Volitional personality change

33

Nathan W. Hudson[1] and R. Chris Fraley[2]
[1]Michigan State University, East Lansing, MI, United States,
[2]University of Illinois at Urbana-Champaign, Champaign, IL, United States

Charles Dickens's classic novel, *A Christmas Carol*, chronicles the tale of an embittered, compassionless miser named Ebenezer Scrooge. One cold, bleak Christmas Eve, Ebenezer is haunted by three apparitions. These spirits reveal that—should he fail to fundamentally alter his harsh, penurious ways—Scrooge's life will end in a lonely and unmourned death. Desperate to avoid this wretched fate, Scrooge pledges to change his personality. And true to his word, in the novel's final pages, Ebenezer transforms from a tightfisted and coldhearted antagonist into an extraordinarily generous, fatherly, and compassionate benefactor.

But can *real* people actually transform core personality traits simply because they believe that doing so would be valuable? In recent years, psychological scientists have begun to tackle this question (Hudson & Fraley, 2015; Robinson, Noftle, Guo, Asadi, & Zhang, 2015). Research has attempted to understand whether people, like Scrooge, want to change their personality traits—and if so, which traits they desire to change and why. Research has also begun to examine whether people are able to successfully change their personality traits—and if so, what kinds of factors facilitate this process. The purpose of this chapter is to overview theory and research on *volitional personality change*—people's desires and attempts to change their own personality traits. After reviewing existing theory and research, we conclude by highlighting what we believe to be the most important questions for future research to address.

Do people want to change their personality traits?

Ebenezer Scrooge's story is admittedly extreme; most people are not motivated to change their personality traits courtesy of spectral threats of imminent doom. Do real people actually want to change their personality traits? How common are *trait change goals*? Several recent studies have examined this question. Hudson and Roberts (2014) created the 44-item Change Goals Big Five Inventory (C-BFI; see Appendix) by asking college students to rate the extent to which they wanted to increase, decrease, or stay the same with respect to each of the items contained within the standard Big Five Inventory (BFI; John & Srivastava, 1999). They found that participants' trait change goals were organized by the Big Five personality dimensions (for an overview of the Big Five, see Goldberg, 1993). That is, participants tended to express desires to change with respect to the five broad dimensions,

rather than specific, unique attributes. For example, if a participant indicated a desire to become more assertive—an attribute related to extraversion—that person was also likely to express goals to increase with respect to other attributes subsumed by extraversion, such as sociability, enthusiasm, and energy. Thus the Big Five personality dimensions can be used to summarize not only personality traits themselves, but also the ways in which most people wish to change.

Within the Big Five framework, Hudson and Roberts (2014) found that the *vast majority* of college students wanted to increase with respect to each positively keyed Big Five personality dimension—extraversion, agreeableness, conscientiousness, emotional stability (the opposite of neuroticism), and openness to experience. Specifically, as can be seen in Fig. 33.1, a minimum of 87% of people wanted to increase with respect to each dimension; and no more than 3% of participants expressed a desire to decrease with respect to any dimension. In a similar study using a shorter, 5-item measure of people's trait change goals (one item per dimension), Robinson et al. (2015) found that a minimum of 56% of college students desired to increase with respect to each Big Five personality dimension—and no more than 7% of their participants wanted to decrease in any dimension.

Taken together, research suggests that the majority of college students want to change aspects of their personality traits. These findings, however, are not limited in their generalizability to American college students. Students in the United Kingdom, Iran, and China also express goals to increase with respect to each Big Five personality dimension (Robinson et al., 2015). Finally—although older adults do tend to express less of a desire to change their personality traits, as compared with younger adults—individuals as old as 70 years of age still indicate goals to increase with respect to each Big Five personality dimension (Hudson & Fraley, 2016b). Taken together, these findings clearly suggest that it does not require anything as extreme as spectral coercion to motivate people to want to change their personality traits. Irrespective of how trait change goals are measured, the majority of adults wish to increase with respect to each Big Five personality dimension (Hudson & Fraley, 2016b; Hudson & Roberts, 2014; Robinson et al., 2015).

Why do people want to change their personality traits?

