# Change You Can Believe In: Changes in Goal Setting During Emerging and Young Adulthood Predict Later Adult Well-Being

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## Abstract

A widely held assumption is that changes in one's goals and motives for life during emerging and young adulthood have lasting influences on well-being into adulthood. However, this claim has yet to receive rigorous empirical testing. The current study examined the effects of prosocial and occupational goal change during college on adult well-being in a 17-year study of goal setting ($N = 416$). Using a latent growth model across three time points, both level and growth in goal setting predicted later well-being. Moreover, goal changes both during college and in young adulthood uniquely predicted adult well-being, controlling for goal levels entering college. These findings suggest that what matters for attaining adult well-being is both how you enter adulthood and how you change in response to it.

## Keywords

goals, well-being, adult development, personality

Emerging and young adulthood often is characterized as a period of flux. It is during this period that individuals consider different options for their identity and direction for life (e.g., Arnett, 2000; Erikson, 1950, 1968). This developmental period is marked by individuals' exploration of and commitment to their later adult roles, including situating oneself within one's community, family, and workplace (Roberts & Wood, 2006; Roberts, Wood, & Smith, 2005). The way one navigates this process can lead to either positive or negative effects later in life (e.g., Helson & Picano, 1990; Lodi-Smith & Roberts, 2007; Roberts, Bogg, Walton, & Caspi, 2006; Sampson & Laub, 1990). One marker of motivation toward this investment is whether one sets and emphasizes goals indicative of adult role adoption, such as being prosocial within one's community and seeking occupational stability and success (Roberts, O'Donnell, & Robins, 2004). The current study investigates whether changes in prosocial and occupational goal setting predict later well-being in adulthood, using a 17-year longitudinal study with three waves of data (freshman year of college, senior year, and mid-30s). Recent work suggests the importance of examining long-term gradual changes in individual differences, as they can have unique predictive value above initial levels (Mroczek & Spiro, 2007; Van den Akker, Dekovic, & Prinzie, 2010). The current study follows this literature by examining whether changing one's goals in response to becoming an adult predicts greater well-being.

Establishing a set of goals is one way to demarcate one's niche or role in life. Indeed, pursuing goals that are personally relevant can motivate one toward psychosocial development (e.g., Sheldon & Houser-Marko, 2001; Sheldon & Kasser, 1998; Sheldon, Kasser, Smith, & Share, 2002). However, it is clearly not possible to entertain all possible life goals indefinitely or to adopt even some of them simultaneously. Accordingly, a selection process narrows options to those one deems most important (Baltes, 1997), which often occurs during emerging adulthood (Freund & Baltes, 2002; Freund, Li, & Baltes, 1999). Put differently, although adolescents might endorse a wide variety of goals as important, emerging adults focus their choices and rate fewer goal domains as important.

Indeed, longitudinal studies found significant overall declines in mean life goal importance across college students for most goal domains, suggesting that students were focusing on those goals most important to them (Lüdtke, Trautwein, & Husemann, 2009; Roberts et al., 2004). However, rank-order

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consistency was evident across the assessment periods, suggesting that life goals are not as transient or as ephemeral as our everyday goals. That said, the moderate stability of life goals during college was not so high as to prohibit change. Given this evidence that goal change occurs (a) during these developmental periods and (b) across several goal domains, it is an interesting question as to whether goal setting in different domains has similar effects.

Prosocial goals, those that focus on others and one's community, typically relate to greater psychological well-being (e.g., Cross & Markus, 1991; Salmela-Aro & Nurmi, 1997; Salmela-Aro, Pennanen, & Nurmi, 2001). For example, adults with generative strivings (e.g., giving more to others, helping the future generation) report less negative affect and more life satisfaction (Sheldon & Kasser, 2001). In addition, a study found that participants who placed greater importance on "community feeling" reported greater vitality and those who emphasized "affiliation" reported less depression and anxiety (Kasser & Ryan, 1993). Moreover, collegiate levels of prosocial goal setting have long-term effects into adulthood (Hill, Burrow, Brandenberger, Lapsley, & Quaranto, 2010). College seniors who emphasized prosocial goals reported higher levels of generativity, personal growth, purpose in life, and integrity 13 years postgraduation. No such benefits though were evidenced for other goal domains, such as aims for occupational success, personal recognition, or creative output. It should be noted though that these studies did not examine the effects of goal *change* during college on later well-being.

