Leadership as contextualized personality traits

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Abstract

Research on leadership styles and behaviors has largely developed independently from personality research. In this chapter, we show that there is a great deal of overlap between leadership styles and personality traits. Leadership styles, such as transformational, charismatic, transactional, instrumental, supportive, ethical, or destructive styles, are defined, conceptualized, and operationalized in similar ways as personality traits and can thus be considered contextualized traits. When taking into account the self-other agreement problem, and as is also evidenced in behavioral genetics studies, leadership styles are strongly related to personality. Furthermore, leadership styles show similar levels of trait variance, stability, heritability, and relations with leadership, subordinate, and organizational criteria as personality traits. Complete contextualization of the six-dimensional HEXACO personality inventory into a contextualized leadership version – the HEXACO-Lead – resulted in an instrument that exhibited higher levels of self-other agreement than observed for leadership styles and slightly stronger relations with leadership styles than found for the HEXACO personality inventory. Suggestions are offered to further our understanding of age-related and volitional changes in leadership, the effects of leadership training, person-supervisor fit, and the role of liking in leadership research using – from personality to leadership – contextualized leadership traits.

Keywords: Leadership, Personality, Contextualization, HEXACO, Big Five, Leader Emergence, Leader Effectiveness, Subordinate Attitudes

Leadership as contextualized personality traits

1. Introduction

Scholars who are interested in leadership face a bewildering task when having to select one of the many leadership models and questionnaire operationalizations (Bass & Bass, 2009; Yukl, 2012). The many available leadership models vary in a number of ways, such as the leadership characteristic that is targeted (e.g., behaviors, styles, traits, values, tactics, strategies, competencies, skills, etc.), the breadth of the model (from focusing on a single construct to a 'full range' of leadership attributes), and the target that is being rated (e.g., self-ratings, (subordinate or supervisory) observer ratings, group ratings). The task of selecting a leadership instrument is further complicated by the widespread presence of the 'jingle-jangle fallacy' in leadership research, either having the same term used for a leadership attribute that is different (jingle fallacy) or having a different term used for a leadership attribute that is the same (jangle fallacy). As an example of the latter, Mackey et al. (2021; see also Schyns and Schilling, 2013) list no fewer than 21 different terms that have been used to operationalize virtually indistinguishable destructive leadership behaviors.

Clearly, an integration of leadership models and operationalizations is called for. In the current chapter, we offer such an integration by arguing that the most important leader characteristics proposed by scholars are instances of what we will call 'contextualized leadership traits'[1]. We define contextualized leadership traits as *the relatively stable intrapersonal structure of individual differences that are manifested through a set of influencing acts of a person – who has gained position power through a process of legitimation – towards an individual or a group of individuals*. First, the definition stresses the usual three important elements in leadership, i.e., that leadership is exhibited by (1) a person who is in a 'legitimate' (but not necessarily formal) position in which they (2) influence (3) an individual or a group of individuals. Second, and important for the remainder

of this chapter, the definition posits that these influencing acts are based on (4) an underlying structure of individual differences and (5) that these acts are relatively stable, two assumptions that are shared with assumptions held in personality research.[2] Consequently, by turning to personality models, on which there is a great deal of consensus, an integration of leadership models and operationalizations can be achieved. Such an integration offers clear advantages by allowing leadership scholars to use one unifying framework to integrate past and future research, similar to the integration in personality research which has been achieved by the introduction of the Big Five (Goldberg, 1990) and its successor, the HEXACO (Ashton et al., 2014) model of personality.

In the following – second – section, we argue that the assumptions and empirical findings in leadership research support a contextualized leadership trait approach. In the third section, we explore the dimensional space of contextualized leadership traits, arguing that these fall within the space of the six-dimensional HEXACO model of personality (Ashton & Lee, 2020; Ashton et al., 2014), and we provide some preliminary results on the self-other agreement and convergent validity of a recently constructed contextualized HEXACO instrument that measures leadership, the HEXACO-Lead (Julian, 2021). In the fourth section, we provide an overview of the most important findings with respect to leadership styles – that can be regarded as contextualized leadership traits – and their relations to leadership emergence and attitudinal and performance outcomes. Last, in the final section, we summarize the main findings and we propose potential fruitful avenues for future research that may further our knowledge about leadership. We conclude by stating that a contextualized leadership trait approach may offer a way out of the wilderness of leadership models and operationalizations by focusing on the most relevant traits that are brought to light by personality researchers.

2. Sensemaking: The case for leadership traits

In this section, we discuss our reasons for conceptualizing leadership as contextualized (from personality to leadership) traits. We focus on personality traits and not on other individual differences, such as physical traits, or individual differences associated with knowledge, skills, and abilities (KSAs; Hofman et al., 2011). Although physical traits, such as physical formidability, height, and attractiveness (Knapen et al., 2016; Little & Roberts, 2012), have been found to be important in leadership, studies on physical traits do not face the same kinds of conceptualization and operationalization problems that are present in studies on psychological traits. With respect to KSAs, operationalizations should be based on test performance (e.g., items with 'right' or 'wrong' answers) and such operationalizations are rare in the leadership literature (for exceptions, see Hoffman et al., 2011). That is, personality trait-like attributes – exemplified in questionnaires that measure styles, strategies, behaviors, acts, etc. – are most common in leadership research. We first define what personality is and we discuss – and provide empirical evidence for – four main arguments to call leadership trait-like: a) the amount of content overlap of leadership style (and behavior, strategy, act, etc.) items with personality trait items, b) the amount of trait variance in leadership, c) the temporal stability of leadership, and d) its heritability and genetic overlap with personality.