Generally, theorists have argued that trait change goals are primarily *extrinsically motivated* (for an overview of intrinsic vs extrinsic motivation, see Deci & Ryan, 1985, 2000). Stated differently, people desire to change their personality traits as an instrumental means to promote valued external outcomes or prevent feared ones (Baumeister, 1994; Hennecke, Bleidorn, Denissen, & Wood, 2014; Hudson & Roberts, 2014; Kiecolt, 1994). For example, individuals may want to become more thorough, hardworking, and responsible as a means to improve their grades or earn promotions at work. Supporting this notion, research has found that students who are dissatisfied with their academic experience are more likely to express desires to
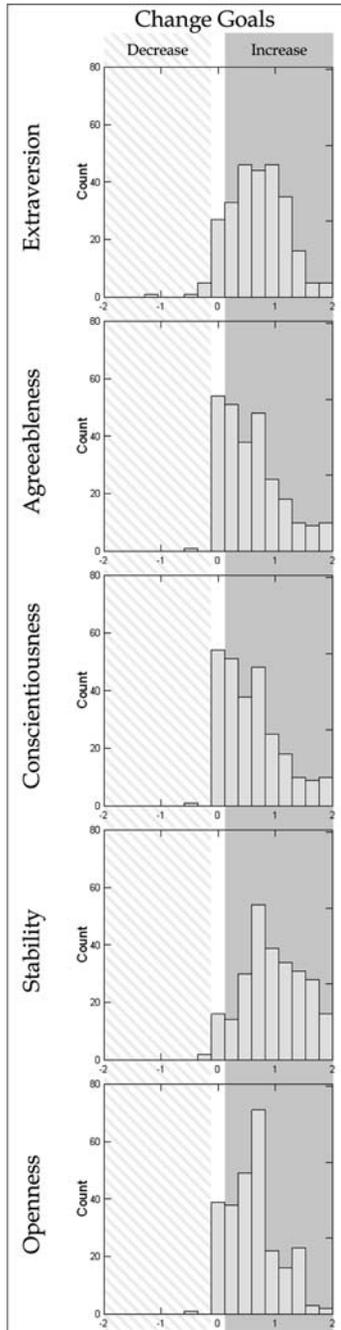
Figure 33.1 Histograms of Hudson and Roberts' (2014) participants' trait change goals, as measured using the C-BFI. Positive values (solid background shading) represent goals to increase. Negative values (striped background shading) represent goals to decrease. Zero values (no background shading) represent goals to remain the same.

increase in conscientiousness (Hudson & Roberts, 2014). Similarly, people who are unhappy with their social lives tend to articulate goals to increase in extraversion—presumably because they believe that being more outgoing, sociable, and enthusiastic would assuage their interpersonal dissatisfaction (Hudson & Roberts, 2014). In fact, individuals who fear even *potentially* being ostracized in the future may formulate goals to alter their personality traits in ways that will minimize the probability of their fears becoming realized (Quinlan, Jaccard, & Blanton, 2006). Across all of these examples, individuals—like Scrooge—may desire to change their personality traits as a means to attain a variety of external goals.

It is also possible, however, that some individuals are *intrinsically motivated* (Deci & Ryan, 1985, 2000) to change their personality traits (Hennecke et al., 2014; Hudson & Roberts, 2014). Specifically, some personality traits, such as extraversion and conscientiousness, are socially desirable in and of themselves (Dunlop, Telford, & Morrison, 2012). Thus some people may want to increase with respect to those traits—not to attain a specific external outcome—but rather for the purpose of possessing the trait *per se* (Hennecke et al., 2014; Hudson & Roberts, 2014). Supporting this notion, research has found that people who are low with respect to socially desirable traits (e.g., extraversion, conscientiousness; Dunlop et al., 2012) are the most likely to report goals to increase with respect to those traits (Hudson & Roberts, 2014).

To summarize, most people—especially young adults—desire to change their personality traits. Theoretically, these goals are primarily extrinsically motivated—individuals want to change their personality traits as a means to attain other, external, valued goals. However, some people may also be intrinsically motivated to grow in socially desirable traits that they lack.

Can people volitionally change their personality traits?

The fact that most people *want* to change aspects of their personality (Hudson & Fraley, 2016b; Hudson & Roberts, 2014) raises an important question: Can people *actually* change their traits simply in virtue of wanting to do so? Before explicitly addressing this question, it is important to review how personality traits are thought to develop more generally in adulthood.

Adult personality development

Research demonstrates that personality traits change during adulthood (for an overview, see Roberts, Wood, & Caspi, 2008). On average, adults tend to become more agreeable, conscientious, and emotionally stable with age (Roberts, Walton, & Viechtbauer, 2006). These normative maturational trends are believed to result from a combination of genetically predetermined maturation (analogous to biologically predetermined physical maturation; Bleidorn, Kandler, Riemann, Angleitner, & Spinath, 2009) in addition to the effects of commonly shared life experiences

(e.g., the fact that most people invest in careers in young adulthood may cause most people to increase in conscientiousness over time; see Roberts & Wood, 2006; Roberts et al., 2008).

In addition to these normative maturational trends, individuals' personality traits also change in idiosyncratic ways, as a function of their experiences. For example, the individuals who most deeply invest in their careers are the ones who increase the most in conscientiousness over time (Hudson & Roberts, 2016; Hudson, Roberts, & Lodi-Smith, 2012). People who invest in romantic relationships tend become emotionally stable at a faster rate than their peers who remain single (Lehnart, Neyer, & Eccles, 2010). Even factors as seemingly trivial as completing daily crossword and Sudoku puzzles have been linked to changes in personality traits over time (Jackson, Hill, Payne, Roberts, & Stine-Morrow, 2012).