Measuring both level and change allows insight into whether individuals are progressing toward their future adult roles or retaining similar goals across the emerging and young adult years. Following a social investment perspective (Roberts et al., 2005; Roberts & Wood, 2006), it is desirable during this developmental period to increase on those dimensions that best allow one to achieve the family, communal, and occupational roles prevalent in adulthood. Given this, individuals who increase their emphasis on prosocial and occupational life goals across college and adulthood should experience greater well-being. Examining only the relation between goal setting at one point in time (e.g., senior year of college) and later adult well-being fails to test this important claim.

The current study provides the first test of whether changes in goal setting during emerging and young adulthood have long-term effects on well-being. Given the importance of this period for identity and self development (e.g., Arnett, 2000; Erikson, 1950, 1968), it seems a glaring omission that no studies have examined the long-term effects of goal *change* during this developmental period. We examined these effects using a nomothetic measure of goal setting assessed at freshman and senior years, and again in adulthood. We focused our examination on prosocial and occupational goal setting, as these goals are highly relevant for adult role adoption. We also compared the effects of change during college to that during young adulthood using residualized change models to test the unique importance of each developmental period. We used the same data set as Hill et al. (2010) but included a freshman wave of data. Although that study demonstrated the relations between senior year goal setting and adult well-being, our focus instead is on goal setting levels entering college as well as *change* in goal setting during college and young adulthood. We expected change in both prosocial and occupational goals to predict higher levels of well-being, as these promote adult role adoption. As a contrast, we also examined creative goal change, as these goals are seemingly not indicative of adult roles.

We cast a broad net in selecting well-being outcomes during adulthood. We assessed generativity, defined as a desire to provide for future generations, which is assumed to be an indicator of adaptive adult development (Erikson, 1950, 1968). We examined three indicators of psychological well-being (Ryff, 1989a): personal growth, purpose, and environmental mastery. We also measured participants' levels of agency, defined as a sense of goal directedness (Snyder et al., 1991). Finally, we assessed whether goal setting influenced subjective well-being, namely life satisfaction (Diener, Emmons, Larsen, & Griffin, 1985).

## Method

### Participants

During freshman and senior year, 1,535 students (63% male) at a private, midsized Catholic university in the Midwestern United States completed survey questionnaires. All students in the current study completed college within 4 years and thus had matched survey data from fall 1990 and spring 1994. About 13 years after graduation, we attempted to contact all graduates to take part in a follow-up survey using information from the alumni center (for more information on this sample, see Hill et al., 2010). Of the initial freshman sample, 459 participants (29.9%) had no information on file. From this broader sample, 416 former students (57% male; $M_{age} = 35$ years) agreed to participate in the adult assessment without compensation. This would constitute a 38.7% response rate if one assumes all available alumni contact information was valid. We compared our participants' freshman year scores to those of the broader sample. Our participants slightly differed from the broader sample, insofar that they were more likely to be female, $\chi^2(1) = 3.89$, $p < .05$, and scored slightly lower on our prosocial goal setting measure, $t(1533) = 3.01$, $p < .05$, $d = .15$, but there were no differences in occupational goal setting, $t(1533) = 0.90$, $p > .05$, $d = .05$. Sample sizes differ for individual analyses, depending on whether participants completed all items for the measures under analysis.

### Procedure and Measures During College

Measures of goal setting at freshman and senior years were extracted from the 1994 College Senior Survey, designed by the Higher Education Research Institute (HERI) at the University of California, Los Angeles for administration to college seniors across the United States. Participants completed the questionnaire as a paper-and-pencil measure and returned it to the university.

## Goal Setting During College

A six-item measure of prosocial goal setting, a three-item measure of occupational goal setting, and a three-item measure of creative goal setting were constructed from the HERI surveys (Hill et al., 2010). Participants were told to "indicate the importance to you personally" of different life goals on a scale from 1 (*not important*) to 4 (*essential*). Sample prosocial items include "participating in a community service program," "help others in difficulty," and "influencing social values." Reliability was adequate at both freshman ($\alpha = .77$) and senior ($\alpha = .76$) years. Occupational items include "being successful in a business of my own," "being very well off financially," and "have administrative responsibility." Reliability was adequate at both freshman ($\alpha = .61$) and senior ($\alpha = .69$) years. Creative items include "creating artistic work (painting, sculpture, decorating, etc.)," "becoming accomplished in one of the performing arts (acting, dancing, etc.)," and "write original works." Reliability was less than ideal at both freshman ($\alpha = .55$) and senior ($\alpha = .56$) years. However, the average item correlations at each time point were consistent with longer scales with satisfactory levels of reliability ($r_f = .29$, $r_s = .30$), indicating that the items were coherent but that future work should add more items to achieve a satisfactory level of internal consistency. All analyses were performed using latent constructs, minimizing measurement error.