Personality defined

In line with other definitions (e.g., Larsen et al., 2021, p. 3), personality is defined here as *the relatively stable intrapersonal structure of traits and mental processes manifested by interpersonal variability and intrapersonal temporal and cross-situational consistency in a person's responses to the physical, mental, and social environment*. That is, personality is (1) structured (the architecture of 'traits' and 'mental processes'), (2) relatively stable across time and situations ('intrapersonal consistency'), and (3) makes individuals different from each other ('interpersonal variability') in (4) their reactions ('responses') to (5) the internal and

external (physical and social) world ('environment'). In other words, personality describes the set of stable characteristics that determine our thoughts, feelings, and behaviors. This definition is more encompassing than the earlier-mentioned contextualized leadership trait definition, but the two definitions overlap substantially in the sense that both cover the structuredness and stability of a person's responses in their environment. Note that the 'structure' part of the personality definition includes 'mental processes' and not only outwardly manifested traits. Operationalizations of leadership most often do not contain references to mental processes because they are not observable for subordinates, who are most frequently used as raters of leadership. Furthermore, the personality definition refers to both the variability between persons and the consistency within persons in their responses to the environment, which make it possible to speak of a person's unique 'style' or 'behavioral pattern'. Without this part, it would be impossible to distinguish – across situations and time – the behavior of one person from another. Last, the definition delineates the (physical, mental, and social) environment in which personality is expressed. Note that the leadership environment is a subset of the personality environment, because the leadership environment refers to much more confined social – and not physical and mental – situations in which a person has gained position power in a group of individuals.

Content overlap personality - leadership

In the following, we focus on the similarities between personality trait and leadership style conceptualizations and operationalizations. We use 'leadership style' as a shorthand for different leadership (style, behavior, strategies, etc.) conceptualizations because these tend to share a similar way of operationalizing constructs (e.g., through the rating of usual behaviors and/or enacted values/preferences in situations). Although there is no widely accepted definition of leadership style, trait definitions (such as the above contextualized leadership trait definition) are very similar to generic (and person-oriented) 'style' definitions that stress

"a way of doing something, especially one that is typical of a person" (retrieved on August 4, 2021 from https://dictionary.cambridge.org/dictionary/english/style). The 'typical of a person' part is in line with the interpersonal variability and intrapersonal situational and temporal consistency part associated with traits that is incorporated in the personality definition, and thus the conceptualizations of (personality) traits and (leadership) styles strongly overlap.

Not only do the conceptualizations overlap, but, more importantly, leadership items are highly similar to personality items. The main difference between leadership items and personality items is that the former refer to much more narrow (most often: hierarchical social) situations. That is, leadership items are personality items designed for a particular context (i.e., they are *contextualized* items). For example, adjectives that are considered prototypical of leadership, such as dynamic, trustworthy, and organized (Lord & Maher, 1993), are a subset of adjectives that define the personality space (Ashton et al., 2004; De Vries, 2008). Similarly, leadership scales, such as the Multifactor Leadership Questionnaire (MLQ, Bass & Avolio, 1999) and the Supervisory Behavior Description Questionnaire (SBDQ, Fleishman, 1953), contain items such as "Talks optimistically about the future" (MLQ) and "Criticizes poor work" (SBDQ), that can be considered contextualized behavioral expressions of personality operationalizations such as "On most days, s/he feels cheerful and optimistic" and "People sometimes say that s/he is too critical of others" (both from the HEXACO Personality Inventory; Lee & Ashton, 2006). That is, although leadership items are often more situationally specific than personality items, there is a large degree of content overlap between the two domains.

Trait variance in personality and leadership

Another piece of evidence for the similarity of leadership styles and personality comes from research using the Social Relations Model (SRM, Kenny, 1994). The SRM distinguishes between four sources of variance in round-robin ratings (where members of a group rate each

other): target variance (associated with rater consensus on a person's trait), perceiver variance (associated with a rater's overall perceptual bias when rating all other group members), relationship variance (associated with each unique dyadic relationship), and error variance. That is, when people in a group rate each other on personality, apart from error variance, people agree on some part of the rating of a person (target variance), another part of that rating is determined by a rater's overall biases in rating others (perceiver variance, which is in the 'eye of the beholder'), and yet another part of the rating is determined by the unique relationship that each person has with another person in the group (relationship variance).

Using the HEXACO Personality Inventory, and when correcting for the error variance component, De Vries (2010) found the following percentages for the three substantive variance components: 47% (target), 18% (perception), and 35% (relationship). That is, most variance in the ratings of personality is target variance, associated with observable traits, but there is still a substantial amount of relationship variance. That is, people in a group tend to agree on somebody's personality for most part (target variance), but the ratings also depend to a considerable extent on the way people have an unique relationship with each other (relationship variance). If leadership would be in the eye of the beholder or mostly driven by unique dyadic relationships, we would expect higher levels of perception and relationship variance, which is not the case. In fact, in a synthesis of leadership studies conducted using the SRM, Livi et al. (2008) actually found high levels of target variance in leadership (again, when correcting for error variance), that is: 57% (target), 15% (perception), and 28% (relationship variance). That is, if anything, there does not seem to be much evidence based on SRM research that leadership is any less trait-like than personality.

Temporal stability of personality and leadership

Yet another piece of evidence comes from longitudinal research on the temporal stability of personality and leadership. Personality has been found to be highly stable across time. For

instance, when correlating personality across two points in time, Costa and McCrae (1994) reported a stability correlation (*r*) of .64 across an average 17-year period of Big Five scales. Similarly, Thielmann and De Vries (in press) reported an average .77 ten-year stability correlation for middle-aged adults and an average of .73 3.5-year stability correlation among students for the six HEXACO personality domain scales.

