	6,173	.15	.18	<b>.19</b>	.22	.04	.26	-.09	.47
Religion	1	5	1,805	.16	.14	<b>.20</b>	.17	.04	.29	-.01	.42
<b>Conflict resolution style</b>											
Avoidance	1	21	5,148	.12	.16	<b>.16</b>	.19	.05	.19	-.09	.40
Compromise	1	19	5,043	.18	.12	<b>.26</b>	.15	.13	.23	.06	.45
Dominance	1	22	5,308	-.19	.14	<b>-.25</b>	.17	-.25	-.13	-.47	-.03
Integration	1	21	5,065	.23	.12	<b>.30</b>	.13	.18	.28	.13	.46
Obliging	1	22	5,308	.13	.17	<b>.18</b>	.21	.06	.20	-.09	.45
<b>Leadership</b>											
<b>Assessment center exercises</b>											
Leaderless group discussion	1	10	2,563	.00	.09	<b>.00</b>	.07	-.05	.05	-.09	.09
Oral presentation	1	2	270	-.10	.12	<b>-.12</b>	.10	-.27	.07	-.24	.01
<b>Leadership</b>											
Overall	1	45	10,507	.05	.13	<b>.08</b>	.16	.02	.09	-.13	.28
Emergence	1	23	5,359	.03	.07	<b>.05</b>	.00	.01	.06	.05	.05
Effectiveness	2	40	8,276	.14	.07	<b>.20</b>	.00	.12	.16	.20	.20
Subordinate job satisfaction	1	2	300	.01	.11	<b>.01</b>	.09	-.15	.16	-.11	.13
Subordinate leader satisfaction	1	2	300	.17	.10	<b>.20</b>	.06	.04	.30	.13	.28
Group performance	1	2	84	.13	.18	<b>.19</b>	.12	-.11	.38	.03	.35
<b>Transformational leadership</b>											
Overall	2	39	7,593	.104	.13	<b>.15</b>	.00	.06	.14	.15	.15
Charisma	2	25	4,085	.14	.17	<b>.20</b>	.00	.07	.21	.20	.20
Individualized consideration	3	22	3,707	.13	.14	<b>.18</b>	.00	.07	.19	.18	.18
Intellectual stimulation	3	21	3,626	.08	.12	<b>.11</b>	.00	.03	.13	.11	.11
<b>Transactional leadership</b>											
Contingent reward	2	13	2,494	.08	.11	<b>.11</b>	.00	.02	.13	.11	.11
Management by exception	2	12	2,291	-.06	.07	<b>-.09</b>	.00	-.10	-.03	-.09	-.09
Passive leadership	2	13	2,522	-.09	.09	<b>-.13</b>	.00	-.14	-.04	-.13	-.13

Note. Values with effects  $\bar{\rho} \geq .20$  are presented in grayscale. *m* = number of independent meta-analyses; *k* = number of independent samples; *N* = total sample size;  $\bar{r}$  = *M* sample-size-weighted observed correlation;  $SD_r$  = *M* observed standard deviation;  $\bar{\rho}$  = estimated population correlation (bold) corrected for unreliability;  $SD_\rho$  = standard deviation of population correlation; 95% CI = 95% confidence interval around observed correlation; 80% CR = 80% credibility interval around population correlation.

Table 4. Meta-Analyses of Agreeableness across Categories of Work/School Variables.

Variable	<i>m</i>	<i>k</i>	<i>N</i>	$\bar{r}$	$SD_r$	$\bar{\rho}$	$SD_\rho$	95% CI		80% CR	
								LO	HI	LO	HI
<b>Vocational interests</b>											
Realistic	2	51	14,456	-.02	.09	<b>.00</b>	.03	-.03	.02	-.04	.03
Investigative	2	51	14,456	.02	.09	<b>.01</b>	.00	-.01	.04	.01	.01
Artistic	2	51	14,456	.06	.11	<b>.04</b>	.01	.004	.06	.02	.06
Social	2	51	14,456	.17	.12	<b>.18</b>	.00	.12	.19	.18	.18
Enterprising	2	51	14,456	-.06	.12	<b>-.06</b>	.00	-.09	-.02	-.06	-.06
Conventional	2	51	14,456	-.01	.07	<b>-.01</b>	.00	-.03	.01	-.01	-.01

(continued)

**Table 4. (continued)**

Variable	m	k	N	$\bar{r}$	SD <sub>r</sub>	$\bar{\rho}$	SD <sub><math>\rho</math></sub>	95% CI		80% CR	
								LO	HI	LO	HI
<b>Work attitudes</b>											
Adjustment to college											
Overall	1	7	1,996	.31	.09	<b>.37</b>	.09	.24	.38	.25	.48
Academic	1	7	1,994	.28	.15	<b>.35</b>	.17	.17	.39	.13	.56
Institutional attachment	1	6	1,913	.27	.05	<b>.34</b>	.00	.23	.31	.34	.34
Personal-emotional	1	7	2,000	.21	.12	<b>.26</b>	.13	.12	.30	.10	.42
Social	1	7	1,994	.25	.06	<b>.31</b>	.01	.21	.29	.30	.32
Applicant attraction to organization	1	12	4,359	.03	.09	<b>.04</b>	.09	-.02	.08	-.08	.15
Expatriate adjustment											
Overall	1	19	3,796	.19	.16	<b>.23</b>	.17	.12	.26	.01	.45
General	1	10	2,215	.11	.10	<b>.14</b>	.10	.05	.17	.01	.27
Interactional	1	12	2,414	.15	.10	<b>.18</b>	.09	.09	.21	.07	.30
Work	1	9	1,906	.12	.09	<b>.15</b>	.07	.06	.18	.06	.24
Job characteristic perceptions: Task											
Task overall	1	30	15,553	.08	.12	<b>.10</b>	.13	.04	.12	-.07	.27
Task autonomy	1	20	12,823	.09	.11	<b>.11</b>	.13	.04	.13	-.06	.27
Task feedback	1	6	1,906	.07	.19	<b>.09</b>	.23	-.08	.22	-.20	.38
Task identity	1	3	1,073	.09	.05	<b>.12</b>	.00	.03	.15	.12	.12
Task significance	1	6	1,890	.10	.08	<b>.13</b>	.08	.03	.17	.03	.23
Task variety	1	5	1,472	.06	.06	<b>.08</b>	.01	.01	.11	.07	.09
Organizational justice perceptions											
Distributive	1	16	5,606	.16	.08	<b>.19</b>	.07	.12	.20	.10	.28
Informational	1	5	1,942	.11	.05	<b>.13</b>	.00	.07	.15	.13	.13
Interpersonal	1	10	3,530	.14	.07	<b>.17</b>	.06	.10	.18	.10	.24
Procedural	1	22	6,859	.17	.10	<b>.21</b>	.10	.13	.21	.08	.34
Safety climate perceptions	1	3	556	.14	.11	<b>.17</b>	.09	.02	.26	.05	.29
Job satisfaction	2	61	14,192	.14	.12	<b>.18</b>	.00	.11	.17	.18	.18
Organizational commitment											
Global	1	10	2,007	.20	.07	<b>.24</b>	.02	.16	.24	.22	.27
Affective	1	29	9,283	.24	.13	<b>.30</b>	.15	.19	.29	.11	.49
Continuance	1	14	4,315	.05	.12	<b>.07</b>	.14	-.01	.11	-.11	.25
Normative	1	13	4,147	.20	.07	<b>.26</b>	.06	.16	.24	.19	.33
Turnover intentions	2	17	4,377	-.14	.10	<b>-.18</b>	.03	-.19	-.10	-.22	-.14
Work-life balance											
Family interference with work	1	9	3,901	-.19	.08	<b>-.23</b>	.09	-.25	-.14	-.35	-.12
Work interference with family	1	12	4,514	-.17	.08	<b>-.21</b>	.08	-.22	-.13	-.31	-.11
Work-nonwork spillover: Negative	1	13	5,309	-.15	.06	<b>-.18</b>	.03	-.18	-.12	-.22	-.14
Work-nonwork spillover: Positive	1	2	2,510	.17	.03	<b>.22</b>	.00	.14	.21	.22	.22
Career decision-making difficulties	1	18	8,180	-.07	.13	<b>-.08</b>	.14	-.13	-.01	-.26	.10
Career adaptability	1	11	10,826	.13	.12	<b>.15</b>	.14	.06	.20	-.03	.33
Career satisfaction	1	13	11,050	.12	.12	<b>.15</b>	.14	.06	.18	-.03	.32
<b>Performance</b>											
Academic attendance	1	6	1,874	.02	.13	<b>.03</b>	.15	-.08	.12	-.16	.21
Academic performance	1	109	58,522	.07	.15	<b>.09</b>	.19	.04	.10	-.15	.33
Postsecondary	4	75	33,528	.06	.07	<b>.06</b>	.02	.04	.07	.04	.09
Training performance	6	48	8,992	.03	.09	<b>.04</b>	.04	.01	.06	-.01	.09
Training and job performance	1	83	12,467	.05	.10	<b>.08</b>	.08	.03	.07	-.03	.18

(continued)

Table 4. (continued)