## Procedure and Measures During Adulthood

Participants completed the adult follow-up survey online, and data were encrypted prior to transmission. Once data collection was completed, each participant's survey was connected to his or her college data by the university using personal identification numbers. The survey contained multiple measures, including the same prosocial ($\alpha = .77$), occupational ($\alpha = .59$), and creative ($\alpha = .61$) goal setting scales and the outcome measures described below.

## Adult Well-Being

We included six measures of well-being in adulthood: generativity, personal growth, purpose in life, environmental mastery, life satisfaction, and agency. The Loyola Generativity Scale (McAdams & de St. Aubin, 1992) measures participants' level of commitment to guide and assist the next generation. Participants rated items on a 4-point scale with higher scores indicating a greater sense of generativity (20 items; $\alpha = .86$; sample item: "I try to pass along the knowledge I have gained through my experiences"). The personal growth scale (Ryff, 1989b; Ryff & Keyes, 1995) measures one's sense of continued development and increasing self-knowledge. Participants rated items on a 6-point scale with higher scores indicating greater growth (14 items; $\alpha = .88$; "In general, I feel that I continue to learn more about myself as time goes by"). Ryff's (1989b; Ryff & Keyes, 1995) purpose in life scale measures participants' sense of direction and whether they have set goals and aims for their lives. Participants rated items on a 6-point scale with higher

scores indicating having a greater sense of a purpose in life (14 items; $\alpha = .91$; "I have a sense of direction and purpose in my life"). Ryff's (1989b; Ryff & Keyes, 1995) environmental mastery scale measures participants' sense of control over their daily environments. Participants rated items on a 6-point scale with higher scores indicating a greater sense of environmental mastery (14 items; $\alpha = .87$; "In general, I feel I am in charge of the situation in which I live"). The Agency subscale of Snyder et al.'s (1991) Hope Scale assesses one's level of goal directedness and self-agency. Participants rated the items on an 8-point scale, with higher scores indicating greater agency (4 items; $\alpha = .87$; "I energetically pursue my goals"). The Satisfaction with Life Scale (Diener et al., 1985) assesses participants' global life satisfaction. Participants rated the items on a 7-point scale with higher scores indicating greater satisfaction (5 items, $\alpha = .87$; "In most ways my life is close to my ideal").

## Plan of Analysis

First, we examined the effects of prosocial, occupational, and creative goal change on later adult well-being using second order latent growth models where the repeated measures were estimated as latent constructs (Bollen & Curran, 2006; see Figure 1 for a representation of this model for a single goal domain). At each time point, the six prosocial goal items were used as indicators of latent prosocial goal setting variables, the three occupational goal items were indicators of the latent occupational goal setting variables, and the three creative goal items were indicators of the latent creative goal setting variables. The residual variances for each item were allowed to correlate across the time points, and we fixed item loadings and residual variances to be equal across the three waves. The latent level parameter assesses the initial level of goal setting entering college and the growth parameter assesses changes in goal setting across the 17 years. All three goal domains were analyzed in a single model, and we controlled for sex differences in the level and growth parameters for each goal domain. We should note that although the parameter is labeled "growth," any individual participant may have increased or decreased on the goal domain of interest. However, we used the term *growth* throughout our discussion for parsimony and to retain the terminology common for discussing these models.