Theoretically, people's personality traits change as a function of their experiences because those experiences serve as strong, consistent presses that evoke certain state-level patterns of thoughts, feelings, and behaviors (Hennecke et al., 2014; Hutteman, Nestler, Wagner, Egloff, & Back, 2015; Magidson, Roberts, Collado-Rodriguez, & Lejuez, 2012; Roberts & Jackson, 2008). For example, workplaces presumably reinforce conscientious behaviors (e.g., responsibility, punctuality, thoroughness) and punish nonconscientious ones (e.g., shoddy workmanship, absenteeism). As a consequence, workplaces cause people to engage in more conscientious state-level thoughts, feelings, and behaviors. Theoretically, any changes to state-level thoughts, feelings, and behaviors that are sustained for a long enough period of time can coalesce into enduring trait-level changes (Hennecke et al., 2014; Magidson et al., 2012; Roberts & Jackson, 2008). Supporting this notion, several longitudinal studies have found that state-level changes to thoughts, feelings, and behavior predict corresponding subsequent trait development (Hudson & Fraley, 2015; Hutteman et al., 2015). Thus, for example, the experience of deeply investing in one's career can lead to lasting gains in conscientiousness—through the process of shaping one's state-level conscientious thoughts, feelings, and behaviors over an extended period of time (Hudson & Roberts, 2016; Hudson et al., 2012; Lodi-Smith & Roberts, 2007).

That said, the precise mechanisms through which state-level thoughts, feelings, and behaviors educe trait development are not well understood. However, scholars have argued that state-level changes may simply become learned, habitual, and automatized over time (Hennecke et al., 2014). As a nonmutually exclusive possibility, it may also be the case that state-level changes to thoughts, feelings, and behavior alter individuals' physiology (perhaps including the epigenome), leading to corresponding trait changes (Roberts & Jackson, 2008).

Volitional trait change

On the simplest level, life experiences (including social roles) are thought to shape people's personality traits by consistently evoking state-level patterns of thoughts, feelings, and behaviors over an extended period of time—and those state-level

changes eventually coalesce into enduring trait change (Hennecke et al., 2014; Hutteman et al., 2015; Magidson et al., 2012; Roberts & Jackson, 2008). This raises the question: Can individuals *volitionally* regulate their own thoughts, feelings, and behaviors over extended periods of time in ways that enable them to change their own traits (Hennecke et al., 2014; Hudson & Fraley, 2015)? Although it seems obvious that people can make changes to their behavior at least over short periods of time, actually changing one's personality traits may be considerably more difficult. For instance, it may be the case that genetic or situational forces exert stronger influences on trait levels than do volitional forces, leading to an outcome in which volitional trait changes are meager, short-lived, or even impossible to attain.

To date, a total of four studies have explicitly examined whether people can volitionally change their own personality traits. In three separate samples, Hudson and Fraley (2015, 2016a) assessed college students' trait change goals via the C-BFI at the beginning of a semester. Over the following 4 months, they collected self-report measures of participants' personality traits. Across all three samples, students' trait change goals, as reported at the beginning of the semester, generally predicted corresponding subsequent trait growth over the course of 4 months. As can be seen in Fig. 33.2, participants who expressed desires to become more extraverted at Time 1, for example, experienced faster growth in trait extraversion over the course of the semester, as compared with their peers who did not wish to change with respect to extraversion.[1] In one study, this phenomenon was corroborated using daily behavior checklists (Hudson & Fraley, 2015). For example, students who—at the beginning of the semester—indicated goals to become more extraverted tended to increase in extraverted daily behaviors at a faster rate over the course of the semester, as compared with their peers who did not wish to become more extraverted. Importantly, however, participants' personality traits and daily behaviors changed at only a slow-to-moderate pace. Across all of Hudson and Fraley's studies, participants were predicted to increase a maximum of approximately 0.25−0.50 standard deviations in desired traits over the course of 4 months (albeit this amount is still substantially higher than meta-analytic estimates of the normative changes that occur during a 4-month period in young adulthood; Roberts et al., 2006).

It is important to note that, in one of Hudson and Fraley's (2015) studies, as students' personality traits changed in ways that aligned with their goals, their trait change goals tended to dissipate. For example, if an individual wanted to become more extraverted—and then actually increased in extraversion over the course of the semester—s/he tended to express *less intense* goals to continue increasing in extraversion at the end of the semester. This is consistent with the idea that people were actually fulfilling their goals—and thus the goal to continue increasing was sated and dissipated.