In contrast to the many studies on personality, there are surprisingly few studies on the temporal stability of leadership, and the following three studies that are summarized suffer from notable methodological limitations. The first study, by Van Dierendonck et al. (2004), measured subordinate-rated leadership behaviors four times, each spaced five months apart. The average correlation across all possible six combinations of measurements was .68. In the second study, by Skogstad et al. (2017), four leadership styles were measured across two occasions in two studies, respectively six months and two years apart. The average temporal consistencies were respectively .57 and .45 (.66 and .55, when using latent variables). In the third study, by Nielsen et al. (2019), transformational and laissez-faire leadership were measured six months apart with temporal consistency correlations of .61 and .50, respectively. Although, on average, these figures are slightly lower than those found for personality, it should be noted that team membership was not consistent across time points (Van Dierendonck et al., 2004) or – in an unknown number of cases – an altogether other leader may have been rated by the subordinate (Nielsen et al., 2019; Skogstad et al., 2017), most likely attenuating the observed correlations. Because it is difficult to study the same subordinate-supervisor dyads across longer periods of time, the level of long-term temporal stability of leadership styles is unclear. However, given the robust, but conservative, estimate of temporal stability, the findings do make clear that – similar to personality – leadership styles are generally highly stable across time.

Heritability and genetic overlap of personality and leadership

A final – and important – piece of evidence comes from behavioral genetics studies on personality and leadership. Based on more than 50 years of twin studies on personality, the average influence of heritability, shared environment, and nonshared environment (plus measurement errors) across the Big Five personality traits has been estimated to be 45%, 5%, and 50%, respectively (Johnson, Vernon, & Feiler, 2008). A recent study using the HEXACO personality model, shows an almost equal amount of heritability (specifically: additive genetic variance), i.e., an average of 43% across different traits (De Vries et al., in press).

Again, there have been only few behavioral genetic studies on leadership, but the available evidence shows that leadership has a similar, or even higher, level of heritability. That is, Li et al. (2012) showed that 48% of the variance in transformational leadership was accounted for by additive genetic factors. In Johnson et al. (2004), 57% of the variance in transformational leadership – and 47% of the variance in transactional leadership – was accounted for by additive genetic factors (the remaining variance in both studies was explained by nonshared environmental factors). Most importantly, Johnson et al. (2004) also showed that personality and leadership styles share a large amount of genetic variance, with conscientiousness (r = .58), openness to experience (r = .56), and extraversion (r = .23) having significant positive genetic relations with transformational leadership, and conscientiousness (r = -.49), extraversion (r = -.46), and agreeableness (r = -.23) having significant negative genetic relations with transactional leadership. In contrast, there was almost no overlap in environmental variance between personality and leadership styles. Consequently, not only are leadership styles at least just as heritable as personality, personality and leadership also show strong genetic overlap, supporting the stance that leadership is trait-like and, thus, that leadership styles can be considered contextualized personality traits.

3. The structure of leadership traits

The previous section has shown that – definitionally – leadership styles can be equated to traits, that leadership items are a subset of personality items, that the trait variance of leadership and personality is highly similar, that leadership is just as stable and heritable as personality, and, most importantly, that there are strong genetic relations between personality and leadership styles.

This latter finding flies in the face of meta-analyses on the relations between personality and leadership, which have been described as 'weak' (Bono & Judge, 2004; p. 906). Similar weak links (e.g., with *r*'s in the .10-.20 range) have been reported in other studies relating personality to leadership styles (e.g., De Hoogh, Den Hartog, & Koopman, 2005; Deinert et al., 2015; DeRue et al., 2011; Judge & Bono, 2000; Lim & Ployhart, 2004). In a recent meta-analysis, Do and Minbashian (2020) also reported weak correlations between the Big Five personality dimensions openness to experience (r = .15), conscientiousness (r = .11), extraversion (r = .23), agreeableness (r = .15), and emotional stability (r = .19) and transformational leadership. Although extraversion has repeatedly emerged as one of the strongest personality predictors of constructive leadership, meta-analytic evidence (Mackey et al., 2021) indicates that it does not significantly predict destructive leadership (ρ = -.03). Correlations of openness to experience (ρ = -.08), conscientiousness (ρ = -.18), agreeableness (ρ = -.15), and neuroticism (ρ = .17) with destructive leadership are, however, similar to those for constructive leadership. Taken together, these findings mimic what Bono and Judge (2004) already concluded based on their meta-analytic findings: Links between personality and leadership styles are weak. As a consequence of these findings, Bono and Judge (2004) have suggested that leadership styles may be less trait-like than expected or that other traits may explain leadership better than the Big Five personality traits used in their meta-analysis.

The self-other agreement problem

However, De Vries (2012) has argued – and shown – that there is a relatively straightforward reason for the weak personality-leadership relations. In all of the above studies, leadership styles have been measured using subordinate observer ratings, whereas personality has been measured using leader's self-ratings, introducing the so-called self-other agreement problem. That is, correlations between two different constructs measured using two different sources face a *ceiling effect* whereby such correlations cannot be higher than the correlation between the same construct rated by two different sources (e.g., heterotrait-heteromethod correlation ≤ monotrait-heteromethod correlation, in which *trait* is the construct being measured and *method* is the source providing the ratings). For example, the correlation between transformational leadership rated by subordinates and leader's extraversion, rated by the leaders themselves (a heterotrait-heteromethod correlation, in which there are two traits (transformational leadership and leader's extraversion) and two rating sources (subordinates and leaders)) cannot be higher than the correlation between the ratings of transformational leadership rated by subordinates and leaders (a monotrait-heteromethod correlation, in which there is one trait (transformational leadership), and two rating sources (subordinates and leaders)).

Although monotrait-heteromethod correlations (or: self-other agreement correlations) of a personality construct are notably high among people who are highly acquainted (e.g., averaging in the r = .50-70 range among family members, close friends, or partners; Connelly & Ones, 2010; De Vries et al., 2008), they are substantially lower in work settings (e.g., .25-.30; Connelly & Ones, 2010; De Vries et al., 2008). The level of self-other agreement on leadership constructs has been found to be even somewhat lower than that of personality, i.e., an average of .24 in Warr and Bourne (1999) and .16 in Ostroff et al. (2004). These correlations using the same construct put an effective ceiling on the correlations between different constructs measured using different sources, whereby in a work setting correlations

between different constructs measured using different sources (heterotrait-heteromethod correlations) cannot logically surpass the .20-.30 boundary imposed by these relatively weak self-other agreement (monotrait-heteromethod) correlations.