We then examined whether these level and growth parameters were related to the six adult well-being outcomes. To test the unique correlations for each goal domain, we analyzed the models separately for each domain and regressed the level parameters from the other two domains on the level for the tested domain. For example, when evaluating the correlations between prosocial goals and well-being, we examined the correlations between the outcome of interest and prosocial level and growth, controlling for any effect of creative level or occupational level on prosocial level. We allowed all other level and growth parameters to correlate with the outcome as well. As previous work has demonstrated positive correlations between the different goal domains (Hill et al., 2010), this approach
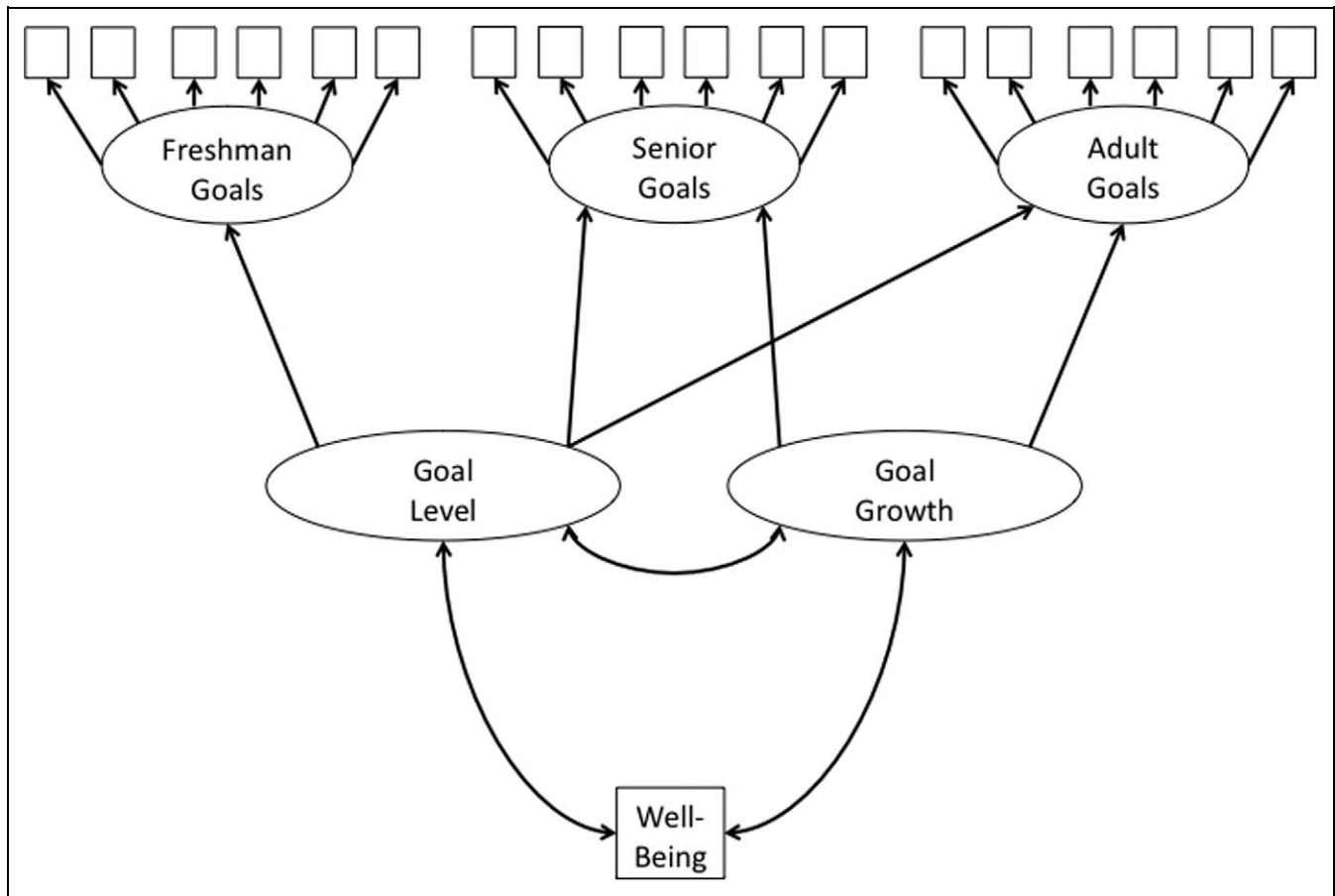
**Figure 1.** Example of a latent growth model for a single goal domain

better allows us to examine whether each goal domain is uniquely related to later well-being.

Second, we followed up these initial analyses using residualized change score models to decompose the change effects into collegiate and young adult change and test whether changes in college were important, separate of changes that occur after college. Figure 2 provides an example of the model tested, again representing only one goal domain although all three were included simultaneously. Freshman levels of prosocial, occupational, and creative goal setting predicted senior levels, and any residual variance is indicative of change during the college years. Similarly, the senior levels were used to predict adult levels, and the residual is considered to be change during the young adult years. We then regressed adult well-being on freshman goal levels, collegiate change, and young adult goal change. These analyses allow us to separately examine the effects of collegiate and young adult change and whether these have an influence above that of initial freshman goal levels. For all models discussed above, we employed all available data from the full sample.