Variable	<i>m</i>	<i>k</i>	<i>N</i>	$\bar{r}$	$SD_r$	$\bar{\rho}$	$SD_\rho$	95% CI		80% CR	
								LO	HI	LO	HI
Situational judgment test performance											
Behavioral tendency tests	1	17	8,358	.33	.18	<b>.38</b>	.20	.24	.42	.12	.64
Knowledge tests	1	34	17,115	.17	.10	<b>.20</b>	.10	.14	.20	.06	.33
Job search intensity	1	14	6,835	.05	.06	<b>.06</b>	.05	.02	.08	-.002	.13
Assessment center ratings											
Organizing and planning	2	11	6,302	.04	.09	<b>.05</b>	.00	-.02	.09	.04	.05
Problem solving	2	12	6,253	.06	.06	<b>.07</b>	.00	.02	.09	.07	.07
Assessment center exercises											
Case analysis	1	3	358	-.06	.10	<b>-.07</b>	.04	-.17	.05	-.12	-.02
In-basket	1	4	606	-.02	.11	<b>-.03</b>	.09	-.13	.09	-.14	.09
Occupational performance	6	301	51,162	.04	.11	<b>.06</b>	.02	.03	.06	.04	.08
Overall job performance											
Supervisor-ratings	10	191	43,456	.08	.10	<b>.13</b>	.04	.07	.10	.08	.19
Peer-ratings	1	17	5,243	.10	.11	<b>.21</b>	.21	.05	.15	-.06	.48
Subordinate-ratings	1	11	3,568	.08	.14	<b>.18</b>	.30	-.01	.17	-.21	.57
Maximal performance	1	4	1,514	.09	.07	<b>.14</b>	.08	.02	.16	.04	.24
Typical performance	1	4	1,514	.06	.05	<b>.09</b>	.00	.01	.11	.09	.09
Technical performance	3	90	23,462	.07	.12	<b>.09</b>	.01	.04	.09	.08	.10
Contextual performance	2	22	4,140	.14	.16	<b>.19</b>	.00	.07	.21	.19	.19
Organizational citizenship behavior											
Overall	1	47	10,308	.11	.11	<b>.15</b>	.12	.08	.14	-.002	.31
Global	1	22	3,875	.10	.12	<b>.14</b>	.13	.05	.15	-.03	.31
Organizational	1	15	4,598	.12	.11	<b>.17</b>	.13	.06	.18	-.001	.34
Change	1	8	1,396	-.02	.11	<b>-.03</b>	.11	-.10	.06	-.17	.11
Adaptive performance											
Overall	2	75	9,288	.08	.11	<b>.10</b>	.00	.05	.10	.10	.10
Proactive forms	1	65	7,093	.06	.11	<b>.08</b>	.07	.03	.09	-.01	.17
Reactive forms	1	69	7,314	.08	.11	<b>.10</b>	.07	.05	.11	.02	.19
Voice											
Overall	1	5	1,429	.00	.14	<b>.00</b>	.15	-.12	.12	-.19	.19
Prohibitive	1	2	699	.03	.12	<b>.04</b>	.13	-.13	.19	-.12	.20
Promotive	1	4	1,163	.02	.12	<b>.03</b>	.13	-.10	.14	-.14	.20
Creativity	2	97	37,987	.01	.06	<b>.02</b>	.02	.003	.03	-.01	.05
Job complexity	1	4	4,078	-.06	.03	<b>-.08</b>	.02	-.09	-.03	-.10	-.05
Job crafting	1	5	2,944	.20	.18	<b>.25</b>	.22	.04	.35	-.03	.53
Performance rating leniency	1	12	1,899	.20	.16	<b>.25</b>	.17	.11	.29	.03	.46
<b>Extrinsic career success</b>											
Academic success	1	15	7,330	.01	.05	<b>.01</b>	.00	-.01	.03	.01	.01
Training success	2	10	1,206	.04	.08	<b>.05</b>	.03	-.01	.09	.01	.10
Job search success											
Employment quality	1	3	376	.13	.11	<b>.15</b>	.07	.01	.25	.05	.24
Employment status	1	2	817	-.02	.05	<b>-.02</b>	.00	-.09	.05	-.02	-.02
Personnel data											
Commendable behavior	1	4	24,259	.08	.10	<b>.11</b>	.00	.04	.11	.11	.11
Status changes	1	9	2,515	.09	.10	<b>.13</b>	.12	.02	.16	-.03	.29
Productivity	3	25	3,495	-.16	.15	<b>-.09</b>	.04	-.13	-.01	-.14	-.03
Promotions	1	4	4,428	-.04	.03	<b>-.05</b>	.00	-.07	-.01	-.05	-.05
Salary	1	6	6,286	-.09	.03	<b>-.10</b>	.01	-.11	-.06	-.11	-.09

Note. Values with effects  $\bar{\rho} \geq .20$  are presented in grayscale. *m* = number of independent meta-analyses; *k* = number of independent samples; *N* = total sample size;  $\bar{r}$  = *M* sample-size-weighted observed correlation;  $SD_r$  = *M* observed standard deviation;  $\bar{\rho}$  = estimated population correlation (bold) corrected for unreliability;  $SD_\rho$  = standard deviation of population correlation; 95% CI = 95% confidence interval around observed correlation; 80% CR = 80% credibility interval around population correlation.

**Table 5.** Meta-Analyses of Agreeableness Across Categories of Antisocial Variables.

Variables	<i>m</i>	<i>k</i>	<i>N</i>	$\bar{r}$	<i>SD<sub>r</sub></i>	$\bar{\rho}$	<i>SD<sub>ρ</sub></i>	95% CI		80% CR	
								LO	HI	LO	HI
<b>Dark traits</b>											
Machiavellianism	1	108	40,818	-.40	.11	<b>-.53</b>	.14	-.42	-.38	-.70	-.35
Narcissism	1	108	40,818	-.18	.19	<b>-.23</b>	.24	-.22	-.14	-.53	.07
Psychopathy	1	108	40,818	-.47	.11	<b>-.61</b>	.14	-.49	-.45	-.79	-.44
<b>Antisocial attitudes</b>											
Prejudice	1	25	4,713	-.22	.06	<b>-.28</b>	.00	-.25	-.20	-.28	-.28
Social dominance orientation	1	31	11,669	-.29	.04	<b>-.36</b>	.00	-.31	-.28	-.36	-.36
Right-wing authoritarianism	1	42	14,301	.00	.05	<b>.00</b>	.00	-.02	.02	.00	.00
<b>Counterproductivity</b>											
Academic dishonesty	1	16	5,253	-.10	.10	<b>-.13</b>	.11	-.15	-.05	-.26	.01
Counterproductive academic behavior											
Overall	1	56	24,436	-.10	.10	<b>-.13</b>	.10	-.12	-.08	-.26	.01
Absenteeism	1	21	5,251	-.07	.10	<b>-.09</b>	.09	-.11	-.03	-.21	.03
Breach of rules	1	4	1,124	-.17	.11	<b>-.22</b>	.11	-.28	-.06	-.36	-.07
Cheating	1	8	2,263	-.17	.10	<b>-.22</b>	.11	-.24	-.10	-.35	-.08
Deception	1	9	1,244	-.05	.14	<b>-.06</b>	.14	-.14	.04	-.24	.11
Low effort	1	6	11,478	-.08	.02	<b>-.10</b>	.00	-.10	-.06	-.10	-.10
Misuse of resources	1	4	1,124	-.21	.03	<b>-.27</b>	.00	-.24	-.18	-.27	-.27
Plagiarism	1	5	1,620	-.03	.08	<b>-.04</b>	.07	-.10	.04	-.13	.05
Applicant faking	2	28	46,025	.06	.04	<b>.06</b>	.04	.04	.07	.02	.11
Counterproductive work behavior											
Overall	3	41	13,280	-.28	.11	<b>-.36</b>	.05	-.32	-.25	-.42	-.29
Other-ratings	1	9	2,246	-.18	.16	<b>-.26</b>	.22	-.28	-.08	-.54	.01
Interpersonal	1	32	8,413	-.31	.10	<b>-.39</b>	.10	-.34	-.28	-.52	-.26
Organizational	1	30	7,871	-.25	.10	<b>-.32</b>	.10	-.29	-.21	-.45	-.19
Withdrawal behavior	1	4	863	-.12	.06	<b>-.15</b>	.00	-.18	-.06	-.15	-.15
Cyberloafing	1	7	2,205	-.09	.06	<b>-.11</b>	.03	-.13	-.05	-.14	-.08
Absenteeism	1	9	1,076	-.05	.08	<b>-.06</b>	.00	-.10	.002	-.06	-.06
Aggression	2	44	9,905	-.32	.07	<b>-.40</b>	.03	-.34	-.29	-.44	-.35
Antisocial behavior	2	44	14,859	-.37	.04	<b>-.46</b>	.05	-.38	-.35	-.52	-.40
Safety performance	1	12	4,791	.20	.06	<b>.25</b>	.05	.16	.24	.18	.31
Irresponsible behavior	1	4	24,259	-.08	.01	<b>-.12</b>	.00	-.09	-.07	-.12	-.12
Sexual activity											
Overall	1	19	31,182	-.10	.04	<b>-.13</b>	.04	-.12	-.08	-.19	-.07
Casual sex	1	6	18,008	-.19	.02	<b>-.23</b>	.02	-.21	-.17	-.26	-.21
Lifetime sexual partners	1	5	6,495	-.05	.02	<b>-.06</b>	.00	-.07	-.03	-.06	-.06
Risky sexual behaviors	1	13	4,165	-.11	.04	<b>-.13</b>	.00	-.13	-.09	-.13	-.13
Sexual infidelity	1	10	18,350	-.18	.03	<b>-.23</b>	.03	-.20	-.16	-.26	-.19
<b>Turnover/Accidents</b>											
Turnover											
Turnover/tenure	1	15	1,838	-.06	.09	<b>-.09</b>	.00	-.11	-.01	-.09	-.09
Turnover	1	15	1,532	-.22	.13	<b>-.27</b>	.12	-.29	-.15	-.42	-.13
Voluntary turnover	1	6	2,449	-.07	.09	<b>-.09</b>	.09	-.14	-.001	-.20	.02
Accidents											
Occupational	1	9	4,239	-.07	.05	<b>-.12</b>	.00	-.10	-.04	-.12	-.12
Vehicular	1	29	10,577	-.07	.06	<b>-.12</b>	.06	-.10	-.05	-.20	-.05

Note. Values with effects  $\bar{\rho} \geq .20$  are presented in grayscale. *m* = number of independent meta-analyses; *k* = number of independent samples; *N* = total sample size;  $\bar{r}$  = *M* sample-size-weighted observed correlation; *SD<sub>r</sub>* = *M* observed standard deviation;  $\bar{\rho}$  = estimated population correlation (bold) corrected for unreliability; *SD<sub>ρ</sub>* = standard deviation of population correlation; 95% CI = 95% confidence interval around observed correlation; 80% CR = 80% credibility interval around population correlation.

