**Age-Related Differences in
Actual-Ideal Personality Trait Level Discrepancies**

Marie Hennecke

Universität Siegen, Department of Psychology, Siegen, Germany

Paul Schumann

Humboldt-Universität zu Berlin, Department of Psychology, Berlin, Germany

Jule Specht

Humboldt-Universität zu Berlin, Department of Psychology, Berlin, Germany

This article is currently in press at “Psychology and Aging”.

This preprint that may slightly differ from the final typeset print version.

Author Note

Correspondence concerning this article should be addressed to Marie Hennecke, University of Siegen, Department of Psychology, Adolf-Reichwein-Str. 2a, 57068 Siegen, Germany. E-mail: marie.hennecke@uni-siegen.de

The data used in this publication were made available by the German Socio-Economic Panel Study (SOEP, Data of the innovation sample SOEP-IS for years 2015 and 2017) at the German Institute for Economic Research (DIW Berlin). The data as well as the materials used can be accessed through this institution (see <https://www.diw.de/soep>). The statistical code can be accessed here: <https://osf.io/EKMXT>. This research was supported by a travel grant from the Graduate Campus of the University of Zurich, Switzerland, to Marie Hennecke.

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

Abstract

People differ from each other in their typical patterns of behavior, thought, and emotion and these patterns are considered to constitute their personalities (Funder, 2001). For various reasons, for example because certain trait levels may help to attain certain goals or fulfill certain social roles, people may experience that their actual trait levels are different from their ideal trait levels. In this study, we investigated (1) the impact of age on discrepancies between actual and ideal Big Five personality trait levels and (2) the impact of these discrepancies on personality trait changes across a period of two years. We use data of a large, nationally representative, and age-diverse sample ($N = 4,057$, 17-94 years, $M = 53$ years). Results largely confirmed previously reported age effects on actual personality trait levels but were sometimes more complex. Ideal trait levels exceeded actual trait levels more strongly for younger compared to older adults. Unexpectedly, neither ideal trait levels nor their interaction with beliefs about the extent to which personality is malleable vs. fixed predicted trait change over two years (controlling for actual trait levels). We conclude that ideal-actual trait level discrepancies may provide an impetus for change but that they appear to neither alone nor in combination with the belief that personality trait change is possible suffice to produce such change. We discuss commitment, self-efficacy, and strategy knowledge as potential additional predictors of trait change.

Keywords: Personality development, Big Five, age, self-regulation, belief

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

Age-Related Differences in

Actual-Ideal Personality Trait Level Discrepancies

People differ from each other in their typical patterns of behavior, thought, and emotion and these patterns are considered to constitute their personalities (Funder, 2001). The most common approach to describe people's personalities is based on the Five Factor model, which postulates five broad traits on which individuals can differ, the "Big Five" traits of openness to experience, conscientiousness, extraversion, agreeableness, and emotional stability (Goldberg, 1993; McCrae & John, 1992; Wiggins & Trapnell, 1997). Aside from their utility for describing individual differences, people's trait levels also predict important outcomes in their lives, from academic achievement (e.g., Robins, John, & Caspi, 1994), job performance (e.g., Barrick & Mount, 1991), and income (e.g., Borghans, Duckworth, Heckman, & Weel, 2008), to health (e.g., Bogg & Roberts, 2004; Booth-Kewley, & Vickers, 1994), delinquency (e.g., John, Caspi, Robins, Moffitt, & Stouthamer-Loeber, 1994), and divorce (e.g., Cramer, 1993).

When browsing the self-help section of a book store, it seems like the personality traits that people have are often not the personality traits they wish to have: Books promise that people can make "a change for good" (Huber, 2007) or that they can change their personalities in only 30 days (Small & Vorgan, 2018). That many people desire to change their personality traits has recently also been demonstrated in a variety of research studies (Hudson, Briley, Chopik, & Derringer, 2019; Hudson & Fraley, 2015, 2016; Hudson & Roberts, 2014). In line with the recent surge of interest in this topic, the current research investigates in a large, representative, age-diverse sample from Germany whether age affects the extent to which people's ideal personality trait levels are discrepant to and, in particular, exceed their actual trait levels. With the exception of one study that has looked directly at people's personality trait change goals (Hudson & Fraley,

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

2016), people's ideal personality trait levels have so far only been studied in samples of young adults and without the consideration of potential age differences (e.g., Back et al., 2010; Hudson & Roberts, 2014; Robinson, Nofle, Guo, Asadi, & Zhang, 2015).

We furthermore look at whether these discrepancies predict the course of personality development across a period of 2 years. Because discrepancies between people's actual and their ideal personality trait levels may result in subsequent attempts to achieve personality trait changes (Hennecke, Bleidorn, Denissen, & Wood, 2014), we predict that this should be the case if people also consider personality traits to be malleable rather than fixed (Dweck, 2008). We will elaborate this hypothesis in more detail below. Let us first turn to why we expect that age has an effect on discrepancies between people's actual and ideal personality trait levels.

Age-Related Differences in Discrepancies Between Actual and Ideal Personality Trait Levels

As briefly mentioned above, many people appear to desire changing their personality trait levels. In a sample of young adults studied by Hudson and Roberts (2014), participants reported the strongest desires to increase their levels of emotional stability and conscientiousness, followed by extraversion, agreeableness, and, lastly, openness. Robinson et al. (2015) report from another sample of young adults that most of them indicated that they wanted to *increase* their levels of emotional stability (71.9%), followed by extraversion (63.0%), conscientiousness (59.2%), openness (55.8%), and agreeableness (33.9%). Only few young adults reported wanting to *decrease* their levels of emotional stability (3.4%), extraversion (1.7%), conscientiousness (2.4%), openness (2.4%), and agreeableness (6.8%). The remaining participants indicated no desire to change.

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

There are several reasons for why individuals may experience discrepancies between their current personalities and their ideal personalities (Hennecke et al., 2014). Irrespective of age, certain trait levels are, per definition, related to certain levels of well-being. Low levels of emotional stability are manifest in negative emotional experiences like worries, anxiety, and depression (Widiger, 2009). Therefore, being more emotionally stable could be desirable just because of the improved hedonic experience that follows from it. Likewise, extraversion is, per definition, manifest in the experience and exhibition of positive emotional experiences (Wilt & Revelle, 2017). Therefore, being more extraverted could also be desirable for hedonic reasons.

In addition, higher trait levels may be seen as instrumental for attaining personal goals and dealing with life's demands (McCabe & Fleeson, 2012, 2016; Roberts & Wood, 2006). Here, a person's age may affect what constitutes desirable trait levels: According to the "social investment principle" (Roberts & Wood, 2006), certain trait levels support age-graded transitions into social roles that are typical for various life phases (e.g., marrying, starting a family, and finding a job for younger adults). This should be the case because these transitions come along with strong social expectations that motivate people to develop towards greater maturity, which is attained by increases in conscientiousness, agreeableness, and emotional stability. People may report desires to increase in trait levels that help them to fulfill such age-graded social roles and developmental tasks (see also Hutteman, Hennecke, Orth, Reitz, & Specht, 2014). Becoming more conscientious could, for example, be desirable to ease one's entry in the work force, and to be more successful in it (Hudson, Roberts, & Lodi-Smith, 2012; Hudson & Roberts, 2016).

What are our predictions for age-related differences regarding the *discrepancies* between people's actual and their ideal trait levels? For younger adults, we expect to replicate that, on average, their ideal levels of the Big Five traits exceed (i.e., are higher than) their current levels

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

(positive discrepancy; Hudson & Roberts, 2014; Robinson et al., 2015). This may result from the goals, social roles, and developmental tasks that younger adults face and for which higher trait levels may promote better fulfillment. Indeed trait *changes* have also been associated with desirable outcomes in educational (Bleidorn, 2012; Göllner et al., 2017), work (Le, Donnellan, & Conger, 2014; Roberts, Caspi, & Moffitt, 2003; Wille, Beyers, & De Fruyt, 2012; Specht, Egloff, & Schmukle, 2011; van Aken, Denissen, Branje, Dubas, & Goossens, 2006; Hudson et al., 2012; Hudson & Roberts, 2014), and social domains (Neyer & Lehnart, 2007; Roberts & Bogg, 2004; Robins, Caspi, & Moffitt, 2002; Scollon & Diener, 2006).

What about older adults? First, older adults already tend to have higher levels of agreeableness, conscientiousness, and emotional stability anyway (Roberts et al., 2006). As a consequence, even if high levels of these Big Five states remain desirable in old age, older adults should report smaller discrepancies between their actual and their ideal personality trait levels. Second, older adults may face fewer and weaker age-related norms and expectations overall (Freund, 2020; Settersen & Hägestad, 1996a, 1996b; Wrosch & Freund, 2001). Accordingly, the social pressures to develop certain personality traits as means to certain ends may be weaker as well. Indeed, the only study that has looked at personality change goals, a potential consequence of perceived discrepancies, in an age-diverse sample (with a wide age range of 18-70 years but a relatively young average age of 28.4 years, Hudson & Fraley, 2016) supports that older adults report less pronounced change goals for extraversion, conscientiousness, and openness than younger adults. Change goals for emotional stability were weaker in older compared to middle-aged adults. Only change goals for agreeableness were least pronounced in middle adulthood and highest in young and old age. It could be that older adults' stronger motivations to experience positive, harmonious relationships with close others (Carstensen, Fung, & Charles, 2003) and to

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

be generative (Erikson, 1950) render agreeableness an even more desirable trait in old age (Hutteman et al., 2014). With this exception, the overall pattern is furthermore in line with the observation that older adults generally report less change goals compared to middle-aged or younger adults and that their goals rather revolve around maintaining the status quo (Ebner, Freund, & Baltes, 2006).