In an empirical study using self- and subordinate rated leader personality and leadership styles, De Vries (2012) showed, using an instrumental variable approach, that the relations between personality and leadership styles are actually mostly strong to very strong, with HEXACO honesty–humility significantly related to ethical leadership ($\beta = .50$), extraversion significantly related to charismatic leadership ($\beta = .76$), agreeableness significantly related to supportive leadership ($\beta = .74$), and conscientiousness significantly related to task-oriented leadership ($\beta = .33$). That is, like in the above-mentioned genetic study (Johnson et al., 2004), there seems to be a strong link between personality and leadership styles. Given such strong links between personality and leadership, and given the empirical evidence that leadership styles are contextualized traits, the question remains which personality traits are most closely related to which leadership styles. For that question, we first have to turn to the dimensional space spanned by personality. That is, what are the most important personality dimensions?

The structure of personality

The question of the optimal dimensional structure of personality has vexed personality researchers for more than a century. Based on Galton's (1884) suggestion, personality scholars have turned to the lexicon to find the most important words (most often: adjectives) that distinguish individuals from one another in their personality traits. By the 1990s, a near consensus was reached by the establishment of the Big Five model of personality (Goldberg, 1990). However, a reanalysis of the – at that time – available lexical studies has shown that the most encompassing cross-culturally replicable factor solution contains six instead of five personality dimensions (Ashton et al., 2004). These six dimensions are known by the HEXACO acronym for honesty-humility, emotionality, extraversion, agreeableness,

conscientiousness, and openness to experience (Lee & Ashton, 2004; Ashton & Lee, 2020). The HEXACO model explains a full additional factor in comparison with the Big Five (Ashton & Lee, 2018) and captures variance associated with honesty-humility that is not well-captured by the Big Five. Additionally, two of the HEXACO dimensions, emotionality and agreeableness, are rotated variants of Big Five neuroticism and agreeableness, with HEXACO agreeableness containing variance associated with irritability that is more closely associated with Big Five neuroticism, and HEXACO emotionality containing variance associated with sentimentality that is more closely associated with Big Five agreeableness. Table 9.1 includes descriptions and example items for each of the six HEXACO domains.

Table 9.1 Descriptions and example items of the generic and contextualized HEXACO domains

Domain	Description	Generic HEXACO-PI-R example item	Contextualized HEXACO-Lead example item
Honesty-Humility	The tendency to be sincere, fair, modest, and to avoid being greedy.	If I knew that I could never get caught, I would be willing to steal a million dollars. (R; Fairness)	If I knew that I could never get caught, I would be willing to take credit for my subordinates' work or ideas. (R)
Emotionality	The tendency to be fearful, anxious, sentimental, and dependent on others.	I sometimes can't help worrying about little things. (Anxiety)	My subordinates would say that I worry a lot at work.
eXtraversion	The tendency to be sociable, bold, lively, and to have self-esteem in social interactions.	On most days, I feel cheerful and optimistic. (Liveliness)	Compared to other leaders, I tend to be more optimistic.
Agreeableness	The tendency to be gentle, flexible, patient, and to easily forgive others.	People sometimes tell me that I am too critical of others. (R; Gentleness)	I have been told I can be too critical of my team's performance. (R)
Conscientiousness	The tendency to be organized, diligent, perfectionistic, and prudent.	I often push myself very hard when trying to achieve a goal. (Diligence)	I often push both myself and my team very hard when trying to achieve a goal.
Openness to Experience	The tendency to be inquisitive, creative, unconventional, and to appreciate aesthetics.	I would enjoy creating a work of art, such as a novel, a song, or a painting. (Creativity)	I enjoy when my team takes on projects requiring creativity.

Note. Descriptions are based on the lower-order facets of the HEXACO domains, example items of the generic HEXACO-PI-R are reproduced from www.hexaco.org (R = Recoded; between brackets the specific facet is also noted), and example items of the HEXACO-Lead are from Julian (2021).

The structure of leadership

Only few lexical studies have been conducted on leadership. Instead of departing from the lexicon, Offermann et al. (1994) had 115 students list up to 25 traits or characteristics of a leader (i.e., based on their 'Implicit Leadership Theory', or ILT), resulting in a list of 160 terms. These 160 terms were further narrowed to 41 terms comprising 8 factors: sensitivity, dedication, tyranny, charisma, attractiveness, masculinity, intelligence, and strength. Using a similar design, Offermann and Coates (2018) complemented these eight factors with a ninth factor, which they named creativity. In a follow-up study of the 1994 study by Epitropaki and Martin (2004), the earlier 41 items were best captured by six factors: sensitivity (cf. agreeableness), intelligence (cf. openness to experience), dedication (cf. conscientiousness), dynamism (cf. extraversion), tyranny (cf. low honesty-humility), and masculinity (cf. low emotionality). Even more recently, Keshet et al. (2020) used the lexicon and identified – after a number of pruning steps – 393 adjectives than can be used to identify effective and ineffective leaders. A factor analysis using 248 leader self-ratings and 307 subordinate observer ratings identified respectively five and four leadership factors, named corruption/tyranny (cf. low honesty-humility), calculated/competency (cf. conscientiousness), weakness (cf. emotionality), positive energy (cf. extraversion), and – in the leader self-ratings only – aggression (cf. low agreeableness). Thus, although there is yet no direct empirical evidence to establish to what extent the leadership lexical factors overlap with the personality factors, the content of the items in these factors suggest a strong overlap between the two (personality and leadership) domains.