## Agreeableness

Table 2 reports meta-analyses of Agreeableness across categories of individual variables. It shows relations in a helpful direction for 83 (93%) of 88 variables, including 39 effects  $\geq .20$ .

**Motivational constructs.** Agreeableness relates positively to psychological needs for relatedness ( $\bar{\rho}=.46$ ), autonomy ( $\bar{\rho}=.32$ ), and competence ( $\bar{\rho}=.31$ ), as well as regulatory focus promotion ( $\bar{\rho}=.23$ ). It relates positively to employee engagement ( $\bar{\rho}=.26$ ), including dedication and vigor components (both  $\bar{\rho}s=.21$ ), and demonstrating effort ( $\bar{\rho}=.20$ ), but relates negatively to goal-setting motivation ( $\bar{\rho}=-.30$ ). The trait also relates positively to noncalculative ( $\bar{\rho}=.35$ ) and social-normative ( $\bar{\rho}=.28$ ) motivations to lead, and proactive career orientation ( $\bar{\rho}=.23$ ).

**Personal values.** Agreeableness relates strongly positively to the higher order value of self-transcendence ( $\bar{\rho}=.50$ ), and its constituent values of benevolence ( $\bar{\rho}=.60$ ) and universalism ( $\bar{\rho}=.37$ ), whereas it relates negatively to the higher order value of self-enhancement ( $\bar{\rho}=-.27$ ) and two of its constituent values—power ( $\bar{\rho}=.42$ ) and achievement ( $\bar{\rho}=-.24$ ). Furthermore, the trait relates positively to the basic personal values of conformity ( $\bar{\rho}=.25$ ) and tradition ( $\bar{\rho}=.22$ ).

**Psychological health.** Agreeableness relates positively to happiness ( $\bar{\rho}=.35$ ), quality of life ( $\bar{\rho}=.30$ ), and the three components of subjective well-being: low negative affect ( $\bar{\rho}=.30$ ), life satisfaction ( $\bar{\rho}=.24$ ), and positive affect ( $\bar{\rho}=.22$ ). It also relates positively to psychological well-being, including components of positive relations with others ( $\bar{\rho}=.47$ ), personal growth ( $\bar{\rho}=.39$ ), purpose in life ( $\bar{\rho}=.34$ ), environmental mastery ( $\bar{\rho}=.34$ ), and self-acceptance ( $\bar{\rho}=.33$ ). The trait relates positively to authentic expressions of pride ( $\bar{\rho}=.27$ ), but it relates negatively to hubristic pride ( $\bar{\rho}=-.48$ ). Agreeableness also relates positively to a sense of coherence ( $\bar{\rho}=.36$ ) and personal accomplishment ( $\bar{\rho}=.29$ ). By contrast, it relates negatively to using substances to cope with stress ( $\bar{\rho}=-.24$ ), overall loneliness ( $\bar{\rho}=-.30$ ) and its social loneliness component ( $\bar{\rho}=-.28$ ), the depersonalization component of burnout ( $\bar{\rho}=-.31$ ), and internet addiction ( $\bar{\rho}=-.28$ ).

**Physical health and medical conditions.** Compared with the previous categories, effects in physical health and medical conditions categories are small; however, they are of great practical importance.<sup>4</sup> Thus, it is notable that Agreeableness relates negatively to sexual dysfunction and excessive alcohol use in concurrent studies, as well as to a reduced risk, in prospective studies, for developing Alzheimer's disease and mortality risk from coronary heart disease (all  $\bar{\rho}s=.05$ ).

Overall, relations reflect motivations for relatedness and effortful engagement, rejection of self-enhancement and

embrace of benevolence values, and evidence of subjective well-being and healthy psychological functioning in coping with interpersonal and environmental stressors.

Table 3 presents meta-analyses of Agreeableness across categories of interpersonal variables. It has relations in a helpful direction for 61 (92%) of 66 variables and 26 effects  $\geq .20$ .

**Interpersonal attitudes.** Agreeableness relates positively to social support perceptions ( $\bar{\rho}=.33$ ), and perceptions of social job characteristics ( $\bar{\rho}=.31$ ), including an absence of conflict ( $\bar{\rho}=.29$ ), social support ( $\bar{\rho}=.28$ ), interaction outside the organization ( $\bar{\rho}=.28$ ), interdependence ( $\bar{\rho}=.24$ ), and feedback from others ( $\bar{\rho}=.21$ ). It is also characterized by sanguine perceptions of others' leadership (passive leadership:  $\bar{\rho}=-.31$ ; transformational leadership:  $\bar{\rho}=.24$ ). The trait relates negatively to workplace ostracism ( $\bar{\rho}=-.31$ ), but relates positively, and substantively, to forgivingness ( $\bar{\rho}=.47$ ), as well as to intimate partner-rated ( $\bar{\rho}=.20$ ) and marital satisfaction ( $\bar{\rho}=.29$ ), pro-environmental attitudes ( $\bar{\rho}=.20$ ), spirituality ( $\bar{\rho}=.25$ ), and religiosity ( $\bar{\rho}=.23$ ).

**Collaboration.** Agreeableness relates positively to negotiation performance and "getting along" performance (both  $\bar{\rho}s=.20$ ), internal networking behavior ( $\bar{\rho}=.21$ ), and religious social investments ( $\bar{\rho}=.20$ ). It also relates positively to cooperative conflict resolution—embracing goal integration ( $\bar{\rho}=.30$ ) and compromise ( $\bar{\rho}=.26$ ) but rejecting dominance of others ( $\bar{\rho}=-.25$ ).

**Leadership.** Agreeableness relates positively to leadership effectiveness, follower-rated satisfaction with leader, and the charisma component of transformational leadership (all  $\bar{\rho}s=.20$ ).

Overall, interpersonal relations reflect a pattern of supportive, cooperative, and satisfying personal relationships both inside and outside the workplace. Relations also reflect a general acceptance of others and nature, as well as aspirations for connection with the transcendent.

Table 4 presents meta-analyses of Agreeableness across categories of work/school variables. It has relations in a helpful direction for 83 (94%) of 88 variables and 39 effects  $\geq .20$ .

**Vocational interests.** Agreeableness has mostly nil relations to variables in this category, but it does display a notable positive relation to social interests ( $\bar{\rho}=.18$ ).

**Work attitudes.** Agreeableness relates positively to variables reflecting adjustment to college ( $\bar{\rho}=.37$ ), including components of academic ( $\bar{\rho}=.35$ ), institutional attachment ( $\bar{\rho}=.34$ ), social ( $\bar{\rho}=.31$ ), and personal-emotional adjustment ( $\bar{\rho}=.26$ ). Similarly, it relates positively to overall expatriate adjustment ( $\bar{\rho}=.23$ ). It also relates positively to more sensitive perceptions of procedural organizational justice ( $\bar{\rho}=.21$ ), as well as



affective ( $\bar{\rho}=.30$ ), normative ( $\bar{\rho}=.26$ ), and global ( $\bar{\rho}=.24$ ) forms of organizational commitment. Finally, Agreeableness is helpful for work-life balance—relating negatively to family interference with work ( $\bar{\rho}=-.23$ ) and work interference with family ( $\bar{\rho}=-.21$ ), and positively to positive work-non-work spillover ( $\bar{\rho}=.22$ ).

**Performance.** Agreeableness relates positively to proficient performance on behavioral tendency ( $\bar{\rho}=.38$ ) and knowledge-based ( $\bar{\rho}=.20$ ) situational judgment tests. It is also associated with receiving higher overall job performance evaluations from peers ( $\bar{\rho}=.21$ ), tendencies to rate the performance of others with greater leniency, and job crafting (both  $\bar{\rho}s=.25$ ). Finally, the relation of Agreeableness to supervisor ratings of overall job performance warrants a few words. Although the relationship falls short of the threshold of  $\bar{\rho} \geq .20$ , second-order meta-analysis ( $m = 10$ ) indicates that Agreeableness shows a small, positive, and generalizable effect for this key work variable ( $\bar{\rho}=.13$ ). This performance relation likely reflects Agreeableness' contributions toward discretionary, contextual performance rather than toward technical proficiency ( $\bar{\rho}=.19$  vs.  $.09$ ).

**Extrinsic career success.** There are no variables with medium (or larger) effects in this category. This omission is notable because, despite its general helpfulness, Agreeableness does have its hindrances. Specifically, the trait has nil or negative relations to outcomes indicative of extrinsic career success, including productivity ( $\bar{\rho}=-.09$ ), academic success ( $\bar{\rho}=.01$ ), training success ( $\bar{\rho}=.05$ ), employment status ( $\bar{\rho}=-.02$ ), promotions ( $\bar{\rho}=-.05$ ), and salary ( $\bar{\rho}=-.10$ ).

Overall, work/school relations reflect a pattern of psychological adjustment, helpful work attitudes, and performance behavior but also lower productivity outcomes and fewer rewards.

Table 5 presents meta-analyses of Agreeableness across categories of antisocial variables. It displays relations in a helpful direction for 36 (98%) of 37 variables, with 18 effects  $\geq .20$ .

**Dark traits.** Agreeableness relates substantially negatively to psychopathy ( $\bar{\rho}=-.61$ ) and Machiavellianism ( $\bar{\rho}=-.53$ ) as well as moderately negatively to narcissism ( $\bar{\rho}=-.23$ ).

**Antisocial attitudes.** Agreeableness relates negatively to social dominance orientation ( $\bar{\rho}=-.36$ ) and prejudice ( $\bar{\rho}=-.28$ ).

**Counterproductivity.** Agreeableness relates negatively to counterproductive academic behavior, including misuse of resources ( $\bar{\rho}=-.27$ ), cheating, and breach of rules (both  $\bar{\rho}s=-.22$ ). It also relates negatively to overall ( $\bar{\rho}=-.36$ ), interpersonal ( $\bar{\rho}=-.39$ ), organizational ( $\bar{\rho}=-.32$ ), and other-rated ( $\bar{\rho}=-.26$ ) counterproductive work behavior. What is more, Agreeableness relates negatively to antisocial

behavior ( $\bar{\rho}=-.46$ ) and aggression ( $\bar{\rho}=-.40$ ), as well as casual sex and sexual infidelity (both  $\bar{\rho}s=-.23$ ). Finally, it relates positively to safety performance ( $\bar{\rho}=.25$ ).

