Volitional change in antagonism

Nathan W. Hudson

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Department of Psychology, Southern Methodist University, Dallas, TX, United States

In the opening scenes of Charles Dickens's (1843) celebrated classic, *A Christmas Carol*, Ebenezer Scrooge was a bitter, antagonistic old miser. He had few friends and treated his business associates with cruelty. Rather than sympathize with the poor, he expressed disdain for them and disregard for their hardships. Indeed, the antagonism so deeply rooted in Scrooge's heart has been memorialized in his iconic catchphrase—"bah humbug"—words he used to openly mock both his own nephew's passion for life and the excitement and joy those around him felt during the holiday season.

One lonely Christmas Eve, however, the grace, redemption, and hope associated with the holiday coalesced and manifested itself to Scrooge as three ghosts. In attempt to redeem his soul, these spirits elucidated all that his antagonism had cost him—and might continue to steal from his future. The first apparition surveyed how Scrooge's personality had robbed his past of romantic love and the joy of fathering children. The second ghost revealed the relational connectedness absent from Scrooge's present. The final spirit prophesied that, should he remain unchanged, Scrooge would die a lonely, unmourned—perhaps even celebrated—death.

Terrified of these revelations, Scrooge vowed to change himself and upload the virtues of Christmas in his heart: love, generosity, kindness, relatedness, and joy. And true to his word, in the novella's final pages, Scrooge transformed from a bitter old man into a loving, generous father figure. In short, Scrooge changed his personality.

But fiction and holiday magic aside, can real people change their own personality traits? Is it possible to follow Scrooge's footsteps and become less antagonistic? Within the past several years, an emerging body of research on *volitional personality change*—people's desires and attempts to change their traits—has begun to grapple with this question. The purpose of this chapter is to review this literature, especially emphasizing findings pertaining to antagonism—operationalized via the big five personality trait of agreeableness (Goldberg, 1993; McCrae & Costa, 1987).

As an important preface, in both the personality and clinical literatures, *antagonism* and big five *agreeableness* simply represent opposite poles of the same unidimensional construct (in the same way that introversion and extraversion are opposite poles of a single continuum; McCrae & Costa, 1987; Suzuki, Samuel, Pahlen, & Krueger, 2015). When used in clinical contexts, *antagonism* refers to maladaptively low agreeableness. Ironically, however, item response theory analyses suggest that typical personality measures of agreeableness are more sensitive to variation on the extreme low end of the dimension than are clinical measures of antagonism (Suzuki et al., 2015). In other words, big five personality measures are adequate—and perhaps even ideal—

for studying antagonism. Thus this chapter exclusively reviews research on people's desires and attempts to increase in *agreeableness*, with the understanding that "increasing in agreeableness" is synonymous with "decreasing in antagonism." Readers should bear in mind, however, that most research described in this chapter utilized convenience samples and thus may or may not generalize to individuals with clinically meaningful levels of antagonism.

Do people want to become more agreeable?

Scrooge was motivated to change his personality by spectral revelations that his antagonism would lead him to a lonely death. Along these lines, scholars have theorized for more than two decades that at least some people might want to change their personality traits if they are deeply dissatisfied with their lives (Baumeister, 1994; Kiecolt, 1994). But are *change goals*—desires to change personality traits—relegated to only the most dissatisfied and desperate individuals? Or do people in less dire circumstances also want to change their traits?

Despite the compelling nature of these questions, researchers have only recently begun to systematically investigate the prevalence and correlates of change goals. Nevertheless, multiple studies in this nascent body of literature have consistently found that the majority of people want to increase in agreeableness, as well as each of the other big five personality traits—extraversion, conscientiousness, emotional stability, and openness (Baranski, Morse, & Dunlop, 2017; Hudson & Fraley, 2016b; Hudson & Roberts, 2014; Robinson, Noftle, Guo, Asadi, & Zhang, 2015). For example, as depicted in Fig. 1, when change goals are measured via structured questionnaires (e.g., by adapting standard personality measures to assess how much people want to increase or decrease with respect to each item; see Hudson & Roberts, 2014), approximately 85% of people express desires to increase in agreeableness (Hudson & Fraley, 2016b). The distributions of change goals are similar for the other big five traits, as well (see Hudson & Fraley, 2017).

One limitation of structured change goals questionnaires, however, is that they may *impose* goals upon participants. For example, there may be social demand to indicate that one wants to become more "helpful and unselfish" when directly asked—irrespective of whether one truly desires this change. Partly addressing this issue, one study found that approximately 70% of people answer "yes" when asked whether they would like to change an aspect of their personality. When subsequently prompted in an open-ended fashion to list *an aspect* (i.e., only one) that they wish to change, approximately 20% of participants freely volunteer attributes related to agreeableness (e.g., "hold grudges less"; Baranski et al., 2017). Although this study found somewhat lower prevalence of goals to change agreeableness (e.g., ~20%) than is typically found using structured questionnaires (e.g., ~85%; Hudson & Fraley, 2016b), it is possible that if participants were prompted to create a more exhaustive list of desired changes (rather than only one) that a greater proportion would volunteer desires to change attributes related to each big five trait—as they do with structured questionnaires (Hudson & Fraley, 2016b).