---

[1] Notably, in later studies, Hudson and Fraley demonstrated that this is not merely an artifact of experimental demand. Hudson and Fraley (2017) assessed participants' personality traits repeatedly *before* and after administering a change goals measure. Exposure to the change goals measure did not moderate growth in participants' traits. Stated differently, people were changing in ways that aligned with their desires *before* Hudson and Fraley asked them about how they would like to change their personality traits—a scenario that is impossible to explain as having occurred due to acquiescence to experimental demand.
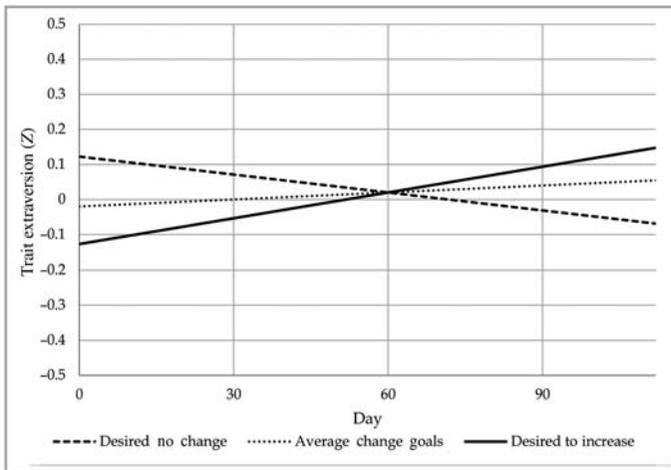
Figure 33.2 Model-predicted growth in trait extraversion for Hudson and Fraley's (2015) participants who, at the beginning of the study, expressed goals to increase or stay the same with respect to extraversion.
Source: Reproduced from Hudson, N. W., & Fraley, R. C. (2015). Volitional personality trait change: Can people choose to change their personality traits? Journal of Personality and Social Psychology, 109, 490−507.

In contrast to the studies discussed earlier, there is at least one study of which we are aware that suggests that people may *not* be able to volitionally change their personality traits. Robinson et al. (2015) assessed students in the United Kingdom who were graduating from college. They measured students' trait change goals using a five-item measure (one item per dimension). They subsequently measured participants' self-reported personality traits twice—once when the students graduated, and once 1 year later. They found that participants' trait change goals predicted either no trait change or trait changes *opposite* the desired direction.

To summarize, the limited empirical evidence available suggests that people do, at the very least, *tend to change* in ways that align with their desires (Hudson & Fraley, 2015, 2016a; cf. Robinson et al., 2015). This may support the notion that people are, in fact, able to *volitionally change* their own personality traits.

How can people change their own personality traits?

Theoretically, trait change occurs when state-level thoughts, feelings, and behaviors are changed over a sufficiently long period of time to educe corresponding trait development (Hennecke et al., 2014; Hudson & Fraley, 2015; Magidson et al., 2012; Roberts & Jackson, 2008). Supporting this notion, in one of Hudson and Fraley's (2015) studies, the association between trait change goals and corresponding trait development was partially mediated by trait-relevant daily behavior. For example, goals to increase in extraversion predicted subsequent increases in extraverted daily behaviors—which, in turn, predicted increases in trait extraversion. This is consistent

with the idea that modifying one's state-level thoughts, feelings, and behaviors over an extended period of time can evoke enduring trait changes.

Moreover, in one of their studies, Hudson and Fraley (2015) experimentally tested the notion that state-level changes to thoughts, feelings, and behaviors might coalesce into trait-level changes. They randomly assigned their participants to intervention and control groups. The intervention group was guided on a weekly basis in modifying their state-level thoughts, feelings, and behaviors to match their ideal traits. Specifically, these participants generated "small steps" and implementation intentions (Gollwitzer & Brandstätter, 1997) that would help them pull their thoughts, feelings, and behaviors in line with their desired traits. For example, someone who wanted to become more extraverted might be coached to create a small step similar to, "I will invite Aaron and Megan to lunch on Tuesday"; that same person might be guided to author an implementation intention similar to, "If I have an opinion on what's being discussed in my philosophy class, then I will voice my thoughts." In contrast, participants in the control group simply wrote about their existing personality traits each week.

Although participants in both groups tended to change in ways that aligned with their trait change goals (e.g., people who wanted to become more conscientious tended to experience faster increases in conscientiousness over time), participants who received coaching in shaping their state-level thoughts, feelings, and behaviors experienced up to *double* the growth in desired traits, as compared with participants in the control group (see Fig. 33.3). Thus it appears that successfully regulating
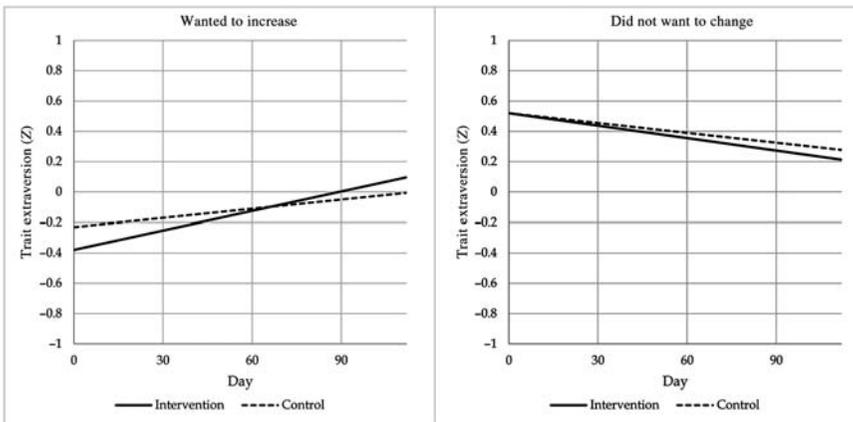

