Editorial

New Developments in HEXACO Personality Research

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About twenty years have passed since the six personality factors in the HEXACO model (i.e., Honesty-Humility, Emotionality, eXtraversion, Agreeableness, Conscientiousness, and Openness to experience) first appeared in the literature (Ashton & Lee, 2001; Ashton, Lee, & Son, 2000; Hahn, Lee, & Ashton, 1999). As recounted by Saucier (2019), before the advent of the HEXACO model, personality researchers were inclined to believe that a maximum set of five personality factors were consistently recovered from lexical studies of personality structure (e.g., Goldberg, 1990). A review of these standard lexical studies as well as subsequent ones, however, generally supports the idea that not just five but six factors emerge consistently from these studies (Ashton, Lee, Perugini, et al., 2004; Lee & Ashton, 2008). The additional sixth factor, which contrasts sincerity, integrity, decency, and trustworthiness with boastfulness, hypocrisy, greediness, and untruthfulness, had already been reported in Dutch (De Raad, 1992), Hungarian (Szirmak & De Raad, 1994), and Italian (Di Blas & Forzi, 1998) lexical studies. The consistency of these "anomalous" findings went unnoticed, however, until a Korean lexical study was conducted, which not only uncovered variants of the usual Big Five factors, but also a clearly interpretable sixth Honesty-Humility factor contrasting adjectives such as truthful and frank with adjectives such as sly and cunning (Hahn et al., 1999).

In follow-up research, Ashton et al. (2000) showed that this sixth lexical factor explained antisocial traits such as Machiavellianism and psychopathy as well as prosocial traits such as morality and cooperation better than did the Big Five lexical factors. More importantly, a large-scale reanalysis of eight lexical studies in seven languages (Dutch, French, German, Hungarian, Italian, Korean, and Polish) showed that this sixth factor emerged consistently (Ashton, Lee, Perugini, et al., 2004). Additional lexical studies in English (Ashton, Lee, & Goldberg, 2004; Lee & Ashton, 2008) further supported this finding, as did re-analyses of previous lexical studies conducted in Turkish (see Wasti, Lee, Ashton, & Somer, 2008), Greek (see Lee & Ashton,

2009), and Croatian and Filipino (see Lee & Ashton, 2008). Finally, cross-cultural comparisons of different lexical factor solutions (De Raad et al., 2014; Saucier, 2009) showed that – across multiple languages – the lexical factor space is best represented by a maximum set of six cross-culturally replicable dimensions of personality, which are now commonly known by the HEXACO acronym.

Since 2004, when the first version of the HEXACO Personality Inventory was published (Lee & Ashton, 2004), the number of studies using the HEXACO model has grown steadily. An overview of work on the HEXACO model is offered on the hexaco.org website. It lists studies on a great number of topics that provide evidence regarding the HEX-ACO Personality Inventory - Revised (HEXACO-PI-R) in terms of its structural properties and its predictive validity. In terms of structural properties, studies are listed on topics such as findings of lexical studies, psychometric properties of the HEXACO-PI-R, comparisons of the HEXACO to the Big Five/Five-Factor Model, self- and observer reports, and problems with higher order factors/personality types. In terms of predictive validity, studies are listed on the relations of the HEXACO personality traits with the dark triad traits, personality disorders, sexual behaviors, risk taking/ sensation seeking, forgiveness, well-being, delinquency, impression management, organizational politics, leadership, bullying, economic behaviors, academic achievement, creativity, authenticity, online and sports behaviors, ecological behaviors, (political) values and religiosity, and response biases (including faking and social desirability). The studies reported on the hexaco.org website have increased our knowledge of the structure of personality, of personality phenomena (such as age-related trends or similarity of social partners), and of the predictive validity of personality for socially important outcomes.

This topical issue, which contains seven articles that cover a wide range of HEXACO topics, adds to this growing body of research on the HEXACO model. The first article, a historical overview by Saucier (2019), shows how adjective

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selection decisions in early lexical studies, particularly those in the English language, led to an underrepresentation of adjectives describing morality-related traits. This underrepresentation is likely responsible for the absence of an Honesty-Humility dimension in those lexical studies. Subsequent lexical studies of personality structure, as conducted in English and several other languages, involved variable selection procedures based in part on the rated familiarity or frequency-of-use of the adjectives, and these studies did recover an Honesty-Humility dimension. Saucier's article implies that past adjective selection decisions have had important consequences for personality psychology; one can easily imagine alternative histories in which - instead of the Big Five - a six-dimensional, HEXACO-like model would have emerged as the consensus model of personality structure by the 1990s or earlier.

