

# Changing for the Better? Longitudinal Associations Between Volitional Personality Change and Psychological Well-Being

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## Abstract

Recent research has found that a vast majority of people want to change their personality traits—and they may be able to find some degree of success in doing so. However, desires for self-change have been theoretically and empirically linked to reduced well-being. The present study utilized a longitudinal design to better understand the associations between people's desires and attempts to change their personality traits and their psychological well-being. Results indicated that possessing change goals did not necessarily predict growing deficits in well-being over time. In contrast, people who were able to change their personality traits in ways that aligned with their desires tended to experience increases in well-being over time. These findings are consistent with theory that dissatisfaction can precipitate change goals, and successful change can ameliorate dissatisfaction.

## Keywords

volitional change, personality development, well-being

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Within the past few decades, personality psychologists have argued that individuals' personalities can be changed by their social roles and interpersonal circumstances. For example, researchers have found that people in stable jobs or romantic relationships tend to become more conscientious and emotionally stable over time (Hudson & Roberts, 2016; Hudson, Roberts, & Lodi-Smith, 2012; Lehnart, Neyer, & Eccles, 2010; Lodi-Smith & Roberts, 2007). Recently, however, an emerging body of literature has begun to suggest that—in addition to merely passively being changed by their social circumstances—individuals can also take a more active role in changing their own personality traits (Hudson & Fraley, 2015; Hudson & Roberts, 2014). Most notably, in two separate studies on volitional trait change, college students who expressed goals to increase in any of the big five personality traits at the beginning of a semester tended to self-report greater growth in those traits over the course of 4 months, as compared with their peers who did not wish to change (Hudson & Fraley, 2015).

Although it appears that people's goals to change their personalities have the potential to precipitate actual trait change, the psychological consequences of such desires are not well understood. Indeed, a large body of research suggests that wanting to change oneself—or even simply failing to possess desired personal qualities—is associated with

reduced psychological well-being (e.g., Hardin & Larsen, 2014; Higgins, 1987; Hudson & Roberts, 2014). That said, researchers are deeply divided over *why* this association exists. On one hand, several theorists have argued that discontent with one's life serves as an impetus for change (Baumeister, 1994; Kiecolt, 1994). For example, individuals who are dissatisfied with their social lives may formulate goals to become more extraverted as a way to assuage their social woes (Hudson & Roberts, 2014).

On the other hand, several scholars have argued that desires or efforts to change oneself per se may be intrinsically detrimental to well-being (Polivy & Herman, 2002)—especially if the desired changes are difficult or impossible to attain (King & Hicks, 2007; Kuhl & Helle, 1986; Polivy, Heatherton, & Herman, 1988). Indeed, it may simply be better—in terms of psychological well-being—to want the traits that one has, rather than to attempt to attain the traits that one wants (Hardin & Larsen, 2014).

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Despite the tension between these perspectives, logically, they are not mutually exclusive. Nonetheless, each perspective has dramatically different implications for understanding people's desires and attempts to change their personality traits. For example, to the extent that discontent precipitates change goals and volitional change can assuage this discontent, it would seem prudent to encourage individuals toward volitional change and to equip them with the tools to facilitate the process. In contrast, if change goals per se breed reductions in well-being, it may be ill-advised to encourage individuals to pursue volitional change—it may be better for them to learn to accept, or perhaps even love, their current traits instead.

The purpose of the present research was to explore in greater depth the longitudinal associations between people's volitional change attempts and their psychological well-being. Specifically, we examined whether (a) change goals are associated with declines in well-being over time and also (b) whether attaining desired changes to one's personality traits is associated with boosts in well-being. To investigate these issues, we followed a sample of college students weekly over the course of a single semester and repeatedly assessed their change goals, personality traits, and subjective well-being.

## Volitional Personality Trait Change

A large body of research demonstrates that people's personality traits change over time—both in normative, predictable ways that reflect maturation (e.g., Lucas & Donnellan, 2011; Roberts & Mroczek, 2008; Roberts, Walton, & Viechtbauer, 2006; Soto, John, Gosling, & Potter, 2011) and in response to their idiosyncratic social roles and interpersonal experiences (e.g., Hudson & Roberts, 2016; Hudson et al., 2012; Lehnart et al., 2010; Lodi-Smith & Roberts, 2007). With respect to the latter, social roles and experiences are believed to change personality traits by creating strong, consistent presses that shape state-level thoughts, feelings, and behavior. For example, finding success in a career requires that one behave at least somewhat conscientiously; conscientious behaviors, such as punctuality, are rewarded, whereas non-conscientious behaviors, such as inattention to detail, are punished.

Theorists have argued that state-level shifts in thoughts, feelings, and behaviors that are maintained for extended periods of time can eventually coalesce into trait-level changes (Magidson, Roberts, Collado-Rodriguez, & Lejuez, 2014; Roberts & Jackson, 2008). For example, people whose jobs require them to behave in a more conscientious manner for a long enough period of time will eventually tend to experience stable increases in trait-level conscientiousness (Hudson & Roberts, 2016; Hudson et al., 2012; Lodi-Smith & Roberts, 2007). In this vein, personality researchers have traditionally focused almost exclusively on how individuals' external circumstances—usually social roles—shape their thoughts, feelings, and behaviors in ways that may

eventually promote trait development (cf., for example, Roberts, O'Donnell, & Robins, 2004).

Recently, however, Hudson and his colleagues argued that *intrapersonal* factors—such as people's desires to change their own personalities—might also be sufficient presses to change patterns of thoughts, feelings, and behaviors, eventually resulting in trait change (Hudson & Fraley, 2015; Hudson & Roberts, 2014). Supporting this line of reasoning, Hudson and Roberts (2014) found that the vast majority of people want to change at least some aspects of their personality traits. In their studies, a minimum of 87% of people wanted to increase with respect to each big five personality dimension—extraversion, agreeableness, conscientiousness, emotional stability, and openness to experience. Moreover, factor analyses revealed that participants' *trait change goals* were organized by the big five personality traits. For example, participants who wanted to become more *talkative*, an attribute subsumed by extraversion, were likely to also desire to increase with respect to other extraverted attributes, such as assertiveness, energy, and enthusiasm. Hudson and Roberts (2014) interpreted this finding to mean that people tend to desire to change whole personality dimensions—as opposed to ad hoc behaviors or qualities.

Beyond merely wanting to change their personality traits, some people also engage in intentional strategies that appear to be designed to change their traits. For example, research has found that some students strategically enroll in extracurricular activities that they believe will instill desired personal qualities—such as leadership (Stevenson & Clegg, 2011). Other studies have found that people attempt to modify their thoughts, feelings, and behaviors to align with desired traits—“fake it until they make it,” as it were. In one study, college students who feared becoming boring adults were more likely to engage in binge drinking behavior—ostensibly in attempt to change their personalities to align with the “fun and interesting” stereotype of underage binge drinkers (Quinlan, Jaccard, & Blanton, 2006). In more general samples, two large, recent studies found that—even when asked via open-ended questions—laypersons indicate desires to change their personality traits and volunteer seemingly reasonable strategies to do so (e.g., “try to force myself to talk more,” “acknowledge when I'm being critical”; Baranski, Morse, & Dunlop, 2016).