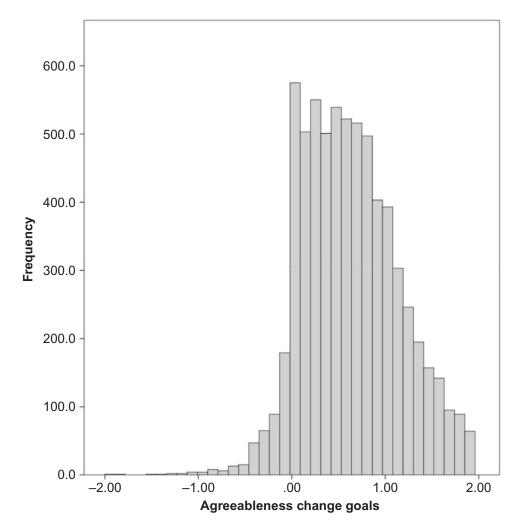


Fig. 1 Histogram of participants' agreeableness change goals, as measured via the 9-item agreeableness subscale from the Change Goals Big Five Inventory (Hudson & Roberts, 2014). Positive values represent goals to increase. Negative values represent goals to decrease. Zero values represent goals to remain the same. Eighty-five percent of people desire to increase in agreeableness.

Data from Hudson, N.W., & Fraley, R.C. (2016b). 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.

In sum, research suggests that it does not require circumstances as dramatic as Scrooge's to motivate change goals. Rather, change goals are normative: Most people want to change their personality traits—and it appears that most people mirror Scrooge's desire to increase in agreeableness.

Why do people want to become more agreeable?

Broadly, scholars have argued that change goals can be both intrinsically and extrinsically motivated (Hennecke, Bleidorn, Denissen, & Wood, 2014; Hudson & Roberts, 2014; Kiecolt, 1994). With respect to intrinsic motivation (see Deci & Ryan, 2000), high levels of agreeableness per se—and each of the other positively keyed big five traits—are widely valued and socially desirable (Dunlop, Telford, & Morrison, 2012; Hudson & Roberts, 2014; Lamkin, Maples-Keller, & Miller, 2018). Moreover, high agreeableness is a component of psychological maturity—as are conscientiousness and emotional stability (Roberts & Mroczek, 2008; Roberts, Wood, & Caspi, 2008). Thus people may wish to increase in desirable traits such as agreeableness for the value those traits inherently have in and of themselves (e.g., to become a "better person"). Supporting this idea, in general, nonclinical samples, trait agreeableness is negatively correlated with goals to become more agreeable. In other words, it is the most antagonistic individuals who express the greatest desires to become more agreeable—perhaps because they wish to possess a valuable trait they lack (Hudson & Roberts, 2014).

With respect to extrinsic motivation (see Deci & Ryan, 2000), like Scrooge, people may desire to increase in traits that they perceive to have utility value in assuaging specific sources of dissatisfaction in their lives or facilitating the attainment of desired outcomes (Baumeister, 1994; Hudson & Roberts, 2014; Kiecolt, 1994). For example, Scrooge wanted to become more agreeable because he believed doing so would help him avoid a lonely death. In this case, empirical research suggests that reality may mirror fiction: Real people also seem to want to change traits they believe will improve their lives (Hudson & Roberts, 2014; Quinlan, Jaccard, & Blanton, 2006).

Studies have most strongly illustrated this phenomenon for extraversion. For example, students want to increase in extraversion if they fear becoming boring persons in the future (Quinlan et al., 2006) or if they believe extraversion will help them in future career endeavors (Stevenson & Clegg, 2011). Similarly, college students who are dissatisfied with their friendships or recreational activities report desires to increase in extraversion—perhaps because they reason that being more extraverted would improve their social lives or enable them to better capitalize on exciting hobbies (Hudson & Roberts, 2014).

In contrast to extraversion, it is less clear from existing research what types of extrinsic motives might underlie goals to increase in agreeableness. Although research suggests that antagonistic individuals recognize that their antagonism impairs their lives (Miller et al., 2017), only one study to date has explicitly examined the correlations between satisfaction with various life domains (e.g., friendships, recreational activities) and change goals. This study used a college sample and found that dissatisfaction with seemingly relevant life domains was *not* correlated with goals to become more agreeable (Hudson & Roberts, 2014). For example, college students who were dissatisfied with their social lives did not indicate goals to increase in agreeableness. Rather, such students tended to express goals to become more *extraverted*. Although agreeableness is certainly relevant for social success (e.g., Ozer & Benet-Martínez, 2006), college students may intuit that popularity is determined to such a great extent by extraversion that they overlook other important determinants, such as agreeableness (Hudson & Roberts, 2014). Thus it is not clear what types of life domains laypersons mentally link to agreeableness.