In the second article (McAbee, Casillas, Way, & Guo, 2019), the application of the HEXACO model in educational and work settings is reviewed. The relations between HEXACO traits and several important outcome variables in educational and work settings are considered, such as the relations with educational and work performance, counterproductive (student/work) behaviors, student adjustment, and organizational citizenship behaviors. The authors devote considerable attention to the relations between the HEXACO traits and students' behavioral skills, captured in the ACT Behavioral Skills Framework (BSF). The authors suggest that, by using the HEXACO model as an organizing principle and by focusing on competencies instead of personality dispositions, the BSF domains may offer an integration of the existing literature on behavioral and skills development in educational and work settings.

The third article (Moshagen, Thielman, Hilbig, & Zettler, 2019) meta-analytically investigates the psychometric properties of the main instrument to measure the six lexically derived personality dimensions, the HEXACO-PI-R, in its three versions: the HEXACO-60, the HEXACO-100, and the HEXACO-200. The authors report (1) reliability values as moderated by the version (60-, 100-, and 200-item) and language (Dutch, English, German, and other) of the inventory, (2) estimates of self-other agreement and scale intercorrelations for the domain scales, and (3) the relations of the HEXACO domain scales with background variables (i.e., gender, age, and education). Based on over 500 independent samples and over 300,000 individuals, the article provides the most encompassing overview of the generic psychometric properties of the HEXACO domain scales so far.

The fourth article (Kandler, Richter, & Zapko-Willmes, 2019) uses an extended twin family design (ETFD) – which includes not only data from 221 monozygotic and 352 dizygotic twins, but also from some of the parents, offspring, and spouses – to provide estimates of different sources of

genetic and environmental variance in the HEXACO-60 domain scales. In contrast to a classical twin design, which cannot simultaneously estimate nonadditive genetic variance and variance due to shared environmental effects and which cannot control for the contribution of twin parents' assortative mating, ETFD is a much more powerful analysis tool which can disentangle multiple genetic and environmental sources of variance. Although some of the results are preliminary due to the sometimes limited sample sizes in the extended family, the article offers a first glimpse of the kinds of results scholars can get from using such a powerful tool.

The fifth article (Barends, De Vries, & Van Vugt, 2019) uses yet another approach to measure personality. In their article, they use virtual behavior cues to measure Honesty-Humility. Virtual behavior cues are derived from choices that people make in an online "gamified" environment that reflect a person's personality, such as the choices people make about (the physical appearance of) an avatar and its (online) environment. In the first two of three studies, the authors constructed and fine-tuned a gamified instrument to measure Honesty-Humility, and in the third study they investigated whether virtual behavior cues were more difficult to fake than self-report Honesty-Humility. The results suggest that Honesty-Humility can be measured with moderate validity by using virtual behavior cues and that the gamified instrument is not more difficult to fake than is self-report Honesty-Humility.

The sixth article, a short research note by Dunlop, Holtrop, Schmidt, and Butcher (2019), uses a new approach to measure personality characteristics through self- or other report, the relative percentile (RP) approach. The RP approach provides respondents with a trait definition and then asks respondents to estimate their (or their target person's) percentile score (0-100) in relation to a given population. Using 71 dyads consisting of persons closely acquainted with each other, the authors investigated the convergent correlations of the 24-item RP questionnaire with the HEXACO-100 (within self-reports and within other reports), self-other agreement, and test-retest reliability. An important finding is that scores on the RP instrument are distributed like scores on usual Likert-type scales rather than like percentile scores, but also that for most personality characteristics, the RP scores showed fairly high self-other agreement and correlations with original HEXACO scales.

Finally, in the seventh article, a short research note (Dinić & Smederevac, 2019), the relations between HEXACO Honesty-Humility and Agreeableness on the one hand and experimentally induced aggressive responses (i.e., auditory "punishments") are investigated using the Taylor Aggression Paradigm (TAP) in no provocation, low provocation, and high provocation conditions.

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Honesty-Humility was related to aggressive responses in all conditions, whereas – in contrast to expectations – Agreeableness was unrelated to aggressive responses, even in high provocation conditions. The results may reflect the fact that the experimentally induced provocation in the TAP may not trigger the kinds of reactive aggression responses associated with low levels of Agreeableness commonly found in other studies, whereas TAP does seem to trigger more antisocial forms of proactive aggression, yielding a positive correlation between Honesty-Humility and auditory punishments.

We believe that the articles in this topical issue offer a valuable addition to the literature on the HEXACO personality factors, their assessment, and their correlates. Furthermore, they point to several unresolved issues and questions, which may ultimately extend our knowledge of the configuration, causes, and consequences of personality.

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