The construction of a contextualized leadership questionnaire

Based on these findings, that demonstrate that leadership dimensions show a high level of semantic overlap with personality dimensions, and given the fact that leadership styles can be regarded as contextualized personality, a logical next step would be to construct a

contextualized leadership questionnaire. Contextualization of a personality measure can be accomplished by instructing respondents to think of a particular context when completing the assessment, by adding a "tag" at the end of each scale item (e.g., for a workplace context, adding the tag "at work" to the end of each item) or by completely re-writing each item to fit within a particular context (see Holtrop et al., 2014). Several HEXACO personality items contain contextual information, and therefore instructions or a tag would obscure the content of such items (Holtrop et al., 2014; Julian, 2021). Furthermore, the complete contextualization ('rewriting') method leads to the highest level of criterion-related validity (Holtrop et al., 2014), and thus this method was employed in the creation of the HEXACO-Lead (Julian, 2021), a contextualized leadership inventory based on the HEXACO model. To construct the HEXACO-Lead, seven subject matter experts created contextual examples for items from the full HEXACO-PI-R (Lee & Ashton, 2004). The examples were used to generate an initial pool of contextualized items, which was subsequently refined using a working student sample (see Julian (2021) for the full procedure and Table 1 for example items).[3]

Self-other agreement of the HEXACO-Lead

In an initial study using the 92-item HEXACO-Lead (Julian, 2021), a sample of leaders (N = 445), as well as a subset of their subordinates (N = 165, nested within 79 leaders and aggregated to the leader level for analyses), completed self- and observer report versions (respectively) of the HEXACO-Lead, the HEXACO-60 (Ashton & Lee, 2009), and various leadership styles (i.e., transformational, contingent reward, ethical, and supportive leadership styles). As mentioned earlier in this chapter, self-other agreement among leaders and subordinates tends to be lower for leadership styles relative to personality traits (De Vries, 2012). When compared with the generic HEXACO personality scales, results using a matched leader-subordinate sample (n = 77-78) showed that the HEXACO-Lead had similar – or even slightly higher – self-other agreement (i.e., mean self-other convergent correlation for

HEXACO-Lead scales was .43, compared to .40 for the HEXACO-60 scales). Importantly, self-other agreement correlations were higher for the contextualized HEXACO-Lead and the generic HEXACO personality measure when compared to those for the leadership styles (i.e., mean correlation of .20 for leadership styles). That is, similar to findings in prior research using generic personality scales (De Vries, 2012), leadership style measures seem to contain much less systematic variance than contextualized and generic personality measures, as evidenced by the lower level of self-other convergent correlations in leadership style measures.[4]

Validity of the HEXACO-Lead

Apart from self-other agreement, the ability of the HEXACO-Lead to predict several leadership styles, compared to the generic HEXACO-60, was also examined (Julian, 2021).[5] For these analyses, the larger leader sample was used which contained self-report personality and leadership style data (n = 436). Results showed that the HEXACO-Lead consistently produced a larger multiple correlation coefficient across all four self-rated leadership style measures, relative to the HEXACO-60 (e.g., when calculating the difference in multiple R values between the two measures when leadership styles are regressed on them, i.e., $R_{diff} = R_{HEXACO\text{-}LEAD} - R_{HEXACO\text{-}60}$), though the differences among the two estimates varied greatly in size (R_{diff} = .03 to R_{diff} = .12). That is, the R_{diff} was significant for supportive leadership only, suggesting that the HEXACO-Lead outperformed the generic HEXACO-60 in the prediction of this leadership style, but it did not for the other three leadership styles. Importantly, the differences among the contextualized and generic measures in this study are in the range of what could be expected based on prior meta-analytic research comparing validities of contextualized versus non-contextualized personality measures (Shaffer & Postlethwaite, 2012). The pattern of consistently higher self-other agreement and stronger prediction (though

not always statistically significant) of leadership styles offered by the HEXACO-Lead shows the potential benefit of a complete contextualization of personality to leadership.

In summary, findings from the HEXACO-Lead research offer additional evidence that self-other agreement among leaders and subordinates is higher for both contextualized and generic personality relative to leadership style measures (De Vries, 2012), and also slightly higher for contextualized leadership traits relative to generic personality traits. Moreover, this research supports a consistent pattern of higher validity in the relation with self-rated leadership styles for the contextualized HEXACO-Lead, relative to the generic HEXACO-60 measure. Although the findings using the HEXACO-Lead are encouraging, more research is needed to further examine the impact of contextualization on self-other agreement and on personality – leadership style relations, and to investigate the incremental validity of the HEXACO-Lead in the prediction of organizational criteria beyond generic personality and leadership styles.

4. The effects of leadership traits

In the previous section, we demonstrated that lexical studies on personality and leadership show high levels of content convergence, and subsequently argued and showed that leadership can best be assessed using a contextualized personality questionnaire. In addition, we reviewed evidence indicating that the generally weak personality-leadership correlations observed in meta-analyses are due to low self-other agreement in ratings of personality and leadership (outcomes). In the current section, we provide a more detailed overview of the relations of both leaders' personality traits and their leadership styles with leadership outcomes (i.e., leadership emergence, leadership effectiveness, and various follower outcomes/perceptions), which are often attenuated as well because of the self-other agreement problem. We will argue that future research may benefit from focusing on contextualized

leadership traits to increase the predictive validity in a number of important leadership outcomes.