## Results

Table 1 presents the means, standard deviations, and correlations for the variables used in the current analyses, controlling for sex. First, we fit an unconditional latent growth model to examine the means and variances of the level and growth parameters. This base model fit moderately well, $\chi^2(597) = 896.52$, root mean square error of approximation $= .04$, comparative fit index $= .92$. Table 2 presents the mean and variance estimates for each parameter. On average, participants declined in their occupational goal setting, replicating past work on economic and wealth goal setting during college (Lüdtke et al., 2009; Roberts et al., 2004), but no mean level change was evident for prosocial or creative goal setting. Importantly, significant variance was evident for each growth parameter, suggesting that people changed at different rates and/or directions. We then adjusted the base model to test for sex differences in the parameters, and allowed all parameters to correlate. Males scored higher on occupational level ($B = .257$, $SE = .056$) and occupational growth ($B = .008$, $SE = .004$) but lower on prosocial level ($B = -.167$, $SE = .053$) and creative level ($B = -.111$, $SE = .045$). In looking at the correlations among parameters, five reached significance. Creative level correlated negatively with creative growth ($r = -.31$) and prosocial growth ($r = -.24$) but positively with prosocial level ($r = .51$). Prosocial growth correlated positively with both occupational growth ($r = .27$) and creative growth ($r = .47$). It is worth noting that significant variance remained evident in the growth parameters, even when accounting for sex differences.
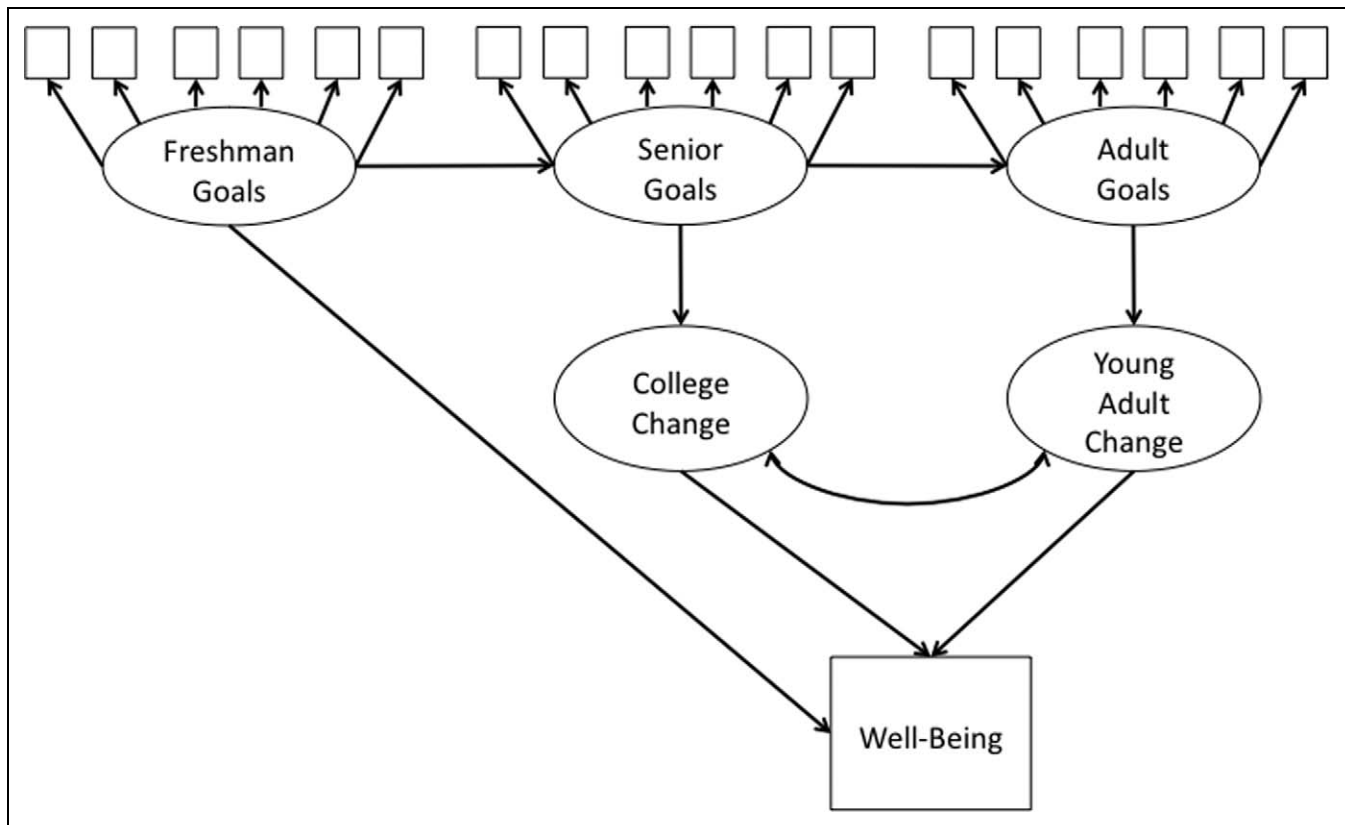
**Figure 2.** Example of a residualized change model for a single goal domain