Figure 33.3 Model-predicted growth in trait extraversion for Hudson and Fraley's (2015) participants in the intervention and control groups who, at the beginning of the semester, expressed goals to increase or stay the same with respect to extraversion. Participants who wanted to increase in extraversion and partook in a weekly goal-setting intervention to pull their thoughts, feelings, and behaviors in line with their desired levels of extraversion experienced up to double the amount of growth in trait extraversion over the course of the semester. In contrast, the intervention had no statistically significant effect on individuals who did *not* wish to change. *Source:* Reproduced 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.

one's own thoughts, feelings, and behaviors—*faking it until you make it*, as it were—may be viable strategy for volitionally changing one's own traits.

That being said, there may be other viable strategies that people can employ to obtain desired changes to their personality traits. Moreover, individual differences in ability to regulate thoughts, feelings, and behaviors may influence whether people are able to successfully change their own personality traits *a fiat*. Thus other strategies, such as committing to social roles that will instill desired traits within oneself, may prove fruitful (Lodi-Smith & Roberts, 2007; Roberts & Wood, 2006; Stevenson & Clegg, 2011). Finally, there may be other strategies that people use to successfully change their personality traits that researchers have not yet anticipated. Clearly, *much* future research is needed to understand the types of strategies people use in attempt to change their traits, and which strategies are the most efficacious.

What are the implications of volitional personality change?

Ebenezer Scrooge was motivated to change his personality traits in order to avoid a feared future—a bitter, lonely, and unmourned death. But in volitionally changing his personality, Scrooge also accrued a variety of additional psychological benefits. Despite once being characterized by greed, isolation, regret, and negative affect, in the novel's final pages, Ebenezer transforms into a character that is better described as abundantly overflowing with generosity, meaningful relationships, and positive affect and joy. Research suggests that, like Scrooge, people want to change their personality traits (Hudson & Fraley, 2016b; Hudson & Roberts, 2014; Robinson et al., 2015) and may be able to find some degree of success in doing so (Hudson & Fraley, 2015, 2016a; cf. Robinson et al., 2015). But *should* individuals attempt to change their personality traits? What are the psychological *implications* of desiring and pursuing trait change? Can individuals, like Scrooge, improve their lives and psychological well-being through volitional personality change? Or does desiring and pursuing self-change actually entail greater psychological costs than benefits?

There are competing theoretical perspectives regarding the psychological implications of desiring and attempting self-change. On one hand, theorists have argued that change goals are frequently motivated by *dissatisfaction* with aspects of one's life (Baumeister, 1994; Kiecolt, 1994). For example, college students who are dissatisfied with their academic experience tend to report desires to become more conscientious (Hudson & Roberts, 2014). Because conscientiousness is associated with academic performance (e.g., Richardson & Abraham, 2009), to the extent that people are able to successfully increase in conscientiousness, they may experience corresponding boosts to academic outcomes. Thus successful volitional personality change may have the potential to assuage the sources of people's woes, improve their life outcomes, and consequently boost their psychological well-being (Hudson & Fraley, 2016a).

   In contrast, other theorists have argued that desires and attempts to change oneself may have the potential to *harm* psychological well-being (Herman & Polivy, 2003; Polivy & Herman, 2002; Trottier, Polivy, & Herman, 2009). For one, focusing on how one falls short of one's ideals may promote negative affect (Higgins, 1987). People who expect unrealistic amounts of self-change—or that self-change will be a panacea—may only set themselves up for psychologically damaging disappointment (Polivy & Herman, 2002). Moreover—especially if volitional personality change is difficult to realize—people may accrue opportunity costs by failing to disengage from their trait change goals in lieu of pursing other, more fruitful ambitions (King & Hicks, 2007). Finally, even if individuals are able to successfully change their personality traits, those changes may be accompanied by unanticipated "side effects" that have the potential to worsen well-being. For example, to the extent that one's time is held constant, efforts to become extremely extraverted may bring boons to one's social well-being at the cost of time and energy focused into one's career. Consequently, it may simply be better to learn to want the traits that one has, rather than to try to attain the traits that one wants (Polivy & Herman, 2002).

   Although there is currently extremely limited empirical data on these issues, in one intensive longitudinal study, Hudson and Fraley (2016a) found preliminary evidence for both perspectives. Holding constant their personality traits—including growth therein—participants who expressed desires to become more conscientious or open to experience at the beginning of the semester tended to experience relative declines in psychological well-being, as compared with their peers who did not wish to change with respect to these traits. This may suggest that focusing on the negative aspects of oneself—how one falls short of one's ideals—is counterproductive to psychological well-being (e.g., Higgins, 1987). Perhaps students expected that increases in conscientiousness or openness to experience would hold panacean implications for their collegiate experience—expectations that seemingly inevitably must lead to disappointment (Polivy & Herman, 2002). Or possibly students who were focused on changing their levels of conscientiousness and openness simply missed opportunities to pursue other goals that might have otherwise improved their lives and psychological well-being (e.g., King & Hicks, 2007).