**Turnover/accidents.** Agreeableness relates negatively to turnover ( $\bar{\rho}=-.27$ ).

Overall, antisocial relations reflect restraint of impulses, attitudes, and behavior that harm or exploit others, as well as a respect for existing social and institutional norms and rules.

**Summary.** Table 6 presents a synthesis of effects of Agreeableness across 275 variables. Effects range from  $\bar{\rho}=-.30$  to  $.61$ , with a grand mean of  $\bar{\rho}_M = .16$  ( $SD = .13$ ). Values at the first ( $\bar{\rho}=.06$ ), median ( $\bar{\rho}=.14$ ), and third quartiles ( $\bar{\rho}=.24$ ) reflect Agreeableness' generally helpful contributions to consequential external variables (93% of total). Across categories, grand means range from nil ( $\bar{\rho}_M = .01$ ) to large ( $\bar{\rho}_M = .46$ ). Grand means for personal values, psychological health, interpersonal attitudes, dark traits, and antisocial attitudes are medium-to-large; grand means for motivational constructs, collaboration, leadership, work attitudes, performance, counterproductivity, and turnover/accidents are small-to-medium; and grand means for physical health, medical conditions, vocational interests, and extrinsic career success are nil/negligible.

### Lower Order Traits

Table 7 presents meta-analyses of Agreeableness' lower order traits. Given sparser data, we present results in a common table, with a column corresponding to each trait. To save space, we display population correlations only. As before, we focus our reporting on effects  $\bar{\rho} \geq .20$  (for details, including sources and complete results for lower order traits, see Tables S7 through S17).

**Compassion.** The compassion aspect has effects in a helpful direction for 13 variables (93%). It relates positively to forgiveness ( $\bar{\rho}=.29$ ), religiosity ( $\bar{\rho}=.31$ ), pro-environmental attitudes ( $\bar{\rho}=.53$ ) and behavior ( $\bar{\rho}=.37$ ), but it relates negatively to psychopathy ( $\bar{\rho}=-.39$ ), narcissism, and antisocial behavior (both  $\bar{\rho}s=-.27$ ).

**Altruism.** The altruism facet shows relations in a helpful direction for all 13 variables (100%). The trait relates positively to religiosity ( $\bar{\rho}=.27$ ), pro-environmental attitudes ( $\bar{\rho}=.42$ ) and behavior ( $\bar{\rho}=.26$ ), and safety performance ( $\bar{\rho}=.35$ ), but it relates negatively to psychopathy ( $\bar{\rho}=-.38$ ), narcissism ( $\bar{\rho}=-.24$ ), antisocial behavior ( $\bar{\rho}=-.29$ ), and aggression ( $\bar{\rho}=-.28$ ).

**Tendermindedness.** The tendermindedness facet has effects in a helpful direction for 13 (87%) of 15 variables. The trait relates positively to overall job performance ( $\bar{\rho}=.23$ ), religiosity ( $\bar{\rho}=.30$ ), pro-environmental attitudes ( $\bar{\rho}=.55$ ), and

**Table 6.** Summary of Meta-Analyses of Agreeableness Across Categories of Variables.

Variable category	$N_v$	$\bar{\rho}_M$	$SD_{\rho}$	Min	Q1	Med	Q3	Max	$N_{\bar{\rho} \geq .20}$
<b>Overall</b>	<b>275</b>	<b>.16</b>	<b>.13</b>	<b>-.30</b>	<b>.06</b>	<b>.14</b>	<b>.24</b>	<b>.61</b>	<b>101</b>
Individual variables									
Motivational constructs	27	.17	.14	-.30	.11	.16	.23	.46	12
Personal values	14	.24	.18	.00	.07	.23	.35	.60	8
Psychological health	28	.26	.11	.07	.18	.28	.34	.48	19
Physical health	9	.02	.03	-.02	.01	.01	.05	.07	0
Medical conditions	10	.01	.02	-.02	.00	.00	.03	.05	0
Interpersonal variables									
Interpersonal attitudes	25	.21	.12	-.11	.18	.23	.29	.47	16
Collaboration	26	.10	.12	-.18	.04	.12	.19	.30	7
Leadership	15	.11	.09	-.12	.06	.11	.19	.20	3
Work/School variables									
Vocational interests	6	.05	.07	.00	.01	.03	.06	.18	0
Work attitudes	34	.19	.08	.04	.13	.18	.23	.37	13
Performance	34	.10	.09	-.07	.04	.08	.15	.38	5
Extrinsic career success	10	.03	.09	-.10	-.04	.03	.11	.15	0
Antisocial variables									
Dark traits	3	-.46	.20	-.61	-.57	-.53	-.38	-.23	3
Antisocial attitudes	3	-.21	.19	-.36	-.32	-.28	-.14	.00	2
Counterproductivity	26	-.19	.13	-.46	-.26	-.14	-.10	.06	12
Turnover/Accidents	5	-.14	.08	-.27	-.12	-.12	-.09	-.09	1

Note. We rekeyed effects for variables with a negative (e.g., dark traits) or a neutral valence (e.g., personal values) in a positive direction prior to calculating overall descriptive statistics.  $N_v$  = number of variables per category;  $\bar{\rho}_M$  =  $M$  estimated population correlation across variables;  $SD_{\rho}$  = between-variables standard deviation in population correlations; Min = minimum correlation; Q1 = correlation at the first quartile (i.e., 25th percentile); Med = median correlation; Q3 = correlation at the third quartile (i.e., 75th percentile); Max = maximum correlation;  $N_{\bar{\rho} \geq .20}$  = number of correlations with medium (or larger) effect size (i.e.,  $\bar{\rho} \geq .20$ ).

behavior ( $\bar{\rho}=.42$ ), but it relates negatively to psychopathy ( $\bar{\rho}=-.33$ ), narcissism ( $\bar{\rho}=-.24$ ), and antisocial behavior ( $\bar{\rho}=-.21$ ).

**Politeness.** The politeness aspect shows relations in a helpful direction for 11 (100%) variables. The trait relates positively to religiosity ( $\bar{\rho}=.26$ ), pro-environmental attitudes ( $\bar{\rho}=.30$ ) and behavior ( $\bar{\rho}=.25$ ), but it relates markedly negatively to narcissism ( $\bar{\rho}=-.55$ ), psychopathy ( $\bar{\rho}=-.53$ ), antisocial behavior ( $\bar{\rho}=-.47$ ), and aggression ( $\bar{\rho}=-.46$ ).

**Straightforwardness.** The straightforwardness facet has helpful relations to 12 (100%) variables. It relates positively to religiosity ( $\bar{\rho}=.28$ ), pro-environmental attitudes ( $\bar{\rho}=.32$ ) and behavior ( $\bar{\rho}=.23$ ), but it relates negatively to psychopathy ( $\bar{\rho}=-.54$ ), narcissism ( $\bar{\rho}=-.43$ ), academic dishonesty ( $\bar{\rho}=-.31$ ), antisocial behavior ( $\bar{\rho}=-.41$ ), and aggression ( $\bar{\rho}=-.37$ ).

**Modesty.** The modesty facet has relations in a helpful direction for 10 (91%) of 11 variables. The trait relates negatively to narcissism ( $\bar{\rho}=-.48$ ), psychopathy ( $\bar{\rho}=-.25$ ), aggression ( $\bar{\rho}=-.22$ ), and antisocial behavior ( $\bar{\rho}=-.20$ ).

**Cooperativeness.** The cooperativeness facet has effects in a helpful direction for all 13 (100%) variables. It relates

positively and notably to contextual performance ( $\bar{\rho}=.20$ ), as well as religiosity ( $\bar{\rho}=.27$ ), pro-environmental attitudes ( $\bar{\rho}=.21$ ) and behavior ( $\bar{\rho}=.20$ ). In contrast, it relates negatively to psychopathy ( $\bar{\rho}=-.45$ ) and narcissism ( $\bar{\rho}=-.36$ ), and markedly negatively to both aggression ( $\bar{\rho}=-.48$ ) and antisocial behavior ( $\bar{\rho}=-.46$ ).

**Trust.** The trust facet has relations in a helpful direction for 12 (93%) of 13 variables. The trait relates positively to religiosity ( $\bar{\rho}=.22$ ), but it relates negatively to psychopathy ( $\bar{\rho}=-.34$ ), aggression, and antisocial behavior (both  $\bar{\rho}s=-.25$ ).

**HEXACO honesty-humility.** Honesty-humility has effects in a helpful direction for 36 (92%) of 39 variables. It relates positively to five components of psychological well-being (range of  $\bar{\rho} = .22-.26$ ), as well as forgivingness ( $\bar{\rho} = .32$ ), pro-environmental attitudes ( $\bar{\rho} = .24$ ) and behavior ( $\bar{\rho} = .25$ ), and “getting along” performance ( $\bar{\rho} = .32$ ). By comparison, honesty-humility relates negatively to Machiavellianism ( $\bar{\rho} = -.70$ ), psychopathy ( $\bar{\rho} = -.61$ ), narcissism ( $\bar{\rho} = -.54$ ), and prejudice ( $\bar{\rho} = -.29$ ). Moreover, it relates negatively to academic dishonesty ( $\bar{\rho} = -.28$ ), and overall ( $\bar{\rho} = -.45$ ), organizational ( $\bar{\rho} = -.37$ ), and interpersonal ( $\bar{\rho} = -.35$ ) counterproductive work behavior, as well as antisocial behavior ( $\bar{\rho} = -.46$ ), aggression, and casual sex (both  $\bar{\rho} = -.39$ ).