**Table 1.** Means, Standard Deviations, and Correlations for Variables of Interest, Controlling for Sex

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Fresh. prosocial | — | | | | | | | | | | | | | | |
| 2. Senior prosocial | .43* | — | | | | | | | | | | | | | |
| 3. Adult prosocial | .34* | .49* | — | | | | | | | | | | | | |
| 4. Fresh. occupat. | .17* | −.01 | .03 | — | | | | | | | | | | | |
| 5. Senior occupat. | .08 | .01 | −.01 | .52* | — | | | | | | | | | | |
| 6. Adult occupat. | .12* | .01 | .13* | .40* | .51* | — | | | | | | | | | |
| 7. Generativity | .15* | .30* | .45* | −.03 | .01 | .15* | — | | | | | | | | |
| 8. Personal growth | .14* | .24* | .39* | .02 | .10 | .13* | .52* | — | | | | | | | |
| 9. Purpose in life | .00 | .07 | .23* | .03 | .11 | .21* | .56* | .57* | — | | | | | | |
| 10. Environ. mastery | .00 | .02 | .06 | .00 | .08 | .13* | .37* | .39* | .66* | — | | | | | |
| 11. Agency | .02 | .06 | .23* | .09 | .18* | .29* | .52* | .50* | .76* | .56* | — | | | | |
| 12. Life satisfaction | −.02 | −.02 | .14* | −.04 | .05 | .12* | .40* | .28* | .58* | .54* | .57* | — | | | |
| 13. Fresh. creative | .28* | .19* | .17* | .01 | −.06 | .03 | .11 | .00 | −.07 | −.07 | .04 | −.03 | — | | |
| 14. Senior creative | .24* | .26* | .16* | .01 | .03 | .06 | .14* | .05 | .00 | .01 | .00 | .02 | .57* | — | |
| 15. Adult creative | .25* | .22* | .35* | .06 | .03 | .11* | .19* | .14* | −.06 | −.06 | −.01 | .04 | .45* | .52* | — |
| M | 2.34 | 2.54 | 2.56 | 2.39 | 2.21 | 2.14 | 2.83 | 5.09 | 4.91 | 4.51 | 6.65 | 5.40 | 1.41 | 1.45 | 1.47 |
| SD | 0.50 | 0.59 | 0.55 | 0.64 | 0.71 | 0.65 | 0.43 | 0.59 | 0.71 | 0.69 | 0.90 | 1.11 | 0.54 | 0.56 | 0.57 |

Note: For individual analyses, N ranges from 274 to 405.
* $p < .05$.

We next tested whether individual differences in change in prosocial, occupational, and creative goal setting were related to adult well-being. Results of the latent growth models are presented in Table 3. Adding the outcome variables to the latent growth models did not appreciably change model fit. Prosocial level, representing freshman year prosocial goals, correlated positively with generativity ($r = .22$) and personal growth ($r = .27$) 17 years later. Changes in prosocial goals also

**Table 2.** Mean and Variance Estimates for the Unconditional Latent Growth Models and Correlations Between Level and Growth Parameters

| | Level | | Growth | | |
|---|---|---|---|---|---|
| Goal domain | M | $\sigma^2$ | M | $\sigma^2$ | $r_{L,G}$ |
| Prosocial | 2.38* | 0.15* | 0.03 | 0.02* | −.29* |
| Occupational | 2.31* | 0.17* | −0.10* | 0.01* | −.27* |
| Creative | 1.42* | 0.11* | 0.01 | 0.01* | −.35* |

* $p$ < .05.

predicted well-being in adulthood. Prosocial growth correlated with five outcomes: generativity ($r = .33$), personal growth ($r = .27$), purpose ($r = .29$), agency ($r = .35$), and life satisfaction ($r = .22$). Put differently, participants who increased their prosocial goal setting reported higher levels of generativity, personal growth, purpose, agency, and life satisfaction as an adult. Similarly, occupational level correlated positively with agency ($r = .17$), whereas occupational growth correlated with four outcomes: generativity ($r = .23$), purpose ($r = .22$), environmental mastery ($r = .21$), and agency ($r = .27$). Thus, participants who increased in occupational goal setting reported higher levels of generativity, purpose, environmental mastery, and agency in adulthood.

In line with our expectations, not every goal domain predicted well-being in adulthood. Creative level failed to correlate with any outcome, and creative growth *negatively* correlated with agency ($r = −.17$). These latent growth results provide strong initial evidence that increases in prosocial and occupational goal setting, domains relevant to adult role adoption, lead to greater adult well-being. However, changes in creative goals have a small or possibly even negative effect on adult well-being.