The vast majority of people want to change their traits—and some people appear to use intentional strategies designed to obtain desired changes. But can people actually successfully change their own personality traits? Across two longitudinal studies, Hudson and Fraley (2015) found that trait change goals predicted moderate amounts of self-reported growth in personality traits across 4 months. For example, people who expressed desires to become more extraverted at the beginning of the semester reported greater increases in extraversion over the course of 16 weeks, as compared with their peers who did not wish to change. People's traits tended to change in ways that aligned with their desires.

Although the specific processes and/or strategies that enable people to change their personality traits are not well understood, theoretically, it may simply be the case that participants were able to alter their personality traits by modifying their state-level thoughts, feelings, and behaviors (Magidson et al., 2014; Roberts & Jackson, 2008). Supporting this line of reasoning, in one of Hudson and Fraley's (2015) studies, a randomized goal-setting intervention that guided participants through the process of making small cognitive, behavioral, and affective changes nearly doubled the amount of change that participants reported in some traits. This may suggest that organized attempts to shift one's behavior ("fake it until one makes it," as it were) have the potential to lead to trait change.

### **Volitional Change and Well-Being**

The limited empirical evidence currently available suggests that people may be able to slowly and moderately change their personality traits in desired ways. However, the psychological consequences of (a) wanting to change oneself and (b) actively pursuing volitional change remain poorly understood. Theorists have argued that desires to change oneself—or even simply discrepancies between one's current/actual self and one's ideal/desired self—are associated with reduced well-being (Baumeister, 1994; Higgins, 1987; Kiecolt, 1994). Indeed, previous research suggests that trait change goals—especially goals to increase in extraversion, conscientiousness, and emotional stability—are negatively correlated with life satisfaction (Hudson & Roberts, 2014).

It is, however, far from clear why trait change goals (or self-discrepancies) are negatively associated with well-being. There are at least two distinct perspectives on the matter. One perspective holds that low levels of well-being promote trait change goals. Specifically, some individuals who are unhappy with aspects of their lives may formulate desires to change themselves (Baumeister, 1994; Hudson & Roberts, 2014; Kiecolt, 1994). For example, students who are performing poorly in their classes may reason that becoming more organized, diligent, and responsible—conscientious—would improve their academic outcomes. Supporting this line of reasoning, research has found that students who are dissatisfied with their college experience tend to report desires to increase in conscientiousness (Hudson & Roberts, 2014).

From this perspective, trait change goals are a consequence, rather than an antecedent, of poor well-being. For instance, in one study, participants who were dissatisfied with their social lives expressed desires to become more extraverted (Hudson & Roberts, 2014). Similarly, participants who were dissatisfied with their daily emotional experiences expressed goals to increase in both extraversion (which includes positive affect) and emotional stability (i.e., reduced negative affect). These findings suggest that—for at least some domains—laypersons are able to reason about

which personality traits are linked to which aspects of their lives, and to conclude that changes to these relevant personality traits might assuage their dissatisfaction with those aspects of their lives. Moreover, this perspective implies that if an individual is able to increase in certain traits (e.g., conscientiousness), the issues driving their dissatisfaction (e.g., poor performance at school) should be ameliorated, ultimately leading to increases in well-being. To the extent that this perspective is correct, we should expect that people who are able to attain desired changes to their personality traits would experience positive growth in well-being. Therefore, one major goal of the present research was to examine whether growth in personality traits that aligns with people's trait change goals predicts increases in well-being.

In contrast, an alternative perspective holds that desires or attempts to change oneself can breed reductions in well-being (e.g., Polivy et al., 1988; Polivy & Herman, 2002). For instance, Polivy et al. (1988) and Polivy and Herman (2002) argued that repeated or prolonged self-change attempts can increasingly exacerbate deficits in well-being over time—especially for individuals who expect unrealistically large amounts of change, or who believe that self-change will be their panacea.

To this end, although Hudson and Fraley (2015) found that people tended to experience trait growth that aligned with their trait change goals, the changes observed in their studies were slowly gained and modest in magnitude. Participants expecting large changes to their traits—or those expecting that self-change would dramatically improve their lives—may set themselves up for disappointment and growing diminishments in well-being over time (e.g., Kuhl & Helle, 1986; Polivy & Herman, 2002). At the very least, pursuing impossible or difficult self-change may cost individuals opportunities to pursue other goals that might have actually increased their well-being (King & Hicks, 2007). Indeed, some scholars have concluded that people may be better served—at least temporarily—by learning to want the traits they possess, rather than attempting to sculpt their traits to match their ideals (Hardin & Larsen, 2014).

Therefore, a second major goal of the present study was to test whether desires to change one's personality lead to decrements in well-being over time. Specifically, we attempted to determine whether participants who want to become more conscientious, for example, experience less (i.e., more negative) growth in well-being over time, as compared with their peers who do not wish to change.<sup>1</sup> Importantly, the two perspectives we have discussed are not mutually exclusive: It is possible both that (a) trait change goals foster reductions in well-being over time and (b) attaining desired changes to one's traits predicts increases in well-being. This would suggest that low well-being can fuel the desire for personality change which, when successful, can lead to improvements in psychological well-being—and when unsuccessful, can lead to growing decrements in well-being.

## Overview of the Present Study

The purpose of the present study was to examine the longitudinal associations between people's goals and attempts to change their personality and their psychological well-being. To do so, we followed a sample of college students for up to 16 weeks and repeatedly assessed their trait change goals, personality traits, and several indicators of well-being. These data were used to examine whether (a) trait change goals predict growth in well-being over time (e.g., does wanting to change oneself predict relative declines in well-being over the semester) and (b) whether changing in ways that aligned with one's goals (i.e., successful volitional change) predicts increases in well-being.

## Method

### Participants

Participants were recruited from a large introductory personality psychology course in exchange for extra course credit. Students were provided a link to the study website and were required to register a user account to participate. Participants were instructed that they should complete one wave of the study each week during the 16-week semester. However, to provide leniency and flexibility, the study website allowed students to complete waves as frequently as once every 5 days. Students who waited longer than 6 days between completing waves were sent automated email reminders.

A total of 158 students provided at least one wave of data. This sample size afforded approximately 78% power to detect average-sized zero-order associations ( $r \sim .21$ ; Richard, Bond, & Stokes-Zoota, 2003).<sup>2</sup> At Time 1, the majority of the sample was female (66%), and ages ranged from 18 to 25 ( $M = 20.13$  years,  $SD = 1.49$  years). The racial composition of the sample was 47% White, 35% Asian, 12% Hispanic, 8% Black, and 1% Native American.<sup>3</sup>

On average, participants provided 12.1 waves of data. At Times 4, 6, 8, 12, and 16, a total of 136 (86%), 131 (83%), 122 (77%), 109 (69%), and 75 (47%) participants provided data, respectively. Attrition analyses revealed that more conscientious participants tended to provide greater numbers of data waves,  $r = .17$ , 95% confidence interval (CI) = [0.02, 0.32]. No other personality traits, trait change goals, or well-being variables were statistically significantly related to total number of waves provided,  $r$ s ranged from  $r = -.11$  (95% CI = [-.26, .05]; emotional stability) to  $r = .14$  (95% CI = [-.01, .29]; extraversion).