Subsequent studies have provided hints, however, that people may desire agreeableness partially for its utility value in performing generative roles, such as

contributing to one's community and investing in subsequent generations. For example, Hudson and Fraley (2016b) recruited an online sample of more than 7000 participants with ages ranging from 18 to 70. They found that agreeableness is one of the least valued traits among younger, college-aged adults. As people age, however, the relative importance of agreeableness (vs other traits) appears to increase. In fact, among older adults, agreeableness is the second most-valued trait (emotionally stability is the most valued trait irrespective of age). Based on these findings, Hudson and Fraley (2016b) theorized that agreeableness likely has higher utility value for the types of generative roles that characterize middle-to-late adulthood (e.g., caring for romantic partners, children, and aging parents; contributing back to one's community; see Erikson, 1974; Hutteman, Hennecke, Orth, Reitz, & Specht, 2014) than it does for the roles that are more typical for younger adults. Thus older adults may value agreeableness because they perceive it would facilitate performance in generative roles and smooth their ability to handle common problems (e.g., effectively providing love to difficult children). In contrast, younger adults' concerns may focus more upon their academic/career and social endeavors-and they may intuit that conscientiousness and extraversion, respectively, are most relevant to those domains (Hudson & Roberts, 2014).

To summarize, people want to increase in agreeableness—and each of the other big five traits—both for intrinsic and extrinsic reasons. Agreeableness is socially desirable in and of itself. Moreover, agreeableness may have utility value in helping people succeed and thrive in generative roles.

Can people volitionally increase in agreeableness?

Scrooge did not stop at vowing to become more agreeable; rather, he followed through on his word and actually changed. In fact, according to the penultimate paragraph of *A Christmas Carol*, "Scrooge was better than his word.... He became as good a friend, as good a master, and as good a man, as the good old city knew, or any other good old city, town, or borough, in the good old world" (Dickens, 1843). Admittedly, the changes that Scrooge experienced to his personality were extreme. Nevertheless, an emerging body of research suggests that Scrooge's story may contain trappings of truth: Ordinary people may also be able to change their traits in desired ways, albeit to a much more moderate degree.

To date, five intensive longitudinal studies have examined the associations between change goals and growth in agreeableness over time. In these studies, students' change goals were measured at the beginning of a college semester. Over the following 4 months—the full semester—participants' personality traits were repeatedly measured on a weekly basis. Across all five studies, goals to increase in agreeableness consistently predicted subsequent trait growth (Hudson, Derringer, & Briley, 2018; Hudson & Fraley, 2015, 2016a, in press-b). In other words, people who indicated greater desires to increase in agreeableness at the beginning of the semester experienced more positive growth in agreeableness over time, as compared with their peers who did not wish to change. For example, as seen in Fig. 2, which

depicts data from Hudson and Fraley's (2015) original volitional change study, participants who reported relatively high desires to increase in agreeableness tended to experience positive growth in trait agreeableness. In contrast, participants who did not wish to change did not experience positive growth in agreeableness over the same period of time. Similar findings have been observed for extraversion, conscientiousness, and emotional stability.

Notably, the personality changes that people experienced in each of these studies were relatively modest. For example, as Fig. 2 depicts, people with relatively strong agreeableness change goals were predicted to increase approximately 0.16 standard deviations in agreeableness across 4 months. In fact, the largest effect size in any of Hudson and colleagues' studies was that in one study, with the aid of an effective intervention, people who wanted to become more extraverted were expected to increase, on average, 0.45 standard deviations in extraversion across 4 months (Hudson & Fraley, 2015, Study 2). Thus in stark contrast to Scrooge's literal overnight transformation from extreme antagonism into radiant agreeableness, personality changes appear to occur slowly and moderately for nonfictitious individuals. Nevertheless, people do appear to change in ways that align with their desires.

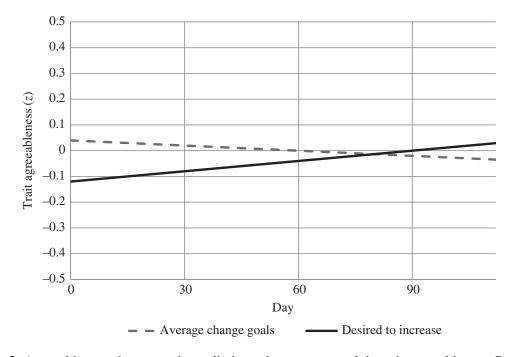


Fig. 2 Agreeableness change goals predicting subsequent growth in trait agreeableness. People with higher change goals tend to experience more positive growth in agreeableness. The "average change goals" line is plotted at the sample mean in agreeableness change goals (original scale score = 0.58). The "desired to increase" line is plotted at one standard deviation above the mean in agreeableness change goals (original scale score = 1.03). From 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. Study 1 data.