Self-Regulated Personality Trait Change

Mean-level changes in personality traits across all of adulthood are by now well-supported (e.g., Damian, Spengler, Sutu, & Roberts, 2018; Graham et al., 2020; Roberts et al., 2006; Specht et al., 2014). It is furthermore widely accepted that various genetic and environmental influences contribute to both stability and change in personality traits (Bleidorn, Kandler, Riemann, Angleitner, & Spinath, 2009; Hopwood et al., 2011; Kandler et al., 2010; Wagner, Orth, Bleidorn, Hopwood, & Kandler, in press). More recently, it has also been acknowledged that people may play an active role and *self-regulate* their own personality development (e.g., Hennecke et al., 2014; Hudson et al., 2020). Self-regulation can be defined as people's capacity to override and alter their responses and to change their behavior in line with some standard such as an ideal or goal (Baumeister & Vohs, 2007), here: ideal personality trait levels.

The three-part framework for self-regulated personality development (Hennecke et al., 2014) proposes three preconditions that must be fulfilled for people to attain self-regulated trait changes. The first two of these preconditions stem from expectancy-value models which view goal commitment as the product of the value and the expectancy of a given goal (e.g. Atkinson, 1957; Fishbein & Ajzen, 1975; Heckhausen, 1977; Vroom, 1964). First, for change motivation to be sufficient, the trait change needs to have some value for the person. We assume that trait

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

change is experienced as valuable to the extent that people experience discrepancies between their actual and their ideal trait levels. The more a person's ideal personality trait levels diverge from their actual trait levels, the higher the value of change may subjectively appear. Hence, we operationalize value as discrepancies between actual and ideal trait levels. This is also in line with models of self-regulation or motivation (e.g., Higgins, 1989), first and foremost cybernetic control models (e.g., Carver & Scheier, 1990; Duval & Wicklund, 1972; Miller, Galanter, & Pribram, 1960), which consider discrepancies as the causal triggers of self-regulatory processes. These models assume that the process of self-regulation entails receiving and responding to feedback about one's current status (here: one's actual personality trait levels) in comparison to a reference value or desired status (here: one's ideal personality trait levels). If a discrepancy between the current status and the desired status is detected, responses aimed at overcoming this discrepancy are triggered, according to these models.

The detection of discrepancies between one's actual and one's ideal trait levels should, however, not suffice as a precondition for the initiation of trait changes. The second precondition of the framework, in line with expectancy-value-models, refers to the expectancy of trait changes. It entails that desired changes must appear feasible to the person. The feasibility or expectancy of trait change should be reflected in people's beliefs that an individual's personality consists of fixed, static traits or that it consists of dynamic personal qualities that can be changed and developed (e.g., Dweck, 2008). One intervention study showed that increasing children's beliefs that aggression is a malleable rather than a fixed trait reduced their aggressive behavior when compared to a control group with no such intervention (Yeager, Trzesniewski, & Dweck, 2013). This is an example that believing that trait change is possible can facilitate such change.

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

Accordingly, we operationalize outcome expectancy as the belief that personality is malleable vs. fixed.

Lastly, the third precondition is that for turning behavioral changes into stable trait changes, people have to form new habits through repeating states, for example of acting more extraverted at parties, or keeping a cleaner house, and organizing their schedules more conscientiously (Hennecke et al., 2014; Geukes, van Zalk, & Back, 2018; Wrzus & Roberts, 2017). Thus, personality trait change is - per definition - only possible across a longer period of time. However, most of the studies associating goals to change personality with personality development, rely on very short time periods, seldom longer than three months. In comparison, the two-year period observed in this study is longer. It remains an empirical question whether it is long enough to observe spontaneous, self-regulated trait changes.

A few studies have recently looked at whether self-regulated personality changes are possible. These studies have focused on change goals as predictors of personality change and results were somewhat mixed. Robinson et al. (2015) report that after 12 months the only changes occurred in the opposite direction of what participants desired: Goals and plans to change conscientiousness and emotional stability predicted change in the opposite direction to the goal. In contrast, Hudson and Fraley (2015, 2016) found across three samples of college students, that their change goals predicted modest changes in traits in the desirable direction over the course of 4 months. A recent mega-analysis of pooled data from various investigations furthermore reports that change goals robustly predict trait growth in all five traits, with the largest effects for extraversion and emotional stability (Hudson, Fraley, Chopik, & Briley, 2020). Pointing at the processes involved, Hudson and colleagues furthermore showed that, if people

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

follow through, and indeed frequently enact certain behaviors that are characteristic for the trait they wish to develop, they can achieve personality change (Hudson et al., 2019).

In this study, we will investigate longitudinal personality trait change and its association with actual-ideal discrepancies in personality trait levels. Specifically, we will consider actual-ideal discrepancies and beliefs in the malleability of personality and their interaction as possible preconditions for personality trait change across two years.

The Current Research

In sum, the current research addresses the following questions: (1) Does age predict differences in people's actual personality trait levels and the extent to which their ideal personality trait levels exceed their actual trait levels? (2) Do discrepancies between people's actual and their ideal personality trait levels together with the beliefs people hold about the fixedness (vs. malleability) of personality predict changes in their personality traits over the course of two years?

Note, that, as commonly done in research on personality, the current research focuses on self-reports of people's personality traits. It therefore addresses people's self-concept, "the individual's belief about himself or herself, including the person's attributes and who and what the self is" (Baumeister, 1999). Whereas assessing personality trait levels through self-report is cost efficient (Paulhus & Vazire, 2007), substantially valid (Funder, 1999), and likely the most straightforward way to assess people's *ideal* personality trait levels, it comes with certain constraints, which we will discuss in more detail later.

While our focus was on actual-ideal discrepancies, we expected to also (albeit cross-sectionally) replicate findings from studies reporting age-related increases in people's actual conscientiousness, agreeableness, and emotional stability across adulthood and decreases in

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

openness in old age (Roberts et al. 2006; Specht, Egloff, & Schmukle, 2011). The pattern of changes in conscientiousness, agreeableness, and emotional stability has been described as reflecting increasing maturity (Roberts & Wood, 2006), as these traits likely serve to facilitate functioning in society (Hogan & Roberts, 2004).

Method

Sample

The data were provided by the German Socio-Economic Panel (SOEP) of the German Institute for Economic Research. The SOEP is a large longitudinal survey of a nationally representative set of private households and all its adult household members in Germany (see Wagner, Frick, & Schupp, 2007, for details). In addition to the regular survey, every year a subsample of the SOEP receives an “innovation survey.” Researchers can submit proposals for surveys and experiments to be included in that survey. In 2015, we were able to include our own measurements of participants’ ideal personality and their beliefs in the malleability of personality (see below). In addition, in 2015 and 2017 participants’ actual personality was measured. We are not aware of any publications using our own measurements. However, other papers published from SOEP data are listed here:

https://www.diw.de/en/diw_02.c.221182.en/publications_with_soep_data.html. The data as well as the materials used can be accessed through the German Institute for Economic Research (DIW Berlin, see <https://www.diw.de/soep>).

We included in our analysis the data of all participants for which we had data about their actual personality in 2015 and 2017. This sample contained $N = 4,057$ individuals (46.4 % male = 1884 men, 53.6% female = 2173 women). We used the difference between their birth year and

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

the year of the first data collection in (2015) to compute their age (17-94 years, $M = 52.98$ years, $SD = 17.83$).

Measures

Actual personality trait levels. The Big Five personality traits openness, conscientiousness, extraversion, agreeableness, and emotional stability (abbreviated as O, C, E, A, ES, respectively, in some of the following tables) were measured twice, namely in 2015 and 2017 using a short version of the Big Five Inventory (BFI-S) (for information on the short version's validity and reliability, see Gerlitz & Schupp, 2005; for further information on the scale, the German translation, and evidence for its reliability and validity see also John, Donahue, & Kentle, 1991; John, Naumann, & Soto, 2008; Lang, Lüdtke, & Asendorpf, 2001). The BFI-S contains 15 items. For each, participants were asked to indicate their agreement on a scale ranging from 1 (does not apply at all) to 7 (applies perfectly). Due to economic considerations and resource limitations, it was not possible to include more items. Donnellan and Lucas (2008) nevertheless report large correlations between the original full BFI and the BFI-S (for each trait, $r > .86$). Internal reliabilities were mostly about $\alpha = .60$, except for agreeableness, where it was $\alpha = .46$ in both years. Lower reliabilities are to be expected for a small number of items that are used to reflect the broad underlying constructs of the Big Five traits (see also Hahn, Gottschling, & Spinath, 2012; Specht et al., 2011). If not otherwise specified, we used trait levels in 2015 for our calculations.