### Measures

**Personality traits.** Each wave, participants provided self-report ratings of their personality traits using the 44-item Big Five Inventory (BFI; John & Srivastava, 1999). The BFI contains subscales that measure extraversion (e.g., "I see myself as someone who is talkative"), agreeableness (e.g., "I

see myself as someone who is helpful and unselfish with others"), conscientiousness (e.g., "I see myself as someone who does a thorough job"), emotional stability (the opposite of neuroticism; e.g., "I see myself as someone who is relaxed, handles stress well"), and openness to experience (e.g., "I see myself as someone who is curious about many different things"). All items were rated on a scale ranging from *strongly disagree* (1) to *strongly agree* (5) and were averaged to form composites (Time 1  $\alpha$ s ranged from .75 [agreeableness] to .87 [extraversion]).

**Trait change goals.** Participants' desires to change their personality traits were measured once every five waves (i.e., on Waves 1, 6, 11, and 16) using the Change Goals Big Five Inventory (C-BFI; Hudson & Roberts, 2014). The C-BFI is a modified version of the BFI. The C-BFI contains the same 44 items as the BFI. However, the wording of the items and response scales are modified to allow participants to report the extent to which they desire to change each personality attribute. For example, one extraversion item is, "I want to be talkative." All items were rated on a scale running from *much less than I currently am* (-2) to *I do not wish to change* (0) to *much more than I currently am* (+2). Thus, participants can indicate goals to increase, decrease, or stay the same with respect to each attribute. Items were averaged to form composites for goals to increase in extraversion, agreeableness, conscientiousness, emotional stability, and openness to experience (Time 6  $\alpha$ s ranged from .81 [goals to change conscientiousness] to .83 [goals to change extraversion/goals to change stability]). In terms of interpretation, positive values for these composites represent goals to increase, negative values represent goals to decrease, and zero-values represent goals to not change.

For the purposes of a different, unrelated study, some participants were not administered the C-BFI until Wave 6. Therefore, all analyses in the present article use participants' trait change goals as measured at Time 6—the first wave with data available for all participants.

**Well-being.** Participants provided self-report ratings of their psychological well-being using the 5-item Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) and the 20-item Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988). The SWLS was administered every wave, and contains five items that measure participants' overall assessment of their well-being (e.g., "In most ways my life is close to ideal"). These items were rated using a scale ranging from *strongly disagree* (1) to *strongly agree* (5) and were averaged together to form a composite (Time 1  $\alpha = .82$ ).

The PANAS was administered on even-numbered waves. Participants were asked to rate the extent to which, during the previous week, they had felt 10 positive emotions (e.g., interested, excited, enthusiastic, proud) and 10 negative ones (e.g., distressed, upset, guilty, nervous). All items were rated

**Table 1.** Descriptive Statistics and Correlations at Time 6 ( $n = 131$ ).

Variable	<i>M</i>	<i>SD</i>	Correlations													
			1	2	3	4	5	6	7	8	9	10	11	12		
<b>Traits</b>																
1. Extraversion	3.17	0.76	—													
2. Agreeableness	3.66	0.57	.05	—												
3. Conscientiousness	3.45	0.58	.06	.41	—											
4. Stability	3.00	0.71	.28	.24	.25	—										
5. Openness	3.59	0.59	.16	.03	.08	.14	—									
<b>Change goals</b>																
6. Extraversion	0.59	0.52	-.33	.22	.15	-.05	.07	—								
7. Agreeableness	0.51	0.48	.09	-.10	-.03	-.05	.15	.32	—							
8. Conscientiousness	0.81	0.49	.08	.01	-.35	-.09	.22	.44	.46	—						
9. Stability	0.85	0.55	-.12	.01	.03	-.59	.02	.38	.29	.40	—					
10. Openness	0.66	0.44	.03	.17	-.03	.06	.11	.29	.39	.63	.29	—				
<b>Well-being</b>																
11. Life satisfaction	3.36	0.80	.31	.32	.28	.43	.09	.00	-.03	-.20	-.29	-.08	—			
12. Positive affect	3.25	0.74	.48	.30	.45	.37	.16	.01	.07	-.10	-.10	.03	.48	—		
13. Negative affect	2.39	0.83	-.06	-.20	-.28	-.59	-.06	.10	.27	.17	.36	.01	-.25	-.17	—	

on a scale running from *very slightly or not at all* (1) to *moderately* (3) to *extremely* (5). Items were averaged to form separate composites for positive and negative affect (Time 2  $\alpha = .85$  and  $.86$ , respectively).

### Procedure

Students were required to register a user account on the study website to participate. At Time 1, all participants provided basic demographic information, as well as self-report ratings of their personality traits and life satisfaction. On all subsequent waves, participants provided ratings of their personality traits and life satisfaction. On even-numbered waves, participants' positive and negative emotions from the previous week were measured.<sup>4</sup> Finally, every fifth wave, participants rated their trait change goals using the C-BFI. Thus, at Times 6, 11, and 16, all participants completed the C-BFI.

After completing all 16 waves, students were provided with a personalized results webpage that summarized their personality traits and trait change goals, and also contained graphs showing whether and how their personality traits had changed over the course of the study. After all data were collected, results webpages were also made available to students who had completed fewer than 16 waves. Participants were awarded prorated extra credit in their introductory personality psychology course, based on the number of waves of data that they had provided during the study.

### Results

Descriptive statistics and intercorrelations for all study variables at Time 6 ( $n = 131$ ) are presented in Table 1.<sup>5</sup> Replicating previous research (Hudson & Fraley, 2015; Hudson &

Roberts, 2014), the average participant in our sample wanted to increase with respect to each of the big five personality traits (positive values on the trait change goals measures represent goals to increase), and goals to change specific traits were, on average, negatively related to existing levels of that trait, average  $r = -.25$ . For example, relatively introverted individuals were most likely to desire to become more extraverted,  $r = -.33$ , 95% CI =  $[-.47, -.17]$ .

### Replication of Previous Volitional Change Effect

Before examining the longitudinal associations between trait change goals and well-being, we first attempted to directly replicate Hudson and Fraley's (2015) findings that trait change goals predict subsequent growth in people's self-reported personality traits over time. Directly replicating Hudson and Fraley's (2015) statistical procedures, we used five separate multilevel models (MLMs) to model growth in each individual personality trait and how that growth was moderated by people's goals to change that trait, as measured at Time 6.<sup>6</sup> For example, the MLM for extraversion was

$$\begin{aligned}
 (\text{trait extraversion})_{ij} = & b_0 + b_1(\text{month})_{ij} \\
 & + b_2(\text{extraversion change goals})_j \\
 & + b_3(\text{month})_{ij} \\
 & (\text{extraversion change goals})_j \\
 & + U_j + \varepsilon_{ij}.
 \end{aligned}$$

All personality traits and trait change goals were standardized across the entire sample before being entered into the models, and Time was scaled in terms of months and centered at Time 1. Thus, for all participants, month was equal to