**Table 7.** Meta-Analyses of Agreeableness' Lower Order Traits Across Categories of Variables.

Variable	Compassion aspect	Altruism facet	Tender-mindedness facet	Politeness aspect	Straight-forwardness facet	Modesty facet	Cooperativeness facet	Trust facet	HEXACO H-H	HEXACO A
<b>Motivational constructs</b>										
Academic procrastination	-.08	-.17	.03	-.07	-.13	.06	-.09	-.16	-.04	-.17
<b>Psychological health</b>										
Happiness									.05	.25
Subjective well-being										
Life satisfaction			.11				.19		.13	.19
Negative affect									-.18	-.30
Positive affect									.08	.16
Psychological well-being										
Autonomy									.23	.02
Environmental mastery									.24	.27
Personal growth									.26	.20
Positive relationships									.24	.32
Purpose in life									.22	.16
Self-acceptance									.17	.27
<b>Physical health</b>										
Physical activity									-.15	-.05
<b>Interpersonal attitudes</b>										
Forgiveness	.29								.32	.43
Religiosity	.31	.27	.30	.26	.28	.04	.27	.22	.19	.33
Pro-environmental attitudes	.53	.42	.55	.30	.32	.16	.21	.05	.24	.17
Pro-environmental behavior	.37	.26	.42	.25	.23	.14	.20	.06	.25	.13
Political orientation: Liberal									.17	.11
<b>Collaboration</b>										
Interpersonal sensitivity	.13		.16					.04		
Prosocial behavior	.12	.11	.16					.14	.17	.09
"Getting along" performance									.32	.16
Networking behavior									-.01	.11
<b>Leadership</b>										
Leadership									.10	-.06

(continued)

Table 7. (continued)

Variable	Compassion aspect	Altruism facet	Tender-mindedness facet	Politeness aspect	Straight-forwardness facet	Modesty facet	Cooperativeness facet	Trust facet	HEXACO H-H	HEXACO A
<b>Work attitudes</b>										
Job satisfaction			.15				.12			
<b>Performance</b>										
Occupational performance					.06	.03	.16	.11	.09	.01
Overall job performance	.18	.09	.23	.11	.06	.03	.16	.11	.06	.18
Technical performance	-.01	.01	-.03	.09	.07	.03	.12	-.13	.13	-.01
Contextual performance	.11	.10	.10	.11	.01	.04	.20	.15	.14	.23
Organizational citizenship										.12
Creativity									-.13	.04
<b>Dark traits</b>										
Machiavellianism					-.43	-.48	-.36	-.19	-.70	-.41
Narcissism	-.27	-.24	-.24	-.55	-.43	-.48	-.36	-.19	-.54	-.22
Psychopathy	-.39	-.38	-.33	-.53	-.54	-.25	-.45	-.34	-.61	-.45
<b>Antisocial attitudes</b>										
Prejudice									-.29	-.10
Right-wing authoritarianism									-.02	.02
<b>Counterproductivity</b>										
Academic dishonesty					-.31				-.28	-.03
Counterproductive work behavior										
Overall									-.45	-.22
Interpersonal									-.35	-.31
Organizational									-.37	-.25
Aggression	-.18	-.28	-.14	-.46	-.37	-.22	-.48	-.25	-.39	-.36
Antisocial behavior	-.27	-.29	-.21	-.47	-.41	-.20	-.46	-.25	-.46	-.31
Safety performance		.35								
Casual sex									-.39	-.11

Note. Values with effects  $\bar{p} \geq .20$  are presented in grayscale. All values are estimated population correlations ( $\bar{p}$ ) corrected for unreliability.

**HEXACO agreeableness.** Agreeableness has relations in a helpful direction for 35 of 39 variables (90%). It relates positively to happiness ( $\bar{\rho} = .25$ ) and low negative affect ( $\bar{\rho} = .30$ ), as well as to four components of psychological well-being (range of  $\bar{\rho} = .20$ – $.32$ ). It also relates positively to forgivingness ( $\bar{\rho} = .43$ ), religiosity ( $\bar{\rho} = .33$ ), and contextual performance ( $\bar{\rho} = .23$ ). In contrast, the trait relates negatively to psychopathy ( $\bar{\rho} = -.45$ ), Machiavellianism ( $\bar{\rho} = -.41$ ), narcissism ( $\bar{\rho} = -.22$ ), interpersonal ( $\bar{\rho} = -.31$ ), organizational ( $\bar{\rho} = -.25$ ), and overall ( $\bar{\rho} = -.22$ ) counterproductive work behavior, aggression ( $\bar{\rho} = -.36$ ), and antisocial behavior ( $\bar{\rho} = -.31$ ).

**Discriminant validity of honesty–humility vis-à-vis politeness.** Evidence indicates that honesty–humility and politeness correlate very strongly ( $\bar{\rho} = .64$ , Ludeke et al., 2019), but little is known about their comparative relations to external variables. Therefore, as a test of discriminant relations, we examined the differences between their respective effects and the similarity of their profiles of external relations (cf. Furr, 2010). Across 11 available variables, results indicate that the two constructs' effects are largely overlapping. Their absolute mean difference is negligible ( $M = .04$ ,  $SD = .03$ ) and their correlational profiles are virtually identical (intra-class correlation = .99; Supplementary Table S18).

**Summary.** Table 8 presents a synthesis of Agreeableness' lower order trait effects across all 42 available variables. HEXACO honesty–humility and agreeableness have received the most meta-analytic attention ( $N_V = 39$ ) and their respective grand means denote medium effects ( $\bar{\rho}_M = .22$ ,  $SD = .18$ ; and  $\bar{\rho}_M = .18$ ,  $SD = .13$ ). Aspects and facets of Agreeableness have received less research attention ( $N_V$  range = 11 to 15) but show more variability in effects. Modesty ( $\bar{\rho}_M = .14$ ,  $SD = .15$ ) and trust ( $\bar{\rho}_M = .14$ ,  $SD = .12$ ) have small-to-medium means; altruism ( $\bar{\rho}_M = .23$ ,  $SD = .12$ ) and tendermindedness ( $\bar{\rho}_M = .20$ ,  $SD = .15$ ) have medium means; and straightforwardness ( $\bar{\rho}_M = .26$ ,  $SD = .17$ ), cooperativeness ( $\bar{\rho}_M = .25$ ,  $SD = .14$ ), and the aspects of compassion ( $\bar{\rho}_M = .23$ ,  $SD = .14$ ) and politeness ( $\bar{\rho}_M = .29$ ,  $SD = .19$ ), all have stronger grand mean effects.

Breaking out the grand means of categories reporting relations to two or more variables, grand means for psychological health are moderate for HEXACO agreeableness ( $\bar{\rho}_M = .21$ ) and honesty–humility ( $\bar{\rho}_M = .18$ ). Grand means for interpersonal attitudes cluster in ranges of small-to-medium large ( $\bar{\rho}_M = .10$  to  $.25$ ; modesty, cooperativeness, HEXACO agreeableness, honesty–humility, trust) and large-to-very large ( $\bar{\rho}_M \approx .30$  to  $.40$ ; compassion, altruism, tendermindedness, politeness, straightforwardness), whereas collaboration grand means range from small ( $\bar{\rho}_M \approx .10$ ; trust, HEXACO agreeableness) to small-to-medium ( $\bar{\rho}_M \approx .15$ ; compassion, tendermindedness, and honesty–humility). Grand means for performance range from nil/negligible ( $\bar{\rho}_M \approx .05$ ; altruism, straightforwardness, modesty) to small ( $\bar{\rho}_M \approx .10$ ; compassion, tendermindedness,

politeness, trust, and HEXACO agreeableness), although cooperativeness and honesty–humility display more moderate grand means (both  $\bar{\rho}_M$ s =  $.16$ ). Dark trait grand means range widely from large ( $\bar{\rho}_M = -.30$  to  $-.40$ ; compassion, altruism, tendermindedness, modesty, cooperativeness, trust, HEXACO agreeableness) to very large ( $\bar{\rho}_M > -.45$ ; politeness, straightforwardness, honesty–humility). For antisocial attitudes, grand means are nil for HEXACO agreeableness ( $\bar{\rho}_M = -.04$ ) and medium for honesty–humility ( $\bar{\rho}_M = -.16$ ). Counterproductivity grand means cluster as small-to-medium large ( $\bar{\rho}_M = -.15$  to  $-.25$ ; compassion, tendermindedness, modesty, trust, and HEXACO agreeableness) and large-to-very large ( $\bar{\rho}_M = -.30$  to  $-.40$ +; altruism, cooperativeness, politeness, honesty–humility, straightforwardness). Overall, lower order traits reveal variability in both research attention and effect sizes. Findings contribute to a richer explanatory account of Agreeableness' innerworkings and to a deeper understanding of its empirical functioning for consequential external variables.

## Discussion

Drawing on 142 distinct meta-analyses reporting effects for 275 unique variables, which represent  $N > 1.9$  million participants across  $k > 3,900$  studies, we presented the largest and most comprehensive quantitative review of the consequential effects of Agreeableness available in the literature. In answer to our first research question, we found that Agreeableness has relations in a desirable direction for 93% of variables and an overall grand mean of  $\bar{\rho}_M = .16$  ( $SD = .13$ ), which reflects its general helpfulness to variables over the lifespan. In addition, by organizing variables across 16 conceptual categories, we answered our second question about a detailed accounting of its effects. Category grand means are medium-to-large for personal values, psychological health, interpersonal attitudes, dark traits, and antisocial attitudes; category grand means are small-to-medium for motivational constructs, collaboration, leadership, work attitudes, performance, counterproductivity, and turnover/accidents; and category grand means are nil/negligible for physical health, medical conditions, vocational interests, and extrinsic career success. In answer to our third question, we described an integrative hierarchical model of Agreeableness, which organizes 10 lower order traits from two models of personality and analyzed traits' effects for 42 variables from 20 meta-analyses. Findings reveal differential functioning and utility among these traits. For example, compassion and its facets have helpful effects for psychological health, but honesty–humility, politeness, and its facets have helpful effects for avoiding counterproductivity. Furthermore, the cooperativeness facet has notable industrial utility. Results highlight the benefits of lower order trait assessment and help illuminate the structure and functioning of Agreeableness.