Mechanisms underlying trait change

How might people be able to change their traits in desired ways? Before considering this question, it is useful to overview how personality change occurs more generally. According to modern personality theory, trait development occurs whenever people change their state-level thoughts, feelings, and behaviors and maintain those changes over an extended time (Hudson & Fraley, 2015; Magidson, Roberts, Collado-Rodriguez, & Lejuez, 2012; Roberts & Jackson, 2008). For example, studies have found that people who intentionally engage in elevated levels of extraverted, conscientious, or emotionally stable behaviors for several months tend to actually increase in the respective traits (Hudson, Briley, Chopik, & Derringer, 2018; Hudson & Fraley, 2015). Similarly, multiple studies have found that regularly practicing techniques to reduce anxiety regarding one's attachment relationships (e.g., expressively writing about one's insecurities) can lead to lasting increases in trait-level attachment security (Carnelley & Rowe, 2007; Gillath, Selcuk, & Shaver, 2008; Hudson & Fraley, 2018).

Why do chronically maintained changes in thoughts, feelings, and behaviors eventually lead to trait-level changes? There are at least three possibilities. First, changes to thoughts, feelings, and behaviors that are maintained for sufficient time may eventually become learned, automatized, and habitual (Hennecke et al., 2014; Hudson & Fraley, 2015). Thus in the same way that children can be trained to be habitually more agreeable (e.g., saying "please" and "thank you") or conscientious (e.g., regularly brushing their teeth), adults may be able to incorporate a variety of new behaviors into their relatively automatic behavioral repertoire.

Second, changes to thoughts, feelings, and behaviors may influence people's identities. For example, a person who chronically engages in kind, tenderhearted behaviors may come to view him- or herself as a fundamentally agreeable person. Individuals may then strive to pull their thoughts, feelings, and behaviors into alignment with newly adopted identities (Burke, 2006; Roberts & Wood, 2006). Thus an individual who views him- or herself as agreeable may strive to behave in kind, tenderhearted manners—producing a self-reinforcing cycle of behavior and identity change.

Finally, scholars have postulated that chronically maintained changes to thoughts, feelings, and behaviors may affect people's biology. These physiological changes may serve as the underlying "biological code" that facilitates lasting trait change. For instance, Roberts and Jackson (2008) argued that changes to thoughts, feelings, and behaviors may alter the epigenome. These epigenetic changes, in turn, educe enduring trait change. As one concrete example, studies with lab rats have found that chronic experiences of emotional stability lead to epigenetic changes (e.g., methylation) that reduce the animals' reactivity to stress hormones (e.g., cortisol). Lower reactivity to stress hormones, in turn, facilitates enduring gains in emotional stability (Weaver et al., 2004). In humans, research suggests that chronic stressful experiences can also alter the physiological structure of the nervous system (e.g., the brain), leading to lasting gains in neuroticism (McEwen, Eiland, Hunter, & Miller, 2012).

In short, chronic changes to state-level thoughts, feelings, and behaviors can eventually coalesce into trait change. Historically, these processes have been used to explain how people's personality traits are passively changed by their life circumstances and social roles (e.g., Lodi-Smith & Roberts, 2007). As one example, successfully committing to social roles typically requires one to internalize and adhere to certain behavioral standards. Excelling in one's career, for instance, often requires one to behave in a conscientious manner (e.g., being punctual, thorough, hardworking; Judge, Higgins, Thoresen, & Barrick, 1999). Thus committing to one's career can lead to enduring gains in conscientious behaviors and, in turn, trait conscientiousness (Hudson & Roberts, 2016; Hudson, Roberts, & Lodi-Smith, 2012). Similarly, romantic relationships can serve as strong, consistent presses to behave in agreeable and emotionally stable manners—perhaps evoking growth in these traits over time (e.g., Lehnart, Neyer, & Eccles, 2010). In sum, people's life circumstances and social roles can shape their thoughts, feelings, and behaviors—eventually producing corresponding trait change.

Volitional personality change

Recently, scholars have begun to question whether strong, external presses (e.g., social roles) are necessary to consistently evoke new thoughts, feelings, and behaviors and eventually spur trait change. Instead, they have postulated that intrapsychic factors, such as the self's volition, might also be sufficiently strong to facilitate trait development (e.g., Hennecke et al., 2014; Hudson & Fraley, 2015; Hudson & Roberts, 2014). In other words, as in Scrooge's story, people might be able to manually modify their thoughts, feelings, and behaviors to volitionally change their personalities.

As reviewed before, preliminary correlational longitudinal data seem to support the idea that people can volitionally change their traits. Across five intensive longitudinal studies, participants tended to change in ways that aligned with their desires (Hudson et al., 2018; Hudson & Fraley, 2015, 2016a, in press-b). For instance, participants who wanted to become more agreeable tended to actually increase in agreeableness at a faster/more positive rate than did their peers who did not wish to change (see Fig. 2).

Moreover, research suggests that attaining desired changes may improve people's well-being. In one intensive longitudinal study, participants who experienced trait growth aligning with their change goals tended to report simultaneous gains in life satisfaction (Hudson & Fraley, 2016a). As depicted in Fig. 3, for example, participants who desired to become more agreeable *and then actually increased* in agreeableness tended to experience larger gains in life satisfaction, as compared with their peers who experienced equivalent growth in trait agreeableness despite not wanting to change. Thus attaining *desired* changes (i.e., volitionally changing oneself) appears to predict heightened subjective well-being, above and beyond the effects of trait growth per se.