**Table 2.** Direct Replication of Hudson and Fraley's (2015) Volitional Change Effects.

Predictors	Outcomes														
	E			A			C			S			O		
	95% CI			95% CI			95% CI			95% CI			95% CI		
	<i>b</i>	LB	UB	<i>b</i>	LB	UB	<i>b</i>	LB	UB	<i>b</i>	LB	UB	<i>b</i>	LB	UB
Intercept	0.03	-0.03	0.08	0.05	-0.02	0.12	.04	-0.02	0.10	-0.09	-0.16	-0.02	0.02	-0.04	0.08
Month	-0.01	-0.02	0.01	-0.02	-0.04	-0.00	-.02	-0.04	-0.00	0.05	0.03	0.07	-0.01	-0.03	0.01
Change goal	-0.06	-0.12	-0.01	-0.06	-0.12	0.01	-.07	-0.13	-0.00	-0.15	-0.24	-0.06	-0.04	-0.10	0.02
Month × Change Goal	0.02	+0.00	0.03	0.03	0.01	0.05	-.01	-0.03	0.01	0.03	0.01	0.05	-0.01	-0.03	+0.00

Note. E = extraversion; A = agreeableness; C = conscientiousness; S = stability; O = openness; CI = confidence interval; LB = lower bound; UB = upper bound.

0 at Time 1. If, for example, a participant completed the second wave 6 days later, their Time 2 month score would be equal to  $6 / 30 = 0.20$ . Consequently, the  $b_1(\text{month})$  coefficient captures the extent to which persons with average trait change goals tend to increase or decrease in standardized extraversion units each month. The  $b_3(\text{Month} \times \text{Change Goals})$  interaction term captures the extent to which people with higher trait change goals experienced lesser or greater growth as compared with their peers with average change goals. Although not depicted above for simplicity, we also controlled for the appropriate Time 1 personality trait and Time 1 Trait  $\times$  Month interaction to rule out regression to the mean as an alternative explanation for our findings.

As can be seen in Table 2, largely replicating previous research, we found that participants' trait change goals predicted subsequent trait growth for extraversion ( $b = 0.02$ , 95% CI = [+0.00, 0.03]), agreeableness ( $b = 0.03$ , 95% CI = [0.01, 0.05]), and emotional stability ( $b = 0.03$ , 95% CI = [0.01, 0.05]). In contrast, trait change goals did not predict subsequent growth in conscientiousness ( $b = -0.01$ , 95% CI = [-0.03, 0.01]) or openness ( $b = -0.01$ , 95% CI = [-0.03, +0.00]). As a comprehensive summary of the existing literature, across three studies (the present study and the two reported by Hudson and Fraley, 2015), trait change goals have consistently predicted subsequent growth in extraversion, agreeableness, and emotional stability. In two of the three studies, trait change goals predicted subsequent growth in conscientiousness. Finally, trait change goals are least robustly related to growth in openness—in only one of the three existing studies have trait change goals statistically significantly predicted subsequent growth in openness.

Collectively, the parameter estimates reported here are somewhat smaller than those observed in Hudson and Fraley's (2015) previous studies—across two studies, their interactions ranged from 0.02 (openness) to 0.08 (extraversion). Part of this discrepancy, however, may be explained by the fact that half the participants in Hudson and Fraley's (2015) previous studies received an intervention designed to facilitate the volitional change process—whereas participants in the present studies did not.

## Associations Between Volitional Change and Well-Being

### Concurrent Associations

When measured concurrently, Hudson and Roberts (2014) found that trait levels of extraversion, agreeableness, conscientiousness, and emotional stability were positively related to life satisfaction. In contrast, goals to increase in extraversion, conscientiousness, and emotional stability were negatively correlated with life satisfaction. As can be seen in Table 1, we largely replicated these findings: Trait levels of extraversion, agreeableness, conscientiousness, and emotional stability were positively correlated with life satisfaction (average  $r = .34$ ), whereas goals to change conscientiousness and emotional stability were negatively associated with life satisfaction ( $r_s = -.20, -.29$ ; 95% CIs = [-.36, -.03], [-.44, -.12]). All other change goals were unrelated to life satisfaction. Change goals were generally unrelated to positive affect (all  $|r|s \leq .10$ ); however, negative affect was positively associated with goals to increase in agreeableness ( $r = .27$ , 95% CI = [.10, .42]), conscientiousness ( $r = .17$ , 95% CI = [-.00, .33]), and emotional stability ( $r = .36$ , 95% CI = [.20, .50]).

### Longitudinal Associations

For our next series of analyses, we examined two different longitudinal associations between volitional change and well-being. First, we examined whether people's trait change goals predicted growing decrements in well-being over time.<sup>7</sup> This was accomplished by modeling well-being as a function of (a) month, (b) change goals, and (c) the Month  $\times$  Change Goal interaction. A negative interaction term would indicate that people with higher desires to change themselves experienced relative decrements (i.e., negative growth) in well-being over time, as compared with their peers.

Second, we examined whether attaining desired changes predicted increases in well-being over time. To do so, we modeled well-being as a function of people's (a) Time 1 traits (between-persons trait) and (b) their current trait at

each time point, centered around their Time 1 level of that trait (within-person trait). A positive association between within-person trait changes and well-being would suggest that within-person increases in the trait were associated with increases in well-being.

Importantly, however, the fact that a person increased in a trait from their Time 1 score (i.e., positive within-person trait change) does not necessarily mean that those increases were desired or the result of volitional change processes. Therefore, we also examined whether people's change goals moderated the association between well-being and within-person trait change. A positive Change Goals  $\times$  Within-Person Trait interaction term would indicate that increases in a trait were predictive of greater increases in well-being for people who wanted to change.

Notably, we modeled both these processes simultaneously for each trait. For example, the MLM predicting life satisfaction from extraversion was

$$\begin{aligned} (\text{life satisfaction})_{ij} = & b_0 + b_1(\text{month})_{ij} + \\ & b_2(\text{extraversion change goals})_j \\ & + b_3(\text{month})_{ij} \\ & (\text{extraversion change goals})_j \\ & + b_4(\text{between-persons extraversion}_{T1})_j \\ & + b_5(\text{within-person extraversion})_{ij} \\ & + b_6(\text{extraversion change goals})_j \\ & (\text{between-persons extraversion}_{T1})_j \\ & + b_7(\text{extraversion change goals})_j \\ & (\text{within-person extraversion})_{ij} + U_j + \varepsilon_{ij}. \end{aligned}$$

One important benefit of modeling these processes simultaneously is that their effects on well-being are mutually controlled. For example, the  $b_3$ (Month  $\times$  Change Goals) interaction term captures the extent to which higher trait change goals predict subsequent growth in well-being, controlling the extent to which participants' traits actually changed over the study (within-person trait). Similarly, the  $b_7$ (Change Goals  $\times$  Within-Person Trait) interaction term captures the extent to which trait changes were especially beneficial for people who wanted those changes, controlling for any growth in well-being due to the change goals per se.

**Do trait change goals predict reductions in well-being?** When measured concurrently at Time 6, goals to increase in agreeableness, conscientiousness, and emotional stability were linked to either reduced well-being or increased negative affect (see Table 1). As can be seen by examining the "Month  $\times$  Change Goals" parameter estimates in Table 3, however, goals to change extraversion, agreeableness, and emotional stability did not predict decreasing well-being over time.