Ideal personality trait levels. In 2015, we also measured participants' ideal personality trait levels by asking them, with regard to the Big Five traits, what kind of person they would like to be. Specifically, the introduction to the questionnaire read as follows: "You have just indicated how strongly different traits apply to you personally. Now we are interested in what kind of

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

person you would like to be.” (see Back et al., 2010, for a similar procedure). We then administered a modified version of the 15 BFI-S items, this time changing the item intros from “I am someone who...” to “I would like to be someone who.....” (scales from 1 = does not apply at all to 7 = applies perfectly). Internal reliabilities ranged between $\alpha = .53$ and $\alpha = .77$, with the exception of extraversion for which internal reliability was lower with $\alpha = .36$.

Belief in the malleability vs. fixedness of personality (entity belief). In 2015, we also assessed the extent to which participants believed in the malleability vs. fixedness of personality. We used a translation of an established three item questionnaire which we adapted from Chiu, Hong, and Dweck (1997; see also Levy, Stroessner, & Dweck, 1998; in diverse samples, α s ranged from .90 to .96, retest-reliability was .82 in a sample of $N = 62$). It consists of the following three items: “The kind of person someone is is something very basic about them and it can’t be changed very much.”, “People can do things differently, but the important parts of who they are can’t really be changed.”, and “Everyone is a certain kind of person and there is not much that can be done to really change that.” (scales from 1 = does not apply at all to 7 = fully applies). Higher scores reflected a stronger belief that personality is fixed rather than malleable (entity belief). In our sample, the scale’s reliability was $\alpha = .64$.

Results

Descriptives and Data Exploration: Actual and Ideal Personality Trait Levels

Table 1 shows means, standard deviations of, and intercorrelations between participants’ reports of their actual personality trait levels (in 2015) and their ideal personality trait levels (2015) (see Table S1 in the supplemental materials for a table including these intercorrelations along with their 95% CIs). Let us first look at differences between ideal and actual trait levels. On average, participants reported significantly higher ideal levels than actual levels on all five

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

personality traits. Emotional stability was the trait where ideal trait levels most clearly exceeded actual trait levels ($M_{diff} = 1.94$, 95% CI [1.89, 1.99], $SD = 1.56$, $F(1,3987) = 6222.41$, $p < .001$, partial $\eta^2 = .61$), followed by openness ($M_{diff} = 0.50$, 95% CI [0.46, 0.53], $SD = 1.18$, $F(1,3983) = 707.61$, $p < .001$, partial $\eta^2 = .151$), conscientiousness ($M_{diff} = 0.31$, 95% CI [0.28, 0.35], $SD = 1.16$, $F(1, 3994) = 285.63$, $p < .001$, partial $\eta^2 = .07$), extraversion ($M_{diff} = 0.44$, 95% CI [0.40, 0.48], $SD = 1.30$, $F(1, 3987) = 452.59$, $p < .001$, partial $\eta^2 = .10$), and agreeableness ($M_{diff} = 0.48$, 95% CI [0.44, 0.52], $SD = 1.17$, $F(1, 3988) = 672.22$, $p < .001$, partial $\eta^2 = .14$). While for all traits, most participants reported higher ideal than actual levels, there was always a proportion of participants who reported lower ideal than actual levels or a match between the two: 17.9% desired lower levels of openness and 11.7% reported no discrepancy. 20.3% desired lower levels of conscientiousness and 23.9% reported no discrepancy. 27% desired lower levels of extraversion and 25.6% reported no discrepancy. 21.2% desired lower levels of agreeableness and 15.7% reported no discrepancy. Finally, 7.1% desired lower levels of emotional stability and 5.5% reported no discrepancy.

Let us now look at the extent to which people's ideal trait levels corresponded to their actual trait levels. For all five traits, people's actual trait scores correlated positively with their ideal trait scores. The correlation was weakest for emotional stability ($r = .09$, $p < .001$) and strongest for openness ($r = .49$, $p < .001$). Accordingly, people's actual and ideal personality trait levels tended to be similar: People with lower actual trait scores also reported more modest ideal trait levels, whereas people with already higher actual trait levels also reported higher ideal trait levels.

People's actual personality trait levels in 2015 correlated highly with their actual personality trait levels in 2017, indicating substantial trait stability and good scale retest-

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

reliability (openness: $r = .67, p < .001$; conscientiousness: $r = .62, p < .001$; extraversion: $r = .69, p < .001$; agreeableness: $r = .56, p < .001$; emotional stability: $r = .67, p < .001$). Additionally, there were significant mean-level changes from 2015 to 2017 for openness, conscientiousness, and emotional stability. Mean levels of openness ($M_{diff} = -0.06$, 95% CI $[-0.09, -0.04]$, $SD = 0.86$, $F(1,4056) = 22.44, p < .001$, partial $\eta^2 = .006$) and conscientiousness decreased over time ($M_{diff} = -0.09$, 95% CI $[-0.11, -0.06]$, $SD = 0.82$, $F(1,4054) = 44.62, p < .001$, partial $\eta^2 = .011$). Mean levels of emotional stability increased over time ($M_{diff} = 0.07$, 95% CI $[0.04, 0.10]$, $SD = 1.03$, $F(1,4056) = 19.51, p < .001$, partial $\eta^2 = .005$). Neither mean levels of extraversion ($M_{diff} = 0.00$, 95% CI $[-0.03, 0.03]$, $SD = 0.90$, $F(1,4056) = 0.00, p = .972$, partial $\eta^2 = .000$) nor mean levels of agreeableness ($M_{diff} = -0.02$, 95% CI $[-0.04, 0.01]$, $SD = 0.90$, $F(1,4056) = 2.00, p = .157$, partial $\eta^2 = .000$) changed over time. Note, that these are mean level differences across the entire sample, not distinguishing between participants of different ages. Accordingly, they do not consider that, across adulthood, the direction and magnitude of change may itself be subject to change.

As displayed in Table 1, age was positively correlated with actual levels of conscientiousness, agreeableness, and emotional stability and negatively correlated with actual levels of extraversion. It was negatively correlated with ideal levels of all five traits. Additional analyses (see below) provide evidence that a (linear) correlation may not be the best way to describe the associations of age and trait levels. Lastly, age was positively correlated with stronger entity beliefs about personality.

Age-Related Differences in Actual and Ideal Personality Trait Levels

To account for possible nonlinear effects of age on personality traits (Lucas & Donnellan, 2011; Roberts et al., 2006; Specht et al., 2011), we compared, for each trait, models against each

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

other that contained (1) only linear age effects, (2) linear and quadratic age effects, and (3) linear, quadratic, and cubic age effects. We used age at time 1 (in 2005). Age was mean-centered and divided by 10 to scale it by decades. Accordingly, regression weights for age must be interpreted as effects of decades (Hudson & Fraley, 2016). Note, that these are based on a cross-sectional analysis of age effects.

In all models, we furthermore controlled for potential gender effects, given that gender is known to affect people's personality trait levels (e.g., McCrae, Terraciano, & 78 members of the personality profiles of cultures project, 2005; Schmitt, Realo, Voracek, & Allik, 2008). We report here the models that showed the best fit to the data as based on a comparison of the Akaike information criterion (AIC, see Akaike, 1974). Accordingly, gender and quadratic and cubic age effects are not reported when a more parsimonious model without these predictors provided a better fit.

Age and actual personality trait levels. The models that showed the best fit to the data are displayed in Table 2. We predicted to replicate increases in conscientiousness, agreeableness, and emotional stability across adulthood but found significant (cross-sectional) age effects for all five traits. For openness, the model with a cubic age effect provided the best fit to the data. Mean levels of openness were relatively similar until and including middle adulthood, but old and very old adults reported lower mean levels of openness than younger and middle-aged adults (see Figure 1). For conscientiousness, the model with a cubic age effect also provided the best fit to the data. Participants tended to show progressively higher mean levels of conscientiousness from young to middle adulthood. Middle-aged and older adults' mean levels of conscientiousness were quite similar (see Figure 2). For extraversion, the model with a quadratic age effect provided the best fit to the data. Older and in particular very old adults' mean levels of extraversion tended to

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

be lower than younger adults' mean levels of extraversion (see Figure 3). For agreeableness, the model with a cubic age effect provided the best fit for the data. Younger and middle-aged adults' mean levels of agreeableness were similar to each other. Older adults showed progressively higher mean levels of agreeableness (see Figure 4). For emotional stability, the model with only a positive age effect provided the best fit to the data. Emotional stability showed progressively higher mean levels across adulthood (see Figure 5).

Age and actual-ideal personality trait level discrepancies. The models that showed the best fit to the data are displayed in Table 3. In these models, we predict ideal personality trait levels, while controlling for participants' actual personality trait levels. By doing so, we can interpret age effects on ideal personality traits as showing the extent to which, when holding actual personality trait levels constant, age predicted ideal personality traits; or in other words: the effects of age on ideal personality traits, when we compare participants with the same actual personality traits to each other. The resulting residualized mean levels (Figures 1-5) indicate the size of discrepancies between actual and ideal trait levels. Note, that we refrained from using difference scores built from actual and ideal personality trait scores in our hypothesis tests given that difference scores, despite their widespread use, suffer from numerous methodological problems (Cronbach, 1958; Edwards, 1994; Johns, 1981), for example, lower reliabilities than their component scores (Johns, 1981; Lord, 1958).