We next tested residualized change models to examine collegiate and young adult goal change as unique predictors of the well-being outcomes. The regression weights and model fits are presented in Table 4. Again, all models fit well. Replicating the results from the level parameters in the latent growth models, initial freshman levels of prosocial goal setting predicted generativity ($\beta = .19$) and personal growth ($\beta = .25$), whereas freshman occupational goal setting failed to uniquely predict adult well-being. During college, increases in prosocial goal setting predicted four outcomes (generativity, $\beta = .43$; personal growth, $\beta = .36$; purpose, $\beta = .28$; and agency, $\beta = .28$), whereas increases in occupational goal setting predicted three outcomes (personal growth, $\beta = .17$; purpose, $\beta = .19$; and agency, $\beta = .29$). During young adulthood, increases in prosocial goal setting predicted five outcomes (generativity, $\beta = .43$; personal growth, $\beta = .43$; purpose, $\beta = .41$; agency, $\beta = .39$; and life satisfaction, $\beta = .24$), whereas occupational goal increases predicted greater agency ($\beta = .24$). Only two results were significant with respect to creative goal setting, and they indicated negative effects (young adult increases predicted less purpose, $\beta = −.24$, and agency, $\beta = −.20$). These residualized change results echo those of the latent growth models, in

providing evidence that increases in only those goals relevant to adult role adoption are beneficial. Moreover, these results clearly demonstrate that goal change during both college and young adulthood is important for later adult development.

## Discussion

It has been widely assumed that changes during emerging and young adulthood are particularly formative for adult development and well-being, as it is during this period that individuals find their direction and niche in life. The current study examined whether changes in goal setting during emerging and young adulthood predict adult well-being, using both latent growth and residualized change models. We focused on prosocial and occupational goal setting, as these types of goals are indicative of intentions to adopt adaptive adult roles (Roberts et al., 2005; Roberts & Wood, 2006). In a 17-year study of goal setting, we demonstrated two primary findings. First, we found that both initial goal levels *and* change uniquely predicted our five well-being outcomes in adulthood. Second, both collegiate and young adult change in goal setting uniquely predicted well-being.

Put differently, above and beyond the effects of initial goal levels entering college, increases in prosocial and occupational goal setting during college and young adulthood predicted greater well-being. The importance of examining both level and change is underscored by the fact that senior occupational goal levels failed to demonstrate benefits in previous work with this data set (Hill et al., 2010). Thus, only through examining trends in occupational goal setting were we able to demonstrate the benefits accorded by setting these goals. Moreover, increases in a goal domain not relevant to adult role adoption, namely creative goals, failed to predict any well-being outcome.

This study heeds recent calls to devote a greater focus to goal development (McAdams & Olson, 2010; Roberts, 2009; Roberts & Jackson, 2008). Goals serve as "the building blocks of adult personality" (Freund & Riediger, 2006, p.353), and goal change correlates systematically with personality trait change (Bleidorn, Kandler, Hülsheger, Riemann, Angleitner, & Spinath, 2010; Lüdtke et al., 2009; Roberts et al., 2004). To this end, changing one's goals may catalyze trait development, as goal setting motivates one toward adopting the social roles relevant for those goals, which in turn can influence trait change (McAdams & Olson, 2010; Roberts et al., 2004). Indeed, recent genetic evidence points to the interplay of goal and trait development over time (Bleidorn et al., 2010). Following social investment theory (Lehnart, Neyer, & Eccles, 2010; Roberts et al., 2005; Roberts & Wood, 2006), when individuals "invest" in their adult social roles, they tend to change their personality in ways that better allow for social integration and well-being in adulthood (Lodi-Smith & Roberts, 2007). This theory presents further rationale for the benefits of prosocial and occupational goal setting, as these goals are clearly indicative of greater social investment in the community and the workplace.

**Table 3.** Results of the Latent Growth Models, Correlating Adult Well-Being Outcomes From Prosocial, Occupational, and Creative Goal Setting Level and Change

| Outcome | PLevel | PChange | OLevel | OChange | CLevel | CChange |
|---|---|---|---|---|---|---|
| Generativity | .22* | .33* | −.06 | .23* | .06 | .00 |
| Personal growth | .27* | .27* | .04 | .10 | −.09 | .07 |
| Purpose | .07 | .29* | .08 | .22* | −.05 | −.12 |
| Environmental mastery | .07 | .05 | .01 | .21* | −.08 | −.04 |
| Agency | −.04 | .35* | .17* | .27* | .08 | −.17* |
| Life satisfaction | −.06 | .22* | .00 | .17 | .01 | .02 |

Note: Correlations are presented for level and change parameters.
* $p < .05$.