Leadership emergence and effectiveness

The study of individual differences to explain and predict leadership emergence and effectiveness is the longest standing research topic in the leadership field (Zaccaro et al., 2018). In their 2002 review, Judge et al. showed that all Big Five traits were related to leadership emergence and effectiveness (except that agreeableness did not predict leadership emergence), with a combined multiple correlation of .53 for leadership emergence and .39 for leadership effectiveness. Extraversion emerged as the most predictive trait, whereas agreeableness was the least predictive trait for both criteria. Similarly, Ensari et al. (2011) meta-analytically demonstrated that extraversion (Fisher's z = .33), conscientiousness (Fisher's z = .19), openness to experience (Fisher's z = .17) and emotional stability (e.g., reversed neuroticism; Fisher's z = .12) were significantly related to leadership emergence in initially leaderless groups. In another meta-analysis, Ilies et al. (2004) showed that intelligence in combination with the Big Five personality traits had a multiple correlation of R = .57 with leadership emergence. Although some of the correlations for personality traits with leadership emergence and effectiveness were relatively weak, the reviewed findings in combination with the attenuation due to the self-other agreement problem indicate that personality traits, and most notably extraversion, play a crucial role in predicting who emerges as a leader and how effective they are.

Research linking different leadership styles to leadership emergence is scarce, likely because leadership styles are usually only assessed once someone has already emerged as a leader, but correlations of the few available studies are generally of similar magnitude as those for the relations of personality traits with leadership emergence. For example, López-Zafra et al. (2008) found that participants who scored high, compared to low, on

transformational leadership were more likely to emerge as leaders. Similarly, Mitchell et al. (2019) found that both task-oriented (cf. conscientiousness, $r = .33$) and relationship-oriented leadership behaviors (cf. extraversion and agreeableness, $r = .35$) were positively related to leadership emergence (although the relation for the latter was curvilinear). Another key finding with regard to leadership emergence is that individuals who communicate more frequently and more forcefully (cf. extraversion) are more likely to emerge as leaders (Acton et al., 2019; Gerpott et al., 2019).

Relations of different leadership styles with perceived leadership effectiveness are generally stronger than those of personality traits. For example, Hoch et al. (2018) and Breevaart and Zacher (2019) found a relation between transformational leadership and leader effectiveness ($\rho = .79$ and $r = .92$ respectively) that even suggests that the two constructs are hard to separate empirically. Similar, albeit slightly weaker, correlations were found in other meta-analyses (Dumdum et al., 2013; Judge & Piccolo, 2004) and for other constructive leadership styles (e.g., Banks et al., 2016; Kim et al., 2018). With regards to negative leadership styles, Breevaart and Zacher (2019) found that laissez-faire leadership was negatively related to perceived leadership effectiveness ($r = -.41$). Next to the fact that these correlations are likely inflated because followers confound their leader's effectiveness with how much they like their leader, these strong correlations can also be explained by the fact that both are usually rated by the follower, dissolving the self-other agreement problem. Overall, leaders' personality and leadership styles seem to exhibit similar correlations with both leadership emergence and effectiveness.

Follower outcomes/perceptions

Different follower outcomes are often regarded as the most crucial outcomes influenced by leaders because they ultimately determine organizational success. Although little research exists, some studies have examined how leaders' personality traits relate to different follower

outcomes (keep in mind that some of the following correlations are based on personality traits rated by leaders and outcomes rated by followers, creating the self-other agreement problem which attenuates these correlations). For example, leaders' extraversion and agreeableness both correlated .18 with followers' perception of LMX (Dulebohn et al., 2012), and leaders' narcissism significantly predicted followers' counterproductive work behavior directed at leaders (r = .57; Braun et al., 2018). Derue et al. (2011) report that leaders' agreeableness (ρ = .22) and emotional stability (ρ = .08) correlate significantly with followers' satisfaction with their leader, whereas correlations for leaders' openness to experience, conscientiousness, and extraversion were non-significant. All of these outcomes can be regarded as leader-directed outcomes.

Very few studies have correlated leaders' personality traits with followers' general attitudes, but Derue et al. (2011) report only non-significant meta-analytic correlations for leaders' Big Five traits with followers' job satisfaction. These meta-analytic correlations are, however, based on only two studies, highlighting the need for more research that examine how leaders' traits correlate with attitudes of followers, such as turnover intentions or organizational commitment. Similarly, very few studies examined relations between leaders' personality and followers' performance outcomes. Derue et al. (2011), based on k = 1-5 studies, found that leaders' conscientiousness (ρ = .31) related positively to followers' group performance, whereas correlations for agreeableness (ρ = .20) and openness to experience (ρ = .13) were modestly sized but non-significant (which can likely be attributed to low statistical power). The current evidence therefore seems to indicate that leaders' personality traits do affect followers' attitudes and performance, but more research is clearly needed.

The relations of different leadership styles with various follower outcomes have been examined abundantly in past decades. Similar to the relations we reviewed above for leaders' personality with follower outcomes, findings for leadership styles generally indicate that

relations are strongest for leader-directed outcomes (e.g., trust in leader, satisfaction with leader), followed by attitudinal outcomes (e.g., job satisfaction, organizational commitment), and ultimately by performance outcomes (e.g., job performance, organizational citizenship behavior). For example, Hoch et al. (2018), who compared effect sizes for the most commonly studied constructive leadership styles (i.e., authentic, ethical, servant, and transformational leadership), reported the strongest correlations for trust in the leader (ρ = .65-.71; i.e., across the four leadership styles), followed by different positive attitudinal outcomes (ρ = .39-.66), and ultimately by various behavioral, performance outcomes of followers (ρ = .12-.45).

Again: The self-other agreement problem

Taken together, these findings indicate that there is strong overlap in the relations of leader personality and of leadership styles with the different leadership outcomes we reviewed here. In other words, leader personality traits exhibit correlations with follower outcomes in a similar magnitude as leadership styles do. An important reason for these correlations that are often interpreted as being weak to medium-sized is the self-other agreement problem described in the previous section. That is, in most studies, leaders report on the predictor variable (i.e., personality), whereas subordinates rate the outcome variable (e.g., leadership effectiveness, attitudinal outcomes). As we noted above, research shows that in work settings, self-other agreement on leadership (r = .24; Warr & Bourne, 1999), leadership behavior (r = .16; Ostroff et al., 2004), and personality (r = .30; De Vries et al., 2008) is quite low, which can explain the weak relations between leader-rated personality and subordinate-rated outcome variables. Supportive of this claim, correlations are much higher for subordinate-rated leadership style and subordinate-rated (leader-directed, attitudinal, and performance related) outcome variables.