For four out of five traits (excluding ideal extraversion), the models containing cubic age effects showed the best fit to the data. Ideal openness showed progressively higher mean levels up until middle adulthood, and progressively lower mean levels of ideal openness until old age where it showed progressively higher mean levels again (see Figure 1). Very young adults showed lower mean levels of ideal conscientiousness than middle aged adults. Ideal

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

conscientiousness showed progressively lower mean levels from middle adulthood to old age.

Very old adults reported progressively higher mean levels in ideal conscientiousness (see Figure 2). Ideal extraversion, for which the model with the best fit contained only the linear effect of age, showed progressively lower mean levels across adulthood (see Figure 3). Ideal agreeableness showed progressively higher mean levels from young to middle adulthood. After middle adulthood ideal agreeableness showed progressively lower mean levels. Older and very old adults reported slightly higher ideal agreeableness again (see Figure 4). Ideal emotional stability showed progressively higher mean levels from young to middle adulthood, followed by progressively lower mean levels in older adulthood that leveled off until very old age (see Figure 5).

Self-Regulated Personality Trait Change

Lastly, we investigated the hypothesis that individuals whose ideal trait levels exceed their actual trait levels and who believe that personality is not a fixed entity show larger personality changes over two years compared to individuals whose ideal trait levels do not exceed their actual trait levels or who believe that personality is a fixed entity. We compared models which – in addition to the main effects of actual personality trait levels at T1, ideal personality trait levels, entity beliefs, and the critical interaction effect of ideal personality trait levels and entity beliefs – also contained age, age and gender, or age, gender and age². Scores indicating entity beliefs and ideal personality traits were mean-centered. The best fitting models are displayed in Table 6. Here we also refrained from using a difference score subtracting ideal from actual personality trait levels as a predictor, given that, in addition to reliability concerns, one component of the difference score (actual personality in 2015) would be highly correlated

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

with the outcome we wish to predict (actual personality in 2017), making the results difficult to interpret.

Critical to our hypothesis, there was only one significant interaction effect of ideal personality trait levels and entity beliefs for the change in extraversion over two years. However, after a closer inspection of the data we found that this effect was mainly driven by outliers with very low values (1-2) in ideal extraversion. We replicated the model without these participants and the interaction disappeared. Thus, we refrain from viewing this effect as substantial.

Although main effects were not a focus of our hypotheses, it is noteworthy that neither ideal personality trait levels alone nor entity beliefs alone predicted personality trait change over time.

Discussion

The current research aimed at answering two questions: (1) Does age predict individual differences in people's actual personality trait levels and the extent to which their ideal personality trait levels exceed their actual trait levels? (2) Do discrepancies between people's actual and their ideal personality trait levels together with the beliefs people hold about the fixedness (vs. malleability) of personality predict changes in their personality over the course of two years?

Overall, most of our hypotheses with regard to the first question were confirmed. Age predicted both people's actual personality trait levels as well as the extent to which their ideal personality trait levels exceeded their actual trait levels (in regression models controlling for the latter). The way age affected actual personality trait levels was quite similar to previously reported effects: Both actual openness and extraversion show progressively lower mean levels across adulthood, with openness even showing very low levels in old age. Except for the fact that

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

in our data very old adults reported higher mean levels of ideal openness (when controlling for actual openness) than their younger counterparts, mean levels of ideal openness and extraversion (when controlling for actual trait levels) showed progressively lower levels across adulthood. Conscientiousness showed progressively higher mean levels in young to middle adulthood. Mean levels of middle-aged and older adults were, however, quite similar and mean levels of very old adults were somewhat lower again. Here, ideal conscientiousness levels, when controlling for actual conscientiousness levels, largely mirrored this development with the highest discrepancies reported in young adulthood. Both actual agreeableness and emotional stability showed progressively higher mean levels across adulthood, with agreeableness showing a more pronounced progression in old age. When controlling for actual levels of agreeableness, ideal levels of agreeableness took a somewhat different shape but overall, did not show any pronounced age differences. When controlling for actual levels of emotional stability, ideal levels of emotional stability, however, showed progressively higher means in young and very old age, but progressively lower means in late middle adulthood.

Taken together, these results indicate that discrepancies between people's actual and their ideal personality trait levels tend to be smaller in older than in younger adults. This finding is in line with Hudson and Fraley (2016) and with our own hypotheses. It is furthermore in line with the observation that due to an increase in self-esteem in young and middle adulthood, older adults (but not very old adults) also have, on average, higher levels of self-esteem than younger adults (Robins, Trzesniewski, Tracy, Gosling, & Potter, 2002; Orth, Erol, & Luciano, 2018). That they are more satisfied with their current selves may be reflected in these less pronounced discrepancies between their actual and their ideal personality trait levels. The positive correlation between age and entity beliefs we found may furthermore point to another mechanism explaining

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

smaller discrepancies between actual and ideal personality trait levels in older adults. It might be the case that because older adults believe (more so than younger adults) that personality change is less feasible, they bring their ideal selves closer to their actual selves as a means of reducing dissonance and protecting their self-esteem (Festinger, 1957).

Note, however, that, as described above, some patterns were more complex than our relatively simple hypotheses that assumed linear age effects. For example, individuals' ideal relative to their actual emotional stability showed progressively higher mean levels in young adulthood but progressively lower mean levels in middle and old adulthood. Given the large size of our sample, future research may want to focus more the processes causing such more differentiated patterns.

Different developmental tasks at different points across the life span may explain changes in ideal trait levels (Hutteman et al., 2014) and be one of the reasons for personality maturation across young adulthood (cf. Roberts & Wood, 2016). In light of the relatively low actual levels of emotional stability in young adulthood, individuals may feel an even stronger need to become less anxious, angry, and depressed. In middle adulthood, when emotional stability is already higher than before, trait levels may have reached a level that allows to manage developmental tasks. In old age, potentially more emotionally threatening developmental tasks like coming to terms with one's own mortality and that of close others (Maxfield et al., 2008) as well as physical impairment may cause the desire to be more emotionally stable to rise again.

When looking at our results on actual-ideal personality trait discrepancies in more detail, our results are also somewhat different from previous work. When asked about their goals directly (Hudson & Fraley, 2015; 2016; Hudson & Roberts, 2014), rather than reporting their actual and ideal personality trait levels as done in our study, participants rarely reported wanting

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

to score lower on the Big Five traits. For example, Hudson and Roberts (2014) report that no more than 3% of participants reported goals to decrease their level on any of the traits. In our study, the proportion of participants reporting lower ideal than actual levels was higher and ranged from 7.1% for emotional stability to 27% for extraversion. Methodological differences might account for these different results. Previous studies (that also looked at goals, not actual-ideal discrepancies) usually relied on convenience samples of US-American undergraduates or mostly female participants who were explicitly interested in assessing or changing their personalities (Hudson et al., 2019; Hudson & Fraley, 2015; 2016; Hudson & Roberts, 2014). We were able to use data from a representative and therefore much more heterogeneous sample. That people do not uniformly desire higher ideal than actual but sometimes lower than actual trait levels, could be seen as support for the idea that in certain social niches (Buss, 1987; Scarr & McCartney, 1983) lower levels of a certain trait may be more desirable. For example, Denissen et al. (2018) have shown that the fit between a person's personality traits and the personality demands of their job predicts income. They found that it can even be financially disadvantageous to have high trait levels if they exceed the level a job demands. Given the heterogeneity of our sample and the many different contexts people in our sample find themselves in, some seem to feel that, for example, being less agreeable (and therefore maybe being better able to stand one's ground) or being less conscientious (and therefore less dutiful) may be beneficial and adaptive, for example by preventing them from taking on too many projects at work.

Regarding our second research question, we could not confirm our hypotheses. We did not find reliable effects of discrepancies, beliefs in the malleability of personality, and their interaction on personality trait development. It might be the case that desiring trait change (operationalized as a discrepancy between one's actual and one's ideal personality) and believing

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

that such change is possible are not enough to bring about personality trait change. As shown by Hudson et al. (2019), even in a personality trait change intervention, trait change goals (which should already come with some actual commitment to change, something we do not know about discrepancies) only predicted change if participants actually implemented certain behaviors that were indicative of the desired trait. In other words: People must frequently, and over extended periods of time show personality states that - through habit formation - then may lead to long-lasting personality trait change (see also Hennecke et al., 2014; Geukes et al., 2018; Wrzus & Roberts, 2017). From the data that we analyzed for this article, we cannot infer the extent to which individuals did so. But it is the case that the sample was not selected based on participants' interest in personality trait change. Hence, the likelihood that these participants invested effort into achieving trait change through the formation of new state habits is lower than in studies that directly targeted samples who were interested in a personality change intervention.