The fact that people appear to change in ways that align with their desires—and that doing so may increase their well-being—has naturally raised questions about the processes through which volitional change might occur, as well as whether interventions may be able to help people attain desired changes. To that end, at least three longitudinal experiments have tested interventions designed to (1) explore the mechanisms underlying volitional change, and (2) help people change (Hudson et al., in press; Hudson & Fraley, 2015). All three interventions were premised on the idea that

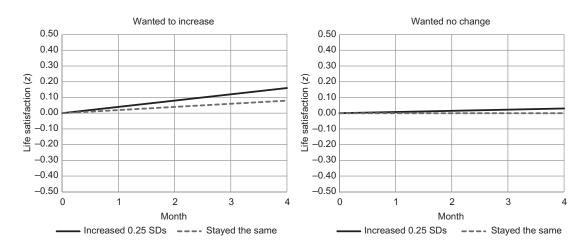


Fig. 3 Growth in life satisfaction as a function of the interaction between agreeableness change goals and experienced growth in trait agreeableness. The "wanted to increase" lines are plotted at a scale score of "1" on the original change goals scale (z = 1.02). The "wanted no change" lines are plotted at a scale score of "0" on the original change goals scale (z = -1.06). The "increased 0.25 SDs" lines represent individuals who reported increasing 0.25 SDs in trait agreeableness across the study. The "stayed the same" lines represent individuals who experienced zero growth in trait agreeableness. Both graphs are plotted with a starting score of 3.66 (z = 0) in agreeableness.

Reproduced from Hudson, N. W., & Fraley, R. C. (2016a). Changing for the better? Longitudinal associations between volitional change and psychological well-being. *Personality and Social Psychology Bulletin*, 42, 603–615.

prolonged changes to thoughts, feelings, and behaviors might promote trait growth. Thus all three interventions were designed to help participants plan, organize, and implement cognitive, affective, and behavioral changes on an ongoing basis.

Hudson and Fraley (2015) tested two very similar interventions. Participants in two intensive longitudinal studies were randomly assigned to receive a weekly goal-setting intervention or to participate in a control task. Participants in the intervention group were asked to generate three concrete, small steps they could take each week to pull their thoughts, feelings, and behaviors into alignment with their desired traits. The original intent was that a person who wanted to become more agreeable, for example, might generate goals similar to, "Send an encouraging text message to a friend this week," or "Donate \$5 to a charity this week."

In their first study, Hudson and Fraley's (2015) intervention backfired—producing growth *opposite* people's desired changes in agreeableness, conscientiousness, and emotional stability. That is, a person in the intervention group who wanted to become more agreeable was likely to experience *less positive/more negative* growth in agreeableness, as compared with a person with equivalent change goals in the control group. In reviewing participants' written weekly goals, Hudson and Fraley noticed that many participants had generated abstract, vague intentions that prescribed little concrete action, such as "help others," or "improve my social skills." Hudson and Fraley speculated that these type of goals provided insufficient guidance and structure for behavioral change—and thus it was likely that many participants who authored these vague

intentions were not actually changing their behavior (the presumed active ingredient for trait change).

Moreover, simply participating in the intervention may have been construed by participants as making progress toward their change goals, undermining motivation for them to take other steps that might have actually produced change (Gollwitzer, Sheeran, Michalski, & Seifert, 2009). In other words, even sans experimenter intervention, people appear to naturalistically take steps to change their own personality traits (see Hudson & Fraley, 2015; Quinlan et al., 2006; Stevenson & Clegg, 2011). Declaring intentions to change and participating in an intervention per se may have been construed by participants as progress toward their goals. This may have undermined their motivation to take other steps to change their traits—even steps they would have naturalistically taken without any sort of external intervention (Gollwitzer et al., 2009).

To overcome these limitations, in a second study, Hudson and Fraley (2015) more thoroughly coached participants to generate concrete, realistic, attainable goals they could *actually do* each week to pull their thoughts, feelings, and behaviors in alignment with their desired traits (e.g., "I will thank my instructor for her lecture on Tuesday"). Moreover, participants were explicitly warned against generating vague, nonspecific goals. This revised intervention appeared to be efficacious. Participants who were randomly assigned to the improved goal-setting intervention experienced much larger changes in extraversion, conscientiousness, and emotional stability but not agreeableness or openness—as compared with their peers in a control condition.

Finally, Hudson et al. (in press) tested a slightly different intervention in which participants were provided with prewritten (by the researchers) cognitive, affective, and behavioral "challenges" that they could accept and attempt to accomplish each week. As with Hudson and Fraley's prior interventions, the challenges were designed to pull participants' thoughts, feelings, and behaviors into alignment with their desired traits. For example, prototypical agreeableness challenges included, "If someone asks you for a favor, do it" and "Send a friend an encouraging text."