Based on the evidence reviewed above, leaders' extraversion is a particularly important trait as it predicts both leadership emergence and effectiveness as well as various follower outcomes/perceptions (e.g., LMX). Conscientiousness also plays an important role in predicting both leadership emergence and effectiveness. Whereas agreeableness seems to be of little relevance in explaining leadership emergence, agreeable leadership does seem to be relevant for maintaining happy and healthy relationships with subordinates (i.e., high LMX and low abusive supervision). Although there is little research linking honesty-humility to organizational outcomes, given that honesty-humility has been positively linked to ethical leadership and negatively linked to abusive supervision (Breevaart & De Vries, 2017; De Vries, 2012), and given that dishonest leaders may provide counterproductive examples, thereby triggering low honesty-humility traits in their subordinates (De Vries, 2018), it seems likely that honesty-humility is an important leadership trait. Future research should therefore examine how leaders' honesty-humility relates to different follower outcomes.

5. Sensebreaking: Summary and future research

In the previous sections, we argued and showed that the most commonly used leadership constructs (i.e., those pertaining to behaviors or styles) can be regarded as contextualized (from personality to leadership) traits. First, we demonstrated that there is a strong overlap between leadership and personality definitions and items, and that personality and leadership constructs have similar levels of target variance, stability over time, and heritability. Furthermore, behavioral genetics studies show strong genetic – and weak environmental – overlap between personality and leadership. Second, we argued that the relatively weak personality – leadership relations in past studies are due to the self-other agreement problem in work settings and that the leadership lexical space is – like the personality space – spanned by a maximum of six factors that align with the HEXACO personality factors. Using a contextualized leadership inventory, the HEXACO-Lead, it was shown that, when compared

to leadership styles measures, complete contextualization of a personality questionnaire results in substantially higher self-other (leader self-rating – subordinate observer rating) agreement. Additionally, the HEXACO-Lead showed slightly – but consistently – higher validity in the prediction of leader-rated leadership style measures than generic HEXACO personality. Third, we delved into the literature on the relations between personality and leadership styles on the one hand with leadership emergence and attitudinal and effectiveness outcomes on the other hand. This section showed that leaders' personality traits exhibit similar (albeit attenuated due to the self-other agreement problem) correlations with follower outcomes as various leadership styles, providing further evidence that leadership can best be conceptualized using contextualized personality traits. Based on the relations with various leader, subordinate, and organizational outcomes, the most important contextualized leadership traits appear to be extraversion, conscientiousness, agreeableness, and – although less research has been conducted on this trait – honesty-humility. In the remaining, we highlight a number of areas that have been underdeveloped in leadership research on which findings in personality psychology can shed light. That is, the contextualized leadership traits approach may open up a number of avenues for future research that may further our knowledge about leadership.

Lifespan leadership research

As section 2 ('Sensemaking: The case for leadership traits') has shown, there is a paucity of research on leadership stability. We were able to locate three articles and in those, the maximum number of years that leaders were followed was only two years. No true lifespan research has yet been conducted on the stability and development of leadership styles, probably because it is almost impossible to obtain data from the same subordinates across such a vast space of time. When using different raters, scholars have to realize that the stability coefficients are likely to be much lower than what is usually found in personality

research. A large cross-cohort study using HEXACO self-ratings shows that there are important age trends in traits that are associated with leadership styles (Ashton & Lee, 2016). That is, given the large changes in honesty-humility (e.g., close to 1 *SD* between 18 and 70 years), one might expect convergent changes in ethical leadership and (less) abusive supervision, with older leaders showing on average more ethical leadership and less abusive supervision than younger leaders. Extraversion, which we have shown is the strongest leadership predictor (e.g., De Vries, 2012; Do & Minbashian, 2020; Bono & Judge, 2004), also shows an upward trend, especially with respect to the facets Social Self-Esteem and Social Boldness, two potentially important leadership traits. Agreeableness, which is positively related to supportive leadership and negatively to abusive supervision (Breevaart & De Vries, 2017; De Vries, 2012), shows a 'U-shaped' trend, with its lowest point around 40 (at the age that most people have young children). It would be interesting to see whether this trend is also present for supportive leadership. Finally, conscientiousness shows a gradual age-related increase, which may result in more consistent and complete leader planning behaviors. Although some leadership studies have investigated leader age and its relation with leadership styles (e.g., Oshagbemi, 2004, 2008), most leadership studies do not report correlations between leader age and leadership styles. That is, until a meta-analysis and/or large-scale age-related and preferably longitudinal leadership style study is conducted, it is unclear what are the most important age-related leadership style changes and whether these coincide with personality changes across the lifespan.

Age-related changes are important for another reason. Recent behavioral genetics research (Kandler et al., in press) has shown a decline in additive genetic effects and an increase in environmental effects on personality across the lifespan. This is accompanied by an increase in stability of personality, which is most stable around the age of 50 (Specht et al. 2011). If these trends are true for leadership as well, it may mean that leadership styles are

'set in plaster'; i.e., formed by environmental forces across time, but increasingly less malleable as time goes by. It may also mean that there is a critical period for leadership training before leadership styles are 'set in stone'. Future research might like to investigate whether there is such a critical period and at what age leadership style changes are harder to realize.