Another limitation of the model we tested here is that it did not consider the role of people's self-efficacy, that is, the belief that they will be able to produce desired attainments (Bandura, 1997). People may believe that in principle, with the proper measures, personality trait change may be possible but at the same time not feel capable of implementing these measures themselves. In turn, individuals with low self-efficacy are unlikely to take any steps to bring about desired trait changes, even if they believe that, in principle and maybe for other people, personality trait change is possible.

Lastly, all beliefs may be misguided and even highly self-efficacious individuals who believe in the malleability of personality traits may have little actual knowledge about strategies they can use to change their traits in desired ways. Given that strategy use is a predictor of self-regulatory success (Hennecke, Czikmantori, & Brandstätter, 2019), not being able to

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

purposefully implement such strategies, might have made personality change difficult, even for individuals who consider themselves capable of it (Hennecke et al., 2014).

Limitations and Future Directions

Among the clearest strengths of this research are its reliance on a large, representative dataset, that furthermore allowed for a longitudinal analysis of personality trait change over two years. However, this research also has some important limitations: First, it relies on people's self-reports of their personality traits. While this is cost efficient, deemed valid (Funder, 1999) and very common in personality science (Paulhus & Vazire, 2007), multi-method assessments that additionally include informant-ratings or behavioral observations (McCrae & Weiss, 2007; Nave, Feeney, & Furr, 2018; Vazire, 2007) are preferable for avoiding self-presentational biases like self-enhancement (Paulhus & Holden, 2010). As mentioned above, the personality trait scales we used furthermore had rather low internal consistencies. This is likely a consequence of the broad and heterogeneous personality traits that have been assessed using a very short questionnaire. Unfortunately, this is common in large scale panel studies with this sample size. Future studies should aim to use questionnaires with higher reliabilities whenever possible (see Bleidorn et al., 2020 for additional recommendations for improving the design of studies focusing on causes of personality change).

Moreover, our assessment of beliefs about the malleability of personality may have been too general. Given that a person's personality is comprised of different traits, people may also hold different beliefs about how malleable each of these traits is (Steimer & Mata. 2016). For example, people may feel that agreeableness is easier to change simply through changing certain overt behaviors (e.g., smiling more, helping other people more, disagreeing less and giving in more often), whereas the inner experiences that come with a lack of emotional stability may feel

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

more difficult to overcome. Future studies should therefore predict change of each trait by participants desire to change exactly that trait and beliefs in the malleability of that trait. As discussed above, individuals' self-efficacy for changing each of the traits should also be considered.

Furthermore, we do not know from our data, whether individuals just imagined an ideal personality or whether they also felt a need to become the person they aimed for. Changing one's personality is a critical endeavor and probably more likely if there is a strong desire to become someone else. Whereas work by Hudson and colleagues (e.g., 2019, 2020) assessed goals directly, and we can assume that goals already entail some commitment, we do not know whether participants who imagined ideal personality traits different from their actual traits, also felt a motivational impetus and commitment to change. We expected that discrepancies would make change appear valuable but have no ultimate evidence for this assumption.

Lastly, one major criticism applying to all cross-sectional studies on age effects is that these may just as well reflect cohort differences or period effects. It could be that, for example due to the constant availability of social comparison (Festinger, 1954) with other people via mainly positive images on social media (Lup, Trub, & Rosenthal, 2015), younger generations might be more prone to experiencing dissatisfaction with their own personality traits compared to older generations (Vries, Möller, Wieringa, Eigenraam, & Hamelink, 2017).

Conclusion

The current research shows that most people across all of adulthood experience discrepancies between their actual and their ideal personality trait levels. On average, ideal trait levels exceeded actual trait levels (positive discrepancies) but discrepancies in the other direction (negative discrepancies) were also observable. With age, discrepancies between actual and ideal

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

personality traits tended to decline: Older individuals seem to be more satisfied with their actual personality trait levels compared to younger individuals.

We did not find differences in personality trait development for individuals with higher compared to lower discrepancies or with a stronger compared to weaker belief in the malleability of personality. Most importantly, we need to keep in mind that ambitious ideals might be a boon and bane: On the one hand, they might be a result of low self-esteem that hinders to accept oneself as the person one is (Baumeister, 1994). On the other hand, they might be an impetus for personality maturation (Roberts et al., 2017). In each case, our results show that coming closer to one's ideal personality traits does not seem to be something that simply "occurs", without the person's commitment to respective change goals and the investment of effort into their pursuit (Hudson et al., 2019).

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

References

- Akaike, H. (1974). A new look at the statistical model identification. *IEEE Transactions on Automatic Control*, 19, 716-723.
- Atkinson, J. W. (1957). Motivational determinants of risk-taking behavior. *Psychological Review*, 64, 359-372.
- Back, M. D., Stopfer, J. M., Vazire, S., Gaddis, S., Schmukle, S. C., Egloff, B., & Gosling, S. D. (2010). Facebook profiles reflect actual personality, not self-idealization. *Psychological Science*, 21, 372-374.
- Barrick, M. R., & Mount, M. K. (1991). The Big Five personality dimensions and job performance: A meta-analysis. *Personnel Psychology*, 44, 1-26.
- Baumeister, R. F. (1994). The crystallization of discontent in the process of major life change. In T. F. Heatherton & J. L. Weinberger (Eds.), *Can personality change?* (pp. 281-297). Washington, DC: American Psychological Association.
- Baumeister, R. F. (1999). *The self in social psychology*. Psychology Press.
- Baumeister, R. F., & Vohs, K. D. (2007). Self-regulation, ego depletion, and motivation. *Social and Personality Psychology Compass*, 1, 115-128.
- Bleidorn, W. (2012). Hitting the road to adulthood: Short-term personality development during a major life transition. *Personality and Social Psychology Bulletin*, 38, 1594-1608.
- Bleidorn, W., Hopwood, C. J., Back, M. D., Denissen, J. J. A., Hennecke, M., Jokela, M., Kandler, C., Lucas, R. E., Luhmann, M., Orth, U., Roberts, B. W., & Wagner, J., Wrzus, C., & Zimmermann, J. (2020). Longitudinal experience-wide association studies: A framework for studying personality change. *European Journal of Personality*.

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

- Bleidorn, W., Kandler, C., Riemann, R., Angleitner, A., & Spinath, F. M. (2009). Patterns and sources of adult personality development: Growth curve analyses of the NEO PI-R scales in a longitudinal twin study. *Journal of Personality and Social Psychology*, 97, 142-155.
- Bogg, T., & Roberts, B. W. (2004). Conscientiousness and health-related behaviors: A meta-analysis of the leading behavioral contributors to mortality. *Psychological Bulletin*, 130, 887-919.
- Booth-Kewley, S., & Vickers Jr., R. R. (1994). Associations between major domains of personality and health behavior. *Journal of Personality*, 62, 281-298.
- Borghans, L., Duckworth, A. L., Heckman, J. J., & Ter Weel, B. (2008). The economics and psychology of personality traits. *Journal of Human Resources*, 43, 972-1059.
- Buss, D. M. (1987). Selection, evocation, and manipulation. *Journal of Personality and Social Psychology*, 53, 1214-1221.
- Carstensen, L. L., Fung, H. H., & Charles, S. T. (2003). Socioemotional selectivity theory and the regulation of emotion in the second half of life. *Motivation and Emotion*, 27, 103-123.
- Carver, C. S., & Scheier, M. F. (1990). Origins and functions of positive and negative affect: A control-process view. *Psychological Review*, 97, 19-35.
- Chiu, C. Y., Hong, Y. Y., & Dweck, C. S. (1997). Lay dispositionism and implicit theories of personality. *Journal of Personality and Social Psychology*, 73, 19-30.
- Cramer, D. (1993). Personality and marital dissolution. *Personality and Individual Differences*, 14, 605-607.
- Cronbach, L. J. (1958). Proposals leading to analytic treatment of social perception scores. In R. Tagiuri & L. Petrullo (Eds.), *Person perception and interpersonal behavior* (pp. 353-379). Stanford, CA: Stanford University Press.

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

- Damian, R. I., Spengler, M., Sutu, A., & Roberts, B. W. (2018). Sixteen going on sixty-six: A longitudinal study of personality stability and change across 50 years. *Journal of Personality and Social Psychology*, *117*, 674-695.
- Denissen, J. J., Bleidorn, W., Hennecke, M., Luhmann, M., Orth, U., Specht, J., & Zimmermann, J. (2018). Uncovering the power of personality to shape income. *Psychological Science*, *29*, 3-13.
- De Vries, D. A., Möller, A. M., Wieringa, M. S., Eigenraam, A. W., & Hamelink, K. (2018). Social comparison as the thief of joy: Emotional consequences of viewing strangers' Instagram posts. *Media Psychology*, *21*, 222-245.
- Duval, S. & Wicklund, R. A. (1972). *A theory of objective self-awareness*. Academic Press.
- Dweck, C. S. (2008). *Mindset: The new psychology of success*. New York, NY: Random House.
- Ebner, N. C., Freund, A. M., & Baltes, P. B. (2006). Developmental changes in personal goal orientation from young to late adulthood: from striving for gains to maintenance and prevention of losses. *Psychology and Aging*, *21*, 664-678.
- Edwards, J. R. (1994). Ten difference score myths. *Organizational Research Methods*, *4*, 265-287.
- Erikson, E. H. (1950). *Childhood and society*. New York, NY: Norton.
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, *7*, 117-140.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Freund, A. M. (2020). The bucket list effect: Why leisure goals are often deferred until retirement. *American Psychologist*, *75*, 499-510.