That is, having the goal to become, for example, more extraverted, did not predict decrements in life satisfaction or positive affect, or increases in negative affect over time. Importantly, these models statistically controlled for the changes that participants experienced to their personality traits. As a consequence, these findings suggest that desires to change one's extraversion, agreeableness, or emotional stability—even if those desires are not realized—do not necessarily lead to decrements in well-being over time.

In contrast, goals to change conscientiousness and openness to experience appeared to lead to relative decreases in life satisfaction (respective Month  $\times$  Change Goals  $b$ s =  $-0.03$ ,  $-0.04$ ; 95% CIs =  $[-0.05, -0.01]$ ,  $[-0.06, -0.02]$ ) and positive affect (Month  $\times$  Change Goals  $b$ s =  $-0.07$ ,  $-0.08$ ; 95% CIs =  $[-0.12, -0.02]$ ,  $[-0.12, -0.03]$ ) over the course of the semester. Examining life satisfaction, simple slope analyses revealed that people who did not want to change with respect to conscientiousness (change goal = 0,  $z = -1.65$ ) were predicted to increase 0.06  $SD$ s (95% CI =  $[0.02, 0.10]$ ) in life satisfaction each month. In contrast, people who expressed desires to increase in conscientiousness (change goal = 1,  $z = 0.39$ ) were predicted to experience no growth in life satisfaction ( $b = 0.00$ , 95% CI =  $[-0.02, 0.02]$ ). Similarly, people who were happy with their current levels of openness (change goal = 0,  $z = -1.50$ ) were predicted to increase 0.07  $SD$ s (95% CI =  $[0.04, 0.11]$ ) in life satisfaction each month, whereas their peers who wanted to increase in openness (change goal = 1,  $z = 0.77$ ) were predicted to experience no change in life satisfaction ( $b = -0.03$ , 95% CI =  $[-0.05, +0.00]$ ).

Collectively, these findings suggest that people who want to become more conscientious or open do not necessarily experience absolute decreases in well-being over time (cf. Polivy & Herman, 2002). Rather, it appears that they tend to fail to experience the same normative increases in well-being as their peers, perhaps because their change goals interfere with their ability to invest in other ventures that might have fostered gains in well-being (e.g., King & Hicks, 2007).

**Does attaining trait change goals lead to increased well-being?** For our final series of analyses, we examined whether participants who attained desired increases to their personality traits experienced simultaneous increases in well-being.<sup>8</sup> First, it is important to note that people's initial levels of traits—except openness to experience—were predictive of higher life satisfaction (average  $b = 0.36$ ) and positive affect (average  $b = 0.30$ ), and lower negative affect (average  $b = -0.22$ ). (The only exception is that extraversion did not predict lower levels of negative affect.)

With respect to change, as can be seen by examining the "within-person trait" coefficients in Table 3, within-person increases in any big five personality traits were also associated with simultaneous increases in life satisfaction ( $b$ s ranged from  $b = 0.13$ , 95% CI =  $[0.07, 0.18]$  [openness] to  $b = 0.27$ , 95% CI =  $[0.22, 0.32]$  [stability]) and positive

**Table 3.** Longitudinal Associations Between Volitional Change and Well-Being.

Predictors	Life satisfaction			Positive affect			Negative affect		
	<i>b</i>	95% CI		<i>b</i>	95% CI		<i>b</i>	95% CI	
		LB	UB		LB	UB		LB	UB
<b>Extraversion</b>									
Intercept	-0.01	-0.17	0.15	0.15	-0.00	0.29	0.11	-0.05	0.28
Month <sub><i>ij</i></sub>	0.01	-0.01	0.03	-0.08	-0.13	-0.04	-0.05	-0.09	-0.01
Change goal <sub><i>j</i></sub>	0.14	-0.02	0.30	0.16	0.01	0.31	0.05	-0.11	0.22
Month <sub><i>ij</i></sub> × Change Goal <sub><i>j</i></sub>	0.00	-0.02	0.02	-0.02	-0.07	0.02	0.02	-0.02	0.07
Between-persons trait <sub><i>ij</i></sub>	0.38	0.22	0.54	0.39	0.26	0.51	0.01	-0.14	0.16
Within-person trait <sub><i>ij</i></sub>	0.25	0.19	0.32	0.64	0.51	0.77	-0.29	-0.42	-0.16
Change Goal <sub><i>j</i></sub> × Between-Persons Trait <sub><i>ij</i></sub>	-0.04	-0.14	0.09	0.01	-0.10	0.12	0.06	-0.06	0.18
Change Goal <sub><i>j</i></sub> × Within-Person Trait <sub><i>ij</i></sub>	0.02	-0.04	-0.08	-0.08	-0.20	0.04	-0.17	-0.28	-0.05
<b>Agreeableness</b>									
Intercept	0.00	-0.16	0.15	0.16	+0.00	0.29	0.10	-0.05	0.26
Month <sub><i>ij</i></sub>	0.01	-0.01	0.03	-0.09	-0.14	-0.04	-0.05	-0.09	-0.01
Change goal <sub><i>j</i></sub>	0.00	-0.15	0.15	0.09	-0.06	0.24	0.10	-0.05	0.26
Month <sub><i>ij</i></sub> × Change Goal <sub><i>j</i></sub>	0.01	-0.01	0.03	-0.02	-0.06	0.03	0.04	-0.00	0.08
Between-persons trait <sub><i>ij</i></sub>	0.33	0.17	0.48	0.19	0.05	0.33	-0.17	-0.31	-0.03
Within-person trait <sub><i>ij</i></sub>	0.23	0.18	0.28	0.35	0.24	0.45	-0.26	-0.36	-0.16
Change Goal <sub><i>j</i></sub> × Between-Persons Trait <sub><i>ij</i></sub>	0.01	-0.14	0.16	0.01	-0.12	0.14	0.01	-0.12	0.15
Change Goal <sub><i>j</i></sub> × Within-Persons Trait <sub><i>ij</i></sub>	0.09	0.04	0.13	0.03	-0.07	0.13	-0.07	-0.16	0.02
<b>Conscientiousness</b>									
Intercept	0.03	-0.13	0.20	0.14	-0.01	0.29	0.06	-0.10	0.22
Month <sub><i>ij</i></sub>	0.01	-0.01	0.03	-0.08	-0.13	-0.03	-0.05	-0.10	-0.01
Change goal <sub><i>j</i></sub>	-0.03	-0.19	0.13	0.12	-0.03	0.27	0.04	-0.12	0.19
Month <sub><i>ij</i></sub> × Change Goal <sub><i>j</i></sub>	-0.03	-0.05	-0.01	-0.07	-0.12	-0.02	0.04	-0.00	0.08
Between-persons trait <sub><i>ij</i></sub>	0.25	0.08	0.41	0.35	0.22	0.49	-0.18	-0.33	-0.04
Within-person trait <sub><i>ij</i></sub>	0.21	0.16	0.26	0.38	0.27	0.50	-0.17	-0.28	-0.07
Change Goal <sub><i>j</i></sub> × Between-Persons Trait <sub><i>ij</i></sub>	0.04	-0.10	0.18	-0.03	-0.14	0.09	-0.09	-0.21	0.04
Change Goal <sub><i>j</i></sub> × Within-Person Trait <sub><i>ij</i></sub>	0.07	0.02	0.12	-0.03	-0.13	0.06	-0.12	-0.21	-0.02
<b>Stability</b>									
Intercept	0.00	-0.16	0.17	0.15	-0.01	0.30	0.01	-0.13	0.16
Month <sub><i>ij</i></sub>	-0.01	-0.03	0.01	-0.12	-0.17	-0.07	-0.01	-0.05	0.03
Change goal <sub><i>j</i></sub>	0.06	-0.13	0.24	0.12	-0.05	0.29	0.01	-0.15	0.17
Month <sub><i>ij</i></sub> × Change Goal <sub><i>j</i></sub>	-0.01	-0.03	0.01	-0.04	-0.08	0.01	-0.02	-0.06	0.02
Between-persons trait <sub><i>ij</i></sub>	0.47	0.29	0.65	0.27	0.12	0.43	-0.52	-0.66	-0.37
Within-person trait <sub><i>ij</i></sub>	0.27	0.22	0.32	0.47	0.37	0.58	-0.59	-0.68	-0.50
Change Goal <sub><i>j</i></sub> × Between-Persons Trait <sub><i>ij</i></sub>	-0.04	-0.17	0.10	-0.11	-0.23	+0.00	-0.04	-0.15	0.07
Change Goal <sub><i>j</i></sub> × Within-Person Trait <sub><i>ij</i></sub>	0.05	+0.00	0.10	-0.04	-0.14	0.07	0.01	-0.08	0.11
<b>Openness</b>									
Intercept	0.02	-0.14	0.17	0.17	0.02	0.33	0.10	-0.06	0.26
Month <sub><i>ij</i></sub>	0.01	-0.01	0.03	-0.09	-0.14	-0.05	-0.05	-0.09	-0.01
Change goal <sub><i>j</i></sub>	-0.06	-0.22	0.10	0.04	-0.11	0.20	0.00	-0.17	0.16
Month <sub><i>ij</i></sub> × Change Goal <sub><i>j</i></sub>	-0.04	-0.06	-0.02	-0.08	-0.12	-0.03	0.04	-0.00	0.08
Between-persons trait <sub><i>ij</i></sub>	0.14	-0.01	0.30	0.10	-0.04	0.24	-0.10	-0.25	0.05
Within-person trait <sub><i>ij</i></sub>	0.13	0.07	0.18	0.21	0.09	0.33	-0.12	-0.23	-0.00
Change Goal <sub><i>j</i></sub> × Between-Persons Trait <sub><i>ij</i></sub>	0.05	-0.09	0.19	0.04	-0.08	0.17	-0.06	-0.19	0.07
Change Goal <sub><i>j</i></sub> × Within-Person Trait <sub><i>ij</i></sub>	0.04	+0.00	0.08	-0.03	-0.11	0.06	-0.03	-0.11	0.05