To answer our final question about the characteristic functioning of Agreeableness across consequential variables, we

**Table 8.** Summary of Meta-Analyses of Agreeableness' Lower Order Traits Across Categories of Variables.<sup>a</sup>

Variable category	$N_v$	$\bar{\rho}_M$	$SD_\rho$	$N\bar{\rho} \geq .20$
<b>Compassion aspect</b>	<b>14</b>	<b>.23</b>	<b>.14</b>	<b>7</b>
Interpersonal attitudes	4	.38	.11	
Collaboration	2	.13	.01	
Performance	3	.09	.10	
Dark traits	2	-.33	.08	
Counterproductivity	2	-.23	.06	
<b>Altruism facet</b>	<b>13</b>	<b>.23</b>	<b>.12</b>	<b>8</b>
Interpersonal attitudes	3	.32	.09	
Performance	3	.07	.05	
Dark traits	2	-.31	.10	
Counterproductivity	2	-.31	.04	
<b>Tendermindedness facet</b>	<b>15</b>	<b>.20</b>	<b>.15</b>	<b>7</b>
Interpersonal attitudes	3	.42	.13	
Collaboration	2	.16	.00	
Performance	3	.10	.13	
Dark traits	2	-.29	.06	
Counterproductivity	2	-.18	.05	
<b>Politeness aspect</b>	<b>11</b>	<b>.29</b>	<b>.19</b>	<b>7</b>
Interpersonal attitudes	3	.27	.03	
Performance	3	.10	.01	
Dark traits	2	-.54	.01	
Counterproductivity	2	-.47	.01	
<b>Straightforwardness facet</b>	<b>12</b>	<b>.26</b>	<b>.17</b>	<b>8</b>
Interpersonal attitudes	3	.28	.05	
Performance	3	.05	.03	
Dark traits	2	-.49	.08	
Counterproductivity	3	-.36	.05	
<b>Modesty facet</b>	<b>11</b>	<b>.14</b>	<b>.15</b>	<b>4</b>
Interpersonal attitudes	3	.11	.06	
Performance	3	.03	.01	
Dark traits	2	-.37	.16	
Counterproductivity	2	-.21	.01	
<b>Cooperativeness facet</b>	<b>13</b>	<b>.25</b>	<b>.14</b>	<b>8</b>
Interpersonal attitudes	3	.23	.04	
Performance	3	.16	.04	
Dark traits	2	-.41	.06	
Counterproductivity	2	-.47	.01	
<b>Trust facet</b>	<b>13</b>	<b>.14</b>	<b>.12</b>	<b>4</b>
Interpersonal attitudes	3	.11	.10	
Collaboration	2	.09	.07	
Performance	3	.04	.15	
Dark traits	2	-.27	.11	
Counterproductivity	2	-.25	.00	
<b>HEXACO Honesty–Humility</b>	<b>39</b>	<b>.22</b>	<b>.18</b>	<b>20</b>
Psychological health	10	.18	.07	
Interpersonal attitudes	5	.23	.06	
Collaboration	3	.16	.17	
Performance	6	.08	.11	
Dark traits	3	-.62	.08	
Antisocial attitudes	2	-.16	.19	
Counterproductivity	7	-.38	.06	

(continued)

**Table 8. (continued)**

Variable category	$N_v$	$\bar{\rho}_M$	$SD_\rho$	$N\bar{\rho} \geq .20$
<b>HEXACO Agreeableness</b>	<b>39</b>	<b>.18</b>	<b>.13</b>	<b>17</b>
Psychological health	10	.21	.09	
Interpersonal attitudes	5	.23	.14	
Collaboration	3	.12	.04	
Performance	6	.10	.10	
Dark traits	3	-.36	.12	
Antisocial attitudes	2	-.04	.08	
Counterproductivity	7	-.23	.12	

Note. We rekeyed effects for variables with a negative (e.g., dark traits) or a neutral valence (e.g., personal values) in a positive direction prior to calculating overall descriptive statistics.  $N_v$  = number of variables per category;  $\bar{\rho}_M$  =  $M$  estimated population correlation across variables;  $SD_\rho$  = between-variables standard deviation in population correlations; Min = minimum correlation;  $Q1$  = correlation at the first quartile (i.e., 25th percentile); Med = median correlation;  $Q3$  = correlation at the third quartile (i.e., 75th percentile); Max = maximum correlation;  $N\bar{\rho} \geq .20$  = number of correlations with medium (or larger) effect size (i.e.,  $\bar{\rho} \geq .20$ ); H-H = honesty-humility.

<sup>a</sup>Descriptive statistics are reported for categories reporting relations to two or more variables.

**Table 9. Synthesis of the Evidence: Eight Characteristic Themes of Agreeableness' Functioning.**

Theme	Description
Self-transcendence	Aspirations for self-directed growth as a person, motivation to show care and concern for others, and engagement in self-transcending practices
Contentment	Acceptance of life as it is, ability to successfully adjust to novel contexts and institutions, and experiences of satisfaction across life domains
Relational investment	Motivation to cultivate and maintain positive relationships with others across life domains, and experiences of mutual support and satisfaction
Teamworking	Empathic capacity to coordinate goals with others and ability to cooperate effectively, regardless of the role, to accomplish collective objectives
Work investment	Willingness to expend effort on work tasks, do quality work, and show responsiveness to the work environment
Lower results emphasis	A generally lower emphasis on setting goals and producing individual results, and a tendency to rate others' performance with greater leniency
Social norm orientation	Greater sensitivity to, respect for, and behavioral compliance with social norms and rules, as well as avoidance of rule-breaking and wrongdoing
Social integration	Capacity for successful integration into social roles and institutions, and a reduced likelihood of delinquency, antisocial behavior, and turnover

used variables with effects  $\bar{\rho} \geq .20$ , in tandem with existing theory, to synthesize eight themes. These themes were not derived from our organizational framework but rather reflect our interpretation and synthesis of the overall body of meta-analytic evidence. In describing these themes, we highlight their associated empirical effects in parentheses and draw on the lower order trait evidence, as available. Table 9 presents the eight characteristic themes of Agreeableness' functioning.

### *Synthesis of the Evidence: Eight Characteristic Themes of Agreeableness' Functioning*

**Self-transcendence.** The first theme reflects evidence that Agreeableness is associated with aspirations to develop as a person, to show benevolence to others, and to connect with the transcendent. The trait is characterized by a desire for self-directed growth (personal growth, need for autonomy). However, this path is not about self-seeking or

self-enlargement (low hubristic pride, low narcissism, and low self-enhancement values) but rather about selfless interconnection. Horizontally, self-transcendence involves deep care for known others (benevolence values), openness and acceptance of unknown others (low prejudice), and general concern for the well-being of humanity and nature (universalism values and pro-environmental attitudes); by contrast, it rejects dominance and control (low power values, low social dominance orientation). Vertically, self-transcendence involves participation in traditional religion (religiosity and social investment in religion) or personal spirituality (spirituality); in fact, Agreeableness is the primary Big Five trait associated with both self-transcending practices (Saroglou, 2010). Interconnection with what lies beyond conveys a rich sense of meaning and purpose (self-transcendence values and purpose in life) and a readiness to overlook the wrongs of others to maintain relational harmony (forgiveness).

**Contentment.** The second theme reflects evidence that Agreeableness is associated with greater acceptance of life, ability to adjust, and cross-domain satisfaction. Acceptance of life as it is a noted correlate of self-transcendence (Reed, 2013; Reischer et al., 2021). Agreeableness is not only associated with greater acceptance of others but also of oneself (self-acceptance), one's circumstances (quality of life), and one's works (personal accomplishment, authentic pride). This humanistic orientation contributes to Agreeableness' success in adjusting to novel environments and institutions (college and expatriate adjustment). Undoubtedly, a richer pool of emotional and cognitive resources also contributes help. Emotionally, Agreeableness is associated with higher levels of positive emotions (happiness, positive affect, low negative affect, and personal-emotional adjustment). Positive emotions are beneficial to adjustment for several reasons, including their ability to energize approach behavior, aid in flexibility, and engender liking in others (Graziano & Tobin, 2017; Wilmot et al., 2019). Cognitively, the trait is associated with a coherent sense of self (sense of coherence) and positive coping strategies, specifically, drawing on social support. Indeed, the trait relates negatively to withdrawal-based coping (low substance use and low internet addiction). Finally, greater acceptance and capacity to adjust enhances cross-domain satisfaction. Agreeableness is associated with satisfaction that spans domains (job and life satisfaction), spills across domains (positive work-nonwork spillover), and accrues over time (career satisfaction).

**Relational investment.** In their seminal review, Graziano and Eisenberg (1997) proposed that Agreeableness could be defined in motivational terms. That is, Agreeableness is a summary label for individual differences in the motivation to maintain positive relationships with others. Results here expound on this claim, providing wide-ranging evidence for this third characteristic theme. Agreeableness is characterized by positive contributions in face-to-face relationships with others (positive relations). These relationships, in turn, act as a source of mutual satisfaction and support (social support, low loneliness). Furthermore, relational investments are not limited to—or limited by—the nonwork domain (low work-family interference), but extend to the workplace (need for relatedness). At home, it is characterized by rewarding relations with intimate partners (intimate partner and marital satisfaction) and family members (social investment with family). At work, it is characterized by 360-degree relational investments: Agreeableness is associated with positive supervisor relations (leader-member exchange), supportive peer relations (social support, social adjustment to college, and low ostracism), transformational follower relations (noncalculative motivations to lead, charisma, and subordinate satisfaction), and humane client relations (interaction outside the organization, expatriate interactional adjustment, and low depersonalization).

**Teamworking.** Cybernetic models of personality posit that the coordination of goals and behavior with others is a key

function of Agreeableness (DeYoung, 2015; Van Egren, 2009). For coordination to work, it requires the ability or motivation to attend to others' mental states. Thus, it follows that empathic ability is a central correlate of Agreeableness (T. A. Allen et al., 2017; Nettle & Liddle, 2008). Accordingly, our fourth theme reflects evidence that the trait is associated with motivation and ability to cooperate with others to accomplish collective objectives. Regarding motivation, Agreeableness is associated with willingness to collaborate (social interdependence) and desire for mutually advantageous conflict resolutions (integrating and compromising styles). Regarding ability, whether it is rated by supervisors (negotiation performance), peers (overall job performance), or subordinates (overall job performance), and whether it involves voluntary help in an individual role (interpersonal citizenship behavior), collaborating in a team role ("getting along" performance), or leading followers in a supervisory role (effectiveness), Agreeableness is characterized by a dependable pattern of effective contributions to teamwork and common goals.