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

Funder, D.C. (2001). Personality. *Annual Review of Psychology*, 52, 197-221.

Gerlitz, J. Y., & Schupp, J. (2005). Zur Erhebung der Big-Five-basierten

Persoenlichkeitsmerkmale im SOEP. *DIW Research Notes*, 4.

Geukes, K., van Zalk, M., & Back, M. D. (2018). Understanding personality development: An integrative state process model. *International Journal of Behavioral Development*, 42, 43-51.

Göllner, R., Damian, R. I., Rose, N., Spengler, M., Trautwein, U., Nagengast, B., & Roberts, B.

W. (2017). Is doing your homework associated with becoming more conscientious?

Journal of Research in Personality, 71, 1-12.

Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American Psychologist*,

48, 26-34.

Graham, E. K., Weston, S. J., Gerstorf, D., Yoneda, T. B., Booth, T., Beam, C. R., ... &

Estabrook, R. (2020). Trajectories of Big Five personality traits: A coordinated analysis of 16 longitudinal samples. *European Journal of Personality*.

Hahn, E., Gottschling, J., & Spinath, F. M. (2012). Short measurements of personality - Validity

and reliability of the GSOEP Big Five Inventory (BFI-S). *Journal of Research in Personality*, 46, 355-359.

Hennecke, M., Bleidorn, W., Denissen, J. J., & Wood, D. (2014). A three-part framework for

self-regulated personality development across adulthood. *European Journal of Personality*, 28, 289-299.

Hennecke, M., Czikmanti, T., & Brandstätter, V. (2019). Doing despite disliking: Self-

regulatory strategies in everyday aversive activities. *European Journal of Personality*, 33, 104-128.

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

- Higgins, E. T. (1989). Self-discrepancy theory: What patterns of self-beliefs cause people to suffer? In *Advances in Experimental Social Psychology* (Vol. 22, pp. 93-136). Academic Press.
- Hogan, R., & Roberts, B. W. (2004). A socioanalytic model of maturity. *Journal of Career Assessment*, 12, 207-217.
- Hopwood, C. J., Donnellan, M. B., Blonigen, D. M., Krueger, R. F., McGue, M., Iacono, W. G., & Burt, S. A. (2011). Genetic and environmental influences on personality trait stability and growth during the transition to adulthood: A three-wave longitudinal study. *Journal of Personality and Social Psychology*, 100, 545-556.
- Huber, C. (2007). *Making a change for good: A guide to compassionate self-discipline*. Shambhala.
- Hudson, N. W., Briley, D. A., Chopik, W. J., & Derringer, J. (2019). You have to follow through: Attaining behavioral change goals predicts volitional personality change. *Journal of Personality and Social Psychology*, 117, 839-857.
- Hudson, N. W., & Fraley, R. C. (2015). Volitional personality trait change: Can people choose to change their personality traits? *Journal of Personality and Social Psychology*, 109, 490-507.
- Hudson, N. W., & Fraley, R. C. (2016). Do people's desires to change their personality traits vary with age? An examination of trait change goals across adulthood. *Social Psychological and Personality Science*, 7, 847-856.
- Hudson, N. W., Fraley, R. C., Chopik, W. J., & Briley, D. A. (2020). Change goals robustly predict trait growth: A mega-analysis of a dozen intensive longitudinal studies examining volitional change. *Social Psychological and Personality Science*.

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

- Hudson, N. W., & Roberts, B. W. (2014). Goals to change personality traits: Concurrent links between personality traits, daily behavior, and goals to change oneself. *Journal of Research in Personality, 53*, 68-83.
- Hudson, N. W., & Roberts, B. W. (2016). Social investment in work reliably predicts change in conscientiousness and agreeableness: A direct replication and extension of Hudson, Roberts, and Lodi-Smith (2012). *Journal of Research in Personality, 60*, 12-23.
- Hudson, N. W., Roberts, B. W., & Lodi-Smith, J. (2012). Personality trait development and social investment in work. *Journal of Research in Personality, 46*, 334-344.
- Hutteman, R., Hennecke, M., Orth, U., Reitz, A. K., & Specht, J. (2014). Developmental tasks as a framework to study personality development in adulthood and old age. *European Journal of Personality, 28*, 267-278.
- John, O. P., Caspi, A., Robins, R. W., Moffitt, T. E., & Stouthamer-Loeber, M. (1994). The “little five”: Exploring the nomological network of the five-factor model of personality in adolescent boys. *Child Development, 65*, 160-178.
- John, O. P., Donahue, E. M., & Kentle, R. L. (1991). The Big Five Inventory: Versions 4a and 54 [Technical Report]. *Berkeley, CA: University of California, Institute of Personality and Social Research.*
- John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative Big-Five trait taxonomy: History, measurement, and conceptual issues. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 114-158). New York, NY: Guilford Press.
- Johns, G. (1981). Difference score measures of organizational behavior variables: A critique. *Organizational Behavior and Human Performance, 27*, 443-463.

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

Kandler, C., Bleidorn, W., Riemann, R., Spinath, F. M., Thiel, W., & Angleitner, A. (2010).

Sources of cumulative continuity in personality: A longitudinal multiple-rater twin study.

Journal of Personality and Social Psychology, 98, 995-1008.

Lang, F. R., Lüdtke, O., & Asendorpf, J. B. (2001). Testgüte und psychometrische Äquivalenz

der deutschen Version des Big Five Inventory (BFI) bei jungen, mittelalten und alten

Erwachsenen. *Diagnostica*, 47, 111-121.

Le, K., Donnellan, M. B., & Conger, R. (2014). Personality development at work: Workplace

conditions, personality changes, and the corresponsive Principle. *Journal of Personality*,

82, 44–56.

Levy, S. R., Stroessner, S. J., & Dweck, C. S. (1998). Stereotype formation and endorsement:

The role of implicit theories. *Journal of Personality and Social Psychology*, 74, 1421-

1436.

Lord, F. M. (1958). The utilization of unreliable difference scores. *Journal of Educational*

Psychology, 49, 150–152.

Lup, K., Trub, L., & Rosenthal, L. (2015). Instagram# instasad?: exploring associations among

instagram use, depressive symptoms, negative social comparison, and strangers followed.

Cyberpsychology, Behavior, and Social Networking, 18, 247-252.

Maxfield, M., Pyszczynski, T., Kluck, B., Cox, C. R., Greenberg, J., Solomon, S., & Weise, D.

(2007). Age-related differences in responses to thoughts of one's own death: mortality

salience and judgments of moral transgressions. *Psychology and Aging*, 22, 341-353.

McCabe, K. O., & Fleeson, W. (2012). What is extraversion for? Integrating trait and

motivational perspectives and identifying the purpose of extraversion. *Psychological*

Science, 23, 1498-1505.

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

- McCabe, K. O., & Fleeson, W. (2016). Are traits useful? Explaining trait manifestations as tools in the pursuit of goals. *Journal of Personality and Social Psychology*, 110, 287-301.
- McCrae, R. R., & John, O. P. (1992). An introduction to the five-factor model and its applications. *Journal of Personality*, 60, 175-215.
- McCrae, R. R., & Terracciano, & 78 Members of the Personality Profiles of Cultures Project (2005). Universal features of personality traits from the observer's perspective: Data from 50 cultures. *Journal of Personality and Social Psychology*, 88, 547-561.
- McCrae, R. R., & Weiss, A. (2007). Observer ratings of personality. In R. W. Robins, R. C. Fraley, & R. F. Krueger (Eds.), *Handbook of research methods in personality psychology* (pp. 259–272). New York, NY: Guilford.
- Miller, G. A., Galanter, E., & Pribram, K. H. (1960). *Plans and the structure of behavior*. Henry Holt & Co.
- Nave, C. S., Feeney, M. G., & Furr, R. M. (2018). Behavioral observation in the study of personality and individual differences. In V. Zeigler-Hill & T. K. Shackelford (Eds.), *The SAGE handbook of personality and individual differences: The science of personality and individual differences* (p. 317–340). Thousands Oaks, CA: Sage.
- Neyer, F. J., & Lehnart, J. (2007). Relationships matter in personality development: Evidence from an 8-year longitudinal study across young adulthood. *Journal of Personality*, 75, 535-568.
- Orth, U., Erol, R. Y., & Luciano, E. C. (2018). Development of self-esteem from age 4 to 94 years: A meta-analysis of longitudinal studies. *Psychological Bulletin*, 144, 1045-1080.