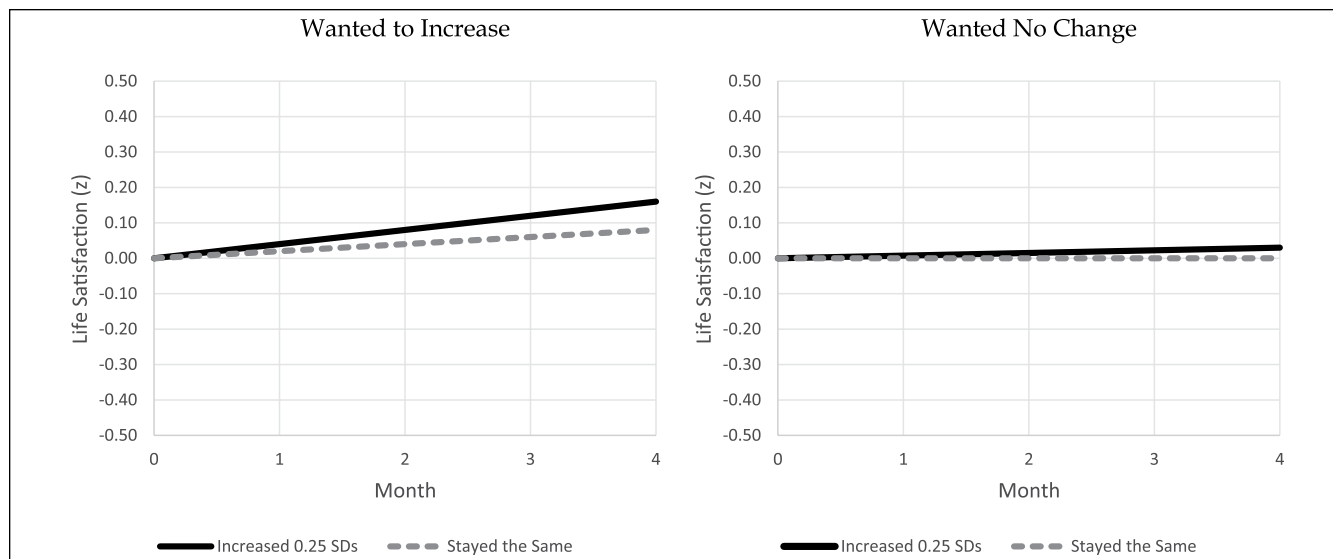
Note. CI = confidence interval; LB = lower bound; UB = upper bound.

affect (*bs* ranged from  $b = 0.21$ , 95% CI = [0.09, 0.33] [openness] to  $b = 0.64$ , 95% CI = [0.51, 0.77] [extraversion]), and decreases in negative affect (*bs* ranged from  $b = -0.59$ , 95% CI = [-0.68, -0.50] [stability] to  $b = -0.12$ , 95% CI = [-0.23, -0.00] [openness]). Thus, within-person increases in any of the big five personality traits, relative to Time 1, were

associated with increases in well-being—irrespective of whether those increases were desired or not.

Finally, as can be seen by examining the “Change Goals × Within-Person Trait” parameter estimates in Table 3, within-person increases in agreeableness, conscientiousness, stability, and openness (but not extraversion) were especially





**Figure 1.** Model-predicted growth in standardized life satisfaction as a function of the interaction between agreeableness change goals and experienced trait growth.

Note. 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 ( $z = -1.06$ ). Both graphs are plotted with a starting score of 3.66 ( $z = 0$ ) in agreeableness at Time 1 (month = 0).

predictive of increases in life satisfaction (but not positive or negative affect) for people who most wanted to change their traits, Change Goals  $\times$  Within-Person Trait  $b$ s ranged from  $b = 0.04$  (95% CI = [+0.00, 0.08]; openness) to  $b = 0.09$  (95% CI = [0.04, 0.13]; agreeableness).