Volitional leadership change

Another area of research that is important for leadership training is research that has focused on volitional change. Thielmann and De Vries (in press) have shown that personality feedback may increase volitional personality change, especially for those who are low on honesty-humility, conscientiousness, and agreeableness (e.g., the three nightmare traits, De Vries, 2018). Studies on volitional change in personality have shown that programs designed to elicit specific behavioral changes can be successful if people are motivated to change (Hudson & Fraley, 2015). As far as we know, there have been no studies looking at volitional leadership change, although in the aforementioned study, especially increases in extraversion were found among those who desired to become more extraverted. A subsequent study (Hudson et al., 2019) found that desire to change was not a sufficient condition to evoke lasting personality change, but that it had to be complemented with successful behavioral change implementations. It is yet unknown to what extent feedback, volitional change motivations, and/or successful behavioral change implementations have an impact on lasting leadership style changes.

Person-supervisor fit

Using (contextualized) personality measures in leadership research may be also advantageous because it makes it easier to 'match' the questions posed to leaders and subordinates when investigating person-supervisor fit (P-S fit). P-S fit has been most closely related to satisfaction with the supervisor (Kristof-Brown et al., 2005), but further

investigations are warranted into the nature of this relation. In terms of personality, the question is on which personality traits P-S fit is more likely to relate to supervisor satisfaction, and, in turn, positive attitudes towards the job and the organization. Some hints may be provided by research showing that, in general, people who are befriended tend to be similar – and assume similarity – on two of the six HEXACO traits: honesty-humility and openness to experience (Lee et al., 2009). Research on preferences for ethical leadership has shown that people high on honesty-humility are more likely to prefer to work for an ethical leader, whereas this was less true for those low on honesty-humility (Ogunfowora, 2014). Because honesty-humility and openness to experience are the dimensions of personality that are most closely related to values (Lee et al., 2009), it is not unlikely that these two play an important role in the attitudes that leaders and subordinates have towards each other.

The role of leader liking

That brings us to another important area that is underrepresented in leadership research, that is, the role of liking and the personal relationships between leaders and subordinates. As we have highlighted in section 2 (‘Sensemaking: The case for leadership traits’), apart from target variance, there is also a substantial amount of relationship variance in personality and leadership (e.g., 35% in De Vries, 2010, and 28% in Livi et al., 2008). It is highly likely that this variance is determined by the extent of liking between leaders and subordinates. Staggeringly high correlations (with $|r| \geq .80$) between leader affect questionnaires (measuring leader (dis-)liking) and leadership styles (e.g., abusive supervision, authentic leadership, and leader-member exchange (LMX)) have been observed (Martinko et al., 2018), showing that at least some leadership style questionnaires do not measure much else than leader (dis-)liking. Such findings may be another reason why researchers should turn to more evaluatively neutral contextualized trait questionnaires (Julian, 2021). Furthermore, social relations analyses (Kenny, 1994) should be used to clarify the nature of the relations between leadership styles

or contextualized traits and liking, i.e., whether this is mainly through the relationship variance or whether there is also target variance (e.g., a leader's extraversion) associated with leader liking.

Incremental validity of leadership

That brings us to a last important point. For leadership style studies to show that they add value in the prediction of leadership outcomes (e.g., leader emergence, leader effectiveness, and subordinate attitudes and performance), leadership scholars have to show that leadership style measures add variance in the prediction of these outcomes beyond liking, generic personality traits, and cognitive ability measures (e.g., objectively measured emotional intelligence, Mayer et al., 2003), while at the same time taking into account the self-other agreement problem noted in section 3 ('The structure of leadership traits'). Only when researchers are able to show that leadership style measures have incremental validity in the prediction of organizational and attitudinal outcomes when combined with leader liking, leader personality, and leader ability measures, we may be able to conclude that such measures are a worthwhile addition at the disposal of scholars.

Concluding remarks

The leadership field has been plagued by a bewildering number of leadership conceptualizations. In this chapter, we have offered an integrative solution for the current state of affairs by conceptualizing leadership styles as contextualized personality. In this chapter, we have outlined why such an integrative solution is warranted (i.e., because of the theoretical, conceptual, operational, and empirical overlap between personality and leadership) and what benefits it may provide. A preliminary study using a fully contextualized leadership measure, the HEXACO-Lead, shows the advantages of using a contextualized leadership measure by offering higher levels of self-other agreement than leadership style measures. Integrating leadership style measures with existing personality trait measures into

an overarching contextualized leadership trait model, such as the HEXACO-Lead, may ultimately result in a more parsimonious and unified leadership field, something that all leadership scholars should strive for.

Footnotes

[1] Please note that this should actually be called 'to leadership contextualized personality traits' or 'from personality contextualized leadership traits', but because these are such a mouthful, we shortened it for the remainder of the chapter to 'contextualized leadership traits'. We refrained from shortening it to 'leadership traits' to make clear that contextualized leadership traits are specific to leadership situations *and* that these traits are aligned with – and should be incorporated in – the existing personality dimensional space.

[2] We very briefly discuss other individual differences in the beginning of the "2. Sensemaking: The case for leadership traits" section.

[3] The most notable difference among the HEXACO-Lead assessment and other generic versions of the HEXACO personality framework is the combination of two facet scales in the Openness to Experience domain, Inquisitiveness and Aesthetic Appreciation, into a single facet scale. Therefore, the Openness to Experience factor contains only three facet scales in the HEXACO-Lead measure, instead of the four scales typical of generic versions.

[4] It is important to note that the sample size available for all of these analyses was small (n = 77-78), and therefore results should be interpreted with caution.

[5] The HEXACO-60 was used as the generic HEXACO measure in this study (as opposed to longer alternatives, e.g., HEXACO-100) to keep the full set of questionnaires to a reasonable length. To rule out the impact of differential assessment length (i.e., 92 items vs. 60 items) on the differences in criterion-related validity between the HEXACO-Lead and the generic measure (respectively), the author recovered a 60-item version of the HEXACO-Lead

and re-ran the regression analyses for the self-rated leadership styles. The regression analyses using this shortened version of the HEXACO-Lead produced multiple correlation coefficients that were comparable to the full version of the assessment.

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