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

- Paulhus, D. L., & Vazire, S. (2007). The self-report method. In R. W. Robins, R. C. Fraley, & R. F. Krueger (Eds.), *Handbook of Research Methods in Personality Psychology* (pp. 224–239). New York, NY, US: Guilford Press.
- Roberts, B. W., & Bogg, T. (2004). A longitudinal study of the relationships between conscientiousness and the social-environmental factors and substance-use behaviors that influence health. *Journal of Personality*, 72, 325-354.
- Roberts, B. W., Caspi, A., & Moffitt, T. E. (2003). Work experiences and personality development in young adulthood. *Journal of Personality and Social Psychology*, 84, 582–593.
- Roberts, B. W., Luo, J., Briley, D. A., Chow, P. I., Su, R., & Hill, P. L. (2017). A systematic review of personality trait change through intervention. *Psychological Bulletin*, 143, 117-141.
- Roberts, B. W., Walton, K. E., & Viechtbauer, W. (2006). Patterns of mean-level change in personality traits across the life course: A meta-analysis of longitudinal studies. *Psychological Bulletin*, 132, 1-25.
- Roberts, B. W., & Wood, D. (2006). Personality development in the context of the neo-socioanalytic model of personality. In D. K. Mroczek & T. D. Little (Eds.), *Handbook of personality development* (pp. 11-39). Mahwah, NJ, US: Lawrence Erlbaum Associates.
- Robins, R. W., Caspi, A., & Moffitt, T. E. (2002). It's not just who you're with, it's who you are: Personality and relationship experiences across multiple relationships. *Journal of Personality*, 70, 925-964.
- Robins, R. W., Trzesniewski, K. H., Tracy, J. L., Gosling, S. D., & Potter, J. (2002). Global self-esteem across the life span. *Psychology and Aging*, 17, 423-434.

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

- Robinson, O. C., Nofhle, E. E., Guo, J., Asadi, S., & Zhang, X. (2015). Goals and plans for Big Five personality trait change in young adults. *Journal of Research in Personality*, 59, 31-43.
- Scarr, S., & McCartney, K. (1983). How people make their own environments: A theory of genotype → environment effects. *Child Development*, 54, 424-435.
- Schmitt, D. P., Realo, A., Voracek, M., & Allik, J. (2008). Why can't a man be more like a woman? Sex differences in Big Five personality traits across 55 cultures. *Journal of Personality and Social Psychology*, 94, 168-182.
- Scollon, C. N., & Diener, E. (2006). Love, work, and changes in extraversion and neuroticism over time. *Journal of Personality and Social Psychology*, 91, 1152-1165.
- Settersten, R. A., Jr., & Hägestad, G. O. (1996a). What's the latest? Cultural age deadlines for family transitions. *The Gerontologist*, 36, 178-188.
- Settersten, R. A., Jr., & Hagestad, G. O. (1996b). What's the latest? II. Cultural age deadlines for educational and work transitions. *The Gerontologist*, 36, 602-613.
- Small, G., & Vorgan, G. (2018). *Snap!: Change your personality in 30 days*. Humanix Books.
- Steimer, A., & Mata, A. (2016). Motivated implicit theories of personality: My weaknesses will go away but my strengths are here to stay. *Personality and Social Psychology Bulletin*, 42, 415-429.
- Specht, J., Bleidorn, W., Denissen, J. J., Hennecke, M., Hutteman, R., Kandler, C., ... & Zimmermann, J. (2014). What drives adult personality development? A comparison of theoretical perspectives and empirical evidence. *European Journal of Personality*, 28, 216-230.

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

- Specht, J., Egloff, B., & Schmukle, S.C. (2011). Stability and change of personality across the life course: The impact of age and major life events on mean-level and rank-order stability of the Big Five. *Journal of Personality and Social Psychology*, *101*, 862–882.
- Trautwein, U., Lüdtke, O., Roberts, B. W., Schnyder, I., & Niggli, A. (2009). Different forces, same consequence: Conscientiousness and competence beliefs are independent predictors of academic effort and achievement. *Journal of Personality and Social Psychology*, *97*, 1115–1128. <https://doi.org/10.1037/a0017048>
- van Aken, M. A. G. van, Denissen, J. J. A., Branje, S. J. T., Dubas, J. S., & Goossens, L. (2006). Midlife concerns and short-term personality change in middle adulthood. *European Journal of Personality*, *20*, 497–513.
- Vazire, S. (2007). Informant reports: A cheap, fast, easy method for personality assessment. *Journal of Research in Personality*, *40*, 472–481.
- Vroom, V. H. (1964). *Work and motivation*. San Francisco, CA: Jossey-Bass.
- Wagner, G. G., Frick, J. R., & Schupp, J. (2007). The German Socio-Economic Panel Study (SOEP) - Scope, evolution and enhancements. *Journal of Applied Social Science Studies*, *127*, 139–169.
- Wagner, J., Orth, U., Bleidorn, W., Hopwood, C. J., & Kandler, C. (in press). Towards an integrative model of sources of personality stability and change. *Current Directions in Psychological Science*.
- Widiger, T. A. (2009). Neuroticism. In M. R. Leary & R. H. Hoyle (Eds.), *Handbook of individual differences in social behavior* (p. 129–146). The Guilford Press.

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

- Wiggins, J. S., & Trapnell, P. D. (1997). Personality structure: The return of the Big Five. In R. Hogan, J. A. Johnson, & S. R. Briggs (Eds.), *Handbook of Personality Psychology* (pp. 737-765). Academic Press.
- Wille, B., Beyers, W., & De Fruyt, F. (2012). A transactional approach to person-environment fit: Reciprocal relations between personality development and career role growth across young to middle adulthood. *Journal of Vocational Behavior*, 81, 307–321.
- Wilt, J., & Revelle, W. (2017). Extraversion. In T. A. Widiger (Ed.), *Oxford library of psychology. The Oxford handbook of the Five Factor Model* (p. 57–81). Oxford University Press.
- Wrosch, C., & Freund, A. M. (2001). Self-regulation of normative and non-normative developmental challenges. *Human Development*, 44, 264-283.
- Wrzus, C., & Roberts, B. W. (2017). Processes of personality development in adulthood: The TESSERA framework. *Personality and Social Psychology Review*, 21, 253-277.
- Yeager, D. S., Trzesniewski, K. H., & Dweck, C. S. (2013). An implicit theories of personality intervention reduces adolescent aggression in response to victimization and exclusion. *Child Development*, 84, 970-988.

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

Tables and Figures

Table 1

Descriptive Statistics and Correlations for Main Study Variables (as assessed in 2015)

Variables	<i>M</i>	<i>SD</i>	α	1	2	3	4	5	6	7	8	9	10	11
1. Age	52.98	17.83	-											
2. Openness	5.02	1.06	.64	-.01										
3. Conscientiousness	5.83	0.93	.61	.15	.18									
4. Extraversion	4.90	1.17	.67	-.09	.34	.16								
5. Agreeableness	5.43	0.96	.46	.08	.14	.28	.05							
6. Emotional Stability	4.13	1.30	.65	.07	.08	.09	.12	.11						
7. Ideal Openness	5.51	1.25	.77	-.07	.49	.11	.15	.10	-.01					
8. Ideal Conscientiousness	6.14	1.03	.56	-.11	.12	.31	.08	.16	-.01	.53				
9. Ideal Extraversion	5.33	1.06	.36	-.22	.20	.08	.32	.08	.01	.46	.42			
10. Ideal Agreeableness	5.90	1.06	.53	-.07	.11	.15	.07	.33	.00	.51	.57	.38		
11. Ideal Emotional Stability	6.07	0.99	.53	-.15	.08	.09	.07	.13	.09	.33	.39	.33	.44	
12. Entity belief	4.49	1.55	.84	.18	-.08	.12	-.02	.04	-.03	-.02	.05	-.06	-.01	-.05

Note. All $r_s \geq .03$ or $\leq -.03$ are significant with $p < .05$.

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

Table 2

Effects of age on actual personality (2015)

Outcome	Intercept			Age/10			(Age/10) ²			(Age/10) ³			Gender		
	<i>B</i>	95% CI	<i>p</i>	<i>B</i>	95% CI	<i>p</i>	<i>B</i>	95% CI	<i>p</i>	<i>B</i>	95% CI	<i>p</i>	<i>B</i>	95% CI	<i>p</i>
Actual...															
O	4.970	[4.91; 5.03]	<.001	0.031	[- 0.09; 0.07]	.127	-	[- 0.024 0.03; -0.01]	<.001	-	[- 0.009 0.01; -0.00]	.001	0.098	[0.03; 0.16]	.003
C	5.801	[5.75; 5.85]	<.001	- 0.007	[- 0.04; 0.03]	.686	-	[- 0.035 0.04; -0.03]	<.001	0.006	[0.00; 0.01]	.014	0.118	[0.06; 0.18]	<.001
E	4.778	[4.72; 4.84]	<.001	- 0.056	[- 0.08; -0.04]	<.001	-	[- 0.008 0.02; 0.00]	.154				0.271	[0.20; 0.34]	<.001
A	5.203	[5.15; 5.25]	<.001	0.044	[0.01; 0.08]	.015	0.018	[0.01; 0.03]	<.001	0.003	[- 0.00; 0.01]	.164	0.276	[0.22; 0.33]	<.001
ES	4.521	[4.47; 4.58]	<.001	0.056	[0.03; 0.08]	<.001							- 0.588	[- 0.66; -0.51]	<.001

AIC (observations)	
Outcome	
Actual...	
O	11960.94 (4,057)

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

C	10967.60 (4,055)
E	12395.37 (4,057)
A	11054.14 (4,057)
ES	13177.00 (4,057)

Note. We report here the models that showed the best fit to the data as based on a comparison of the Akaike information criterion (AIC, see Akaike, 1974).