**Table 4.** Results of Residualized Change Score Models Predicting Adult Well-Being Outcomes From Initial Freshman Prosocial Goal Levels, Goal Change During College, and Goal Change During Adult Years

| Outcome | PFL | PCC | PYC | OFL | OCC | OYC | CFL | CCC | CYC | $\chi^2(591)$ | CFI | RMSEA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Generativity | .19* | .43* | .43* | −.05 | .12 | .15 | .06 | .04 | −.02 | 820.59 | .94 | .03 |
| Personal growth | .25* | .36* | .43* | −.04 | .17* | −.01 | −.06 | .05 | −.01 | 824.81 | .94 | .03 |
| Purpose | .12 | .28* | .41* | .03 | .19* | .15 | −.12 | .00 | −.24* | 816.98 | .94 | .03 |
| Environmental mastery | .12 | .06 | .14 | −.04 | .16 | .15 | −.14 | .09 | −.14 | 815.83 | .94 | .03 |
| Agency | .03 | .28* | .39* | .12 | .29* | .24* | .04 | −.10 | −.20* | 834.34 | .94 | .03 |
| Life satisfaction | .02 | .09 | .24* | −.05 | .12 | .09 | −.05 | .08 | −.04 | 802.47 | .95 | .03 |

Note: PFL = prosocial freshman level; PCC = prosocial collegiate change; PYC = prosocial young adult change; OFL = occupational freshman level; OCC = occupational collegiate change; OYC = occupational young adult change; CFL = creative freshman level; CCC = creative collegiate change; CYC = creative young adult change; CFI = comparative fit index; RMSEA = root mean square error of approximation. Standardized regression weights are presented for all parameter values.
* $p < .05$.

Two other points regarding the interpretation of our results are worth further note. For one, our longitudinal study lacked relevant well-being measures at the freshman and senior years. One would prefer to have assessed well-being across all waves to assess *changes* in well-being. Although our results provide evidence that the prediction of adult well-being was increased by considering both level and change in goal setting, we are unable to test whether changes in goal setting coincided with changes in well-being. Moreover, it would be of interest to examine whether goals and well-being have reciprocal effects over time. For example, prosocial individuals might experience greater well-being, which in turn motivates them toward an even greater emphasis on prosocial goals in the future. Both of these questions remain important aims for future research.

Another topic of discussion regards our choice of well-being measures and how results differed across these measures. As noted above, we strived toward inclusivity in our conception of well-being, including measures of both hedonic (life satisfaction) and eudemonic (purpose, personal growth, environmental mastery) well-being as well as measures of adaptive cognitive appraisals (agency) and a developmental benchmark during adulthood (generativity). Prosocial and occupational goal change both correlated with higher scores on generativity, in addition to indicators of greater eudemonic well-being and greater self-agency. However, only changes in prosocial goals during young adulthood predicted hedonic well-being. In explaining the lack of an occupational effect, it

is worthwhile to compare our results to those examining the link between income and well-being. Although we did not have access to participants' income levels, greater emphasis on occupational goals presumably should correspond to higher personal income. If one grants this connection, it is interesting to note that our observed correlation between occupational goal change and life satisfaction (.17) is similar to the magnitude of the relation evidenced between income and life satisfaction (Lucas & Dyrenforth, 2006), although our correlation failed to reach significance. Future research thus should examine how changes in occupational goal change correspond to changes in income and whether these changes uniquely predict life satisfaction.

As this study serves as an initial investigation into the predictive value of goal change, our results likely generate as many questions as they answer. First, it would be worth examining whether changes in different goal domains have stronger effects on outcomes specific to that domain; for example, increases in occupational but not prosocial goal setting might predict greater job satisfaction and income later in adulthood. Second, work is needed to compare these results to emerging adults not enrolled in college. Comparing students and nonstudents would allow an investigation of whether these effects are endemic to the college experience or to the emerging adult years more broadly. In addition, results should be compared to students at different universities, as a private Catholic school is a unique academic environment. Third, these results can

provide a foundation for future intervention work. Research has demonstrated that goal setting interventions can improve both academic performance (Morisano, Hirsh, Peterson, Pihl, & Shore, 2010) and psychological well-being (Sheldon et al., 2002). Similar methods could be used to motivate college students and young adults toward setting goals in line with adaptive adult role adoption. Therefore, although our study provides an informative first step, it opens the door to a number of future studies.

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