   In contrast, Hudson and Fraley (2016a) found that participants who actually increased in any of the Big Five personality dimensions over the course of the study—irrespective of whether the trait changes were desired—tended to experience simultaneous gains in well-being. Thus participants who became more extraverted, for example, were likely to also increase in life satisfaction. Moreover, participants' change goals moderated the link between trait growth and increases in well-being, such that *desired* trait changes were especially predictive of boosts to well-being.

   Collectively, these findings might suggest that, like Scrooge, people may be able to improve their life circumstances and psychological well-being through volitional changes to their personality traits. That said, simply desiring change may lead to decrements in well-being over time. Thus especially unfruitful desires and attempts to change oneself may backfire, leading to worsened well-being. The question, therefore, of whether individuals *should* pursue self-change may depend on a variety of factors—including what types of change people desire, the feasibility of

actually attaining those changes, and the beliefs and expectations individuals hold regarding the impact self-change will have on their lives.

Future directions

The empirical literature on volitional personality development is in its infancy. Thus many critical questions remain unexplored. For the remainder of this chapter, we highlight what we believe to be the most crucial questions for future research.

Methodological issues

Multimethod triangulation. One of the biggest limitations of existing research on volitional personality change is that all studies to date have relied exclusively on self-reports of personality trait change. Several studies have attempted to address some of the limitations of self-report measures by collecting self-report daily behavior checklists—which are ostensibly more objective than self-reported trait ratings— or by ruling out experimental demand as an explanation for the observed correlations between participants' trait change goals and subsequent corresponding trait development (Hudson & Fraley, 2015, 2017). Nevertheless, the fact remains that self-report measures suffer numerous limitations (Paulhus & Vazire, 2007). For example, experimental demand aside, the self may be biased to see illusory/placeboic personality growth in the desired direction over time.

We believe it is therefore critical for future studies to employ a variety of personality measures, including self-reports, observer reports, and perhaps even objective behavioral measures. Although observer reports, for example, are not necessarily superior to self-reports (e.g., the self has the greatest amount of insight and information in evaluating its own personality; Paulhus & Vazire, 2007), they can partially address and overcome the limitations of self-reports (e.g., self-favoring bias). That said, the use of observer reports may require studying volitional personality change over a longer period of time. As compared with the self, observers may be less motivated or able to detect changes in the self's personality (Paulhus & Vazire, 2007). Moreover, observers might discount "true" changes in the self's personality as "merely" being due to situational forces (Hennecke et al., 2014). For example, observers might attribute increases in the self's gregariousness, activity, energy, and enthusiasm as being due to the self associating with a more partying crowd of friends, rather than "true" changes to the self's level of extraversion. Thus it may require greater changes—and changes that are sustained for a longer period of time—for volitional change to be detectable to observers.

More thorough longitudinal studies. To date, all of the longitudinal studies examining volitional change processes have been relatively short in duration: 16 measurement occasions over 4 months (Hudson & Fraley, 2015, 2016a, 2017) or two measurement occasions over 12 months (Robinson et al., 2015). Although most studies have found that people tend to change in ways that align with their trait

change goals (Hudson & Fraley, 2015, 2016a, 2017), it is unclear (1) how much trait change people can attain and (2) whether those trait gains can be sustained over an extended period of time. Specifically, it is unlikely that individuals can increase with respect to any trait *ad infinitum*. Thus it seems reasonable that individuals would eventually reach a point of diminishing returns in their attempts to change their own personalities. Moreover, it remains an open question whether individuals can *maintain* volitional trait changes over time. It may be the case that once individuals stop actively pursuing volitional change, they revert to their baseline levels of each trait.

Pertaining to this issue—as we have already discussed—Robinson et al. (2015) measured people's personality traits twice, 1 year apart, and found that people did *not* change according to their desires. This raises the possibility that, although people can volitionally change their personalities over the short-term and in a relatively invariant context (a semester of college), such changes might get disrupted—or may even fail to persist—over important life transitions (e.g., graduation), or over extended periods of time. We believe it is therefore absolutely critical for future research to examine volitional change processes over longer time periods and across important social and developmental transitions.

Generalizability. To date, most research on volitional change has focused on young, American, college samples. Although there is evidence that non-Americans and older adults express *trait change goals* (Hudson & Fraley, 2016b; Robinson et al., 2015), future research should explore whether noncollege aged adults can also *volitionally change* their personality traits in desired ways. On one hand, personality traits appear to become less plastic with age (Roberts et al., 2006)—which might lead one to expect that older adults may attain less success in their volitional change efforts. On the other hand, empirical evidence suggests that personality remains an open, malleable system well into adulthood (e.g., Hudson & Roberts, 2016; Jackson et al., 2012), and that its plasticity may actually *increase* in the latter years of life (Specht et al., 2014)—which might lead one to expect that older adults (perhaps especially the elderly) would experience similar success in changing their traits, as compared with college students.