**Work investment.** The fifth theme reflects Agreeableness' association with a willingness to expend effort at work (demonstrating effort). The trait is marked by energetic engagement on work tasks (employee engagement), motivation to do proficient work (need for competence), and adaptation of one's job characteristics and career path (job crafting, proactive career orientation).

**Lower results emphasis.** Work investment notwithstanding, our sixth theme reflects the evidence that Agreeableness is also characterized by a lower drive to set and achieve goals (low achievement values and low goal-setting motivation), and, by extension, reduced individual output (productivity). Relatedly, it is associated with greater leniency in rating others. Agreeableness is characterized by more sanguine ratings of supervisory leadership (leadership perceptions) and more generous ratings of subordinate performance (leniency). When taken into account with the preceding themes, the interactive nature of Agreeableness' characteristic themes becomes clear: Agreeableness is characterized by work investment, but this energy is best directed in helping or cooperating with others (teamworking). Likewise, its lower results emphasis reflects the obverse of its higher person emphasis (relational investment), which prioritizes people compared with performance.

**Social norm orientation.** Norms play a major role in social interactions. Norms specify what is typically done in a given setting (i.e., descriptive norms) and what is approved of (or not) by society (i.e., injunctive norms; Reno et al., 1993). Because predictability and morality enable harmonious interactions with others, it follows that Agreeableness reflects evidence of greater sensitivity to, respect for, and compliance with social norms and rules. Hence our seventh theme. Agreeableness is associated with increased awareness of what behavior is appropriate in a given situation



(knowledge-based situational judgment tests) and greater sensitivity to deviation from normative procedures (organizational justice and safety climate perceptions). It is associated with greater respect for norms in general (conformity and tradition values) and in specific institutions, whether in individual contributor (regulatory focus promotion) or leader roles (social-normative motivation to lead). Finally, Agreeableness is characterized by greater behavioral compliance (safety performance and behavior-based situational judgment tests) and avoidance of rule-breaking behavior and institutional wrongdoing (low breach of rules, low cheating, and low resource misuse).

**Social integration.** Integrating individuals into normative social roles and institutions has societal implications. Individuals who are more socially integrable are more willing to invest in social roles, commit to institutions, and avoid delinquency and antisocial behavior; in turn, they are accorded the benefits of social bonding, institutional identity, access to resources, etc. (Lodi-Smith & Roberts, 2007). Thus, our final theme reflects evidence that Agreeableness is associated with successful integration into social roles and institutions. It is characterized by a propensity to adopt roles and commit to responsibilities of social institutions (academic adjustment to college and expatriate work adjustment). It is also associated with ease of socialization and operation within existing social networks (internal networking, social feedback, and absence of conflict). In addition, the trait is associated with greater commitment levels (organizational commitment and institutional attachment), more frequent citizenship behavior (organizational citizenship behavior), and less turnover (turnover). Finally, Agreeableness is characterized by the disposition (low psychopathy and low Machiavellianism) and associated behavioral restraint to avoid delinquency and antisocial action across domains, including in intimate (low casual sex, low infidelity), interpersonal (low aggression), and institutional arenas (low counterproductive behavior and low antisocial behavior).

**Lower order trait contributions.** Lower order trait evidence shines further light on the functioning of Agreeableness. Overall, three major findings stand out. First, compassion and its facets have comparatively stronger effects for self-transcendence, whereas politeness, honesty–humility, and facets have comparatively stronger effects for social integration (see Table S19). This pattern of approach-versus-restraint parallels aspects' respective neurobiological linkages to dopamine and serotonin (DeYoung, 2013; Wright et al., 2019) and also mirrors (and illuminates) processes of social accommodation and self-regulation underlying expressions of Agreeableness (cf. Graziano & Habashi, 2010). Second, HEXACO agreeableness shows a comparatively large effect for contentment (see Table S20). Results likely reflect the stronger influence of emotional stability variance in HEXACO agreeableness compared with its eponymous Big

Five factor. Third, across performance variables, the cooperativeness facet has the most consistently strong effects (see Table S21), which promises industrial utility. More broadly, it also suggests that teamwork (vs. individual work) is a productive way to apply Agreeableness' functioning in work contexts.

### Potential Boundary Conditions

Findings demonstrate that Agreeableness has generally helpful effects for consequential variables. However, certain boundary conditions may merit consideration when interpreting and drawing inferences from our results. In the next section, we review some relevant considerations.

**Unhelpful effects.** Agreeableness' characteristic themes mainly comprise variables with medium (or larger) effects. However, the trait also has null effects and small negative relations in an unhelpful direction. Although the effects are sparser and weaker in magnitude, it is notable that Agreeableness is linked to three unhelpful trends. The first is *unassertiveness*, which concerns a tendency to avoid interpersonal conflict, fail to stand up for oneself (conflict resolution styles of avoidance, obliging), and be taken advantage of (low self-enhancement values). Said differently, unassertiveness is a limitation of self-transcendence, and certain forms of relational conflict may act as a boundary condition on the theme. The second trend is somewhat *lower extrinsic success* (fewer promotions, lower salary; also see Judge et al., 2012). This is likely determined, in part, by Agreeableness' lower results emphasis, but it may also be reinforced (or perhaps rationalized) by its contentment theme. Regarding the final trend, although our study focused on non-clinical variables and populations, clinical meta-analyses indicate that Agreeableness relates positively, albeit weakly, to dependent personality disorder ( $\bar{\rho} = .09$ ; Samuel & Widiger, 2008; Saulsman & Page, 2004),<sup>5</sup> which reflects slightly elevated *excessive dependency* on others (for a review, see Disney, 2013). In sum, Agreeableness has its downsides, and these areas may merit future study.

**Other ratings.** Our review focused on self-report measures of Agreeableness. However, other ratings of personality also offer useful information. Self-reports give insight into a person's self-perceptions (i.e., their *identity* as agreeable), whereas other ratings reflect the perceptions of others (i.e., their *reputation* as agreeable). Overlap between these sources captures the self-other consensus of a person's trait standing (cf. McAbee & Connelly, 2016). Meta-analyses show that Agreeableness' self-other consensus correlations increase with more intimately acquainted raters (range of  $\bar{\rho} = .12$ – $.50$ ; Connelly & Ones, 2010). Yet, the interrater reliability of other ratings is rather low, even for better-acquainted raters (i.e., single rater  $\bar{r}_M = .32$ ; Connelly & Ones, 2010). Because other ratings are partly idiosyncratic to each rater's

specific relationship with and liking of the target, sufficient raters are needed to obtain a reliable measurement. When enough raters are obtained, other ratings of Agreeableness can predict academic and job performance better than self-reports (cf. Connelly & Ones, 2010; Oh et al., 2011). Thus, findings suggest that other ratings offer both shared and uniquely predictive information about Agreeableness' functioning.

**Contexts.** Our review focused on Agreeableness' effects as an individual-level construct. However, different contexts or levels of analysis may also have important implications. Meta-analyses have examined the relevance of Agreeableness for occupations, teams, and cultures.

Job analyses document that Agreeableness is a highly relevant personal characteristic in occupations that involve interpersonal work and helping (National Center for O\*NET Development, 2021). Second-order meta-analyses of personality and performance in nine major occupational groups corroborate this linkage. Results indicate that Agreeableness has its strongest effects for performance in customer service, clerical, and health care occupations, which involve helping. In contrast, it has nil effects in sales and management occupations, which entail goal-oriented achievement and emphasizes on production (Wilmot & Ones, 2021). Thus, job demands and/or contextual features of occupations may amplify themes of Agreeableness' functioning (e.g., teamworking and lower results emphasis).

Agreeableness can impact the composition and effectiveness of teams. It facilitates group processes by enhancing group cooperation, social cohesion, shared mental models, and conflict resolution (Barrick et al., 1998; Neuman & Wright, 1999; Taggar, 2002). Meta-analyses indicate that teams with higher minimum and average levels of Agreeableness tend to perform better in field settings (Bell, 2007), and teams with more variable levels of Agreeableness tend to perform worse (Peeters et al., 2006). Thus, greater homogeneity (vs. heterogeneity) of Agreeableness in teams contributes to greater (vs. poorer) team effectiveness. Results imply that multilevel models with cross-level interaction effects (Aguinis et al., 2013) may merit future investigation.

Culture is another key consideration. At the individual level of analysis, Agreeableness is higher in cultures that are lower in individualistic and masculine cultural values. At the country level of analysis, countries higher in Agreeableness are characterized by lower individualism and higher power distance (Taras et al., 2010). Agreeableness' cultural consequences also tend to be generally helpful. Countries higher in Agreeableness report higher subjective well-being, human development, environmental sustainability, and gross domestic product (Hirsh, 2014; McCrae et al., 2005). We suspect that national goals are helped by nations that are characterized by greater self-transcendence, relational investment, social norm orientation, and social integration. Indeed,

aggregate themes of Agreeableness' functioning may propel both national wealth and well-being.

**Interventions.** Our review focused on Agreeableness as a determinant or a correlate of consequential variables. However, a growing number of studies are focusing on trait change as the outcome of certain behavior, events, or interventions. Meta-analyses suggest that there may be less motivation and/or ability to increase one's Agreeableness levels. Regarding motivation, Thielmann and de Vries (2021) reported a small negative relation ( $\bar{r} = -.12$ ) between individuals' personality change goals and concurrent levels of Agreeableness. Regarding ability, Roberts et al. (2017) examined trait change from clinical interventions (e.g., therapy). The authors reported a small positive effect size ( $\bar{d} = .15$ ). Although it may be challenging to achieve large increases in Agreeableness via intervention, natural processes of maturation, as noted in the literature review, also result in increases in levels of Agreeableness across the lifespan (see Roberts et al., 2006).