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

Table 3

Effects of age on ideal personality (2015)

	Intercept			Actual trait level			Age/10			(Age/10) ²		
	<i>B</i>	95% CI	<i>p</i>	<i>B</i>	95% CI	<i>p</i>	<i>B</i>	95% CI	<i>p</i>	<i>B</i>	95% CI	<i>p</i>
Outcome												
Ideal ...												
O	2.578	[2.41; 2.75]	<.001	0.582	[0.55; 0.61]	<.001	-0.102	[-0.14; -0.06]	<.001	-0.009	[-0.02; 0.00]	.113
C	3.950	[3.75; 4.15]	<.001	0.371	[0.34; 0.40]	<.001	-0.116	[-0.15; -0.08]	<.001	0.010	[0.00; 0.02]	.049
E	3.946	[3.81; 4.08]	<.001	0.271	[0.25; 0.30]	<.001	-0.111	[-0.13; -0.09]	<.001			
A	3.840	[3.66; 4.02]	<.001	0.371	[0.34; 0.40]	<.001	-0.088	[-0.13; -0.05]	<.001	0.001	[-0.01; 0.01]	.881
ES	5.650	[5.53; 5.78]	<.001	0.095	[0.07; 0.12]	<.001	-0.154	[-0.19; -0.12]	<.001	-0.015	[-0.03; -0.06]	.002

	(Age/10) ³			Gender			AIC (observ- ations)
	<i>B</i>	95% CI	<i>p</i>	<i>B</i>	95% CI	<i>p</i>	
Outcom e							
Ideal ...							
O	0.008	[0.00; 0.01]	.008	0.093	[0.02; 0.16]	.007	11963.6 9 (3,984)
C	0.004	[-0.00; 0.01]	.142				11080.2 1 (3,995)

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

E				0.106	[0.04; 0.17]	.001	11211.1 8 (3,988)
A	0.005	[-0.00; 0.01]	.066	0.100	[0.04; 0.16]	.002	11267.8 2 (3,989)
ES	0.010	[0.00; 0.01]	<.001	0.170	[0.11; 0.23]	<.001	11058.6 8 (3,988)

Note. We report here the models that showed the best fit to the data as based on a comparison of the Akaike information criterion (AIC, see Akaike, 1974).

Table 4

Effects of entity beliefs and ideal personality on actual personality (2017) (controlling for personality in 2015 and age)

Outcome	Intercept			Actual trait level (2015)			Age/10			(Age/10) ²		
	<i>B</i>	95% CI	<i>p</i>	<i>B</i>	95% CI	<i>p</i>	<i>B</i>	95% CI	<i>p</i>	<i>B</i>	95% CI	<i>p</i>
Actual ...												
O (2017)	4.97 1	[4.93; 5.01]	<.001	0.654	[0.63; 0.68]	<.001	-0.016	[-0.03; -0.00]	.028	-0.010	[-0.02; -0.00]	.011
C (2017)	5.78 2	[5.74; 5.82]	<.001	0.631	[0.60; 0.66]	<.001	-0.014	[-0.03; 0.00]	.053	-0.018	[-0.02; -0.01]	<.001
E (2017)	4.88 6	[4.84; 4.93]	<.001	0.656	[0.63; 0.68]	<.001	-0.016	[-0.03; -0.00]	.040	-0.008	[-0.02; -0.00]	.045
A (2017)	5.35 1	[5.32; 5.39]	<.001	0.542	[0.52; 0.57]	<.001	0.037	[0.02; 0.05]	<.001			
ES (2017)	4.29 9	[4.26; 4.34]	<.001	0.643	[0.62; 0.67]	<.001	0.290	[0.01; 0.05]	.001			

Gender	Ideal trait levels	Entity belief	Ideal trait levels × Entity belief
--------	--------------------	---------------	---------------------------------------

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

Outcome	<i>B</i>	95% CI	<i>p</i>	<i>B</i>	95% CI	<i>p</i>	<i>B</i>	95% CI	<i>p</i>	<i>B</i>	95% CI	<i>p</i>
Actual ...												
O (2017)	0.036	[-0.01; 0.08]	.147	0.021	[-0.00; 0.04]	.063	-0.137	[-0.03; 0.02]	.094	-0.002	[-0.01; 0.01]	.720
C (2017)	0.034	[- 0.12; 0.08]	.114	-0.012	[-0.36; 0.01]	.309	0.004	[-0.01; 0.02]	.634	-0.001	[-0.02; 0.01]	.877
E (2017)	0.078	[0.03; 0.13]	.003	0.019	[-0.01; 0.04]	.151	-0.003	[-0.02; 0.01]	.756	-0.015	[-0.03; -0.00]	.039
A (2017)	0.091	[0.04; 0.14]	<.001	0.021	[-0.00; 0.05]	.096	-0.008	[-0.02; 0.01]	.322	-0.007	[-0.02; 0.01]	.340
ES (2017)	-0.178	[-0.24; -0.12]	<.001	-0.006	[-0.04; 0.02]	.712	-0.010	[-0.03; 0.01]	.287	-0.014	[-0.03; 0.01]	.150

Note. We report here the models that showed the best fit to the data as based on a comparison of the Akaike information criterion (AIC, see Akaike, 1974).

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

Outcome	AIC (observations)
Actual ...	
O (2017)	9229.86 (3,969)
C (2017)	8865.29 (3,979)
E (2017)	9590.24 (3,973)
A (2017)	9428.932 (3,974)
ES (2017)	10664.22 (3,973)

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

Figures

Figure 1. Openness: Age effects on actual openness and actual-ideal discrepancies (ideal openness controlled for actual openness).

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

Figure 2. Conscientiousness: Age effects on actual conscientiousness and actual-ideal discrepancies (ideal openness controlled for actual conscientiousness).

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

Figure 3. Extraversion: Age effects on actual extraversion and actual-ideal discrepancies (ideal extraversion controlled for actual extraversion).

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

Figure 4. Agreeableness: Age effects on actual agreeableness and actual-ideal discrepancies (ideal agreeableness controlled for actual agreeableness).

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

Figure 5. Emotional stability: Age effects on actual emotional stability and actual-ideal discrepancies (ideal emotional stability controlled for actual emotional stability).

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

Supplement

Table S1

Correlations for Main Study Variables (as assessed in 2015) with 95% bootstrapped confidence intervals

Variables	1	2	3	4	5	6	7	8	9	10	11
13. Age											
14. Openness	-.01 [-.04, .03]										
15. Conscientiousness	.15 [.12, .18]	.17 [.14, .21]									
16. Extraversion	-.09 [-.12, -.06]	.34 [.31, .37]	.16 [.13, .19]								
17. Agreeableness	.08 [-.04, .10]	.14 [-.10, .17]	.28 [.25, .31]	.05 [.02, .09]							
18. Emotional Stability	.07 [.03, .10]	.08 [.04, .11]	.09 [.06, .13]	.12 [.09, .15]	.11 [.08, .15]						
19. Ideal Openness	-.07 [-.10, -.04]	.49 [.46, .52]	.11 [.07, .14]	.15 [.12, .19]	.10 [.07, .13]	-.01 [-.04, .02]					
20. Ideal Conscientiousness	-.11 [-.15, -.09]	.12 [.08, .15]	.31 [.27, .34]	.08 [.05, .11]	.16 [.13, .19]	-.01 [-.04, .03]	.53 [.50, .56]				
21. Ideal Extraversion	-.22 [-.25, -.19]	.20 [.17, .23]	.08 [.05, .11]	.32 [.29, .35]	.08 [.05, .12]	.01 [-.03, .04]	.46 [.43, .49]	.42 [.39, .45]			

ACTUAL AND IDEAL PERSONALITY TRAIT LEVELS

22. Ideal Agreeableness	-.07 [-.11, -.04]	.11 [.08, .14]	.15 [.12, .18]	.07 [.04, .10]	.33 [.30, .36]	.00 [-.03, .04]	.51 [.48, .54]	.57 [.54, .60]	.38 [.35, .41]		
23. Ideal Emotional Stability	-.15 [-.18, -.12]	.08 [.04, .11]	.09 [.06, .13]	.07 [.10, .13]	.13 [.10, .16]	.09 [.06, .12]	.33 [.30, .36]	.39 [.36, .42]	.33 [.30, .36]	.44 [.41, .47]	
24. Entity belief	.18 [.15, .21]	-.08 [-.11, -.05]	.12 [.09, .15]	-.02 [-.05, .02]	.04 [.01, .07]	-.03 [-.07, .00]	-.02 [-.06, .01]	.05 [.02, .09]	-.06 [-.09, -.02]	-.01 [-.04, .02]	-.05 [-.08, -.02]

Note. 95% confidence intervals are based on 1000 bootstrap samples. All r s $\geq .03$ or $\leq -.03$ are significant with $p < .05$.