By providing prewritten goals, this intervention ensured that all participants were implementing concrete behavioral changes. Moreover, unlike Hudson and Fraley's (2015) prior interventions, in which participants all wrote three weekly goals, in Hudson et al.' (in press) intervention, participants were free to accept between 1 and 4 challenges per week. Thus there was individual variation in the extent to which people were attempting to change their behavior. Finally, participants also reported whether they had completed each accepted challenge or not. Thus Hudson et al. (in press) were able to isolate the extent to which people's personality traits changed as a function of (1) participating in an intervention (accepting challenges), and (2) actually changing their behavior (completing challenges).

In this study, completing more numerous challenges predicted growth in extraversion, agreeableness, conscientiousness, and emotional stability—although the effect for agreeableness fell just short of statistical significance. This finding supports modern personality theory that changes to state-level behavior have the potential to coalesce into trait growth (e.g., Magidson et al., 2012). Moreover, accepting *but not* *completing* challenges backfired: Participants who accepted but failed more numerous challenges tended to experience trait growth in the *opposite* direction of their desires. For example, persons who accepted many challenges pertaining to agreeableness *and then failed those challenges* were predicted to *decrease* in agreeableness across time. This finding appears to align with Hudson and Fraley's (2015) explanation that merely making intentions to change—and declaring those intentions, even to a computer screen while completing an online study—may be construed as goal progress and undermine effective goal pursuit (Gollwitzer et al., 2009).

To summarize, three interventions have tested whether making small cognitive, affective, and behavioral changes has the potential to catalyze trait growth. These studies have converged on the finding that regularly pulling one's thoughts, feelings, and behaviors into alignment with one's desired traits can, in fact, produce trait change. For example, a person who wants to become more agreeable may be able to do so by simply engaging in increased levels of agreeable behaviors over the course of several months. Moreover, interventions that help participants thoughtfully plan and implement concrete, specific, attainable changes to their behavior can facilitate volitional change efforts. Collectively, these findings align with and support theory that prolonged changes to state-level thoughts, feelings, and behaviors can eventually coalesce into enduring trait-level changes (Hennecke et al., 2014; Hudson & Fraley, 2015; Magidson et al., 2012; Roberts & Jackson, 2008).

Interventions and agreeableness. As reviewed before, three interventions have been tested to help participants make desired changes to their personality traits. These interventions appeared to be effective in helping people increase in extraversion, conscientiousness, and emotional stability. Notably, however, none of the interventions had a statistically significant effect in facilitating growth in agreeableness.

Why did these interventions fail to help people change with respect to agreeableness? There exist at least two possibilities. First, it may be the case that participants in Hudson and colleagues' studies were not pursuing changes in agreeableness as enthusiastically as they were pursuing changes in other traits. Specifically, across all interventions, participants were asked to nominate which traits they wanted to work on changing over the course of the semester. For instance, a participant might indicate that s/he wanted to work on changing extraversion and emotional stability during the study. The interventions were then tailored to individuals' goals: Participants were prompted to change behaviors relevant only to the nominated traits.

Likely due to the college-aged samples used in each study, participants were more than twice as likely to nominate that they wanted to work on extraversion, conscientiousness, and emotional stability, as compared to agreeableness (see Hudson & Fraley, 2016b). For example, in Hudson and Fraley's (2015) successful intervention study, only 11% of participants chose to work on changing agreeableness—as compared with more than 25% of participants choosing each of extraversion, conscientiousness, and emotional stability. Similarly, in Hudson et al.' (in press) intervention, only about 20% of participants chose to work on agreeableness whereas closer to 50%–60% of participants nominated each of extraversion, conscientiousness, and emotional stability. Thus it may have been the case that sample sizes of participants actively working on changing agreeableness were too small in each of these studies to reliably detect effects. In other words, the interventions may have failed to produce statistically significant findings for agreeableness due to low statistical power and sampling error.

Similarly, although the majority of college students do express desires to become more agreeable, they express even greater desires to increase in the other four traits (Hudson & Fraley, 2016b). In other words, agreeableness is the trait for which college students *least* desire changes. Thus the college-aged participants in Hudson and colleagues' intervention studies may have lacked sufficient motivation to consistently change their agreeable behaviors. It may be the case that, if Hudson and colleagues' studies were replicated with older adults—who tend to value agreeableness to a greater degree than do younger adults (Hudson & Fraley, 2016b)—that a greater portion of participants would choose to specifically work on changing agreeableness, that they would be more motivated to change their agreeable behaviors, and that the intervention would consequently exhibit greater efficacy in changing agreeableness.

Alternatively, it may be the case that agreeableness is simply more difficult to change via pure volition alone, as compared with extraversion, conscientiousness, and emotional stability. Prior research suggests that more systemic interventions (such as committing to a career) can produce changes in agreeableness (e.g., Hudson & Roberts, 2016). Thus it may be the case that more powerful interventions would be required to change agreeableness, as compared with the other traits. Future research is needed to elucidate which strategies are most effective in helping people grow in agreeableness—as well as the other four traits.