Theoretical issues

What are the obstacles to volitional change? Future research should explore the obstacles that may interfere with people's ability to change their personality traits as desired. For example, people may underestimate the value that trait change could bring (Hennecke et al., 2014), or they may believe that it would be impossible to change personality traits (Chiu, Hong, & Dweck, 1997; Dweck, 2008). With respect to the latter, research on mindsets suggests that people vary in the extent to which they believe that personality is immutable versus changeable—and these beliefs have implications for personality functioning (Chiu et al., 1997; Dweck, 2008). Hudson and Fraley (2017) examined whether generalized lay theories about personality change moderate people's abilities to attain desired trait changes. In their studies,

participants' beliefs about the malleability of personality did *not* moderate trait growth; people who desired to change in specific traits tended to do so regardless of whether they believed personality can change.

Nonetheless, the basic idea still rings true. There should be specific attitudes or mindsets that people hold that will facilitate or impair their ability to change in desired directions. One potential way to explore these ideas in the future is to examine the extent to which more granular *expectancy* (e.g., beliefs that *extraversion* can change) and *value* (e.g., beliefs regarding how one's life would be improved by becoming more extraverted) are related to change goals and actual change. Furthermore, the factors that *motivate* people's trait change goals may predict their ability to successfully change. For example, intrinsically motivated trait change goals may garner greater success in attaining trait change, as compared with extrinsically motivated goals (Deci & Ryan, 1985, 2000).

Beyond beliefs, expectations, and motives, other individual differences may also moderate people's abilities to engender desired changes to their personality traits. For instance, individuals with greater variability in their within-person personality states (e.g., Fleeson, 2001) may be more easily able to shift their thoughts, feelings, and behaviors toward ideal levels, as compared with individuals whose personality states are more constant.

What change strategies work best? Existing studies suggest that changing state-level thoughts, feelings, and behaviors over a long enough period of time may be one way to successfully attain volitional change goals (Hudson & Fraley, 2015; Hutteman et al., 2015; Magidson et al., 2012; Roberts & Jackson, 2008). That said, individual differences in people's ability to regulate their own behavior may determine the success of attempting to "brute force" cognitive, affective, and behavioral changes (Hennecke et al., 2014). Moreover, there may be a variety of other strategies that people might use to attempt to change their traits. For example, committing to social roles that instill desired traits within oneself may be a viable means to attain volitional change (Lodi-Smith & Roberts, 2007; Roberts & Wood, 2006; Stevenson & Clegg, 2011). Future research should first identify the strategies that appear to be most promising in helping people volitionally change their traits. The efficacy of these strategies should then be formally tested using intensive longitudinal experiments (e.g., Hudson & Fraley, 2015).

Conclusion

Recent research suggests that Ebenezer Scrooge's journey of self-change reflects some trappings of truth. Like Ebenezer, many people are motivated to change their personality traits in order to attain external goals—including improving their psychological well-being. And moreover, an emerging body of studies suggests that people can, in fact, follow in Scrooge's footsteps and *actually* change their personality traits in moderate, albeit psychologically meaningful ways. It is our hope that future research will begin to elucidate more fully which strategies and circumstances best enable individuals to realize their trait change goals—and to more

completely understand the long-term implications of people's active attempts to volitionally change their own personality traits.

References

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.

Bleidorn, W., Kandler, C., Riemann, R., Angleitner, A., & Spinath, F. M. (2009). Patterns and sources of adult personality development: Growth analyses of the NEO PI-R scales in a longitudinal twin study. *Journal of Personality and Social Psychology*, *97*, 142−155.

Chiu, C. Y., Hong, Y., & Dweck, C. S. (1997). Lay dispositionism and implicit theories of personality. *Journal of Personality and Social Psychology*, *73*, 19−30.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York, NY: Plenum.

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.

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.

Dweck, C. S. (2008). Can personality be changed? *Current Directions in Psychological Science*, *17*, 391−394.

Fleeson, W. (2001). Toward a structure- and process-integrated view of personality: Traits as density distributions of states. *Journal of Personality and Social Psychology*, *80*, 1011−1027.

Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American Psychologist*, *48*, 26−34.

Gollwitzer, P. M., & Brandstätter, V. (1997). Implementation intentions and effective goal pursuit. *Journal of Personality and Social Psychology*, *73*, 186−199.

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.

Herman, C. P., & Polivy, J. (2003). Realistic and unrealistic self-change efforts. *American Psychologist*, *58*, 823−824.

Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, *94*, 319−340.

Hudson, N. W., & Fraley, R. C. (2016a). Changing for the better? Longitudinal associations between volitional personality 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). To what extent do beliefs and expectations moderate volitional change processes? Under Review.