As a concrete example, Figure 1 illustrates the model-predicted growth in life satisfaction for participants who wanted to increase in agreeableness (change goal = 1,  $z = 1.02$ ) versus people who desired no change in agreeableness (change goal = 0,  $z = -1.06$ ). Within each panel, two trajectories are plotted: The dashed lines represent individuals who started exactly average in agreeableness and experienced no change, and the solid lines represent participants who started exactly average in agreeableness but increased 0.25  $SD$ s over the course of the semester.<sup>9</sup> As can be seen by comparing the two panels of Figure 1, an individual who wanted to increase in agreeableness (change goal = 1,  $z = 1.02$ ), and actually increased 0.25  $SD$ s over the course of the semester would be expected to also increase 0.08  $SD$ s in well-being (95% CI = [0.06, 0.10]). In contrast, a person who experienced an equivalent increase of 0.25  $SD$ s in agreeableness despite not wanting to change (change goal = 0,  $z = -1.06$ ) would be expected to increase only 0.04  $SD$ s in well-being (95% CI = [0.02, 0.05]).

Finally, to provide a more holistic view of our findings, Figure 2 depicts the same interaction for conscientiousness. As discussed above, merely possessing the goal to become more conscientious appeared to stifle normative growth in well-being. Nevertheless, within-person increases in conscientiousness were particularly satisfying for individuals who desired those increases.

Collectively, our findings point to the existence of a complex series of associations between volitional change and

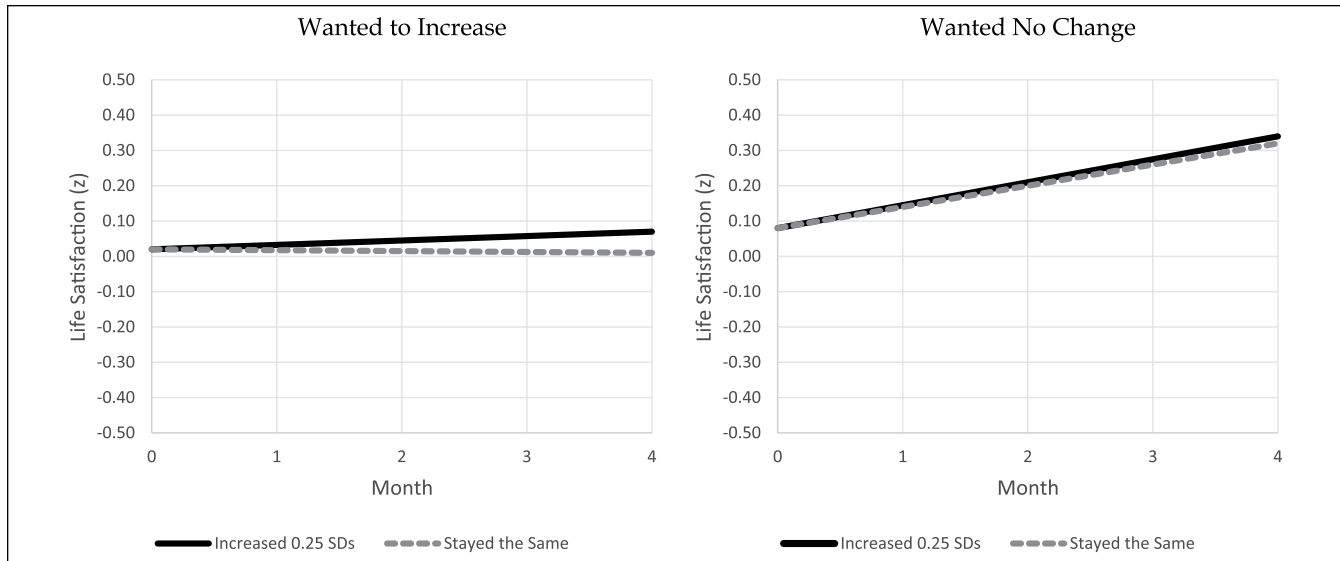
well-being. People who want to change certain traits (conscientiousness, openness) may experience less positive growth in well-being over time, as compared with their peers who desire no change. However, increases in any of the big five personality traits appear to be associated with increases in well-being—and this is especially true if those increases were desired (i.e., the result of volitional change processes).

## Discussion

Previous research suggests that a vast majority of people want to change at least some of their personality traits—and they may actually be able to experience some degree of success in doing so (Hudson & Fraley, 2015; Hudson & Roberts, 2014). However, desires to change oneself have been theoretically and empirically linked to lower levels of psychological well-being (Baumeister, 1994; Hardin & Larsen, 2014; Higgins, 1987; Hudson & Roberts, 2014; Kiecolt, 1994). Nevertheless, scholars disagree with respect to whether poor well-being is an antecedent of desires and attempts to change oneself (e.g., Kiecolt, 1994) or a consequence thereof (Polivy & Herman, 2002). The present study was designed to shed some light on these issues by examining the longitudinal associations between volitional change and psychological well-being.

### *Do Change Goals Lead to Decreases in Well-Being Over Time?*

Replicating previous research (Hudson & Roberts, 2014), we found that, when measured concurrently, goals to become more agreeable, conscientious, or emotionally stable were associated with lower life satisfaction and/or higher negative



**Figure 2.** Model-predicted growth in standardized life satisfaction as a function of the interaction between conscientiousness change goals and experienced trait growth.

Note. The “wanted to increase” lines are plotted at a scale score of “1” on the original change goals scale ( $z = 0.39$ ). The “wanted no change” lines are plotted at a scale score of “0” on the original change goals scale ( $z = -1.65$ ). Both graphs are plotted with a starting score of 3.45 ( $z = 0$ ) in conscientiousness at Time 1 (month = 0).

affect. In isolation, these findings are ambiguous: It could be the case that people who are dissatisfied with their lives eventually formulate the desire to change themselves in an attempt to improve their circumstances (Baumeister, 1994; Kiecolt, 1994); or, it may be the case that focusing on undesirable aspects of one’s personality leads to reductions in well-being (Hardin & Larsen, 2014).

Scholars have argued that repeated or extended attempts to change oneself can lead to growing decrements in well-being (Polivy & Herman, 2002)—or at the very least, missed opportunities to increase one’s well-being (King & Hicks, 2007). Consistent with these notions, we found that people who expressed desires to increase in conscientiousness or openness tended to experience less positive growth in life satisfaction and positive affect over time, as compared with their peers who did not wish to change. Stated differently, people who were satisfied with their current levels of conscientiousness and openness tended to increase in life satisfaction over time; however, people who expressed goals to increase in these traits did not experience any sort of growth in life satisfaction.

In contrast, goals to become more extraverted, agreeable, or emotionally stable were unrelated to growth in life satisfaction or positive affect. Moreover, for all big five personality traits, change goals were unrelated to growth in negative affect. Collectively, these findings suggest that goals to change personality traits generally do not have growing negative implications for psychological well-being over time—perhaps with exceptions for conscientiousness and openness. It does not appear that people who want to change themselves become less satisfied, feel fewer positive emotions, or experience greater negative emotions over time.

Perhaps coincidentally, students’ goals to change with respect to conscientiousness and openness to experience did not predict increases in those traits—and these same change goals were the only to predict decrements in life satisfaction over time. It may therefore be the case that only difficult-to-attain self-change goals are likely to predict declines in well-being (Kuhl & Helle, 1986; Polivy et al., 1988; Polivy & Herman, 2002).