Interestingly, it may be easier to decrease levels of Agreeableness. Meta-analyses have examined the potential reductions in Agreeableness due to declines in psychological and physical health. A meta-analysis of prospective studies found that experiencing depressive symptoms was associated with a small decrease in Agreeableness levels (Hakulinen, Elovainio, Pulkki-Raback, et al., 2015). By comparison, over an average follow-up of 5.6 years, risky alcohol use was associated with large declines in trait levels (Hakulinen & Jokela, 2019). In contrast, meta-analyses of trait change due to chronic disease diagnoses (i.e., heart disease, stroke, diabetes, cancer, hypertension, arthritis, and respiratory disease) showed no evidence of reduction in Agreeableness (Jokela, Hakulinen, et al., 2014). Therefore, declines in psychological health and risky alcohol use, but not chronic disease, are associated with declines in Agreeableness. We could speculate about consequences to themes of Agreeableness' functioning due to trait change, but, given the increasing policy relevance of personality (Bleidorn et al., 2019), we expect future studies to explicate these important matters.

### *Contributions and Future Research Directions*

This article makes three major contributions to the literature. First, we present the most comprehensive quantitative review to date of Agreeableness' effects for consequential external variables. We report that Agreeableness has relations in a helpful direction for 93% of variables and we quantify magnitudes of its effects. Breaking out effects across 16 conceptual categories, we offer a rich and detailed account of when and where Agreeableness confers its most helpful contributions. Second, we synthesize variables with medium (or larger) effects and arrange them into eight themes that succinctly capture Agreeableness' characteristic functioning.

Specifically, self-transcendence, contentment, relational investment, teamworking, work investment, lower results emphasis, social norm orientation, and social integration are parsimonious syntheses of the most beneficial effects of Agreeableness and promise to advance future research and theory building. The third contribution is our quantitative summary of the evidence of Agreeableness' lower order traits. Results showcase their predictive utility and diverse operation, which helps to expand knowledge about their unique contributions to Agreeableness' thematic functioning (e.g., effects of compassion and its facets for self-transcendence, effects of politeness and its facets for social integration) and to better understand the interrelations of Big Five and HEXACO models. Altogether, we offer deep integration of past scholarship that should help to guide future work.

Our findings point to several promising future directions. First, we encourage researchers to search out the full extent and boundary conditions of themes of Agreeableness' functioning. In addition to exploring the effects of different perspectives, contexts, and interventions, examining the interactive effects of Agreeableness and other personality traits will help us better understand their competing or compensatory effects for particular themes. Second, we urge researchers to go beyond the "big" trait domain and, for three reasons, to shift focus to assessing lower order traits. Theoretically, although self-transcendence, contentment, and social integration have received some research attention at the lower order trait level, other themes have received none. Empirically, accountable variance is underestimated using global measures of Agreeableness. We compared global measures to a facet-based composite for 11 variables reporting facet-level effects. Results indicate that the mean validity increase across criteria is considerable ( $\bar{\rho}_{Global} = .25$  vs  $\bar{\rho}_{Composite} = .39$ ; see Table S22). Analytically, Agreeableness is hierarchical and multidimensional. To the extent that its components predict in the same or different directions, or to different degrees, the construct's full predictive potential may be underrealized. Accordingly, using lower order trait measures, in tandem with bifactor models, permits data analytic methods that can disentangle the distinct influences of general and specific factors for consequential variables (for a primer, see Wiernik et al., 2015). Second, the HEXACO model is a currently popular competitor to the Big Five trait taxonomy. Much has been made of honesty–humility as a theoretically distinct (Ashton et al., 2014) and incrementally valid (e.g., Lee et al., 2019) trait dimension. However, we found little evidence of predictive differences vis-à-vis politeness. External effects, together with traits' strong intercorrelation (Ludeke et al., 2019), indicate that honesty–humility and politeness appear to be mostly overlapping constructs based on the given data. This finding is highly integrative for theory about Agreeableness' themes and for personality structure in general; nevertheless, it may be controversial. As a result, further comparative tests between

honesty–humility and politeness, specifically, and Big Five and HEXACO models, generally, are warranted (for details of profile similarities of external relations for all Agreeableness' lower order traits, see Table S23). One promising avenue that builds on the present research is to compare models' collective effects for common external variables as reported in existing meta-analyses. Full model (vs. trait-specific) investigations would not only provide a fuller account of models' predictive potentials, but they would also inspire fresh ways of looking at traits (i.e., as criterion profiles; Wiernik et al., 2021).

### *Limitations and Constraints on Generality*

All studies have limitations and constraints on the generalizability of its findings (Simons et al., 2017), and the present investigation is no exception. We detail three relevant issues below.

The first limitation concerns the data. To qualify for study inclusion, the data had to come from a published meta-analysis using self-reports of Agreeableness to examine its relations to a consequential external variable. Thus, we were unable to examine potential boundary conditions of certain relations (e.g., variables without a meta-analysis, meta-analyses using other-ratings, and team- or culture-level effects). All the data are individual-level, zero-order correlations (or, in the case of certain physical health and medical condition variables, partial correlations) that assume linear relations. Accordingly, mediators, moderators, omitted variables, and/or nonlinear effects remain undetected and unconsidered. Furthermore, all the data are correlational, so we urge caution when making causal inferences. Nevertheless, these data also represent the richest distribution of Agreeableness' empirical effects and should be useful baselines of comparison for future studies.

A second limitation concerns our population. To maximize the impact and the inferential potential of our findings, we primarily focused on the general adult population. Accordingly, our meta-analytic database mainly consisted of studies using cross-sectional samples and concurrent designs (the exception being medical conditions variables from Table 2, which used prospective designs). Although a focus on the general population mirrors the target population of most meta-analyses, we acknowledge the potential for a general effect to mask a more specific effect within a subpopulation (e.g., sex; Judge et al., 2012), context (e.g., occupations; Wilmot & Ones, 2021), or in the presence of a clinical disorder (Samuel & Widiger, 2008). As a supplement to our study, we explored meta-analyses that reported selected demographic moderators (e.g., sex, race/ethnic group, age, and culture) of Agreeableness' effects (for details, see the online supplemental material and Table S24). Overall, we found no consistent evidence of replicable moderator effects; thus, constraints on the generality of our findings for any specific

subpopulation are not supported by the current available evidence. Nevertheless, these questions remain open, and constraints may be warranted if replicable evidence emerges for a given subpopulation. To facilitate future meta-analyses of these matters, we urge researchers to report results by subpopulation in the article of record or in their supplemental material (for an outstanding example, see the Life Outcomes of Personality Replication Project [Soto, 2019] and its analyses by subpopulation [Soto, 2021]).

The third limitation concerns the subject of our review. We focused our study entirely on Agreeableness. However, we note that it is not the sole determinant or correlate of consequential external variables. In reality, multiple traits, cognitive abilities, and other personal characteristics operate serially and/or in tandem to affect external variables. These attributes, as well as relevant situational features, may increase, decrease, interact with, or reverse effects of Agreeableness.

## Conclusion

Agreeableness meaningfully impacts people and real-world outcomes. Our article presents the most exhaustive account of its external consequences available in the literature. Although the trait has generally helpful effects, Agreeableness offers the most help in certain domains. Based on the variables with the strongest effects, we synthesized eight themes that concisely capture the characteristic functioning of Agreeableness. Namely, self-transcendence, contentment, relational investment, teamworking, work investment, lower results emphasis, social norm orientation, and social integration. Analyses of lower order trait effects provide further insights into these themes.

Throughout a century of research, Agreeableness has been given many names, including *love* (Digman, 1990). Accordingly, we conclude by quoting the Apostle Paul, who, in his epistle to the church at Corinth some 20 centuries earlier, brilliantly portrays the empirical structure and nomological network of Agreeableness, taken to its fullest and most sublime extent:

Love is patient, love is kind. It does not envy, it does not boast, it is not proud. It does not act unbecomingly, it is not self-seeking, it is not easily angered, it keeps no record of wrongs. It does not delight in wrongdoing but rejoices with the truth. It bears all things, believes all things, hopes all things, endures all things. Love never fails. (1 Corinthians 13:4–8)


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## Supplemental Material

Supplemental material for this article is available online.

## Notes

1. A further distinguishing characteristic of HEXACO agreeableness is, unlike its eponymous Big Five factor, it does not capture variance associated with the compassion aspect. Instead, this variance is distributed across HEXACO's emotionality factor and an interstitial facet labeled *altruism* (see Ashton & Lee, 2007; Ludeke et al., 2019, p. 1027).
2. Following others (e.g., Judge et al., 2013; Vize, Miller, & Lynam, 2018; Wilmot et al., 2019), we limited the scope of the facets of Agreeableness to the six facets that are assessed in the Revised NEO Personality Inventory (Costa & McCrae, 1992). These facets are also supported by meta-analyses of the lower order structure of Agreeableness (see Davies, 2012).
3. A few notes about our organizing framework. Concerning dispositional variables, although vocational interests and dark traits were amenable to sorting due to their respective work/school and antisocial content, variables comprising motivational constructs and personal values were difficult to sort due to their heterogeneous content. Thus, instead of disaggregating their constituent variables, we retained their more familiar and theoretically relevant groupings under the content domain of individual variables. A similar situation occurred for leadership. Most behavioral and outcome variables were amenable to sorting by their respective content domains, but the category of interpersonal outcomes was only populated by a few leadership variables. Although both collaboration and leadership primarily comprise behavioral variables, we ultimately decided to separate them into two categories due to their theoretical differences. In the end, we balanced the use of our organizational framework with the constraints of established theoretical schemas.
4. Effect sizes are not directly comparable for two reasons. First, variables in the category of psychological health are self-reports of attitudes and behaviors, whereas variables in the categories of physical health and medical conditions are respectively assessed by measures of behavior and objective outcomes. Second, most of these effects are partial correlations, with the effects of demographic characteristics (i.e., sex, age, race/ethnicity, and education) removed.
5. Facet level effects range widely (range of  $\bar{\rho} = -.09$  to  $.21$ ), with modesty ( $\bar{\rho} = .21$ ), cooperativeness ( $\bar{\rho} = .13$ ), and tendermindedness ( $\bar{\rho} = .12$ ), showing small-to-medium positive relations (for details, see Samuel & Widiger, 2008).

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