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., & 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., Nestler, S., Wagner, J., Egloff, B., & Back, M. D. (2015). Wherever I may roam: Processes of self-esteem development from adolescence to emerging adulthood in the context of international student exchange. *Journal of Personality and Social Psychology*, *108*, 767−783.

Jackson, J. J., Hill, P. L., Payne, B. R., Roberts, B. W., & Stine-Morrow, E. A. L. (2012). Can an old dog learn (and want to experience) new tricks? Cognitive training increases openness to experience in older adults. *Psychology and Aging*, *27*, 286−292.

John, O. P., & Srivastava, S. (1999). The Big-Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin, & O. P. John (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp. 102−138). New York, NY: Guilford Press.

Kiecolt, K. J. (1994). Stress and the decision to change oneself: A theoretical model. *Social Psychology Quarterly*, *57*, 49−63.

King, L. A., & Hicks, J. A. (2007). Whatever happened to "What might have been?" Regrets, happiness, and maturity. *American Psychologist*, *62*, 625−636.

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*, *Advance online publication*.

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: The Guilford Press.

Polivy, J., & Herman, C. P. (2002). If at first you don't succeed: False hopes of self-change. *American Psychologist*, *57*, 677−689.

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.

Richardson, M., & Abraham, C. (2009). Conscientiousness and achievement motivation predict performance. *European Journal of Personality*, *23*, 589−605.

Roberts, B. W., & Jackson, J. J. (2008). Sociogenomic personality psychology. *Journal of Personality*, *76*, 1523−1544.

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: 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* (3rd ed., pp. 375−398). 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.

Specht, J., Bleidorn, W., Denissen, J. J. A., 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.

Stevenson, J., & Clegg, S. (2011). Possible selves: Students orientating themselves towards the future through extracurricular activity. *British Educational Research Journal*, *37*, 231−246.

Trottier, K., Polivy, J., & Herman, C. P. (2009). Effects of resolving to change one's own behavior: Expectations vs. experience. *Behavior Therapy*, *40*, 164−170.

Appendix. Change Goals Big Five Inventory (C-BFI; Hudson & Roberts, 2014)

Instructions

How much do you want to change yourself? Here are a number of personality traits that you may or may not want to change within yourself. Please rate the extent to which you want to change each trait.

Response scale

All items are rated using the following response scale:

Much more than I currently am (+2)
More than I currently am (+1)
I do not want to change in this trait (0)
Less than I currently am (−1)
Much less than I currently am (−2)

Items

1. I want to be someone who is talkative
2. I want to be someone who is reserved (r)
3. I want to be someone who is full of energy
4. I want to be someone who generates a lot of enthusiasm
5. I want to be someone who tends to be quiet (r)
6. I want to be someone who has an assertive personality

 7. I want to be someone who is sometimes shy, inhibited (r)
 8. I want to be someone who is outgoing, sociable
 9. I want to be someone who tends to find fault with others (r)
10. I want to be someone who is helpful and unselfish with others
11. I want to be someone who starts quarrels with others (r)
12. I want to be someone who has a forgiving nature
13. I want to be someone who is generally trusting
14. I want to be someone who can be cold and aloof (r)
15. I want to be someone who is considerate and kind to almost everyone
16. I want to be someone who is sometimes rude to others (r)
17. I want to be someone who likes to cooperate with others
18. I want to be someone who does a thorough job
19. I want to be someone who can be somewhat careless (r)
20. I want to be someone who is a reliable worker
21. I want to be someone who tends to be disorganized (r)
22. I want to be someone who tends to be lazy (r)
23. I want to be someone who perseveres until the task is finished
24. I want to be someone who does things efficiently
25. I want to be someone who makes plans and follows through with them
26. I want to be someone who is easily distracted (r)
27. I want to be someone who is depressed, blue (r)
28. I want to be someone who is relaxed, handles stress well
29. I want to be someone who can be tense (r)
30. I want to be someone who worries a lot (r)
31. I want to be someone who is emotionally stable, not easily upset
32. I want to be someone who can be moody (r)
33. I want to be someone who remains calm in tense situations
34. I want to be someone who gets nervous easily (r)
35. I want to be someone who is original, comes up with new ideas
36. I want to be someone who is curious about many different things
37. I want to be someone who is ingenious, a deep thinker
38. I want to be someone who has an active imagination
39. I want to be someone who is inventive
40. I want to be someone who values artistic, esthetic experiences
41. I want to be someone who prefers work that is routine (r)
42. I want to be someone who likes to reflect, play with ideas
43. I want to be someone who has artistic interests
44. I want to be someone who is sophisticated in art, music, or literature

Administration and scoring

Items should be presented in randomized order. Reverse items are indicated above
with (r). Average items to form composites as follows:

    Items 1−8: goals to change extraversion
    Items 9−17: goals to change agreeableness
    Items 18−26: goals to change conscientiousness
    Items 27−34: goals to change emotional stability
    Items 35−44: goals to change openness to experience.