### *Does Successful Volitional Change Predict Increases in Well-Being?*

Finally, we examined whether people who successfully changed their personality traits in desired ways experienced increases in well-being over time. When measured in a between-persons fashion, all the big five personality traits except openness were positively correlated with life satisfaction and positive affect, and negatively associated with negative affect. In terms of within-person change, participants who experienced increases in any of the big five personality traits (relative to their Time 1 level) tended to experience simultaneous increases in life satisfaction and positive affect, and decreases in negative affect.

Moreover, we found that, with respect to life satisfaction, people’s change goals moderated this effect. Specifically, increases in any of the big five personality traits except extraversion were especially beneficial for people who desired those changes. This pattern of findings is consistent with the idea that people who feel unhappy with aspects of their lives may formulate goals to change traits that they believe would ameliorate the problems that underlie their dissatisfaction (Baumeister, 1994; Kiecolt, 1994). The

present findings may suggest that attaining desired trait change truly can resolve dissatisfaction and lead to incremental gains in well-being.

### **Limitations and Future Directions**

One limitation of the present research is that we relied exclusively upon correlational methods. Consequently, we were unable to make strong causal inferences regarding whether change goals initially cause dissatisfaction or vice versa. Nevertheless, our data do suggest that—with a few exceptions—change goals generally do not predict worsening well-being over time.

A second limitation is that we assessed well-being on a global level. Hudson and Roberts (2014) found that change goals were associated with dissatisfaction with relevant life domains (e.g., people dissatisfied with their friendships wanted to become more extraverted). Future research should examine whether volitional change leads to increments in these more granular types of well-being.

Third, the present study did not explore potentially important factors that might moderate the links between change goals, volitional change, and well-being. Specifically, the motives underlying participants' change goals may be relevant to well-being. For example, it may be the case that extrinsically motivated change goals are more predictive of declining well-being, whereas intrinsically motivated change goals are not (e.g., Deci & Ryan, 2000). Similarly, participants' regulatory focus (i.e., goals to prevent unwanted outcomes as opposed to goals to promote desired outcomes) may be an important moderator of the links between volitional change processes and well-being (e.g., Higgins, Shah, & Friedman, 1997).

Fourth, a limitation of this study—and the volitional change literature more broadly—is that the precise processes and/or strategies that successfully enable participants to change their personality traits are not well understood. Future research should explore the specific mechanisms through which participants can obtain desired changes to their personality traits—including “fake it until one makes it” modifications to thoughts, feelings, and behaviors (Hudson & Fraley, 2015; Roberts & Jackson, 2008), or putting oneself in social situations that will instill the desired traits (Stevenson & Clegg, 2011). Moreover, the types of strategies individuals utilize to attain desired changes to their traits may predict well-being. Future research should explore these issues.

Finally, the present study was relatively short in duration. Thus, it remains an open question whether the volitional changes observed in our studies—and the consequent increases in well-being—can be maintained over an extended period of time. For example, it may be the case that the gains in personality traits and well-being observed in our studies are short-lived, and that participants may revert to their baseline levels of each personality trait over the course of several years (see, for example, Robinson, Nofle, Guo, Asadi, &

Zhang, 2015). Or it may be the case that there are individual differences in the extent to which volitional changes can be maintained over an extended period of time. Clearly, future research employing extended longitudinal designs is needed to more fully understand volitional change attempts and their implications for psychological well-being.

### **Conclusion**

In conclusion, emerging research on volitional personality trait change suggests that many people not only want to change their personalities, but are able to do so. The purpose of this research was both to replicate these findings and to extend that work by investigating how well-being impacts—and is impacted by—personality change. Our findings suggest that, although people low in well-being are more likely to have personality change goals, having change goals does not necessarily undermine life satisfaction across time. Importantly, our findings also indicate that life satisfaction improves when people are able to alter their personalities in ways that are compatible with their change goals. Taken together, this work helps to advance research and theory on volitional personality change, psychological well-being, and the dynamic interface between the two.

### **Declaration of Conflicting Interests**

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### **Notes**

1. It is unclear from the existing empirical literature how one might expect well-being to normatively develop in college-aged young adults. On one hand, several studies suggest that well-being tends to normatively decline across the life span—including young adulthood (Baird, Lucas, & Donnellan, 2010; Realo & Dobewall, 2011). In contrast, other studies suggest that well-being may increase in young adults, before plateauing and declining in middle age (Galambos, Fang, Krahn, Johnson, & Lachman, 2015). Nevertheless, irrespective of the normative trends, our analyses were concerned with whether people who expressed greater change goals experienced less positive/more negative growth in well-being over time, as compared with their peers.
2. Computing a priori power for multilevel models is considerably more complex. We present this basic zero-order power analysis in hopes that it will provide readers with a general sense of the size of effects our study could reasonably detect.
3. These percentages total to more than 100% because participants were instructed to check all races or ethnicities with which they identified.
4. The data reported in this article are from a larger study. At each wave, participants completed a variety of personality

- questionnaires and tasks—only a subset of which are relevant to the present study. For the purposes of other studies, information about participants' romantic relationships was collected on odd-numbered waves.
5. We present this information from Time 6 instead of Time 1 because Time 6 was the first wave when all measures were administered simultaneously.
  6. These analyses were designed to examine whether change goals predict subsequent trait growth that aligns with the expressed goals—and Time 6 was the first wave in which change goals were measured for all participants. We did not treat change goals as a time-varying predictor because doing so answers a different question: How do change goals and trait covary over time? Previous research suggests that although change goals predict subsequent trait growth, change goals and traits negatively covary over time, presumably because as people attain their goals, the goals per se are fulfilled and tend to dissipate (Hudson & Fraley, 2015).
  7. Averaging across the entire sample, mean-level growth in life satisfaction was 0.01 *SDs* per month (95% CI = [−0.03, 0.05]; growth *SD* = 0.22). Mean-level growth in positive affect was −0.09 *SDs* per month (95% CI = [−0.14, 0.03]; growth *SD* = 0.20). Mean-level growth in negative affect was −0.05 *SDs* per month (95% CI = [−0.10, 0.00]; growth *SD* = 0.14).
  8. Averaging across the entire sample, mean-level growth in extraversion was −0.01 *SDs* per month (95% CI = [−0.03, 0.02]; growth *SD* = 0.14). Mean-level growth in agreeableness was −0.02 *SDs* per month (95% CI = [−0.06, 0.01]; growth *SD* = 0.17). Mean-level growth in conscientiousness was −0.02 *SDs* per month (95% CI = [−0.05, 0.01]; growth *SD* = 0.14). Mean-level growth in emotional stability was 0.05 *SDs* per month (95% CI = [0.01, 0.08]; growth *SD* = 0.17). Mean-level growth in openness to experience was −0.02 *SDs* per month (95% CI = [−0.05, 0.02]; growth *SD* = 0.20).
  9. The chosen values of growth in agreeableness—0.00 *SDs* versus 0.25 *SDs*—are arbitrary and chosen purely for illustrative purposes. Average growth in agreeableness was −0.02 *SDs* per month (growth *SD* = 0.17). Thus, a person who increased 0.25 *SDs* over the semester (~0.07 *SDs* per month) would be approximately a half standard deviation above the mean in growth in agreeableness.

### Supplemental Material

The online supplemental material is available at <http://pspb.sagepub.com/supplemental>.

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