To summarize, most people want to change their personality traits—including agreeableness. Moreover, people tend to change in ways that align with their desires. Goal-setting interventions that help people effectively plan changes to their thoughts, feelings, and behaviors appear to facilitate growth in extraversion, conscientiousness, and emotional stability—but not necessarily agreeableness. Future research is needed to determine whether this lack of efficacy in interventions targeting agreeableness is due to low participant motivation to change agreeableness—or whether the strategies utilized by existing interventions (e.g., setting weekly behavioral goals) are insufficient to change agreeableness.

Future directions

Ebenezer Scrooge was able to change his antagonistic personality—and in doing so, dramatically improve his well-being. Preliminary research suggests that real people can follow Scrooge's footsteps and volitionally change their personality traits, as well—potentially improving their well-being in the process. However, the emerging body of literature on volitional change is still in its infancy. Thus many critical questions remain unexplored.

Two of the most crucial immediate questions concern (1) the extent to which individuals can change their personality traits, and (2) whether volitional changes can be maintained over extended timeframes (e.g., years). With respect to the former, all intensive longitudinal studies examining volitional change to date have used relatively short timeframes—approximately 4 months. During these spans of time, participants experienced relatively linear growth in their personality traits. However, it seems unlikely that people can change their traits ad infinitum; rather, it seems likely that most individuals will eventually experience diminishing returns in their efforts to change. Future research is needed to understand the boundaries of change—and individual differences that might influence the amount of trait growth people can experience.

With respect to the latter, it remains an open question whether people can *maintain* changes to their personality traits across time. A recent meta-analysis of how personality changes in response to psychotherapy suggest that "real" trait growth can occur quickly (e.g., within 6 weeks) and last for years after interventions are discontinued (Roberts et al., 2017). However, it is unclear whether self-driven efforts to change one's own personality can similarly produce enduring trait growth—or whether people might revert to their baseline levels of each trait after they stop "working on" changing. Future studies using longer timeframes are necessary to disentangle these possibilities.

Focusing specifically on volitional change in antagonism, future research needs to explore the generalizability of the findings described within this chapter. Namely, most of the work described here utilized convenience samples of college students or internet users. Thus little is known about volitional change processes in samples with clinically meaningful levels of antagonism. For example, although relatively disagreeable college students tend to desire increases in agreeableness (Hudson & Roberts, 2014), it is unclear whether persons with extreme levels of antagonism necessarily want to become warmer, kinder, more tenderhearted persons (although preliminary research suggests they may; Miller et al., 2017). Similarly, although interventions designed to help college students become more agreeable were less efficacious than interventions targeting extraversion, conscientiousness, and emotional stability (Hudson et al., in press; Hudson & Fraley, 2015), it is unclear why this phenomenon occurred. As one possibility, college students may be insufficiently motivated to change their agreeableness. Consequently, interventions targeting agreeableness may be more efficacious among older adults who tend to exhibit greater motivation to become more agreeable (Hudson & Fraley, 2016b), or among samples with extreme levels of antagonism (who have more "room" to grow). Thus the work described in this chapter could be replicated with extremely antagonistic samples to test whether the findings generalize.

Conclusion

Recent research suggests that Ebenezer Scrooge's journey of self-change reflects a kernel of truth. Like Scrooge, most people are motivated to become more agreeable. Moreover, an emerging body of studies suggests that people can, in fact, follow Scrooge's footsteps and actually increase in agreeableness. Future research should continue to elucidate more fully which strategies and circumstances best enable individuals to realize their change goals—and the extent to which those findings generalize to clinical and/or older adult samples.

References

- Baranski, E. N., Morse, P. J., & Dunlop, W. L. (2017). Lay conceptions of volitional personality change: from strategies pursued to stories told. *Journal of Personality*, 85, 285–299.
- 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.
- Burke, P. J. (2006). Identity change. Social Psychology Quarterly, 69, 81-96.
- Carnelley, K. B., & Rowe, A. C. (2007). Repeated priming of attachment security influences later views of self and relationships. *Personal Relationships*, *14*, 307–320.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: human needs and the self-determination of behavior. *Psychological Inquiry*, *11*, 227–268.
- Dickens, C. (1843). A Christmas Carol. England: Chapman & Hall.
- Dunlop, P. D., Telford, A. D., & Morrison, D. L. (2012). Not too little, but not too much: the perceived desirability of responses to personality items. *Journal of Research in Personality*, *46*, 8–18.
- Erikson, E. H. (1974). Dimensions of a new identity. New York, NY: Norton.
- Gillath, O., Selcuk, E., & Shaver, P. R. (2008). Moving toward a secure attachment style: can repeated security priming help? *Social and Personality Psychology Compass*, *2*, 1651–1666.
- Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American Psychologist*, 48, 26–34.
- Gollwitzer, P. M., Sheeran, P., Michalski, V., & Seifert, A. E. (2009). When intentions go public: does social reality widen the intention-behavior gap? *Psychological Science*, 20, 612–618.
- Hennecke, M., Bleidorn, W., Denissen, J. J. A., & Wood, D. (2014). A three-part framework for self-regulated personality development across adulthood. *European Journal of Personality*, 28, 289–299.
- Hudson, N. W., Briley, D. A., Chopik, W. J., & Derringer, J. (2018). You have to follow through: attaining behavioral change goals predicts volitional personality change. Advance online publication. *Journal of Personality and Social Psychology*. https://doi.org/10.1037/ pspp0000221.
- Hudson, N. W., Derringer, J. L., & Briley, D. A. (2018). *Does the motive for wanting to change one's personality matter? I: Intrinsically motivated volitional change goals predict greater trait change*. (unpublished manuscript).
- 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. (2016a). Changing for the better? Longitudinal associations between volitional change and psychological well-being. *Personality and Social Psychology Bulletin*, 42, 603–615.
- Hudson, N. W., & Fraley, R. C. (2016b). 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. (2017). Volitional personality change. In J. Specht (Ed.), *Personality development across the lifespan* (pp. 555–571). San Diego, CA: Elsevier.
- Hudson, N. W., & Fraley, R. C. (2018). Moving toward greater security: the effects of repeatedly priming attachment security and anxiety. *Journal of Research in Personality*, 74, 147–157.

- Hudson, N. W., & Fraley, R. C. (in press-b). To what extent do beliefs and expectations moderate volitional change processes?
- 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.
- Judge, T. A., Higgins, C. A., Thoresen, C. J., & Barrick, M. R. (1999). The big five personality traits, general mental ability, and career success across the life span. *Personnel Psychology*, *52*, 621–652.
- Kiecolt, K. J. (1994). Stress and the decision to change oneself: a theoretical model. *Social Psychology Quarterly*, *57*, 49–63.
- Lamkin, J., Maples-Keller, J. L., & Miller, J. D. (2018). How likable are personality disorder and general personality traits to those who possess them? *Journal of Personality*, 86, 173–185.
- Lehnart, J., Neyer, F. J., & Eccles, J. (2010). Long-term effects of social investment: the case of partnering in young adulthood. *Journal of Personality*, 78, 639–670.
- Lodi-Smith, J., & Roberts, B. W. (2007). Social investment and personality: a meta-analysis of the relationship of personality traits to investment in work, family, religion, and volunteerism. *Personality and Social Psychology Review*, 11, 68–86.
- Magidson, J. F., Roberts, B. W., Collado-Rodriguez, A., & Lejuez, C. W. (2012). Theory-driven intervention for changing personality: expectancy value theory, behavioral activation, and conscientiousness. *Developmental Psychology*, 50(5), 1442–1450.
- McCrae, R. R., & Costa, P. T. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, *52*, 81–90.
- McEwen, B. S., Eiland, L., Hunter, R. G., & Miller, M. M. (2012). Stress and anxiety: structural plasticity and epigenetic regulation as a consequence of stress. *Neuropharmacology*, 62, 3–12.
- Miller, J. D., Sleep, C. E., Lamkin, J., Vize, C., Campbell, W. K., & Lynam, D. R. (2017). Personality disorder traits: Perceptions of likability, impairment, and ability to change as correlates and moderators of desired level. *Personality Disorders: Theory, Research, and Treatment*,.
- Ozer, D. J., & Benet-Martínez, V. (2006). Personality and the prediction of consequential outcomes. *Annual Review of Psychology*, 57, 401–421.
- Quinlan, S. L., Jaccard, J., & Blanton, H. (2006). A decision theoretic and prototype conceptualization of possible selves: implications for the prediction of risk behavior. *Journal* of Personality, 74, 599–630.
- Roberts, B. W., & Jackson, J. J. (2008). Sociogenomic personality psychology. *Journal of Personality*, 76, 1523–1544.
- 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., & Mroczek, D. (2008). Personality trait change in adulthood. *Current Directions in Psychological Science*, 17, 31.
- Roberts, B. W., & Wood, D. (2006). Personality development in the context of the neosocioanalytic model of personality. In D. K. Mroczek & T. D. Little (Eds.), *Handbook of personality development* (pp. 11–39). Mahwah, NJ: Lawrence Erlbaum Associates.
- Roberts, B. W., Wood, D., & Caspi, A. (2008). The development of personality traits in adulthood. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 375–398). (3rd ed.). New York, NY: The Guilford Press.
- Robinson, O. C., Noftle, 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.
- Stevenson, J., & Clegg, S. (2011). Possible selves: students orientating themselves towards the future through extracurricular activity. *British Educational Research Journal*, 37, 231–246.
- Suzuki, T., Samuel, D. B., Pahlen, S., & Krueger, R. F. (2015). DSM-5 alternative personality disorder model traits as maladaptive extreme variants of the five-factor model: an item-response theory analysis. *Journal of Abnormal Psychology*, *124*, 343–354.
- Weaver, I. C. G., Cervoni, N., Champagne, F. A., D'Alessio, A. C., Sharma, S., Seckl, J. R., et al. (2004). Epigenetic programming by maternal behavior. *Nature Neuroscience*, 7, 847–854.